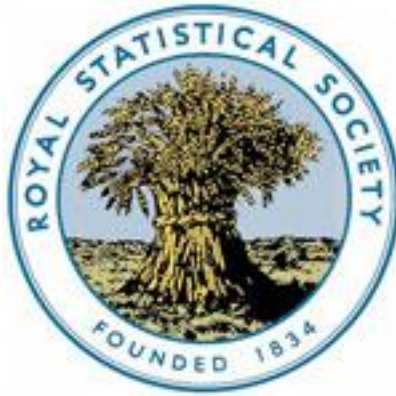


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The Census of Bengal

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The CENSUS of BENGAL. By HENRY BEVERLEY, M.A., Inspector-General of Registration in Bengal.

[Read before the Statistical Society, 17th March, 1874.]

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I.—*Introduction.*

THE Census of Bengal that was effected at the commencement of 1872, deserves notice no less on account of its novelty than from the importance of its results. It was the first attempt at anything like a systematic enumeration of the people in that part of India. Up to that time all that was known regarding the numbers of the people, was based upon estimates, the credibility of which varied according to the common sense, the local knowledge and the experience, of the officers by whom they were made. On no previous occasion had any endeavour been made to ascertain by actual house-to-house enumeration the numbers of the heterogeneous masses subject to the Lieutenant-Governor of Bengal. The result was, that the census of 1872 in those provinces brought to light some 25 millions of Her Majesty's subjects, of whose existence our Government had previously been in complete and utter ignorance. The population of Bengal rose in one day from 42 to 67 millions. The Lieutenant-Governor, who was already supposed to have one of the largest gubernatorial charges in the world, suddenly found that he had unconsciously been the ruler of an additional population more than equal to that of the whole of England and Wales.

It is unnecessary to remark in this place, and before the present audience, upon the *importance* of such a discovery regarding the population of a rich and fertile country like Bengal. The census of 1872 will henceforth mark an epoch in the history of the administration of that province. To quote the Administration Report, "the result has already been almost to revolutionise our ideas both in regard to the total amount of the population, and relatively in regard to its distribution in different districts, races and religions; while, by showing that the numbers vastly exceed any former computation, it has wholly altered our calculations with respect to the incidence of taxation, the consumption of salt, and many other matters." The census is in fact the first great statistical undertaking on which the Government of Bengal has ever engaged, and as such—as an earnest of future statistical researches in that country, it is not unworthy of being brought under the notice of this Society. Even were India altogether independent of this country, this Society could not but welcome any contribution regarding it which tended to advance statistical science. But looking to the intimate connection existing between Great Britain and her vast possessions in the East, this Society has set a noble example in determining that questions relating to India shall receive a large share of its attention. I conceive, therefore, that no apology is needed for introducing to you this evening the subject of the population of the largest, richest, most fertile and most populous, of our Indian provinces.

One remark I may venture to make in this place, in illustration of the utility and importance of the great undertaking which is to receive our attention to-night. For some months past Bengal has been threatened with one of those terrible famines which every now and then devastate our Eastern possessions, and create a spasmodic and extraordinary interest in India among all classes of Englishmen. Before the close of the present year many of the millions of whom I shall speak to you to-night will have felt the pinch of scarcity, and, notwithstanding all exertions to save them, some thousands will probably have fallen victims to famine. The Indian Government is doing and will do all it can to mitigate the horrors of so frightful a calamity, but, do what it can, the mortality from want and disease must be severe. It is a very fortunate circumstance, that at this moment the Government of Bengal has before it the records of the late census, and is thus in a position to estimate the extent and possible severity of the disaster. By showing the true numbers of the people and their distribution in different parts of the country, the census has enabled the Government to see where relief is needed and to what extent. The population of Behar was till last year put down at 11½ millions; the

census showed it to be $19\frac{3}{4}$ millions. Had there been no census, therefore, it may be assumed that there would have been upwards of 8 millions of souls in that province alone entirely ignored in all measures of relief.* Moreover, the Government would have had little or no information to guide it in the selection of the proper sites for the storage of food and for the organisation of relief works. It was owing to its ignorance regarding the numbers and distribution of the people, as much as to anything, that the Government was unable to grapple properly with the famine of 1866. It is owing to the complete information on these points which the census has placed at the disposal of the Government, as much as to anything, that the measures which have been taken to mitigate a similar calamity in 1874, will in all probability be attended with a fair amount of success.

II.—*Description, Area and Population of Bengal.*

The old division of India into the three Presidencies of Bengal, Madras and Bombay, though still retained in some departments of the administration, is for most purposes practically obsolete. The fact is, there are now no fewer than *ten* governments subordinate to our Indian Viceroy and his Council. These ten governments are—Bengal, the North-West Provinces, the Punjab, the Central Provinces, Oudh, Berar, Mysore, Madras, Bombay, and British Burmah.† Madras and Bombay are administered by Governors; Bengal, the North-West Provinces and the Punjab, by Lieutenant-Governors; and the rest by Chief-Commissioners, deriving their authority from the Governor-General. But, notwithstanding the difference in the designation of the principal magistrate, these ten administrations are all separate and distinct. They may differ in the degree of their relationship to the supreme government; but they are in no way subordinate to one another. Of these administrations Bengal ranks first, not only in population and wealth, but in the degree of moral and material progress to which she has attained. It will be remembered, however, that it is not the old Presidency of Bengal of which I speak, but simply that portion of it which is subject to the Lieutenant-Governor.

The Lieutenant-Governor of Bengal administers five provinces, Bengal Proper, Behar, Orissa, Chota Nagpore and Assam;—provinces differing from each other, more or less, in their natural

* In Mr. Cockerell's Report on the Famine of 1866, the population of the six districts of Chumparun, Gya, Monghyr, Sarun, Shahabad and Tirhoot, is put down at $7\frac{3}{4}$ millions; the census showed it to be $13\frac{1}{2}$ millions.

† Scinde and Coorg are also sometimes spoken of as separate administrations; the former, however, is more properly considered as subordinate to Bombay, and the latter to Mysore. Assam is about to be constituted a separate administration.

features as well as in the race, language, creed and institutions of their inhabitants. Bengal Proper forms the great alluvial delta of the Ganges and Brahmapootra rivers; it is inhabited throughout by Bengalis speaking the Bengali language. Behar is the name given by the Mogul Government to the lower portion of the Gangetic plain, inhabited by Hindustanis, speaking the same language, and in their manners and customs identical with the people of Oudh and the North-West; Orissa, only too well known to Englishmen from the calamity which devastated it in 1866, is the tract of plain and hill country, lying at the north-west corner of the Bay of Bengal; its inhabitants speak Oorya, a language derived from Sanskrit, like Hindee and Bengali, but with a distinct written character. Chota Nagpore is the name we have given to the table-land lying south of Behar, and largely, though not exclusively, inhabited by aboriginal tribes in a very rude stage of civilisation. Assam is the valley of the Upper Brahmapootra, with such of the hill territory on either side as lies within the British frontier. It is inhabited, though sparsely, by a variety of races. The Assamese language appears to be merely a dialect of Bengali.

These five provinces have a total area of 248,231 square miles, with a population of 66,856,859 souls. The figures for each province are given below:—

Area and Population of the several Provinces of Bengal.

Provinces.	Area in Square Miles.	Population.	Average Number of Persons to Square Mile.	Proportion per Cent. of the Area.	Proportion per Cent. of Population.
The entire territory under the Lieutenant- Governor of Bengal }	248,231	66,856,859	269	100	100
Bengal	94,539	36,769,735	389	38.1	55.0
Behar	42,417	19,736,101	465	17.1	29.5
Orissa	23,901	4,317,999	181	9.6	6.5
Chota Nagpore	43,901	3,825,571	87	17.7	5.7
Assam	43,473	2,207,453	51	17.5	3.3

It will thus be seen that both the area and the population of the territory subject to the Lieutenant-Governor of Bengal are rather more than double those of the United Kingdom; the average number of persons to the square mile being in the United Kingdom 263 and in Bengal 269. It may be observed, moreover, that, as in the United Kingdom, so in Bengal, the density of the population is by no means uniform, but varies considerably in different provinces, in different districts or counties in the same province, and even in different parts of the same district or county. Scotland, "land

"of the mountain and the flood," scarcely supports 110 persons to the square mile, while England has an average of 422. Similarly the various provinces which constitute the territory administered by the Bengal Government differ enormously in the proportion of the population which they contribute to make up the grand total of 67 millions for the whole proconsulate. Thus, Bengal Proper, though occupying not much more than a third of the whole area, contributes more than half the population. Behar, with one-sixth of the total area, contributes three-tenths of the population. The provinces of Assam and Chota Nagpore are as large as Behar, yet they have only a ninth and a fifth part of its population respectively. The average number of persons to the square mile is 465 in Behar; 389 in Bengal; 181 in Orissa; 87 in Chota Nagpore, and 51 only in Assam.

III.—*Mode of Taking the Census.*

Before proceeding with the discussion of these figures, it may be convenient if I give a brief account of the manner in which the census of 1872 was effected in Bengal. It will readily be understood that the organisation required for the numbering of a population of 66 millions demanded no little forethought and elaboration, and the difficulties were enhanced by the novelty of the undertaking. The Government of India originally desired to take a census of the whole country in very great detail. It was proposed to record the precise status of every individual man, woman and child, with all the rigorous accuracy of a European census. In some provinces a succession of rough censuses had paved the way for such a measure; but in Bengal, as I have said, this was the first attempt at anything of the kind, and it seemed wiser in a first attempt to undertake the business on a less ambitious scale, so as not to court failure by aiming to achieve too much. Moreover, Bengal is not so rich as some other provinces in official and indigenous agencies, and the wishes of the Government of India could not have been carried out without vast hired establishments which would have involved a great cost. The Government of India was for a long time urgent in the matter; but when Sir George Campbell repeated the same arguments which had been used by his predecessor, Sir William Grey, it was conceded that the census operations in Bengal should be of a somewhat simpler character than was at first proposed. At the same time it was understood that all the information that was really necessary for practical and administrative purposes, should as far as possible be collected.

The manner in which the census was actually taken was as follows:—Except in a few outlying districts in which, owing to imperfect agency or political difficulties, a detailed enumeration

could not possibly be made,* the people were everywhere counted by means of a house-to-house visitation. In noting the numbers of each household, a distinction was made between males and females, children and adults. The names, nationality, religion and occupation of all adult males were entered, but in the case of children and women (except where heads of houses), the bare numbers were recorded, the caste, &c., of the head of the family being assumed to be that of its female and infant members. Adults were defined to be persons over twelve years of age.

The census was effected for the most part by the people themselves. Two or more of the most respectable residents in each village were selected for this purpose, and complimentary letters were addressed to them by the magistrate of the district appointing them to be the enumerators of their village and giving them the necessary instructions. These enumerators were required in most cases to lend their services gratuitously; but, in order to strengthen the hands of the executive and prevent any unfortunate complication which might arise from the employment of an unpaid agency, a brief Act was passed by the Bengal Legislative Council, investing the enumerators so appointed with the necessary authority, and prescribing penalties for their misconduct or neglect. In places where a sufficient number of intelligent residents qualified to act as enumerators were not to be found, outsiders were specially entertained and paid for the duty. The proceedings of the enumerators were everywhere supervised by the police or by a special agency employed for the purpose; and the supervisors were in their turn controlled and directed by the numerous assistants, European and native, which every magistrate has at his disposal.

By this arrangement it was hoped that a maximum of statistical accuracy would be combined with the minimum of inquisitorial oppression. The enumerators, taken as they were from among the villagers, might naturally be supposed to possess the confidence, as well as some acquaintance with the domestic affairs, of their neighbours. They would already know something of everybody and everybody's children in the village, and there was no fear that they would extort bribes from the men, or insult the women, among whom they would have to live their lives long after the census was done with and forgotten. The temporary importance conferred by the office of enumerator would tend to enhance the respectability of the incumbent, both in his own eyes and in those of his fellow-villagers, and would thus contribute, it was hoped, to an accurate and conscien-

* The exceptional districts were the Naga, Khasia and Garo Hills (the wild mountainous country south of the Assam valley), and Hill Tipperah, the whole occupying some 18,000 square miles. For these districts the best estimates available were adopted.

tious discharge of its duties. On the other hand, the control and guidance afforded by the supervising agency would have the effect of checking exuberance of zeal on the part of the enumerators, would remove their doubts, instruct their ignorance, and secure the uniformity which is indispensable in a large undertaking of this nature. The success which attended these arrangements exceeded the most sanguine anticipations. The enumerators, as a body, did their work willingly and well, manifesting a zeal and interest in the proceedings, for which they had hardly been given credit. The competition for the office, unpaid and onerous as it was, was often keen. The letters of appointment are still treasured up among the family archives, to be produced whenever evidence of respectability is required in a court of justice. The police were strictly kept to their work of supervision, being allowed to communicate with the people only through their recognised representatives. The result was that the census was carried out with marvellously little opposition or excitement. No doubt it was generally regarded as a prelude to additional taxation, and in some out-of-the-way places even more absurd beliefs may have taken hold of the popular mind. But, with one single exception, no violent outbreak took place,—a result which, as Sir George Campbell observes, goes further than anything that has occurred in recent years, to show the strength of our political position in these provinces. At the same time, the figures are believed to be as correct as it was possible for them to be, under the circumstances. The district officers, who began by doubting whether the returns would be worth the paper on which they were written, ended by thinking that the census had been well and thoroughly taken. It would be almost unreasonable to expect that, in a country as large as Bengal, a novel experiment like the census could be perfectly successful everywhere, or in every minute particular. But the manner in which the registers and returns were submitted to me for compilation, enable me to bear witness to the evident care and thoroughness with which the business was conducted, both on the part of the enumerators and of those whose duty it was to supervise their proceedings.

In more civilised communities a large proportion of those enumerated, assist the operation by themselves filling up their household schedules. In India, on the other hand, owing to the comparative paucity of persons able to read and write, the whole work of filling up the schedules devolves on the enumerators. The question of effecting a census in one and the same day over an enormous tract of country, is thus involved in considerable difficulty: Persons qualified to act as enumerators are not forthcoming in sufficient numbers for each enumerator to have a beat small enough to enable him to record all the necessary particulars regarding it within a few

hours. If the enumerator had had to fill up every schedule as he went along, some of the beats would have been altogether unmanageable. The difficulty was partly overcome, however, by allowing the enumerators to compile rough schedules beforehand. They then went round again on the day fixed for the census, and made such corrections or alterations as they found to be necessary. And though, unfortunately, owing to a discretion which the local government allowed to commissioners of divisions, the same date was not fixed for the whole of Bengal, still the margin of inaccuracy which has thus crept into the returns is practically insignificant and may be ignored. In most places the night of the 25th January, 1872, was the date to which the returns refer.

The various forms required for the census were, with some few exceptions, printed at the large Government Press which Dr. Mouat organised in the Alipore prison near Calcutta. These forms had to be translated into several languages to suit the different nationalities to be found in Bengal. Thus, a Bengali translation was required for Bengal Proper; Hindustani in both the Persian and Kaithi character for Behar; Ooria for Orissa; Hindee in the Nagri character for Chota Nagpore and the Sonthal Pergunnahs, and Nepalese for some parts of Darjeeling. Some places in the Sonthal Pergunnahs were so wild that the people could only be counted after the rude national method of the tribe, viz., by tying knots on a number of strings of different colours, a black string being used for male adults, a red one for female adults, a white one for boys, and a yellow one for girls. In the Chittagong Hill Tracts the deputy-commissioner reported that the only way he could count the semi-savage tribes there was by means of notched sticks. Whether the numbering was really effected in this primitive method, I am not prepared to say, the result having been reduced to writing before the returns were submitted to me. The enumerators' schedules were stitched in books of ten or twenty sheets, with a form filled up as a specimen, a printed set of instructions, and a docket cover. The intention was that a separate book should be used for the enumeration of each village or hamlet, but it was not always possible to adhere to this arrangement. Altogether, upwards of 6,500,000 copies of forms in different languages and of various sizes were distributed from the Census Office at Calcutta.

The census was based upon the survey, the survey *mouzah* being adopted as the unit for enumeration purposes. The term *mouzah* is usually translated "village," but more correctly it denotes the village lands, it being by no means an uncommon case to find *mouzahs* without any village at all in the sense of a group of dwellings. Possibly the *mouzah* may at some time have had dwellings upon it, but they have perhaps been washed away, or in some other manner have disappeared. A *mouzah* is really little more than

a survey block. A list of the survey blocks in each police circle was prepared some time before the census, and inquiry was made as to the villages and hamlets in existence on each. In this manner, by working on a geographical basis, and by referring every collection of houses to the land on which it stood, care was taken that no village was omitted from the census or counted twice over. At the same time caution and local knowledge were required in order to work satisfactorily upon this basis. In the first place the names of the *mouzahs* or survey blocks, and of the villages situated upon them, did not always agree, and a strict process of identification became necessary. A *mouzah* or survey block again might contain four or five distinct hamlets, and if the population of these four or five distinct hamlets was recorded merely as belonging to one and the same block, it was liable to be mistaken for the population of one large village or town. On the other hand, a town might have sprung up on the borders of two or more survey blocks, and unless this was specially pointed out, its population was liable to be exhibited as that of two or more distinct villages bearing the names of those survey blocks.

For administrative purposes, Bengal is divided into eleven commissioners' divisions, comprising fifty-three districts or counties. The size of a Bengal district in the present day averages about 4,000 square miles. With improvements in the administration, the boundaries of districts have undergone, and are undergoing, frequent change. Unfortunately these changes in the past have not been carried out on any fixed principle, and the result has been to introduce a confusion of jurisdiction which is often of extreme inconvenience. Thus, although in the regulation districts of Bengal the offices of collector and magistrate are vested in the same person, it by no means follows that the jurisdiction of the collector is contemporaneous with that of the magistrate. The civil courts, again, have generally a local jurisdiction of their own, so that it is no unfrequent case to find the district boundaries entirely distinct for civil, criminal, and fiscal purposes. In other words, the district has different limits according as it is the district of the collector, of the magistrate, or of the judge. In the Report on the English census, I see that the complexity of boundaries and the want of harmony in the geographical divisions are said to have added considerably to the labours of the undertaking, and in Bengal we have been allowing ourselves to drift into a similar condition of affairs. The matter was prominently brought to the notice of the Government in my official Report as one calling for immediate attention, if a periodical census was to be of any use in calculating the growth of the population; and it is to be hoped that further alterations in boundaries will only be permitted when they tend to a simplification of existing

subdivisions. For the purpose of the census, the jurisdiction of the magistrate was taken as the district limits; and the *thannahs*, or police circles, as the subdivisions of the district. The old Mogul divisions of *pergunnahs*, or hundreds, have nearly died out in Bengal, and their want of compactness would always constitute an objection to their adoption for census purposes. *Thannahs*, or police circles, on the other hand, are compact, and for most districts have been defined with the utmost precision by the survey authorities. They are also of late years being gradually adopted as the unit of geographical division for administrative purposes. The average extent of a police circle may be said to be about 300 square miles.

Thus the district was subdivided into *thannahs* or police circles, and the circles into *mouzahs* or survey blocks. Lists of the villages and hamlets in each block were made out, and for each village or hamlet one or two of the most respectable residents were appointed enumerators. The enumerators were instructed and supervised by the police, acting under the control of the magistrate and his assistants.

Many of the peculiar difficulties which had to be overcome by those in charge of the Bengal census, arose from the physical characteristics of the country itself. In some provinces whole villages are buried in forests of mango, palm, or tamarind; while the extent to which the country is intersected everywhere, and especially in the delta of Lower Bengal, by innumerable creeks and water-courses, adds to the difficulty of locomotion, and so of effective supervision and control. Moreover, in a country where considerable numbers of the people pass days and nights, nay, may almost be said to live altogether, on board the countless boats which crowd its waters, it might well be feared that many persons would escape enumeration. Arrangements were made, however, for numbering the floating population, and though no one would of course pretend to say they were perfect, the large number of pilgrims and travellers recorded show that it would have been a mistake to ignore them altogether. The number of vessels and barges alone which came under the observation of the census officers was 60,000, containing something like 300,000 souls. Enumerators were stationed at all the principal ghâts and landing-places for several consecutive days, and every craft which touched during that period was censused in the same way as if it were a house on land, a ticket being given to prevent a repetition of the process elsewhere.

On the completion of the census, the enumerators' books were collected at the head-quarters of each district, and were then forwarded to me for compilation. It was originally intended to have only one compiling office for the whole of Bengal; but the work was found to be so stupendous, and there were so few clerks in Calcutta

who could read the Hindee and Oorya returns, that branch offices were established at Patna and Cuttack. In these offices, registers giving the totals for each village were compiled for each district, the totals for each police circle being forwarded to the district officers for explanation and comment. In this way the whole work of compilation was effected in the course of a few months, and my final Report on the subject was published within a twelve-month from the date on which the census was taken.*

The cost has been altogether insignificant when compared with the magnitude of the undertaking and the character of the work. The total charge amounted to 21,500*l.*, or less than one-third of a farthing per head of the population; that is, about one-fifteenth part of the cost of the late elaborate census of England and Wales, allowance being made for the difference in the number of the population.

IV.—*Density and Distribution of the Population.*

The vast population which the census of Bengal brought to light was something so unexpected, that some of our best-informed officials at first refused to credit the results. A keen scrutiny of the figures, however, and the application of a variety of tests, have now convinced most people of the general trustworthiness of the census tables. Indeed the results are not really such as should have taken anyone by surprise. Our ignorance in the matter is to be attributed partly to official carelessness, and partly to our own want of reflection. The census of the North-Western Provinces had disclosed a density of 361 persons to the square mile, and, as I pointed out in a paper I read before the Social Science Association of Bengal in 1869, "the Lower Provinces are quite as well cultivated as the North-West Provinces, and there is every reason to suppose that they support an equally dense population." In that same year, the census of Oudh disclosed the still higher average of 474 souls to the square mile, over an area of 24,000 square miles. But, besides the inferences that might have been drawn from these figures, statistics were not altogether wanting, even in regard to Bengal itself. Dr. Buchanan Hamilton, who was employed by the Court of Directors, in 1807-14, to carry on a statistical survey of the northern districts of Bengal, estimated a population of 15,443,220 for some 37,000 square miles. The present census gives 14,926,337 souls, or within three or four per cent. for what appears to be the same tract of country. In 1813-14, a civil servant, Mr. Bayley, found that there were over 600 souls to the square mile in the district of Burdwan; the census figures give the average for the district as it then stood at 610 to

* It should be stated that in Calcutta and its suburbs the municipal authorities took the census and compiled their own returns.

the square mile. Other computations doubtless were made which fell wide of the mark, and, besides the difficulty of distinguishing estimates which were probable from those which were absurd, mistakes were increased by clerical errors perpetuated without observation.* So late as 1870, the population of some districts was gravely and officially stated at a third, a fourth, and even a seventh, of what has now been ascertained to be the correct figure.

In a country like Bengal where a large proportion of the land yields two crops a year, where the food of the people consists almost entirely of rice, where there are no moral checks to the increase of the population, where marriage is universal, and where the only positive checks are famine and disease, we must expect to find a population far in excess of what we are accustomed to see in Europe. The simple habits of the people enable a naturally fertile soil to feed a much larger number of mouths, than the same extent of highly cultivated land would support in this country. Sir G. Campbell estimates the food-producing area at not more than half an acre per head. Statistics on this point are not available in Bengal, but the statement is supported by the following calculation. In a good harvest, an acre of land will yield 12 maunds of rice of 80 lbs. to the maund. A family of three persons, it is said, consume 4 lbs. per diem, or 18 maunds a year. The result is that each person is supported by the produce of half an acre. Such, indeed, is the fertility of the soil that, notwithstanding its enormous population, Bengal exports large quantities of food grains (estimated in a good year at over 500,000 tons), while the area taken up by such crops as jute, indigo, opium and oil-seeds, is something very considerable. With such abundance, therefore, in ordinary years the population goes on multiplying its numbers without fear of transgressing the margin of subsistence. It is only when a year of scarcity intervenes, or when epidemic disease commits its ravages, that any check whatever is imposed on the natural increase of the people.

For the entire territory subject to the Lieutenant-Governor of Bengal, some 250,000 square miles, the population averages 270 souls to the square mile. But it has already been pointed out that this population is very unequally distributed throughout the country. If we exclude the non-regulation provinces of Assam and Chota Nagpore, and a few of the outlying districts of Bengal, Behar and Orissa, we have for the strictly "regulation" districts, as they

* To give one instance out of many. In the Bengal Administration Report for 1870-71, the population of the district of Tipperah was stated to be 100,000 souls. In the Report for 1866-67 I find it given at 1,000,000. In one of the intervening years a cipher appears to have dropped out of the type, and the mistake was repeated year after year without detection.

are called, a population of 57 millions over an area of 112,638 square miles, giving an average of 505 persons to the square mile.

	Area.	Population.	Persons per Square Mile.
<i>Bengal</i> , exclusive of Darjeeling, Jelpigoree, Cooch Behar, Cachar, Hill Tracts, and Hill Tipperah } <i>Behar</i> , excluding Sonthal Pergun- nahs.....	67,992	35,413,897	521
.....	36,929	18,476,814	500
<i>Orissa</i> , without Tributary Mehals	7,717	3,034,690	392
Total for Regulation Districts	112,638	56,925,401	505

Even within this area there are several tracts comparatively sparsely peopled. All the districts of Behar south of the Ganges run more or less into the southern hills; on the north they skirt the sub-Himalayan range. Parts of Bancoorah and Midnapore are as barren as the province of Chota Nagpore with which they march. In Northern Bengal there is a wide tract of thinly populated country in the districts of Purneah, Dinagapore and Maldah. In Sylhet and Mymensingh, too, there is a considerable quantity of jungle and hilly country, which greatly reduces the average of population in those districts.

If these exceptional tracts be eliminated, the cultivated champaign of Bengal and Behar will probably show an average of not less than 650 souls to the square mile, or at least one person to every acre of gross area. In Orissa the average is not perhaps so high, as that country has not yet recovered from the effects of the famine of 1866. But in parts of Bengal and Behar even this large average falls short of the actual density of the population. For the vast district of Tirhoot the average is about 700 to the square mile; in Patna 740; in Sarun or Chupra 780. In the metropolitan districts of Hooghly and the Twenty-four Pargunnahs, which include the capital, Calcutta, we find, over an area of 4,220 square miles, a population of nearly 1,000 souls to the square mile. Even if the city of Calcutta be left out of the calculation, the average is still some 900 persons to the square mile. On the banks of the Hooghly, from the borders of the Sunderbuns as far north as Moorshedabad, the population varies from 3,000 to 8,000 souls to the square mile. There can be little doubt indeed, that the Gangetic plain of Behar and the alluvial delta formed by the river system of Bengal, are tracts of country as densely populated as any in the world.

It is only a few months since Sir George Campbell, in connection with this subject, wrote as follows:—

“ This scantiness of the land compared to the population sug-

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“gests the great social difficulties which may arise if population much further increases. And the same calculation renders terrible the thought of what might happen if the seasons, which our experiences of 1871-72 show to vary so much, should ever take so unhappy a turn as to lead to a really serious failure of the crops in these provinces. With such few means of communication and good prices, the natives certainly do not hoard grain as they used to hoard it. In case of failure, how many railways and steamers would suffice to bring food for sixty or seventy millions of people, and where should we get food to bring? The grain-exporting countries of Asia are very few and small, the grain-importing countries are many. It may be some consolation, however, to observe that no very general failure throughout Bengal is known to have occurred in times with which we are acquainted. The inquiries of the Famine Commission regarding previous famines show from official papers that the accounts in popular histories of the great famine of 1770 have been very greatly exaggerated. That was a very great and severe famine, but it did not extend to the eastern districts, and so far from the country relapsing into jungle from which it did not recover for generations, as has been supposed, the land revenue was within a year or two after the famine greater than it had ever been.”

V.—*Nationalities, Races and Tribes.*

With such an enormous population, Bengal naturally comprises numerous varieties of race. To a certain extent, each of the five provinces may be said to have its distinct nationality, though it is to be observed that the ethnical boundary and the political boundary do not always coincide. Bengal Proper is inhabited by a heterogeneous race of mixed Aryan and aboriginal extraction, in every possible stage of development. A Bengali may, on the one hand, be of the purest Aryan type, or, on the other, he may scarcely differ in ethnical characteristics from the lowest aboriginal. Speaking generally, they are not a robust or muscular race, yet are capable of greater fatigue and endurance than their purely vegetable diet and moist habitat would lead one to suppose. In active pursuits they are timid and indolent, but in intellect keen and subtle. Besides inhabiting Bengal Proper, they are also to be found in most of the districts which march with its political boundary; and their numbers may be roughly estimated at from 37 to 38 millions. Whether the people of Orissa are more nearly allied to the Bengalis, or to their western and southern neighbours, is as yet open to question, but there seems no doubt that they have acquired certain peculiarities of physiognomy and character from their isolated position. More timid and conservative than the Bengalis, the Ooryas have for many

centuries been one of the most bigoted and priest-ridden peoples in India. In Orissa, taking the plain and hill country together, they number about 4 millions; but, like the Bengalis in Bengal Proper, they slightly overstep the boundaries of the province. The people of Behar are Hindustanis. They speak Hindee, the language of Upper India, and are a hardier and more manly race than the inhabitants of Lower Bengal, though inferior to them in intellectual power. Their numbers may be reckoned at 20 millions. The Assamese speak a dialect closely allied to Bengali. Like the Bengalis, they are more or less a mixed race, with a large infusion of Indo-Chinese blood. The earliest historical notices we have of the country mention it as part of the ancient Hindu kingdom of Kamroop, but with the fall of the Pâl dynasty it became a prey to contending factions, and appears to have been overrun by successive hordes of aboriginal tribes, who swarmed into the rich valley from India on the one side and from Burmah on the other. These tribes have still their representatives in Assam, but they are fast losing their individuality in the process of fusion which is going on. The purest Assamese are said to be the Ahoms of Sebsaugor, but few have preserved their lineage undefiled. They number less than 2 millions.

Besides these four distinct nationalities, Bengal contains a vast number of indigenous or non-Aryan tribes, in a more or less primitive stage of civilisation. Regarding the origin of these tribes, or their relation to each other, very little is known; we call them the aboriginal inhabitants of the country because they are the oldest inhabitants of whom we have any certain knowledge, dating as they do from before the Aryan invasion. In the present day they are principally found in the mountain ranges which surround Bengal on the north and east, and in the highlands of Chota Nagpore and Orissa. Some of them are fine-looking specimens of the human family, but others are mere savages both in manners and appearance. At least one of these tribes still clothes itself after the fashion of our first parents. Many of them retain and habitually use their own aboriginal tongues, while others have adopted the language of their Aryan conquerors. Their manners and customs are often extremely curious, and have attracted much observation of late years. The most important of them are the Kôls and Gonds of Chota Nagpore; the Sonthals; the Lepchas and Mechs of Darjeeling; the Garos, Khasias and others in Assam; the Kookis, Lushais, and other hill tribes of the eastern frontier, and the Khonds of Orissa. The purer aborigines may be reckoned at about $3\frac{1}{2}$ millions; those who have become partially Hinduised, at 10 million souls.

The mention of Hinduised aborigines perhaps requires some

explanation. The fact is, it is absolutely impossible to draw the line between the various Hindu races and the aboriginal tribes, so insensibly do they merge into one another. In the first place we have no clear definition of what we mean when we speak of a Hindu. Sometimes the term is used in a generic sense, to denote all or any of the inhabitants of India. Sometimes it is used in a religious sense, to designate the great body of the people who are not Mahomedans. Sometimes again a distinction is insisted on between what are called pure and impure Hindus. But what pure Hinduism consists in, and what is to be the shibboleth by which the orthodoxy of the various races of India are to be tried, has never, so far as I am aware, been laid down by competent authority. Now, in Bengal we have a great variety of aboriginal and semi-aboriginal tribes, who have been brought into contact with the Aryan Hindus, and many of whom have been partially civilised by them. Living for centuries side by side, these two elements have acted and reacted on each other. On the one hand the savage tribes have renounced their barbarism and adopted many of the rites and customs of the invaders; on the other the Hindu religion has itself been debased from the Vedic monotheism of the Middle-land. Those who have made the subject their study, tell us that the Hinduism of the present day is as unlike the Hinduism of the Vedas, as we may suppose the modern Bengali ryot is unlike his Aryan prototype. And the cause of this, they go on to say, is due to contamination from aboriginal sources. Hinduism has been lowered from its pure type in order to meet the necessities of the indigenous tribes among whom it took up its home. And the result is, that just as we find at the present day tribes in every stage of civilisation, so does the Hindu religion in Bengal assume a Protean form, from the austere rites practised by the shaven pundits of Nuddea to the fetish-worship of the semi-barbarous Boona. The Bouris, Bagdis, and Chandals of the lower delta; the Kochs and Poliyas of Dinagepore; the Dosadhs and Musahars of Behar, with many others, are probably all of aboriginal extraction, but have adopted as their religion a form of Hinduism, and are now-a-days generally recognised as Hindus. "It is a great mistake," writes Sir G. Campbell, who has given considerable attention to this subject, "to suppose that the Hindu religion is not proselytising. The system of caste gives room for the introduction of any number of outsiders; so long as people do not interfere with established castes, they may form a new caste and call themselves Hindus if they like; and the Brahmins are always ready to receive all who will submit to them and pay them. The process of manufacturing Rajpoots from ambitious aborigines goes on before our eyes, and both in the west and the east many new Hindus exist who are in no degree Hindu in blood."

Some idea of the present state of these aboriginal tribes may be gained by comparing the past history of our own country. In the seventh and eighth centuries of our era, England, as I imagine, presented a very similar appearance, from an ethnical point of view, to that which we find at the present day in Bengal. The Anglo-Saxon invaders spread themselves over the land, and gave their language, their manners and customs, to the aboriginal Welsh whom they had conquered. Some of these Welsh took refuge in the mountains and fastnesses of Strath-Clyde, Wales and Cornwall, where they still preserved their independence and their native speech. But the vast majority were doubtless absorbed by the victorious Saxons into the English nation. Particular tribes lost their individuality, their differences being merged in one common stream, wide enough and deep enough to embrace all. So in Bengal the aboriginal tribes which remained in the plains are fast losing all traces of their origin, being gradually absorbed in the nationality, if I may use the term, of their Aryan conquerors. Only in the hills and in those primeval forests which have proved inaccessible to Hindu and Mahomedan invader alike, do we now find the remnants of those tribes which formerly peopled the whole face of the country. That the great bulk of them have been swallowed up and merged into the nationality of their conquerors, sufficient traces remain to leave no room for doubt.

VI.—*Religions. Mahomedans in Bengal.*

Among the many interesting facts established by the census, one of the most surprising is the extent to which the religion of Mahommed is professed by the people of Bengal. The total number of Mahomedans in the Bengal provinces exceeds twenty and a half millions (20,664,775), being nearly one-third of the whole population. Nor are these twenty millions of Mahomedans distributed throughout the country quite in the manner that our previous knowledge would have led us to expect.* The vast majority of them are found in Bengal Proper, where they number $17\frac{1}{2}$ millions against 18 millions of Hindus. In Behar, where we should have expected perhaps to find them most numerous, they hardly number more than two-and-a-half out of a total population of nearly twenty millions. The fact is that in Bengal Proper, the Mahomedans as a rule are the cultivators of the soil, day-labourers, or the humbler sort of mechanics; and so they do not come so prominently or so frequently under the notice of Europeans as in Behar where their position is reversed, the Mahomedans of Behar belonging mostly to the upper orders and dwelling in towns like Patna, Barh and Behar. Throughout Bengal Proper, east of the line of the Bhagirutty or Hooghly river, the

* Even Mr. Beames has fallen into error on this point. See his "*Comparative Grammar of the Modern Aryan Languages of India*," Introduction, pp. 39 and 40.

Mahommedan element may be said to constitute at least one-half of the population. In parts of that tract, as in the districts of Rajshahye, Bogra, Noacolly and Chittagong, they form as much as three-fourths. These are very remarkable facts, and facts regarding which we have absolutely no historical evidence whatever. How comes it that the Mahommedans are infinitely more numerous in Bengal Proper than in the Upper Provinces of India, and how is it that in Bengal more than elsewhere, they seem to form the cultivating and the labouring class?

I have already spoken of the vast numbers of aboriginal tribes, the remnants of whom are still to be found scattered throughout Lower Bengal. These tribes, swept down the Gangetic valley by the advancing wave of Aryan immigration, were brought to bay, as it were, in the sea-girt province of Bengal. There they were partially incorporated into the Hindu system, or became the slaves of their Aryan conquerors. It would be as great a mistake to suppose that the Aryan invaders exterminated or drove out all the aboriginal inhabitants of Bengal as it would be to suppose that the Saxons exterminated all the ancient Britons who did not flee into Wales. Indeed, so far from displacing the indigenous children of the soil, the Aryan element, as we know, was only able to hold its own by frequent importations of fresh blood from Upper India. In order to exist at all, in fact, Hinduism in Bengal had to assume a baser form than elsewhere. It was compelled to assimilate and adopt the barbarous practices and superstitions of those whom it sought to embrace within its fold. Its Pantheon became crowded with elephant-gods and bloodthirsty goddesses, of whom the primitive Aryans knew nothing. The absorption, however, of the aboriginal in the Aryan element was far from being complete. The indigenous tribes, though possibly admitted into the social and religious system of the Hindus, found themselves at the very bottom of the scale. Under an exclusive caste system, they were merely the despised serfs of a victorious and superior race. They were the hewers of wood and drawers of water, for a set of masters in whose eyes they were unclean and altogether abominable. Such was the condition of these tribes, we may suppose, at the time of the Mahommedan invasion. To such people that invasion would not be altogether unwelcome. In the eye of Islam, at any rate, all men are equal. We can easily understand, therefore, that when once the Mahommedan conquest was extended to Bengal, large numbers of these miserable helots would hasten to profess the religion of their conquerors. They thus not only escaped from their ignoble position under the Hindu system, but they might aspire to be the social equals of their late masters.

A strong proof that this is in reality the true explanation of the large number of Mahommedans now found in Lower Bengal is

afforded by the close resemblance between them and their fellow-countrymen who still form the low castes among the Hindus. That both were originally of the same race seems sufficiently clear, not only from comparisons of physical characteristics, but from the similarity of their language, manners and customs. The Bengali Musalman is still in many respects a Hindu. Caste distinctions, one of the main objects of which would seem to be to prescribe the limits of the *jus connubii*, are to a certain extent as prevalent and as fully recognised among the Mahommedans of Bengal, as among Hindus. As Buchanan pointed out sixty years ago, they not unfrequently meet at the same shrine, both invoking the same object of worship though perhaps under different names. Instead of commencing a letter "In the name of God" (which is the orthodox fashion), the Bengali Musalman will superscribe the name of some Hindu deity. He speaks the same language, and uses precisely the same nomenclature and the same expressions of thought as his Hindu neighbour. Their very names are identical, the prefix of Shaikh alone distinguishing the convert to Islam.

I think, therefore, there is reason to believe that, the Musalman invasion following upon the Aryan conquest of Bengal, before the Hindu religious system had had time to consolidate itself, as in Upper India, large numbers of the old inhabitants of the country, who occupied only a helot position under the Hindu system, embraced the religion of their new conquerors and became Mahommedans. This is, indeed, the only theory by which it seems to me to be possible to explain the existence of so large a body of Mahommedans in Lower Bengal.

Some corroboration of this theory seems to be afforded by a consideration of the census results themselves. One of the most interesting points in connection with the aboriginal tribes is the apparent fact that, so far from their being in process of dying out, as our experience in other parts of the world might lead us to expect, their numbers are under British rule rapidly on the increase. Judging from the number of children among them, as disclosed by the census, they would seem to be the most prolific among Her Majesty's Indian subjects. Among the Sonthals and the Kôls of Chota Nagpore, for instance, children under twelve years of age are remarkably numerous, the census results being confirmed in this respect by the experience of all those who are acquainted with that part of the country. In Bengal Proper the children under twelve compose 33·6 per cent. of the population; among the aboriginal tribes of Chota Nagpore and the Sonthal Pergunnahs they compose as much as 40 and even 45 per cent. Now in the central and eastern divisions of Bengal, where the Mahommedans are most numerous, the proportion of children among them is very considerably in excess of what it is among the Hindus. In the *Dacca* and *Chittagong*

divisions the percentage of children among Mahommedans is as high as 38·2 and 40·4, against 31·5 and 32·2 among Hindus respectively. Such a remarkable difference is not found either in Behar or in Upper India. In Behar the Hindus exhibit a larger percentage of children than the Mahommedans. In the North-West Provinces the children are more numerous among the Mahommedans, but the difference is very slight, the proportion being 33·2 per cent. among Hindus and 33·7 per cent. among Mahommedans. Only in Bengal Proper do we find a striking difference in the comparative fertility of Hindus and Mahommedans. May not the explanation of this difference lie in the circumstance that the great bulk of the Mahommedans of Lower Bengal have been drawn from the aboriginal tribes, and that they still retain to some extent the wonderful fertility which it is proved that those tribes possess, wherever we find distinct communities of them in the present day ?*

In opposition to this theory it may be objected that if the Mahommedans of Lower Bengal are really converts from the helot castes of Hinduism, the same proportion of children ought to exist among those helot castes that have not been converted. Unfortunately, the census tables do not enable us to examine this point, which is one that ought to be borne in mind at the next census. It may be stated, however, that the helot castes in Bengal do not number more than 5 millions, against $12\frac{1}{2}$ millions of purer Hindus; and Aryan influences may possibly have affected the fertility of even the lowest castes of Hinduism.

The Mahommedans of Bengal, as a rule, practise monogamy just like the Hindus, though perhaps divorce and re-marriage is more common among the former. Even granting a laxer morality, however, in this respect, it may be questioned whether it would have a tendency to bring about the result which is under consideration. A lax morality is not generally considered to conduce to a higher degree of fecundity. It should further be mentioned that the Mahommedans of Bengal are the class from which the native sailors are taken, and some might therefore suppose that the comparative excess of children among the Mahommedans of the eastern districts was to be explained by the absence of the adult males on seafaring pursuits. The number of lascars, however, employed in the commerce of the Indian seas, is too small to account for the phenomenon we have observed. It is true that the number of children among

* Children are also found to be very numerous in the Central Provinces, which contain a large aboriginal population. It is stated that "the proportion of children is greater among the aboriginal tribes than among Hindus, and among Hindus greater in those districts in which there is a large aboriginal population than in others;" and the writer of the Census Report considers it "possible that climatic influences are at work, if it be not intermixture of blood between the two races." In the Central Provinces, as in the North-West, the age of each individual was carefully noted.

Mahommedans is greatest in the Chittagong district, which supplies the bulk of the lascars who go to sea, but it is very nearly as great in Sylhet and Cachar, which are not maritime districts at all; while the excess of children, as compared with Hindus, is even greater in Rajshahye and Patna, which are also inland districts. This will be seen from the following table:—

Districts.	Percentage of Mahommedans in Population.	Percentage of Children in Total Population.	Percentage of Children in Hindu Population.	Percentage of Children in Mahommedan Population.	Difference.
Burdwan	17·1	29·4	29·3	29·9	0·6
Bancoorah	2·6	33·6	33·3	33·0	-0·3
Beerbhoom	16·1	31·4	30·6	34·4	3·8
Midnapore	6·2	32·3	31·8	35·7	3·9
Hooghly with Howrah	20·1	31·2	29·1	30·2	1·1
Total for Burdwan Division	12·8	30·9	30·6	31·5	0·9
Twenty-four Pergunnahs	38·4	28·3	27·0	30·1	3·1
Nuddea	54·3	32·9	29·5	35·7	6·2
Jessore	55·5	32·2	30·7	33·4	2·7
Total for Presidency Division	48·2	30·8	28·7	33·0	4·3
Moorshedabad	44·6	32·1	29·3	35·3	6·0
Dinagepore	52·8	35·1	34·7	35·4	0·7
Maldah	46·0	34·6	32·6	37·0	4·4
Rajshahye	77·7	36·1	29·2	37·9	8·7
Rungpore	60·0	32·4	30·2	33·8	3·6
Bogra	80·7	34·4	29·1	35·6	6·5
Pubna	69·9	35·2	29·2	37·7	8·5
Total for Rajshahye Division	61·0	34·0	31·0	36·0	5·0
Dacca	56·7	35·6	31·3	38·8	7·5
Furreedpore	58·1	31·8	29·1	33·8	4·7
Backergunge	64·8	35·8	31·8	37·9	6·1
Mymensingh	64·7	35·4	30·6	38·0	7·4
Sylhet	49·7	37·8	33·3	41·1	7·8
Cachar	36·3	36·0	33·8	40·0	6·2
Total for Dacca Division	59·1	35·5	31·5	38·2	6·7
Chittagong	70·5	39·8	34·1	42·1	8·0
Noacolly	74·7	38·3	31·8	40·4	8·6
Tipperah	64·8	36·4	31·4	39·2	7·8
Total for Chittagong Division	67·4	37·9	32·2	40·5	8·3
Total for Bengal	48·8	33·6	30·5	36·6	6·1

The number of persons professing the Christian religion in Bengal is less than 100,000. Of these some 20,000 are Europeans; 24,000 persons of mixed European and native extraction, and about 50,000 native converts.

VII.—*Sex.*

I proceed now to examine the census results in regard to the sexes of the population. It has been said to be a law of nature that, while slightly more males are born into the world than females, the sexes of adult age are about equal in number. In European countries it has generally been found that the females of all ages are in excess of the males. At the last census of the United Kingdom the females exceeded the males *at home* by 892,088 in a population of 31,628,338, or, after allowing for men in the army, navy, and merchant service abroad, by 663,088 in a population of 31,857,338. In Sweden, Norway and Holland, too, it is found that there are from 104 to 105 females to every 100 males; and the phenomenon is sometimes explained by the maritime position of those countries and the attractions of a seafaring life, which draw away a certain number of the males. The disparity of the sexes in these countries, and especially in the United Kingdom, is also due, in a large measure, to the greater number of males who emigrate to foreign lands. In fact, the phenomenon of a preponderance in the female element of the population is not confined to maritime countries in Europe. At the last census of the German Empire, taken on the 1st December, 1871, the females are to the males in the ratio of 103·7 to 100. The excess of females in Germany, therefore, though less than in England, where they bear to males the proportion of 105·4 to 100, is still considerable; and though it may partly be accounted for by the casualties of the late wars in which Germany has been engaged, it is borne out by what we know of emigration from Germany to the United States of America and elsewhere. In Russia, I find from our *Journal* for September, 1872, the proportion of females to every 100 males of the population is 102·5, in Poland 106·8, and in Finland 105·4. In short, I believe it is accepted as the rule, though of course there are exceptions, that in Europe generally the females are more or less in excess of the males.

In India, on the other hand, it has usually been found that the males are greatly in excess of the females. In the North-Western Provinces the census of 1865 disclosed only 86·5 females to every 100 males; the census of 1872 raised this ratio to 87·5. In Oudh the census of 1869 gave 93·0 females to 100 males. In the Punjab there are said to be only 81·8 females to 100 males; in the Central Provinces 96·6, and in Berar 95·5. So far as our experience goes, then, the females are apparently in a minority all over India. The

disproportion is greatest in the Punjab, the North-Western Provinces come next; then Oudh; and then Berar and the Central Provinces. In Bengal the sexes are very nearly equal, though there is still a slight preponderance in favour of the males. Of 66,672,679 souls, 33,398,605 were returned as males and 33,274,074 as females. There are thus 99·6 females to every 100 males; in other words, the females number 49·9 per cent. of the total population.

Several ingenious theories have been put forward to explain this apparent contradiction between the laws of nature in the East and in the West. Mr. Plowden, a Fellow of this Society, who examined the subject at great length in his official report on the census of the North-Western Provinces in 1865, expressed an opinion that the excess of males was mainly, if not entirely, due to an excess of male *births*, and he drew attention to two theories in explanation of this phenomenon, which have found acceptance with some European statisticians and physiologists. These theories are—

(1.) That the ratio of male to female births varies with the temperature of the climate, the proportion of male births increasing as we approach the tropics.

(2.) That the average difference in age between husband and wife in India being greater than in Europe, the result is a greater proportion of male births.

A proof of the excess of male births has usually been held to lie in the preponderance of the male element among children under a certain age; a little consideration, I think, will show that no great weight is to be attached to this apparent phenomenon. It is quite true that in every Indian census, with one exception, the percentage of males is greater among children than among adults. Thus :—

Province.	Year.	Percentage of Males in the Total Population.	Percentage of Males among Adults.	Percentage of Males among Children.	Difference.
Punjab.....	1868	54·4	54·5	54·2	—0·3
North-West Provinces	'65	53·6	52·4	55·8	+ 3·4
"	'72	53·3	52·7	54·6	+ 1·9
Oudh	'69	51·8	50·5	54·3	+ 3·8
Central Provinces	'66	51·2	49·9	53·0	+ 3·8
"	'72	50·9	50·1	52·1	+ 2·0
Bengal.....	'72	50·1	47·7	54·5	+ 6·8

Now in Bengal the proportion per cent. of adults and children of each sex is as follows :—men, 31·3; boys, 18·8; women, 34·2; girls, 15·7. Thus, although the boys exceed the girls, the adult women are in excess of the men to the same extent, the total numbers of the sexes being nearly equal. This was found to be the case in

every part of the country, the figures presenting an uniformity singularly suggestive of their accuracy. The explanation is, to my mind, simple enough. The natives of India keep no record, and have but the vaguest idea, of their age. Girls arrive at maturity sooner than boys, and thus many of them have been returned as women, whilst males of the same age have been classed as boys. In India girls are married while mere children, and are not unfrequently mothers at the age of 14 or 15. They thus come to be looked upon as women at an earlier age than that at which boys would be considered to arrive at manhood. The large excess of males, therefore, among the children is fictitious and deceptive, and no argument can be based upon it as to an excess of male births. It is far more probable that a large number of girls figure as women in the census returns, and that the proportion of the sexes at different ages has never been correctly ascertained.

Still we have the apparent fact that in India the males are everywhere in excess of the females—an excess which, though insignificant in Bengal, assumes remarkable dimensions in the North-West Provinces and the Punjab. Now, it is a curious circumstance that, amongst children under 12 years of age, the percentage of males is much the same in all provinces (even including the Punjab), for which I have the requisite figures. The average is about 54 per cent. It is therefore amongst adults that we find the greatest variation in the proportion of the males—a variation ranging from 47·7 in Bengal, to 54·5 in the Punjab. But if girls on the eve of maturity are passed off as women in Bengal, we may fairly assume that the same error is committed in other provinces; and as the percentage of males among children is nowhere much greater than in Bengal, it follows that the great deficiency of women noticed in the North-West Provinces and the Punjab must occur among the adults. So far, then, from the excess of males being attributable to an excess of male births, the figures might be used to show that it was rather due to the males outliving the females. In point of fact, however, our Indian statistics are not yet sufficiently trustworthy to justify the deduction of general laws. In Bengal, for instance, as I have explained, the census was an entire novelty, and though, as I believe, the enumeration was made with a fair approximation to accuracy, and though in this respect it will probably be found to bear comparison with any other Indian census, still, until the results have been confirmed by further inquiry, it would be only waste of time to attempt to base physiological theories upon them. Moreover, as the numbers of the sexes are nearly equal in Bengal, the necessity of accounting for any such disproportion as appears to exist in other provinces, does not seem to arise on the present occasion.

The preponderance of males, which has been so marked in previous Indian censuses, is sometimes explained by supposing that the number of women, from motives of fear or delicacy, is understated. If we are to suppose that this has been the case in Bengal, the result would be that the females would to a greater or less extent outnumber the males, and so bring that country into accord with European experience. But, as if to show that this cannot be the true explanation, it has been found that whereas it might be expected that the Musalmans would be the more scrupulous in declaring the true number of their womankind, the excess of males is always greater among Hindus than among Mahommedans. Thus, in the North-West in 1865 the percentage of males among Hindus was 55·37, and among Mahommedans 52·79 only.* In the Punjab there are 81·66 females to every 100 males amongst the Hindus, but amongst the Mahommedans as many as 85·99. In Oudh, 48 per cent. of the Hindu population is of the female sex, and 49·6 per cent. of the Mahommedan. In Bengal there is little difference in this respect. For the whole territory, the males among Hindus number 50·0 per cent. of the population, among Mahommedans 50·3. For Behar, however, if we exclude Purneah and the Sonthal Pergunnahs, which are to a great extent Bengali districts, the figures are in accord with those for the Upper Provinces. Thus the percentage of males in the two communities in the strictly Behar districts is as follows:—

District.	Hindus.	Mahommedans.	Difference.	District.	Hindus.	Mahommedans.	Difference.
Patna	49·2	46·0	3·2	Sarun.....	48·3	48·0	0·3
Gya	49·3	45·8	3·5	Chumparun	51·2	50·9	0·3
Shahabad	48·6	46·8	1·8	Monghyr	49·6	47·9	1·7
Tirhoot	50·1	49·1	1·0	Bhaugulpore	50·2	49·9	0·3

In Bengal Proper, on the contrary, with one or two exceptions which may easily be accounted for, the percentage of males is greater among the Mahommedans than among the Hindus. The exceptions are mainly in the maritime districts of Chittagong and Noacolly, where, as before explained, a certain number of the Mahommedan males are always absent at sea. We have, then, this result, that whereas the figures for Behar are in accord with those obtained for the Upper Provinces of India, the figures for Bengal Proper show little or no difference between the Hindu and Mahommedan communities in this respect, the percentage of males being slightly greater among Mahommedans than among Hindus. May not the explanation of this phenomenon be, that whereas the Mahom-

* The census of 1872 has reduced these figures to 53·5 and 52·1 respectively.

medans of other provinces may to a greater or less extent be said to have a distinct nationality of their own, the Bengali Mahommedans for the most part belong to the same ethnical stock as the Bengali Hindus?

VIII.—*Large Proportion of Children.*

From what I have said above as to the futility of basing calculations upon the returns which the natives of India make in regard to their ages, it follows that any remarks in respect to the proportion of children in an Indian population must be received with considerable caution. The subject, however, is one of great interest, and with this warning, I may be excused if I devote a few minutes to its consideration.

In his report on the census of the North-West Provinces in 1865, Mr. Plowden brought to notice the excessive proportion of children in India as contrasted with European experience; and each successive census in that country has only served to bring the phenomenon into greater prominence. In the North-West Provinces the percentage of children under 12 in the population was, in 1865, 35·58; in 1872, 33·3. In the Punjab it was 35·42; in Oudh, 36; in Bengal, 34·5. In Berar, the age at which children were distinguished from adults was taken to be 13, and the children were found to compose 35·7 per cent. of the population. In the Central Provinces, when the limit of age was 14, the children numbered 39·9 per cent.; with the limit at 12 in 1872, the percentage fell to 38·1.

In England, which, of all European countries, is said to have the highest proportion of children, the percentage up to 12 years of age is 29·85. In every province of India, therefore, so far as we may trust our statistics, the ratio which children bear to the rest of the population is considerably in excess of European countries. The excess is least in Bengal, but even in Bengal the children under 12 would seem to be no less than 15 per cent. more numerous than they are in England. Moreover, if there is any ground for the supposition that a large number of girls have been returned as grown-up women, it follows that the number of children in Bengal is really understated at the above figure, and that some 3 per cent. of the population should be added to it in order to arrive at the true proportion. Thus the proportion of children in the total population would amount to 37·6 per cent. against 29·85 per cent. in England. In other words, three-eighths of the population of Bengal are under 12 years of age, as against less than three-tenths of the population of England. Supposing these figures are no more than approximations to the truth, we must conclude, either that more children are born proportionately in India than in England, or that

life is shorter in the former country than in the latter ; or it may be that both these causes combine to bring about this remarkable result. Looking at the singular uniformity which marks the proportion of children, not only in the several provinces of India, but in the different parts of the same province, it is impossible to reject the figures as altogether inaccurate.

In a paper which I read four years ago before the Social Science Association of Bengal, I made the following remarks, which I may be permitted to repeat here :—

“The wider prevalence, I may say the universality, of marriage in this country will account for a larger proportion of births among the population. Marriage and the raising of offspring is considered a religious duty by the Hindu, and both sons and daughters are early provided for in this respect by all right-minded and orthodox parents. So important is it considered to have male offspring by whom the funeral rites may be duly celebrated, that not only is a second marriage permitted to males, but a pretext is thus found even for polygamy. It is quite possible, again, that owing to the earlier age at which marriage is consummated as compared with European countries, larger families as a rule should be the result. It may, of course, be urged that the interdiction of widow marriages must have an injurious effect upon the increase of the population, but after all, I should be inclined to doubt whether the proportion of Hindu widows at all approaches the proportion of unmarried women in England or other European countries. And we must further bear in mind, that moral restraints upon marriage do not exist in this country. The information which this Association lately collected in regard to the agricultural classes, conclusively shows that marriage takes place as a matter of course, and is scarcely, if at all, influenced by any consideration of the means of living.

“That the rate of mortality in this country is higher than in Europe will only be conclusively demonstrated when a system of mortuary returns shall have been established upon a satisfactory basis. Such, however, is the universal belief of those who have studied the question ; and if we consider the earlier maturity of life in this country, and consequently the earlier expenditure of the forces of nature ; or, if we regard the absence of many of those comforts, or rather necessities, in the way of food, shelter and medical skill, which in civilised countries are such prophylactics to longevity ; or, lastly, if we contemplate those vast calamities, such as famine and pestilence, which periodically devastate whole provinces, we must admit that *primâ facie* there are not wanting causes sufficient to produce such a result.”

I have already remarked upon the large proportion of children

among the aboriginal tribes as well as upon the fact that in Bengal Proper the proportion of children is everywhere greater among Mahommedans than among Hindus. I pass on to examine the question in relation to the sex of the children.

It has been stated that, as a rule, the boys exceed the girls by about 3 per cent. of the population. The following table shows the excess in each division, and in the two great religious classes:—

Division.	Percentage of Boys in Total Population.	Percentage of Girls in Total Population.	Difference.	Difference among	
				Hindus.	Mahommedans.
<i>Bengal—</i>					
Burdwan	17·1	13·8	3·3	3·4	3·9
Presidency	17·2	13·6	3·6	3·1	4·0
Rajshahye	18·8	15·2	3·6	3·0	4·0
Dacca	19·5	16·0	3·5	3·1	3·8
Chittagong	20·7	17·2	3·5	3·2	3·8
<i>Behar—</i>					
Patna	18·3	16·1	2·2	2·1	2·4
Bhaugulpore	19·5	16·7	2·8	2·7	4·2
<i>Orissa</i>	18·9	16·6	2·3	2·2	3·5
<i>Chota Nagpore</i>	21·3	17·3	4·0	4·5	5·0
<i>Assam</i>	18·8	16·9	1·9	1·8	3·5

In every case, it will be seen, the percentage of boys exceeds that of girls—the difference ranging between 1·9 per cent. in Assam and 4 per cent. in Chota Nagpore. In Bengal Proper this difference remains wonderfully steady, ranging as it does from 3·3 to 3·6. In every case, again, the difference is greater among Mahommedans than among Hindus. Either, then, there is a larger proportion of male births among the Mahommedans, or, if we accept the supposition that a certain number of girls are returned as women, more girls are reckoned as women among the Mahommedans than among the Hindus. This is probably just what we should have expected.

On the other hand, these figures may be used to prove that many girls are not returned at all, for it would naturally be expected that if concealment is practised, it would be practised by the Mahommedans to a greater extent than by the Hindus. In other words, the excess in the number of boys over girls being greatest among Mahommedans, and, it may be added, greater among Hindus than among aboriginal tribes, this excess may be attributed to the persistent concealment of the girls. If this were really the case, however, we must recollect that two consequences would follow:—*First*, the equality of the sexes would be impaired; we should have to make allowance for a large number of concealed females, which would result in an excess of females over males, contrary to all Indian experience. In the

next place, we have seen that children are already more numerous relatively among Mahommedans than among Hindus, and if we are to suppose that more girls are concealed among the former than among the latter, the result must be a still greater disproportion in the relative numbers of the children. The explanation suggested, however, seems to me to be quite sufficient. The same motives which would prompt a person to conceal the number of his woman-kind, would prompt him to return them as grown-up women. In the absence of any trustworthy registration of births in India, it is impossible to say whether male births do or do not predominate; and if they do, whether the predominance is more marked among Mahommedans than among other classes of the population. For the present we must be content simply to chronicle our results. Further light will doubtless be thrown upon the subject by the census in other provinces, and the day may arrive when we shall be able to interpret the social and physiological laws which are at work in India with some degree of certainty and satisfaction.

IX.—*Rural Character of the Population. Occupations.*

Dense as is the population of Bengal, an Englishman cannot but be struck by the small number of large towns which it contains. Outside Calcutta and its suburbs, there are probably not more than half-a-dozen towns with a population of 50,000 inhabitants. Calcutta itself is a city of the first rank. In the table appended to this paper, the population is entered at 447,601 souls, but it should be explained that this is really only the population of a part of the town, viz., the old city, for which courts of justice were established by royal charter, but which no more represents the whole of Calcutta than the City of London represents the whole of London. The population of Calcutta, including the suburban towns on both sides of the river Hooghly, is actually from 800,000 to 900,000 souls, according to the limits which may be assumed to mark it off from the surrounding country. The city of Patna has a population of 159,000; Dacca, 69,000; Bhaugulpore, 69,000; Gya, 67,000; Monghyr, 60,000, and Cuttack, 51,000. The supposed great city of Moorshedabad, the seat of the Nawab Nazim and his numerous followers, even if we include some outlying places not properly belonging to the city, has only 46,000 souls; and there are probably not more than a dozen others in the whole country which have a population in excess of 20,000. Even of those named the boundaries sometimes include large rural tracts, and some of them might more justly be described as groups of villages formed into an union for municipal purposes, than as towns in the European sense of the word.

The truth is, the vast population of Bengal is of an essentially rural character. The villages are closely studded and densely populated, but they have no pretensions to be designated towns. The main business of their inhabitants is agriculture. Even where they have been exalted to the dignity of towns for municipal purposes, it is no uncommon sight to find cattle grazing and rice growing in their midst. Some idea of the large proportion of the people who are engaged in agriculture, may be formed by an examination of the occupation table. According to that table, the male adult agriculturists number 12,107,680, or 18·1 per cent. of the total population. Now the male adults, as we have seen, form 31·3 per cent. of the population, so that according to this calculation *at least* three-fifths of the people practise agriculture as their occupation. I say *at least* three-fifths, for, in point of fact, this figure is much below the mark. In the first place, a large proportion of those who describe themselves as shopkeepers or artisans, have nevertheless their little patch of two or three acres of ground which they cultivate with the help of their families in addition to their other avocations. In the next place, a considerable number—probably by far the greater number—of that large and indefinite section who are simply described as “labourers,” ought to be reckoned as belonging to the agricultural classes. Some may be employed in building operations, making roads or railways, or other work not strictly of an agricultural character; but the great majority doubtless occupy the position of farm-labourers. This class numbers as many as 2,659,701, and if they were all classed as agriculturists, would raise the percentage of male adult agriculturists to 22·1 upon the total population. In the third place, as explained in the note to that table, a certain number of those included in the miscellaneous section should properly fall under the heading of agriculture. Taking these points, therefore, into consideration, it is certainly within the mark to assert that at least two-thirds of the people of Bengal belong to what are called the agricultural classes. Agriculture is, indeed, the principal occupation of the province,—the raising of food-grains and other produce, either for home use or for exportation. The staple food of the country is rice, but other cereals are also grown in large quantities, especially in Behar. Among the exports may be mentioned opium, jute, indigo, tea, sugar, and oil-seeds. Opium is grown in Behar, and to a small extent in Chota Nagpore; jute is grown throughout Eastern Bengal; indigo, both in Behar and Lower Bengal; tea in Assam, Darjeeling and Cachar, and (though to a less extent) in Sylhet, Hazareebagh and Chittagong. There are few manufactures of any importance in Bengal. The invention of machinery and the appliances of steam in Europe have ruined what once formed the staple manufacture of

the province and the bulk of the East India Company's annual investment. Instead of the Dacca muslins now finding their way to Europe, Bengal is one of the best foreign markets for our English piece-goods. Even the native weavers are said to prefer English twist to what they can spin themselves, and it is not surprising, therefore, that we find the art of weaving employing a much smaller proportion of the people than formerly. A few mills on the European system, for the spinning of cotton and jute, have been set up in the neighbourhood of Calcutta, but they give employment to comparatively few hands, and the weavers of Bengal are gradually being compelled to take to other and more remunerative pursuits. The whole number of manufacturers and artisans does not exceed 11 per cent. of the population. The most important of these are bricklayers, carpenters, blacksmiths, goldsmiths, weavers, potters, pressers of oil, and basket-makers. This class also includes the dealers in foods and drinks, such as confectioners, greengrocers, fishmongers and milkmen. Thus the number of artisans proper is probably not more than 5 per cent. of the total adult males. Only those arts, indeed, are practised which belong to a comparatively rude stage of civilisation, and their development can only be gradually effected as the country progresses in prosperity and wealth.

Considering the difficulty of fixing accurately the definition of a *house*, and then of inducing some thousands of enumerators to adhere to it, it is not to be wondered that there should be considerable variation in the average number of persons belonging to each household. A Bengali house generally consists of three or four buildings, arranged in the form of a quadrangle, and these separate buildings may be inhabited by different branches of the same family. Indeed, under the Hindu family system, the cognate members of a family, to the third and fourth generation, are often found dwelling together within the same enclosure, if not strictly under the same roof. Taking the average for each district, the number of souls to a house varies from 4·3 in Beerbhoom to 7·6 in Mymensing. The highest averages are found in the eastern districts, where, as we have seen, the proportion of children is the highest. For Bengal, the average is 5·7; for Behar, 6·1; for Orissa, 5·2; for Chota Nagpore, 5·1; for Assam, 5·5. Within the same district, the average for each police circle shows a remarkable uniformity. One curious circumstance, however, is to be noticed in the returns. The average number of souls to a house always seems to be less in circles containing large towns than in purely agricultural districts. In European countries we generally find the proportion of souls to a house greater among an urban population than in rural tracts. In India the reverse seems to be the case. In the Burdwan thannah the great majority of

the inhabitants are collected in the town of that name, and the average is only 3·5. In Hooghly it is the same; in Serampore the average is 4; in Howrah, 4·5; in Behampore, 3·5; in Moorsshedabad the same. The fact is that in Indian towns many of the so-called houses are merely shops, and a large number of the shop-keepers are traders from other parts of India, whose families do not reside with them.

In one point of view these household averages are important. Previous estimates of the population have generally been based upon an enumeration of the houses, each house being assumed to contain a certain constant number of inmates. If then the very definition of a house is uncertain, it will readily be understood that all such estimates naturally rested upon a very precarious foundation. In making such an estimate, two things are necessary. First, a correct definition of a house, to be thoroughly understood and acted on throughout the area under enumeration; and, secondly, a correct average of the inmates according to that definition. It clearly makes a serious difference in the result whether the multiple which represents the average be 3 or 5 or 8. It makes a still more serious difference if this multiple is applied to houses where it should more properly be applied to enclosures, or to enclosures where it ought to be applied to houses. Both these errors have entered into previous estimates. No definition of a house was prescribed or thought of; and the average number of inmates was assumed at pleasure. This may explain to some extent the very wide difference between the results of the actual census as now ascertained and the vague estimates with which the Government has been satisfied for so many years past.

X.—*Conclusion.*

That we have now at length more certain data to go upon, is matter for the most sincere congratulation. Imperfect though they may be in some particulars, the results of the census cannot but exercise a weighty and beneficial influence upon all the details of administration in Bengal. A flood of light has now been thrown upon problems in regard to which we were previously groping in the dark. Now, at length, we are for the first time acquainted with the real responsibilities of our position in those provinces. We see how they teem with human life, far in excess of anything known in Europe, or hitherto believed to exist even in the East. A knowledge of the distribution of the people cannot but assist the administration in supplying their wants and necessities in such important matters as justice, education, health, and the like. In view of the great emergency which now engages the attention of the Indian Government, this knowledge is, as I have said, of the very highest value.

If we contrast the state of affairs in Bengal in 1865 and that in 1873, and consider the various causes which should operate to mitigate the horrors of the present famine as compared with that of 1866, one point, as it seems to me, stands out pre-eminent. The census of 1872 has shown us the true numbers of the people with which we have to deal. In place of vague estimates, the authorities now know exactly how many mouths there are to feed, and they can calculate the quantity of food that will be required. In these calculations one-third of the population will no longer be ignored. The very density of the population, as ascertained by the census, showed the necessity for watching carefully the signs of the times. If the authorities were early on the alert, if the precautions taken to ward off or mitigate the impending calamity have been in any degree more ample and more successful than they were in 1866, may not some credit be taken for the superior knowledge of the country which has been gained by the census of 1872? For my own part, if I am not over-rating these considerations, it is no small satisfaction to think that the work on which I was so long and laboriously engaged, has demonstrated its utility within so short a period. If one of the indirect results of the census proves to be the salvation of a few thousands only from the miseries of famine, I may safely assert that those who lavished time and trouble on that gigantic undertaking will consider themselves amply repaid.

TABLE I.—Area and Population of each District in

District.	Area in Square Miles.	Population.	Persons per Square Mile.	Total Males.	Total Females.	Per- centage of Females on Total Popula- tion.	Adults of both Sexes exceeding 12 Years of Age.
Bengal.							
WESTERN DISTRICTS.							
<i>Burduwan Division—</i>							
Burdwan	3,523	2,034,745	578	995,818	1,038,927	51·1	1,435,999
Bancoorah	1,346	526,772	391	261,690	265,082	50·3	349,846
Beerbhoom	1,344	695,921	518	834,550	361,371	51·9	477,545
Midnapore	5,082	2,540,963	500	1,257,194	1,283,769	50·5	1,718,618
Hooghly with Howrah	1,424	1,488,556	1,045	722,856	765,700	51·4	1,053,874
Total	12,719	7,286,957	573	3,572,108	3,714,849	51·0	5,035,882
CENTRAL DISTRICTS.							
<i>Presidency Division—</i>							
24 Pergunnahs	2,788	2,210,047	793	1,155,759	1,054,288	47·7	1,526,261
Calcutta	8	447,601	55,950	299,857	147,744	33·0	381,051
Nuddea	2,796	2,657,648	950	1,455,616	1,202,032	45·2	1,907,312
Jessore	3,421	1,812,795	530	877,125	935,670	51·6	1,216,322
Total	3,658	2,075,021	567	1,051,126	1,023,895	49·3	1,406,655
Total	9,875	6,545,464	663	3,383,867	3,161,597	48·3	4,530,289
<i>Rajshahye Division—</i>							
Moorshedabad	2,578	1,353,626	525	645,335	708,291	52·3	918,764
Dinagopore	4,126	1,501,924	364	776,431	725,493	48·3	975,103
Maldah	1,813	676,426	373	331,087	345,339	51·1	442,229
Rajshahye	2,234	1,310,729	587	650,586	660,143	50·4	838,104
Rungpore	3,476	2,149,972	619	1,095,026	1,054,946	49·1	1,454,042
Bogra	1,501	689,467	459	347,864	341,603	49·5	452,522
Pubna	1,966	1,211,594	616	602,514	609,080	50·3	785,372
Total	17,694	8,893,738	503	4,448,843	4,444,895	50·0	5,866,136
<i>Cooch Behar Division—</i>							
Darjeeling	1,234	94,712	77	53,057	41,655	44·0	64,458
Julpigoree	2,906	418,665	144	216,893	201,772	48·2	268,041
Cooch Behar	1,307	532,565	407	278,585	253,980	47·7	355,009
Total	5,447	1,045,942	192	548,535	497,407	47·6	687,508
EASTERN DISTRICTS.							
<i>Dacca Division—</i>							
Dacca	2,897	1,852,993	640	905,775	947,218	51·1	1,193,512
Furzedpore	1,496	1,012,589	677	497,854	514,735	50·8	690,102
Backergunge	4,935	2,377,433	482	1,204,237	1,173,196	49·3	1,527,153
Mymensing	6,293	2,349,917	373	1,187,962	1,161,955	49·5	1,517,703
Sylhet	5,383	1,719,539	319	880,330	839,209	48·8	1,079,472
Cachar	1,285	205,027	160	110,373	94,654	46·2	131,317
Total	22,289	9,517,498	427	4,786,531	4,730,967	49·7	6,139,259

Bengal, with Details of Sex and Age, and Percentages.

Children of both Sexes not exceeding 12 Years of Age.	Percentage of Children on Total Population.	Exceeding 12 Years of Age.		Not exceeding 12 Years of Age.		Percentage on Total Population of			
		Men.	Women.	Boys.	Girls.	Men.	Women.	Boys.	Girls.
598,746	29·4	661,104	774,895	334,714	264,032	32·5	38·1	16·4	13·0
176,926	33·6	166,124	183,722	95,566	81,360	31·5	34·8	18·1	15·5
218,376	31·4	218,730	253,815	115,820	102,556	31·4	37·2	16·7	14·7
822,345	32·3	799,461	919,157	457,733	364,612	31·5	36·2	18·0	14·3
434,682	31·2	478,159	575,715	244,697	189,985	32·1	38·7	16·4	12·8
2,251,075	30·9	2,323,578	2,712,304	1,248,530	1,002,545	31·9	37·2	17·1	13·8
683,786	30·9	777,679	748,582	378,080	305,706	35·2	33·9	17·1	13·8
66,550	14·8	262,077	118,974	37,780	28,770	58·6	26·6	8·4	6·4
750,336	28·3	1,039,756	867,556	415,860	334,476	39·1	32·6	15·7	12·6
596,473	32·9	546,109	670,213	331,016	265,457	30·1	37·0	18·3	14·6
668,366	32·2	675,807	731,348	375,819	292,547	32·5	35·3	18·1	14·1
2,015,175	30·8	2,261,172	2,269,117	1,122,695	892,480	34·5	34·7	17·2	13·6
434,862	32·1	408,615	510,149	236,720	198,142	30·2	37·7	17·5	14·6
526,821	35·1	482,736	492,367	293,695	233,126	32·1	32·8	19·6	15·5
234,197	34·6	203,749	238,480	127,338	106,859	30·1	35·3	18·8	15·8
472,625	36·1	388,571	449,533	262,015	210,610	29·6	34·3	20·0	16·1
695,930	32·4	703,602	750,440	391,424	304,506	32·7	34·9	18·2	14·2
236,945	34·4	216,700	235,822	131,164	105,781	31·4	34·2	19·0	15·4
426,222	35·2	369,918	415,454	232,596	193,626	30·5	34·3	19·2	16·0
3,027,602	34·0	2,773,891	3,092,245	1,674,952	1,352,650	31·2	34·8	18·8	15·2
30,254	32·0	36,585	27,873	16,472	13,782	38·6	29·4	17·4	14·6
150,624	36·8	133,584	134,457	83,309	67,315	31·2	32·0	20·4	16·4
177,556	34·3	176,396	178,613	102,189	75,367	33·1	32·6	19·3	15·0
358,434	35·7	346,565	340,943	201,970	156,464	32·9	31·4	19·7	16·0
659,481	35·6	549,442	644,070	356,333	303,148	29·6	34·8	19·2	16·4
322,487	31·8	318,818	371,784	179,536	142,951	31·5	36·7	17·7	14·1
850,280	35·8	738,019	789,134	466,218	384,062	31·0	33·2	19·6	16·2
832,214	35·4	727,616	790,087	460,346	371,868	31·0	33·6	19·6	15·8
640,067	37·3	526,706	552,766	353,624	286,443	30·6	32·1	20·6	16·7
73,710	36·0	69,536	61,781	40,837	32,873	33·9	30·1	19·9	16·1
3,378,239	35·5	2,929,637	3,209,622	1,856,894	1,521,345	30·8	33·7	19·5	16·0

TABLE I.—Area and Population of each District in Bengal,

District.	Area in Square Miles.	Population.	Persons per Square Mile.	Total Males.	Total Females.	Per- centage of Females on Total Popula- tion.	Adults of both Sexes exceeding 12 Years of Age.
Chittagong Division—							
Chittagong	2,498	1,127,402	451	536,059	591,343	52·5	678,149
Noakhally	1,557	713,934	459	362,067	351,867	49·3	440,822
Tipperah	2,655	1,533,931	578	782,891	751,540	49·0	975,507
Chittagong Hill Tracts	6,882	69,607	10	40,883	28,724	41·3	45,782
Hill Tipperah	3,867	35,262	9	—	—	—	—
Total	17,459	3,480,136	199	1,721,400	1,723,474	50·0	2,140,260
Total for Bengal...	85,483	36,769,735	430	18,461,284	18,273,189	49·7	24,399,334
Behar.							
Patna Division—							
Patna	2,101	1,559,638	742	761,877	797,761	51·2	1,048,752
Gya	4,718	1,949,750	413	954,129	995,621	51·1	1,288,414
Shahabad	4,385	1,723,974	393	835,374	888,600	51·5	1,137,981
Tirhoot	6,343	4,384,706	691	2,191,764	2,192,942	50·0	2,873,091
Sarun	2,654	2,063,860	778	996,683	1,067,177	51·7	1,320,550
Chumparun	3,531	1,440,815	408	737,529	703,286	48·8	933,902
Total	23,732	13,122,743	553	6,477,356	6,645,387	50·6	8,602,690
Bhaugulpore Division—							
Monghyr	3,913	1,812,986	463	897,074	915,912	50·5	1,168,761
Bhaugulpore	4,327	1,826,290	422	917,183	909,107	49·8	1,171,387
Purneah	4,957	1,714,795	346	876,320	838,475	48·9	1,131,889
Sonthal Pergunnahs	5,488	1,259,287	229	629,716	629,571	50·0	746,700
Total	18,685	6,613,358	354	3,320,293	3,293,065	49·8	4,218,737
Total for Behar ...	42,417	19,736,101	465	9,797,649	9,938,452	50·4	12,821,427
Orissa.							
Orissa Division—							
Cuttack	3,178	1,494,784	470	725,330	769,454	51·5	978,733
Pooree	2,473	769,674	311	389,449	380,225	49·4	507,302
Balasore	2,066	770,232	373	379,077	391,155	50·8	502,640
Tributary Estates ...	16,184	1,283,309	79	646,205	637,104	49·6	798,479
Total for Orissa...	23,901	4,317,999	180	2,140,061	2,177,938	50·4	2,787,154
Chota Nagpore.							
Chota Nagpore Division							
Hazareebagh	7,021	771,875	110	397,045	374,830	48·6	491,289
Lohardugga	12,044	1,237,123	103	621,548	615,575	49·8	737,823
Singbhoom	4,503	415,023	92	207,926	207,097	49·9	249,149
Maunbhoom	4,914	995,570	203	500,936	494,634	49·7	625,697
Tributary Estates ...	15,419	405,980	26	205,925	200,055	49·3	242,016
Total for Chota Nagpore	43,901	3,825,571	87	1,933,380	1,892,191	49·5	2,345,984

with Details of Sex and Age, and Percentages—Contd.

Children of both Sexes not exceeding 12 Years of Age.	Percentage of Children on Total Population.	Exceeding 12 Years of Age.		Not exceeding 12 Years of Age.		Percentage on Total Population of			
		Men.	Women.	Boys.	Girls.	Men.	Women.	Boys.	Girls.
449,253	39·8	287,648	390,501	248,411	200,842	25·5	34·7	22·0	17·8
273,112	38·3	209,942	230,880	152,125	120,987	29·4	32·3	21·3	17·0
558,424	36·4	482,644	492,863	299,747	258,677	31·5	32·1	19·5	16·9
23,825	34·2	27,994	17,788	12,889	10,936	40·2	25·6	18·5	15·7
—	—	—	—	—	—	—	—	—	—
1,304,614	37·9	1,008,228	1,132,032	713,172	591,442	29·3	32·8	20·7	17·2
12,335,139	33·6	11,643,071	12,756,263	6,818,213	5,516,926	31·7	34·7	18·6	15·0
510,886	32·8	491,394	557,358	270,483	240,403	31·5	35·7	17·4	15·4
661,336	33·9	609,553	678,861	344,576	316,760	31·3	34·8	17·7	16·2
585,993	34·0	522,657	615,324	312,717	273,276	30·3	35·7	18·2	15·8
1,511,615	34·5	1,377,765	1,495,326	813,999	697,616	31·4	34·1	18·6	15·9
743,310	36·0	606,897	713,653	389,786	353,524	29·4	34·6	18·9	17·1
506,913	35·2	466,874	467,028	270,655	236,258	32·4	32·4	18·8	16·4
4,520,053	34·4	4,075,140	4,527,550	2,402,216	2,117,837	31·1	34·5	18·3	16·1
644,225	35·5	553,983	614,778	343,091	301,134	30·6	33·9	18·9	16·6
654,903	35·9	565,131	606,256	352,052	302,851	30·9	33·2	19·3	16·6
582,906	34·0	548,569	583,320	327,751	255,155	32·0	34·0	19·1	14·9
512,587	40·7	359,965	386,735	269,751	242,836	28·6	30·7	21·4	19·3
2,394,621	36·2	2,027,648	2,191,089	1,292,645	1,101,976	30·7	33·1	19·5	16·7
6,914,674	35·0	6,102,788	6,718,639	3,694,861	3,219,813	30·9	34·1	18·7	16·3
516,051	34·5	453,357	525,376	271,973	244,078	30·3	35·2	18·2	16·3
262,372	34·1	250,820	256,482	138,629	123,743	32·6	33·3	18·0	16·1
267,592	34·8	232,933	269,707	146,144	121,448	30·2	35·0	19·0	15·8
484,830	37·8	389,185	409,294	257,020	227,810	30·3	31·9	20·0	17·8
1,530,845	35·5	1,326,295	1,460,859	813,766	717,079	30·7	33·8	18·9	16·6
280,586	36·4	233,750	257,539	163,295	117,291	30·2	33·4	21·2	15·2
499,300	40·4	347,612	390,211	273,936	225,364	28·1	31·5	22·2	18·2
165,874	40·0	119,309	129,840	88,617	77,257	28·7	31·3	21·4	18·6
369,873	37·1	295,433	330,264	205,503	164,370	29·7	33·2	20·6	16·5
163,954	40·4	120,742	121,284	85,183	78,771	29·7	29·9	21·0	19·4
1,479,587	38·6	1,116,846	1,229,138	816,534	663,053	29·2	32·2	21·3	17·3

TABLE I.—Area and Population of each District in Bengal,

District.	Area in Square Miles.	Population.	Persons per Square Mile.	Total Males.	Total Females.	Per- centage of Females on Total Popula- tion.	Adults of both Sexes exceeding 12 Years of Age.
Assam.							
<i>Assam Division—</i>							
Goalpara.....	4,433	444,761	100	229,374	215,387	48·4	291,778
Kamroop.....	3,631	561,681	155	292,688	268,993	47·9	358,552
Durrung	3,413	236,009	69	122,837	113,172	48·0	158,030
Nowgong	3,648	256,390	70	133,107	123,283	48·1	161,878
Sebsaugor	2,413	296,589	123	154,940	141,649	47·8	189,963
Luckimpore	3,145	121,267	39	64,692	56,575	46·6	78,322
Naga Hills	4,900	68,918	—	—	—	—	—
Khasia and Jyn- teah Hills	6,157	141,838	—	68,593	73,245	51·6	84,280
Garo Hills	3,390	80,000	—	—	—	—	—
Total for Assam....	35,130	2,207,453	63	1,066,231	992,304	48·2	1,322,803
Total country inclu- ded in census	230,832	66,856,859	290	33,398,605	33,274,074	49·9	43,676,702
Add for waste, &c.	17,399	—	—	—	—	—	—
Total territory under Lieutenant-Gover- nor of Bengal.....	248,231	66,856,859	269	—	—	—	—

TABLE II.—Population of each Province, classified according to Nationality or Race.

Race or Nationality.	Bengal.	Behar.	Orissa.	Chota Nagpore.	Assam.	Total.
Europeans and other non-Asiatics	17,135	3,305	239	1,517	412	22,608
Eurasians	18,419	1,477	271	53	59	20,279
Non-Indian Asiatics	99,590	2,363	6	3	2,029	103,991
Aborigines, pure	387,157	693,648	367,308	1,290,700	651,765	3,390,578
Semi-Hinduized Abori- gines	5,110,989	2,993,483	572,595	797,176	614,248	10,088,491
Hindus	12,425,750	13,299,908	3,231,799	1,524,277	672,522	31,154,256
Mahommedans	17,608,730	2,636,053	74,466	169,006	176,195	20,664,450
Native Christians	27,705	3,245	3,213	14,226	1,034	49,423
Others.....	415,753	102,619	68,102	28,613	9,189	624,276
Total	36,111,228	19,736,101	4,317,999	3,825,571	2,127,453	66,118,352

Note.—The grand total in this table falls short of that in the preceding table by 738,507. This number represents the population of Cooch Behar, the Western Dooars (90,680), Hill Tipperah, and the Garo Hills, where no classification of the people according to race was attempted.

with Details of Sex and Age, and Percentages—Contd.

Children of both Sexes not exceeding 12 Years of Age.	Percentage of Children on Total Population.	Exceeding 12 Years of Age.		Not exceeding 12 Years of Age.		Percentage on Total Population of			
		Men.	Women.	Boys.	Girls.	Men.	Women.	Boys.	Girls.
152,983	34·4	145,919	145,859	83,455	69,528	32·8	32·8	18·8	15·6
203,129	36·2	185,461	173,091	107,227	95,902	33·0	30·8	19·1	17·1
77,979	33·1	82,770	75,260	40,067	37,912	35·0	31·9	17·0	16·1
94,512	36·9	83,460	78,418	49,647	44,865	32·6	30·5	19·4	17·5
106,626	36·0	99,718	90,245	55,222	51,404	33·6	30·4	18·6	17·4
42,945	35·4	42,023	36,299	22,669	20,276	34·7	29·9	18·7	16·7
—	—	—	—	—	—	—	—	—	—
57,558	40·6	39,882	44,298	28,611	28,947	28·2	31·2	20·2	20·4
—	—	—	—	—	—	—	—	—	—
735,732	35·7	679,333	643,470	386,898	348,834	33·0	31·3	18·8	16·9
22,995,977	34·5	20,868,333	22,808,369	12,530,272	10,465,705	31·3	34·2	18·8	15·7
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

TABLE III.—Occupations of the Males over 12 Years of Age in each Province.

Occupation.	Bengal.	Behar.	Orissa.	Chota Nagpore.	Assam.	Total.	Percentage on Total Adult Males.
Public service	135,368	55,362	28,022	8,632	3,990	231,374	1·1
Professions	272,455	61,302	47,466	7,385	4,152	392,760	1·9
Private service	631,139	344,553	63,318	42,592	25,341	1,106,943	5·3
Agriculture	6,598,322	3,586,031	689,743	711,161	522,423	12,107,680	58·0
Commerce and trade	861,236	253,379	50,086	32,037	20,012	1,216,750	5·8
Manufactures, including artisans }	1,421,585	590,025	205,349	88,415	16,594	2,321,968	11·1
Labourers not specified }	1,180,177	1,041,551	201,203	213,093	23,677	2,659,701	12·8
Miscellaneous	542,789	170,585	41,108	13,531	63,144	831,157	4·0
Total	11,643,071	6,102,783	1,326,295	1,116,846	679,333	20,868,333	100·0

Note.—In Cooch Behar, the Bhootan Dooars, and the Khasia Hills, no account was taken of the occupations of the people; the adult males in those tracts therefore (237,453) are included in the *miscellaneous* class.

DISCUSSION *on* MR. BEVERLEY'S PAPER.

THE CHAIRMAN (Dr. Farr) said that the Society had always taken the deepest interest in India, which was a most important part of Her Majesty's dominions. There was never a period at which our Indian dominions were regarded with more interest than at the present moment. He had to assist in the census of the United Kingdom, and at that time it was suggested that a census should be taken of the whole of the empire. It was found that there were 235,000,000 of people under the dominion of the Queen, living on 8,000,000 square miles of territory. There was a population, he believed, of 196,000,000 in India, and one of the most important questions now occupying public attention was how to feed a large proportion of that population exposed to one of the most dreadful forms of death—starvation. Mr. Beverley's paper could not fail to be of the greatest interest at the present moment, as, notwithstanding all the articles in the newspapers in relation to the famine, the subject, he did not think, was at all understood, and he hoped that the discussion which would follow would throw a new light upon it.

MR. BEVERLEY said, that he hoped to have had a map which would have shown the extent of the famine at the present time, but, unfortunately, it had not arrived. The tract now affected by the famine was the whole of Behar, part of the North-West Provinces, and the upper part of Bengal, extending to the borders of the Brahmapootra; it was also thought that there was some danger to the Burdwan division. One of the worst tracts of the famine was to the north of the Ganges in Behar, and the part worst of all was that bordering on Nepaul and the sub-Himalayan ranges.

The CHAIRMAN asked if Mr. Beverley could tell the usual fall of rain in that district, and the fall during the last year, so as to throw light on the cause of the famine?

MR. BEVERLEY said, that the average annual rainfall was about 60 inches. Last year not more than 2 inches fell during the latter part of the season.

In reply to a question, Mr. Beverley stated that there were no statistics as to the agricultural area of Bengal.

General STRACHEY, R.E., F.R.S., said, that as to the general result of the census of Bengal, he thought it was impossible that such an inquiry could have been better conducted than it had been by Mr. Beverley. From the extremely modest way in which the paper was written, probably some of the gentlemen who had heard it read would not altogether appreciate the fact that the census of Bengal was, absolutely and wholly, the work of Mr. Beverley himself. The instigating force had been Lord Mayo's Government. That there should be no record whatever, up to 1872, of the population of the province of British India which had been longest in our possession was, some people would consider, not altogether a reputable circumstance. At the commencement of Mr. Beverley's paper, he had not altogether stated what perhaps did occur in reference to the undertaking of that census exactly in the way in which an outsider might have done. He did not say there had been an unfair resistance, but certainly there had been an absolute resistance made to the making of that census. It was said it would be impossible, and all sorts of reasons were given why it would be impossible; but Mr. Beverley had shown that it was not so. Considering the extreme difficulties under which a census was necessarily made for the first time in an Indian province, and the enormous variety of population in a country like Bengal, he thought it was extremely creditable to Mr. Beverley and Sir George Campbell's

Government that such a census should have been accomplished. During the whole of the time he (General Strachey) had been employed in the Indian Government, he had taken a great interest in these matters, and had done his utmost to stimulate investigations of that sort, and, amongst others, a similar sort of inquiry, which, up to the present time, had totally failed—an inquiry into the agricultural statistics of the country, which, under present circumstances, in Bengal would have been of inestimable value. There was absolutely nothing in the shape of agricultural statistics of British India. The only way of governing a country well was to acquire a knowledge of the facts under which the population exists, and under which the whole of the operations that conduce to the existence and well-being of the population, are carried on. Without such knowledge, good government was absolutely impossible. Anything that the Society could do to further the acquisition of statistical information regarding British India, would be of the very greatest benefit to the inhabitants of that great country.

Dr. MOUTAT said, that having passed a considerable number of years in Bengal, he desired to say a few words regarding the facts presented to the Society by Mr. Beverley. When he first heard the results of the census, he disbelieved in their accuracy, and thought that they could not possibly be correct. He had frequently traversed the country from one end to the other with his eyes open, he had kept careful notes of his observations by the way, he had studied all previous records on the subject, and was familiar with the calculations of Buchanan Hamilton, of Adams in his Education Reports, as well as the excellent records of the Revenue Survey Department, so far as they were in print, and he believed that he possessed as much knowledge of this great province as any man. As the outcome of this knowledge, although he regarded the former estimates of the population to be too low, he was thoroughly disposed to question the existence of the 67 millions of Mr. Beverley's census.

Since that time he had obtained the "Census Report of 1872," and had studied it carefully, section by section. Testing its statements by his own personal knowledge of the country and the people, he had arrived at the conclusion that, although a census conducted in the manner of that of Bengal must of necessity be imperfect—an imperfection which its author had candidly admitted as to many matters of detail—where it erred, it probably erred rather on the side of under than of overstatement. Considering the habits and strong prejudices of nearly all the nationalities found in Bengal, there were a multitude of reasons against an exaggeration of their numbers, and none for the opposite supposition. He believed, therefore, that the results obtained by Mr. Beverley, might fairly be accepted as an approximation to the truth, as near as could be obtained in existing circumstances.

As to the reasons assigned for the simplicity of the forms adopted, they had his entire concurrence. There were one or two points, however, in which he was somewhat at issue with Mr. Beverley. He (Dr. Mouat) thought that the age of 12 as the limit between childhood and the adult period, if based on physiological grounds—as it probably was—was too low; for among the many fallacies current regarding India was that which exaggerated the premature development of the frame, and the consequently early advent of puberty. This question cropped up incidentally, when the late Mr. Drinkwater Bethune, one of the founders of the Statistical Society, was engaged on the Indian Penal Code. A considerable amount of information was collected for him by Pundit Mudusuden Gupta, the first Hindu Professor of Anatomy in Calcutta, the result of which was, that although the advent of puberty was undoubtedly somewhat accelerated in both males and females, it was not so to the extent generally believed—and that extremely early maternity was more an exception to the general rule than was generally supposed. Hence it seemed to him to be incorrect to class all males and females above 12 years of age as adults. He thought it would have been better, in the absence of specific details of age for every year of early life, to have fixed the standard at a somewhat higher figure, probably 15 years for boys and 14 for girls. The points ought, at all events, to be carefully considered in any future numbering of the people.

Dr. Mouat fully endorsed all that Mr. Beverley had said about the difficulty

of taking a census at all, from the absurd rumours to which any attempts of the kind invariably gave rise. The prospect of increased and novel taxation was not the least mischievous of such rumours. They not only prevailed in distant parts of the country among savage and semi-civilised tribes, but even in Calcutta itself, where the means of obtaining accurate information were within the reach of all classes. The fact of so good a census having been obtained in the face of such difficulties and disadvantages, was creditable to all concerned, and most so to the author of the modest and sensible report, in which his inexpensive and thorough work had been recorded.

Dr. Mouat had heard with particular pleasure the important services rendered by the press, which he had organised in the Alipore gaol some time since, from which several millions of forms had issued, and, without which the cost and difficulty of the census would have been much increased.

He agreed in the main with most of Mr. Beverley's views respecting the nationalities and races of Bengal. He thought that the great fecundity of the aboriginal people was partially due to their marriage at a later period of life, to their more simple manners and better morals, and to their more active life and more varied dietary. He referred more particularly to the Kols and Sonthals, of whom he had seen a good deal at different times.

He was not disposed altogether to concur in the statement that Hinduism was a proselytising religion. Pundits might manufacture sham Rajpoots, but they and all others who fell into the rear of the column were, in reality, without the pale of Hinduism, and nothing could bring them within it. The distinctions between Hindus and Mahomedans in Eastern Bengal was so slight in manners, customs, and religious ceremonies, that the only distinction between them was frequently one of name, for many of both religions joined in the same festivals and with equal fervour.

On the whole he considered the paper one of the most interesting and valuable which had ever been read in that room, regarding the portion of British India to which it related. It would be difficult to over-estimate the importance of having accurate figures in dealing with the great calamity now pending—the Bengal Famine. Estimated by the old figures, millions might have perished from absolute ignorance of their mere existence, and consequent failure to provide food where it was required. As it is, should the calamity assume the proportions now considered probable, a great loss of life *must* result in spite of all the care taken to prevent it.

He had not come prepared to discuss the large question of the famine, nor had he been able to reconcile the conflicting statements made regarding it, beyond the conviction that we were in presence of a great and afflicting calamity.

He would limit his remarks to two points only, the prohibition of the exportation of rice from the port of Calcutta, and the importation of Burmese rice to fill the void.

He thought it a matter of regret that the question had been determined solely from its economic side, because the rules of political economy in their relation to supply and demand were not so firmly established as to be accepted by all men in ordinary times and circumstances; and, it was by no means established, that they were fitted to control and regulate such very exceptional circumstances as the food supply of Bengal at the present time. Moreover, the measure seemed to him to have failed in producing the desired result.

Whether the exodus of the food of the country could have been prevented by any measures short of those adopted, he was not prepared to say; but it ought, he thought, to have been prevented at all hazards—from a point of view which did not appear to him to have been sufficiently considered, viz., the great probability that a new and unaccustomed variety of rice, requiring a different mode of preparation for its assimilation with safety, will be attended with disastrous effects on the feeble frames and lowered vitality of the famine-stricken.

Dr. Mouat had had unhappy experience of the dangers of unaccustomed varieties of food in less difficult circumstances than those of famine, and he confessed to looking with some apprehension on the possibility of the famine-stricken starving in the midst of plenty.

He would have preferred the distribution of the food—for this was one of the

chief difficulties of the famine—through the natural channels of supply of the country, rather than from relief centres. By this means alone could it have reached the remote corners, to which it is not now likely to find its way, and where death will be faced with the quiet, uncomplaining, passive stoicism which is so marked a feature of the Indian character.

He could not help thinking that the whole produce of the grain-producing districts might have been bought up by the Government, without such disturbance of trade as was feared. It would doubtless have cost much money, but when lives are in one scale and money in the other, there should be no hesitation as to which should kick the beam.

He had no desire to criticise in an unfriendly or ungenerous spirit the actions of those whose whole energies as men, administrators and Christians were directed to pulling the people committed to their charge through this difficulty, with the least possible loss of life. It was more easy to criticise at a distance than to act on the spot, and to those who have to bear the heat and burden of the day, our strongest sympathy and support should be given in the execution of a mission of mercy, which needs all the strength and manhood of Englishmen to carry out without fear, and to effect without reproach.

Not the least service rendered to the country in this great crisis has been the census of Bengal, and, if any large saving of life results from the measures adopted, much of the credit will be due to Mr. Beverley and his coadjutors.

Sir GEORGE BALFOUR, M.P., said, he could well understand the difficulties which Mr. Beverley had had to encounter in bringing his census to a close. Sir George Campbell had worthily borne testimony to Mr. Beverley's work, and he knew of no testimony to any man's work that was more worth having. He hoped that a copy of the Bengal Administration Report, in which Sir G. Campbell's opinion was recorded would be procured for the library. He was exceedingly anxious to see more accurate statistics given with regard to India. He had prepared for another place (the House of Commons) a statement of the previous census. Within the last ten years the population of Bengal had been varied from 37,000,000 to 66,000,000. The whole population of India was now given at 40,000,000 or 50,000,000 more than it had been estimated at, in former official statistics. He believed that cultivation was very defective in Bengal, but in Madras, where statistics had been at the command of Government for a series of years, barely 140 acres per square mile were stated to be under cultivation. But this information could not be very reliable, when it was considered that there were in that presidency 31,000 of people to every 141 square miles. Sir George Campbell had reckoned upon half an acre of food cultivation in Bengal for every inhabitant. Last century, according to the report by Mr. Edward Colebrooke, it was calculated that one acre was set apart. Looking at the figures, there were only 27,000,000 of acres under cultivation in Bengal and Behar. Last century, there were 32,000,000 of acres set apart for food, independently of other supplies; so that instead of cultivation increasing with the population, it had fallen off. It was not surprising, therefore, to find the food in Bengal scarce. Another difficulty was the absence of reliable information as to the quantity of rice produced in Bengal. The Society would be doing a great service if they could induce the Government of India to endeavour to find out the agricultural statistics of the whole of India. Looking back one hundred years ago, no one could fail to have seen that the great famine of 1770, came on exactly in the same manner as that of 1873-74. The cessation of rains took place in 1769, exactly the same way as in 1873, and the same results then followed as it was feared would follow now. At least 3,000,000 inhabitants were supposed to have then suffered, and he very much feared that Mr. Beverley's calculations would fall far below the terrible loss that would be sustained. He believed there were few in the room that had ever seen a famine. He had seen one; but he never wished to see another. He hoped that the discussion would have some practical effect in inducing the Government of India to use all possible measures for the prevention of such calamities.

Mr. C. WALFORD asked if Mr. Beverley had any hopes of a system of registration of births, deaths and marriages being introduced into India?

Mr. TRELAWNEY SAUNDERS thought that the necessity of issuing agricultural statistics in India ought to be urged upon the Government. The importance of that would be the more strongly felt, when it was known that Bengal and the North-West Provinces were the sole exceptions among the other districts under British administration in India, that did not return agricultural statistics in some form or another. It was exceedingly remarkable that so important a Government as the Lieutenant-Governorship of the Lower Provinces of Bengal should be one of those provinces of the British administration that was lacking in that respect. He believed the explanation was to be found in the fact that it was due to the permanent settlement.

Mr. J. H. ELLIOTT said, that as he apprehended, there was no part of the world over-fed, and that it had no food to spare, he would ask where was the food to come from, to meet the requirements of the famine?

General STRACHEY said, that he did not come to the meeting with the expectation that the famine in Bengal was to be discussed, but he might say, in answer to Mr. Elliott, that he had seen a telegram which had been sent by the Governor-General of India, in which he stated it as his opinion that there was ample food available in India to meet every possible requirement; and if there was any one who had the means of information on the subject, it would be Lord Northbrook.

The CHAIRMAN (Dr. Farr) said, he could not but commend the zeal that had been shown by their Indian brethren in taking the census. The population returns had a very important bearing on the question of famine. The English census had shown that in purely agricultural counties, the agricultural system, as at present existing, supported about 150 persons to every square mile of territory, and in earlier times, as for instance, in the time of Queen Elizabeth, there were about 83 persons to the square mile. Now there were 390, including all the manufacturing and mining portions of the population, who produced articles which they exchanged for food obtained from America, Russia, and other parts of Europe. So that considering that Bengal had an almost entirely agricultural population subsisting on a remarkably fertile soil, one would expect that more food would be produced, but the population had been bred up to the very highest point, and there were 400 and 500 and 600 people to a square mile of territory. No doubt the produce could be increased by improved modes of cultivation; but great improvements could also be effected in the roads and means of transport, which would equalise the distribution of food. He believed that what Lord Northbrook had said was incontestable—that there was plenty of food in India. The failure was quite partial, the only thing wanted was better means of distribution by roads and railways. Bengal was pretty much in the same situation as Ireland was before the famine. There were $8\frac{1}{2}$ millions of a population in Ireland, who had no claim on the property of the country. There was no effective poor law, and the population increased at a very rapid rate. The landlords living on their rents had no interest in the lives of the people. Bengal was much in the same position now. What was wanted then was some system by which the owners of property in Bengal, should have an interest in the lives of the people. The greatest danger to be encountered now-a-days was not an external or an invading enemy, but one far worse—death by starvation. Of course, if the population increased to such a degree that there were 500 or 600 to the square mile, which could only sustain in comfort 400, there would come a period of failure, and death from starvation must ensue. Unfortunately the people of India thought it their duty to marry at the early age of between 15 and 20. At home, there is scarcely a girl married at that age, or if they are, it is with great danger to themselves and injury to the population. It was a matter of religion in India, that girls and young men too, should be married, not of their own will, but by the will of their parents,

and the consequence is the extraordinary rate of the increase of the population. After the period of famine was over, it would be well worth considering whether the Government of India could not introduce some plan akin to our poor law system, by which the people of India would have a claim upon the property of the country. The intelligent classes would then find their way to discourage the notion that it was a duty to marry so early, and there would be eventually a better population. Dr. Farr concluded by moving a vote of thanks to Mr. Beverley for his excellent paper.

Colonel MAKINS, M.P., in seconding the motion, said that he had known Mr. Beverley all his life. They were undergraduates at Cambridge together at the same college. He was glad that Mr. Beverley's energies had not been crystallised by a college fellowship, but had been devoted to the service of his country. He was glad to have heard the paper and the discussion, because it would enable him the more readily to take part in the debates upon Indian questions. It would be his duty—and it should also be the duty of others who had the welfare of India at heart—to press upon the Government the importance of getting agricultural and other statistics, because, with such information, they would be enabled to deal successfully with such crises as had arisen within the last two months.

Mr. BEVERLEY returned thanks. Replying to the several speakers, he said he would be acting unfairly if he did not state that he had been ably seconded in his efforts in making the census by all the district officers in Bengal, and unless those efforts had been more than seconded by Sir George Campbell himself, he was afraid the census would not have been such a success. There was no one who took a deeper interest in agricultural statistics than Sir George Campbell, who had endeavoured to collect all possible information on this point, although, he was sorry to say, the information had as yet proved very worthless. A staff of deputy-collectors have lately been established for the purpose of collecting information, but he was afraid that unless a regular department was organised, and each district taken separately and worked out thoroughly, there could be no statistics obtained that would be worth the expense.

In regard to the registration of births and deaths outside the limits of the presidency towns of Calcutta, Madras and Bombay, he believed that no system of registration of births existed in India at all. There was at the present time a rough system of registration of deaths through the instrumentality of the rural police. Although the returns were as yet worthless, the minds of the people were getting accustomed to the idea, and in the course of time it was hoped that a regular system would be established. There were peculiar difficulties connected with the registration of marriages, which prevented its being entered into at present, and it was also a subject which touched upon the religion of the people. He thought that Dr. Mouat was under a slight misapprehension in his remarks regarding the age of children as distinguished from adults. That age was not, as he seemed to think, the period of puberty; it was simply the age of 12 years. There was no mention of the age of puberty in the returns. Parents were asked simply whether their children were 12 or below that age, and he thought that the returns were not very incorrect on the subject. In the North-West Provinces, where a census was taken in 1865, the age of every man, woman and child was recorded, and the proportion of children under 12 years of age was very nearly what it was in Bengal. There was no question of puberty; it was simply one of age. The central provinces presented a stronger case. At the previous census the limit of age was 14, and the children numbered 40 per cent. of the population; and when the limit was reduced to 12, the percentage fell 2 per cent. That might not be the strict statistical proportion, but it showed that the people did not treat the question merely as one of puberty.

The motion was unanimously carried.