

CENSUS OF INDIA, 1921

VOLUME VIII



BOMBAY PRESIDENCY



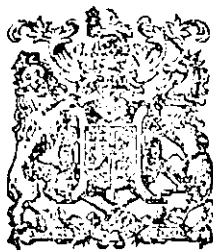
PART I GENERAL REPORT

BY

L. J. SEDGWICK

OF THE INDIAN CIVIL SERVICE

SUPERINTENDENT OF CENSUS OPERATIONS



BOMBAY

PRINTED AT THE GOVERNMENT CENTRAL PRESS

1922

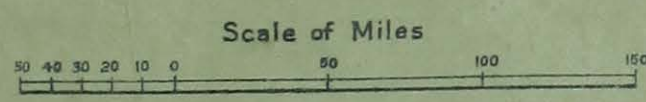
TABLE OF CONTENTS

	PAGE.
INTRODUCTION	
CHAPTER I.—Distribution	i
CHAPTER II.—Cities, Towns and Movements of the Population	1
CHAPTER III.—(after Towns and Villages	42
CHAPTER IV.—Religion (Chapter XI). .. .. .	..
CHAPTER V.—Age	61
CHAPTER VI.—Sex	78
CHAPTER VII.—Civil	102
CHAPTER VIII.—Literary Condition	121
CHAPTER IX.—Language	133
CHAPTER X.—Infirmity	151
CHAPTER XI.—Castes	164
CHAPTER XII.—Birth (Tribe or Race)	178
CHAPTER XIII.—Occupation	191
APPENDIX A.—Vital Statistics	206
APPENDIX B.—Criminal Tribes in Settlements	i
APPENDIX C.—Claims of obscure Language Names	ii
APPENDIX D.—Sindhi and new Caste Nomenclature	viii
APPENDIX E.—Sects and ethnography	xi
APPENDIX F.—Sects of Jains	xiv
APPENDIX G.—Sects of Musalmans	xvi
APPENDIX H.—Public Christians	xviii
APPENDIX I.—Divorced Books	xxiii
APPENDIX J.—Effect	xxvi
APPENDIX K.—The Effect of Irrigation on Population	xxviii
APPENDIX L.—“The Regions of Decay in Ahmedabad and Kaira	xxix
APPENDIX M.—The Jhils—Are they Hindus or Animists?	xxxii
APPENDIX N.—Change of Village and the Unit of Residence	xx
APPENDIX O.—Registration in the Population of Talukas, 1911—1921, studied in connection with the Influenza Epidemic .. .. .	..
APPENDIX P.—Aryas of Decay in the Karnatak and Kanara	liii
APPENDIX Q.—Cost and Brahmos	lix
APPENDIX R.—Density and Ceremonies	lxii
APPENDIX S.—The Index based on Cultivable Area	lxxii
APPENDIX T.—Analytical relation between the Various Causes of Deaths	lxxx
APPENDIX U.—Families of Families	lxxxii
APPENDIX V.—Inventories	xcvi
APPENDIX W.—Attendant Correlation between Prices and Births over a wide Area	cxvi
DISCONTINUED RECONSTRUCTION OF THE POPULATION OF THE AHMEDNAGAR DISTRICT after eliminating the Factor of Famine	cxvii
MISCELLANEOUS SUBJECTS	cxviii
CH 10—A	
ALPHABETIC TABLES	cxviii



BOMBAY PRESIDENCY

Showing
NATURAL DIVISIONS ADOPTED FOR THE CENSUS OF 1921



- REFERENCES.
- District Boundary.....
 - District Head Quarter..... POONA
 - Taluka Head Quarter..... BARAMATI
 - Railway.....
 - Sind.....
 - Gujarat.....
 - Deccan.....
 - Konkan.....
 - Karnatak.....
 - Baroda territory.....
 - Portugese territory.....
 - 1. Part of Punjab.
 - 2. Part of Ahmedabad.
 - 3. The Dangs (Surat Agency)
 - 4. Part of Aundh.
 - 5. Part of Kolhapur.
 - 6. Part of Southern Mahratha Country States.
 - State Territory.....

INTRODUCTION

SECTION 1.—THE FORM OF THE REPORT.

The Report of the 6th Decennial Census of this Presidency consists of six volumes, which are numbered in the Census of India Series as follows :—

- Volume VIII—Part I.—General Report (*i. e.*, the present volume).
- Part II.—Imperial and Provincial Tables.
- Part III.—Report and Tables for Aden.
- Part IV.—Administrative Report.

Volume IX.—Parts I and II.—Report and Tables for Cities of the Bombay Presidency.

Of these the Aden volume has been separately prepared by the Aden Authorities. At this Census, as in the past, the taking of the Census of the Aden Settlement devolved upon me to the extent of having to supply all forms and Instructions for enumeration, and subsequently all slips, registers and forms required for the abstraction of the results. The actual organisation was in the hands of the Chairman, Aden Settlement, who conducted the operations throughout. Under Government Order the expenses of the Census were directed to be shared in equal proportions by the Census grant (Imperial) and the Aden Settlement funds. But it was subsequently decided that, instead of including the Aden figures in each of the Tables for the Presidency and nominally including Aden in the scope of the General Report, the figures for the Settlement should be excluded from all Tables except Imperial Tables I and II, and a separate volume of Tables and Report should be prepared locally. I am therefore not concerned with Volume VIII—Part III.

Volume VIII—Part IV, the Administrative Report, is a technical account of the current Census, written from the Departmental point of view, and is not available to the public.

Volume IX deals with the statistics specially relating to Cities. It corresponds to Census of India Volume VIII, Bombay (Town and Island), 1912. But, whereas that volume dealt only with Bombay City, the scope of Volume IX of this Census has been largely extended. In the first place the special housing Tables previously taken out for Bombay have been taken out this time for Karachi and Ahmedabad, those cities having agreed to the Bombay principle of the Local body sharing with Government the entire cost of the operations. And in the second place such portions of the Imperial Tables as relate only to cities (all cities that is, not merely the three above mentioned) have this time been excluded from the Tables Volume (Volume VIII—Part II) and included in Volume IX.

Volume VIII—Part II contains the main Census figures. And it is those figures which the present volume is intended to discuss. The Title of the Tables Volume has been given as "Imperial and Provincial Tables." It should be explained that in 1901 there were two Table Volumes, *viz.*, one for Imperial Tables (*i.e.*, Tables in which the unit is the District) and the other for Provincial Tables (*i.e.*, Tables in which the unit is the Taluka). In 1911 the number of Provincial Tables was cut down to two, and these, instead of being presented in a separate Volume, were included at the end of the Imperial Tables Volume. But as the title of the Volume was simply "Imperial Tables" the fact that it contained two Provincial Volumes was liable to be lost sight of. The Title given this time will avoid confusion. The Tables remain substantially the same as in 1911, with certain rearrangements in the numbering, some alterations in form, the omission of two minor Tables connected with Occupations, and the addition of several new Industrial Tables. The extent of these changes is indicated in the Tables Volume itself.

SECTION 2.—THE TAKING OF THE CENSUS.

The 6th regular Decennial Census of India was taken on the 18th March 1921. The Census organisation consists of a Census Commissioner for India, with a Superintendent for each of the Provinces and each of the States which are in Political

relation with the Government of India. States which are in Political relation with a Local Government or Administration are dealt with by the Superintendent for the Province concerned. Theoretically any State can stand out of the Indian Census if it wishes; but in practice none do so; and the methods adopted are those laid down for British Territory. The Census Commissioner coordinates the work of the Superintendents, and issues such general instructions as shall insure that the Census in every Province and State is taken in the same way, and shall produce figures which represent the same facts.

The Superintendent gets the Census taken by the District Officers in British Territory and by Officers deputed for the work in the States of his Province. In his dealings with the States he has to correspond with the Political Agent; and this introduces a delaying factor, which is very undesirable and inefficient. In the case of Kathiawar each of the four Prants appointed an Indian of the rank of Assistant or Deputy Political Agent as the Census Officer, and these persons therefore stepped into the shoes of the Political Agent for all Census correspondence. The Political Agents for Bhor and Akalkot arranged that the Superintendent might, instead of corresponding with them, correspond directly with that officer of the State who was deputed to do the Census work. This arrangement was admirable, and saved a great deal of unnecessary delay to the Census, and a great deal of unnecessary post-office work to the Political Agent. At all future Censuses it is desirable that the intermediation of the Political Agent should be everywhere cut out, and the Superintendent be allowed to correspond direct with the State Census officer in all matters of pure Census organisation.

The Census throws a very heavy extra burden on the Districts, which was felt much more at this Census than on any previous occasion, because of the excessive growth of all other work, and the peculiar circumstances existing. The Census would in my opinion be better organised if on future occasions special officers of the rank of Deputy Collector could be placed on this work only in all Districts, and one extra clerk of good calibre deputed in the Taluka Offices. Whether this could be done is entirely a question of what money could be made available. It is really mistaken economy to do any item of work cheaply but badly. There are certain Districts where the Census was done badly, in the sense that there was inadequate organisation at the right moment. The importance of the Census is not lost sight of; but as an example of what I mean I may cite an instance where, at the most critical period, I was informed that nothing could be done in either the District Head Quarters or the Head Quarters Taluka of a certain District because the Commissioner was expected, and the preparations for his visit and that visit itself would involve the whole energies of the staff for ten days. Now, had there been an officer of the District on Census work only, and a clerk in each Taluka office on the same, the visit of the Commissioner would have swept over them without disturbing the even tenor of their work.

After getting our organisation down to the Taluka we have still to find the basic men in the form of Supervisors and Enumerators. The system is built up on the "house". Houses are grouped in Blocks, that being the smallest Census unit, in charge of an Enumerator, who is the individual who actually writes up the schedules. Blocks are grouped into Circles, each under a Supervisor, who is responsible for the work of his Enumerators. Circles are grouped into Charges, under Charge Superintendents, and the Charges together constitute the Census District. The Census District is always the Revenue District, with the Collector as District Census Officer. Each Taluka is a charge (rarely two Charges) with the Mamledar as Charge Superintendent. But, except in a few Districts, any Municipality within the Taluka is separated off as a separate Charge, under its President or Chief Officer.

Under the arrangement suggested by me the District Census Officer would be no longer the Collector at all, but the special Deputy Collector. The Mamledar would still be Charge Superintendent; but, if the special clerk was a good man, his responsibilities and duties as Charge Superintendent would be comparatively light.

The Enumerator used to be always the Village Accountant, supplemented in the case of large villages by extra men, mainly school-masters, pensioners and

shop-keepers. The Supervisors were of much the same class, except that some are obtained from the ranks of the Revenue Circle Inspectors, Government clerks and so on. At this Census for obvious reasons our supplies of Enumerators and Supervisors were scanty and difficult. This did not result in more omissions; but it did result in a much less complete mastery of the very elaborate instructions for filling up the schedules, with the result that mistakes of detail were certainly more numerous than in 1911. The supply of Enumerators and Supervisors will always be a problem. We cannot in India work on the Western system, whereby each householder has a schedule handed to him to fill up, and that schedule is simply collected. Nor, as a matter of fact, is the Western method so good as ours. In previous Censuses, when the instructions were mastered, there is no doubt that the schedules were better filled than western schedules filled up by the householder, who can never be relied on to read instructions. For instance, the wag in Bombay, who filled up the column for language of his infant son as "Not yet identified," had presumably not read the simple instruction that for infants the language of the mother is to be entered. Nor can we pay our staff a satisfactory sum. In British Districts there were 99,816 Blocks and 9,188 Circles. Even such a small sum as, say, Rs. 50 to each man would therefore amount to a huge figure. We can do nothing but refund out-of-pocket expenses, and these (stated in terms of T. A.) are already very large. The problem is likely therefore to be a permanent one. But we may hope that at the next Census the discontent of the Village Officers and the antagonistic attitude of the public will both be things of the past.

Sanads of three Classes were distributed, as at the last Census, to those who had assisted in the Enumeration, otherwise than on whole time pay. This Sanad system would be excellent, were it certain that the documents would always go to the right people. But unfortunately, lack of moral courage often vitiated the judgment of those who had to recommend names,—everyone without exception being put down, irrespective of the quality of their work, in strict order according to their official or social positions. This threw one more burden on the Collectors, who had to cut down the lists without possessing the necessary information, which their subordinates had possessed but failed to use.

SECTION 3.—THE RELIABILITY OF THE FIGURES.

Owing to the difficulties just referred to in Section 2 I have noticed an attitude of scepticism as regards our figures. It is said that the Census must have been incomplete (by which, presumably, is meant proportionately more incomplete than its predecessors); and there has even been one case of a Commissioner suggesting that for purposes of Public Health the present figures should be discarded and estimates framed. There is nothing to support this view. Reference is invited to the Section of the 1st Chapter of this Report in which the Accuracy of the Census is discussed, and still more to the discussions of Influenza mortality. The subsidiary evidence all points to the conclusion that omissions were not proportionately more numerous than before. The details of the columns of the schedules were worse filled; but the actual individuals were entered to the same extent. All Censuses err on the side of understatements. But it is to be remembered that the tendency is for all estimates to err on the side of exaggeration. And the error of the estimates will usually be many times as great as the Census error. For example Bombay City was estimated to have increased to one and a half million. This estimate has nothing to support it. For this reference is invited to Chapter II of the Report on the Cities of the Bombay Presidency, Vol. IX of this Series.

SECTION 4.—TABULATION OF THE RESULTS.

After getting our schedules we have to tabulate the figures. The method which we use is the Slip System. The details for every individual entered in the schedules is copied on to a slip. Main religions are distinguished by the colour of the paper, and Sex and Civil condition by symbols printed on the slips. The other entries are copied by hand, abbreviations being used to some extent. The only variation from this method is in the case of Infirmities, which are separately dealt with. The slips can then be sorted into pigeon holes, labelled for the headings required, and the numbers in each hole, when counted, give the crude figures for the Sorter's unit.

These figures are entered on "Sorters' Tickets," which are in their turn handed over to Compilers, who total them for the units for which representation of the figures is ultimately required.

A number of different Abstraction Offices are required to copy and sort the slips. The supply of copyists and sorters is most difficult; and we largely obtain clerical labour which has been rejected by all other employers. It has been suggested to tabulate in 1931 by machines. For these machines, instead of copying on to slips, cards are punched with holes in certain places, and these cards are then sorted through machines, which, according to the position of the holes, let down the cards into separate compartments. The cards from each compartment are then passed through a second machine, which simply counts them. There are thus three operations—the punch, worked by hand, the sorting machine, working by electricity on cards fed into it by hand, and the counting machine, which, by comparison, is fairly simple and safe. The sorting machine will automatically reject a card which contains an impossible entry, but not one which contains an entry which, though incorrect, is intelligible. Consequently everything depends upon the punching. Now the punching of a hole is an easy thing, but not the deciding what hole to punch. The punched card is final; and classification has therefore to be done by the puncher. This is quite the reverse of our method, by which the copyist has only to copy, and classification is done afterwards by a higher staff—not on the individual entry, but on the totalled number of that particular type of entry. The obstacles to the introduction of the mechanical method are therefore—(1) the difficulty of getting a temporary staff of punchers good enough to classify before punching, (2) the multiplicity of the vernaculars, (3) the fact that the cards are at present only obtainable in the U.S.A., and (4) uncertainty as to how the machines would behave in our climate. It has been suggested that experiments should be conducted in the intercensal period. Certainly, in view of the high cost of tabulation by our methods in this Presidency, where clerical wages are much higher than in the other Provinces, the experiment is worth making. But it is certainly rash to dogmatise on the suitability of mechanical methods of Census tabulation for India at present.

SECTION 5.—CENSUS ERRORS.

Apart from the tendency to deny that the Census is complete there is another tendency to say that our final figures are "cooked". This is far from being the case. The extent to which incomplete entries on the slips are filled up by probabilities in any case is stated in black and white in the opening paragraphs of each Chapter of this Report from III onwards (IV onwards as the Chapters are here printed). Beyond these methods of completing incomplete entries there are no artificial methods employed. The figures are those actually obtained from the schedules.

There are details in which our scheduled entries are inaccurate, for instance Age. Attention is drawn to these in the Report. But in some such cases, for instance Age itself, the errors are approximately constant from Census to Census, and valuable inferences can therefore be drawn even from the incorrect figures. There are other cases, for instance the number of Animists, in which the figures show no rational changes from Census to Census, and are therefore worthless. Lastly there is one case, namely Subsidiary Occupations, in which the figures are not only incomplete but are becoming more so at each successive Census. To all these matters attention is drawn. I have in fact made a special point of taking the reader into my confidence, and not glossing over any points in which the Census figures are to be discounted.

We have also unknown errors. Apart from the unknown absolute shortage of the enumerated population, which is not believed to be higher here than in other Countries, almost every set of figures is subject to errors. When using any Table the reader has to consider (1) what errors are likely and (2) whether they will be compensating. As an example of compensating errors we can take the case of Sex. There are sure to be a few persons, who, being males, were entered by mistake as females, and *vice versa*. But in such a case there is no probable bias, and the errors will therefore balance out. As an example of cumulative or non-compensating

errors we can take the numbers of Rajputs. There would always be a tendency for persons not of Rajput caste to return themselves as such, and there would be no compensating tendency for genuine Rajputs to return themselves as anything else. Consequently our Rajput figures are always too high.

After considering the probable extent and character of errors the reader can next ascertain whether the figures are reliable by finding *whether they show rational changes* from Census to Census. This I consider to be the most important test. As an example of figures which, though known to be incorrect, nevertheless show such rational changes I would cite the instance of the Leprosy figures. This matter is fully discussed in Chapter X. No one would dream of suggesting that the Leprosy figures are the same as would be obtained if a competent staff of medical men could make an entire house-to-house inspection of the whole Presidency. But they show consistent distribution by territory, by age, and by sex; *and figures which do this are capable of statistical treatment, and are therefore of some value.*

SECTION 6.—DANGER OF MISUSING STATISTICS.

I now turn to the silly fiction that "anything can be proved by statistics." That adage seems slow to die. The true fact is that statistics which are correct can only prove what is false if incorrectly used. The classic instance of incorrect deductions is the comparative mortality in different occupations in England. It was proved by figures that the death-rate among Agricultural Labourers was much higher than the death-rate among Glass-workers and Lead-workers, both of them notoriously dangerous trades. This curious result was achieved by neglecting a concealed factor,—in this case age distribution. The reason why the death-rate among Agricultural Labourers is so high is that that occupation is followed by a large proportion of old men,—men that is of those age-periods whose specific death-rate is high,—while the other two trades mentioned are followed almost entirely by men in the prime of life. We can find similar instances in every walk of life. A and B have during the same season batting averages of 97 and 34 respectively. It is therefore argued that A is the better bat, though it was previously thought that he is not so good a bat as B. The concealed factor here is that A played only against inferior bowling, while B played almost always against first-class bowling.

The interest of writing a Census Report largely consists in looking out for these concealed factors. I have detected many. But I can hardly hope that many more have not eluded me, or that those which I have hit on are always the right ones. But there is a fascination about the search, which only those who have tried can appreciate.

SECTION 7.—UTILITY OF THE CENSUS.

The last type of critic with whom we have to deal is the person who denies the advantage of having a Census at all, and says that even civilised countries could get on very well without one. The distinguished position of some of the persons who have told me this during the course of the present operations would surprise the reader, could I but give their names. This view is after all quite natural, because the human mind leans ever to crank ideas; and the pleasantest form of crankhood is to start hurling epigrams at the ninepins of civilisation. Abolitional crankhood is easier than constructional crankhood. There are people who advocate the abolition of intoxicants, the abolition of titles, the abolition of monarchies, or *per contra* democracies, and a million other things. Why not the abolition of the Census? One can never argue with the crank. These remarks are therefore addressed to the possible waverers, who are still able to give intelligent consideration to the problem. The most obvious question is—where would we have been in the great war, had we had no English and French Census figures, and still more no German Census figures to guide us? We should certainly have underestimated the German and overestimated the French potential fighting strength! However, leaving aside big world events of that kind, consider a single city in time of peace. Without a Census will its Corporation be able to judge the number of police required, the necessary extent of every public service, the healthiness or unhealthiness of its dwellings, and a hundred other things? It will be groping in the dark the whole time. Again, a private company proposes to run a railway across a certain

bit of country, or to run a tram service in a town or between two adjacent towns. The first thing that the promoters turn to is the population figures. And it is idle to say that they can be guessed. I have already drawn attention to the characteristic of exaggeration which is a special feature of estimates. And the exaggeration will not be always in the direction of excess. The bias will be to overestimate any known or imaginary movement. Consequently, while, on the one hand, if it is believed that a town is increasing in size, the estimate will exaggerate that increase on the other hand, it is believed that a town, or a tract of country is declining, the estimate will exaggerate that decline. As an example of the latter point let me invite reference to Appendix Q of this Report. For some years there has been an outcry about the declining condition of Kanara. In Appendix Q I have been able to show the extent of the decline and its exact territorial distribution. Estimates would almost certainly have exaggerated the decline, and placed it wrongly on the map. In short, to do without the Census would not bring the world to an end nor would it extinguish civilisation. But it would seriously impair efficiency, and reduce the level of civilisation slightly nearer to the savage. So far from doing away with the Census it would be desirable to have one every year. That Censuses are taken only in every tenth year is due to their cost; and to that only. Actually the utility of every set of Census figures diminishes more and more rapidly as the inter-censal years pass by; and it would be a serious thing for many Departments, for example the Department of Public Health, if they were prevented from revising their basic figures once in ten years.

SECTION 8.—SCOPE OF THE 1921 REPORT.

I now turn to the character and scope of this Report. It is well known that the Indian Census reports of the preceding decades, especially those of 1901 and 1911 devoted their main attention, not so much to the statistical treatment of the figures, as to the incorporation of numerous notes and discussions on the ethnography and anthropology of the Indian peoples. So firmly implanted was the idea of the Indian Census as an Ethnographic enquiry that a friend remarked to me before the operations commenced—"You will find it rather hard, I should think, to write anything new on Indian ethnology." However it was decided that on the present occasion there should be a sort of ban on ethnographic writing, and that any side-line enquiries on this occasion should be rather of an economic type. This was largely due to the remarks of a recent Industrial Commission in India, which made some scathing comments on the absence of economic information in the Census Reports. The question is one of personal point of view. While on the one hand we have the Commission in question writing that economic enquiries "are at least as worthy" of investigation "as the ethnographic enquiries, which have figured so largely in the Census reports of the past", on the other hand we have Messrs. Haddon and Quiggin, in their reedition of A. H. Keane's work, referring to "the magnificent Census reports of 1901 and 1911".* It is impossible in such a case to please everybody. Nevertheless, in view of the completion of the work of the so-called Ethnographic Survey in this Presidency, the decision was no doubt a wise one.

The special form in which, after consideration of various possible methods, I decided to put my economic enquiries, was the "family budget". The agency which I employed was Honorary Correspondents. It is unnecessary to say more; the reader is simply referred to Appendix W, in which the results are fully set forth.

In various other Appendices will be found other matter of a special kind, excluded for convenience from the regular Chapters.

Both in the Appendices and in the body of the Report itself the ideal to which I have tried to attain is a more detailed analysis of the figures themselves than has been attempted in the past. I have tried so far as possible never to suggest a theory without figures to establish it; and in the few cases in which such unsupported theories do occur, it will be found that they require for their proof or disproof figures other than those available in the Census.

* "Man Past and Present," Cambridge, 1920; p. 548, footnote.

SECTION 9.—DIAGRAMS.

A special feature of this Report is the diagrams. The graphic method of representing figures, and facts proved by figures, has received a great impetus in recent years. This being the first time that this method has been extensively employed in a Bombay Census Report I have to apologize in advance for the fact that some of the diagrams are not very happily designed. My successor will have an easier task in this one particular, since he will have my failures to warn him. It is also regretted that of some of the diagrams printed earliest an inadequate number of copies were ordered, so that some are missing from some copies, of this Report.

It ought not to be necessary to apologize for the use of Logarithmic curves. The advantage of this method lies in the fact that proportional changes are thereby shown instead of arithmetic changes. Curves of percentage changes give the same results as Logarithmic curves; but percentages take time to work out, and are not always so suitable as the logs for the result desired to be shown.

SECTION 10.—COST OF THE CENSUS.

Here we find a melancholy state of things. The approximate cost of each of the last three Censuses will have been—

	Rs.
1901	1,70,000
1911	2,10,000
1921	4,64,000

The great rise at this Census is due entirely to the rise in the cost of living—using that term not in the limited sense of the cost of food-grains, but in the wider sense of the general expense of getting a job done. The principal item is wages to the enormous staff of temporary, and rather unsatisfactory, hands that are necessary in the Tabulation stages. But the enormous increase in the cost of paper and printing, and in the amounts demanded for Travelling allowance also go far to contribute to the increase.

The above estimate of the cost can only be fully appreciated if it is remembered that the printing is all done at the Government Presses, which charge nothing for overhead charges or staff. Estimates were from time to time obtained from private presses for various works; and comparison showed that the Government Press charges are quite extraordinarily cheap. The printing is burdensome not so much from its difficulty as from its bulk. Of the General schedule alone more than three million copies were required, and of copying slips over thirty millions.

I wish particularly to thank Mr. E. E. Coombs, the Superintendent of Printing, Messrs. Phillips and Neale of the Government Central Press, Mr. Audy and Captain Howie of the Photozinc Press and the officers in charge of the Jail Press at Yerrowda, together with their respective staffs, for their unfailing courtesy and promptness. Even an inefficient Enumerator, Supervisor or higher officer can muddle through the Census somehow, but always provided that he gets his forms. The printing is the only irreducible essential.

So far as the Districts are concerned it is impossible to single out particular Collectors or other officers for thanks, partly because it would be invidious, and partly because I am not always sure of my facts. Some officers openly profess to pay no attention to the Census, but actually take all steps necessary to efficiency. Others say nothing and do nothing. It is certainly a very heavy burden; and the Superintendent should be the last man to fail to realise that fact.

My cordial thanks are due to the whole of my own staff, and the staff of the Central Compilation Office at Poona, as well as to some of the Deputy Superintendents and others in the various Abstraction Offices. Deserving workers have been recommended to those in whose hands their future fortunes rest. And this I hope will prove more to their advantage in the end than the recital of their names in this place.

CHAPTER I.—DISTRIBUTION AND MOVEMENTS OF THE POPULATION.

PART I.—INTRODUCTORY.

SECTION I.—AREA.

1. This report deals with the Bombay Presidency, excluding Aden (see Introduction), i.e., the British Districts of the Presidency, and those Indian States which are in Political relations with the Government of Bombay.

2. The total area is 186,994 square miles, consisting of the main portions noted below with variations since 1872 :—

	Area in square miles.					
	1872.	1881.	1891.	1901.	1911.	1921.
BRITISH DISTRICTS.						
Sind Districts	46,598	48,014	47,789	47,066	46,986	46,506
Presidency Districts	77,860	76,108	77,275	75,918	75,993	77,035
Total	124,458	124,122	125,064	122,984	122,979	123,541
STATES AND AGENCIES	39,444*	73,753	89,045	65,761	63,864	63,453
Grand Total	163,902	197,875	194,109	188,745	186,843	186,994

* The area for Cutch is blank for 1872.

For comparison I quote the following figures of area of other countries.

	Area in square miles.
British India, excluding Burma	1,571,818
Burma	230,839
Madras	152,875
Afghanistan	250,000
Cape Colony	276,966
England and Wales	58,340
Scotland	30,415
Ireland	32,560

3. The decrease from Census to Census in the area of Indian States has been mostly due to correction of areas through survey operations. There have been a few unimportant intertransfers of territory between States and British Territory. Changes since 1911 are given in detail below.

4. The area included for the Report is unsatisfactory for two reasons,—(1) Sind is separated from the rest of the Presidency not only by distance, but by conditions of every conceivable sort, climatic, racial, linguistic and sentimental—(2) The interspersions of Baroda with British territory vitiates the value of our figures. The only way to get satisfactory results would be to separate Sind altogether, conducting a separate Census for that Province, and to take a joint Census of the remainder of the Presidency and Baroda, as was done in the Census of 1872, before Baroda passed into political relation with the Government of India. At present for an appreciation of Gujarat conditions as revealed by the Census it is necessary to consult both the Bombay Report and the Baroda Report.

5. Since the last Census two new Districts have been formed, one Nawabshah in Sind, and the other the Bombay Suburban District. The former has been in existence sufficiently long for separate figures to be given for it throughout. But the Bombay Suburban District was founded in the autumn of 1920. Consequently for some statistics, such as Agricultural figures and figures of birth-place, it has been found necessary to retain the new District as part of the Thana District from which it was formed. The limits of this District are likely to expand gradually for a considerable time to come. The latest (post-Census) addition—the Ambarnath Taluka—for instance, is an isolated patch in the heart of the Thana District. An important point of a more or less popular kind is whether the figures of this District are to

be counted as "Suburbs" of Bombay, in the same way as suburbs are counted in the case of other Cities and towns. It is well known that in the case of some cities detached portions are sometimes regarded as suburbs and sometimes not, for instance Howrah in the case of Calcutta, and Salford in the case of Manchester. And heated newspaper discussions often result. Bombay, as an island, has always been so definite in boundary that the problem has never before arisen. But there are strong reasons for counting at any rate the South Salsette Taluka as a suburb of Bombay. Many business men reside in Bandra, Kurla, Ghatkopar and Andheri. There are cotton Mills at Kurla. And there is an admirable service of purely suburban trains on both the G. I. P. and B. B. & C. I. Railway systems.

6. The exact changes of territory since 1911 for the various units appearing in the Imperial Tables are shown in the annexed Table. Units in which there has been no change are not shown. It is to be noted that in all cases in which comparison is made in the Tables between population statistics at this Census and at past Censuses the figures for past Censuses are adjusted for changes in area. Where the population in any transferred area is known it is transferred intact. Where the exact population is not known it is estimated on the same proportion to total population of the unit as the area transferred bears to the total area.

Subsidiary Table No. 1.—Changes in Area since 1911.

Unit.	Gain.	Loss.	Net Difference.		Causes of Change.
			+	—	
Bombay Presidency (excluding Aden).	172	21	151	....
British Districts ..	1,134	572	562	....
Bombay City ..	1	....	1	....	Reclamation.
Bombay Suburban Division and District.	142	....	142	....	New Division and District created out of Thana District in N. D. on 1st December 1920.
Northern Division ..	....	142	....	142	See above.
Thana ..	....	142	....	142	
Central Division ..	1,055	14	1,041	....	See below.
Ahmednagar ..	....	3	....	3	Mistake of the previous Census report corrected.
Khandesh East ..	1	....	1	....	One uninhabited village added from Khandesh West.
.. West ..	963	1	962	....	See last entry. Also Mewas Estates treated as Mahal of this District instead of as an Agency.
Nasik ..	....	2	....	2	Uninhabited territory ceded to Baroda.
Poona ..	....	9	....	9	Double addition of Poona Cantonment.
Satara ..	92	....	92	....	Area corrected.
Southern Division ..	....	....	....	....	Corrections due to Survey of Inam Villages.
Belgaum ..	....	2	....	2	Inter-District change due to one village of Belgaum District being transferred to Dharwar District.
Dharwar ..	2	....	2	....
Sind—					
Hyderabad ..	78	558	....	480	3,392 sq. m. transferred to Nawabshah and 225 sq. m. to Thar and Parkar.
..	....	3,617	....	3,617	
Karachi ..	....	551	....	551	Ceded to Cutch State.
Larkana ..	4	....	4	....	Corrections by Survey and changes by river action.
Nawabshah ..	3,889	....	3,889	....	New District out of Hyderabad (3,392 sq. m.) and Thar Parkar (475 sq. m.) and gain of 22 sq. m. due to Survey and river action.
Sukkur ..	35	8	27	....	Gain by river action (29 sq. m.), from Upper Sind Frontier District (6 sq. m.).
Thar and Parkar ..	225	477	....	252	Loss to Bahawalpur (3 sq. m.) to Upper Sind Frontier District (3 sq. m.), and by river action (2 sq. m.).
Upper Sind Frontier ..	26	6	20	....	From Hyderabad (225 sq. m.). To Nawabshah (475 sq. m.) and a mistake of 2 sq. m. corrected.
Indian States and Agencies.	552	903	....	411	From Sukkur (3 sq. m.). By river action (23 sq. m.). To Sukkur (6 sq. m.).
Cutch ..	551	....	551	....	See below.
Other States in the Presidency Proper.	1	903	....	902	From Karachi District in Sind.
					Owing to transfer to Khandesh West of Mewas Estates 903 sq. m. and a mistake of one sq. m. corrected (Jath-Daflapur being 981 instead of 980).

SECTION 2.—UNITS SHOWN IN THE TABLES.

7. The units for which separate statistics are shown in the Imperial Tables have been materially modified on this occasion. At previous Censuses States were shown according to Agencies without regard to their individual size. The result was that while very small States like Surgana and Savanur received separate treatment, large states like Bhavnagar were merged in the general total for Kathiawar. On the present occasion the separate Agencies attached to Districts have been neglected. It is necessary to treat as single wholes the large separate Agencies such as Kathiawar, Mahi Kantha, Rewa Kantha and Palanpur, because these units have a homogeneous official and to a certain extent social and political life. Thus there are Agency Police forces, Agency Courts, and so on. The principle followed has been to give the figures for these Agencies as a whole, and in addition for those individual States within them which have a population of more than 100,000. The same principle has been followed in the case of the unit known as the Southern Mahratta Country States, although the solidarity of the Agency is there probably less conspicuous. For States assigned to all other Agencies the principle followed has been to treat as distinct units all States with a population over 100,000, and to amalgamate the remainder in one unit. To this an exception was made in the case of Cambay, which, on account of its isolated position has been treated as a unit.

8. The Khandesh Mehvas Estates, which had been treated (apparently incorrectly) as an Agency in previous reports, have been treated this time as a separate Mahal within the West Khandesh District. These estates have no political status, either singly or together.

9. It would of course be an advantage to get the separate figures of every State for every Table. For instance it will be seen in the Chapter on Language that I have made use of the figures for Surgana State, as tabulated in 1911 and 1901. But space and time have both to be economized; and wider considerations dictate the desirability of treating a State of the size of Bhavnagar as a unit rather than one of the size of Surgana.

SECTION 3.—NATURAL DIVISIONS.

10. Throughout the Tables Volume the District figures are grouped into Divisional Totals according to Administrative Divisions. But for the purposes of this report they are grouped according to *Natural Divisions*. It is open to question whether this method is sound, and there are strong arguments on both sides. In 1891 Mr. Drew used Natural Divisions in his report. In 1901 Mr. Enthoven abandoned them, giving two grounds—first, that while figures are constantly required by administrative areas they are never in practice required by units of natural geography, and secondly, that the natural divisions themselves, if their boundaries are made co-terminous with Districts, or even Talukas, are necessarily unscientific. He therefore abandoned the arrangement altogether and gave his figures in his Subsidiary Tables in a simple list of Districts without striking totals by either method. Mr. Mac Gregor reverted to Mr. Drew's system. I have myself adhered to the same arrangement though not entirely convinced of its soundness. The natural divisions themselves vary much in homogeneity. Sind requires no comment. The Karnatak is a fairly sound division, happening to be so largely because there is a belt of State territory dividing it off from the Deccan division on the north. But on its southwest corner it passes by imperceptible gradations into the conditions prevailing in the above-ghat portions of Kanara. This objection affects the Konkan division in the same way. That division would be almost exactly natural if the boundaries of Kanara coincided with the crest of the ghats. It is impossible however to break up Districts, and Kanara must therefore either stay in the Konkan division or constitute a separate one of its own. The Deccan division is satisfactory except for the inclusion of Khandesh, which is historically, and to a certain extent naturally, distinct. But there are parts of Nasik which pass gradually into Khandesh; and the breaking up of districts being impossible, and the multiplication of divisions undesirable, there is no option but to leave Khandesh in the Deccan. The last division, Gujarat, is, however, hardly "natural". There are extreme differences between the Pardi-Bulsar rice country, the uplands of Dohad, the

alluvial sand of Ahmedabad, the rocky wooded hills of Modasa, and the black soil plain of the Bhal. But if not one Division Gujarat would have to be many. And as against its physical variability it must be remembered that it is bound together by the ties of language and sentiment. Consequently I have in all cases retained the scheme used in the last Census. Against Mr. Enthoven's first argument it may be answered—first that in the Tables Volume the absolute figures are given throughout by administrative divisions, and secondly, that readers of this report are expected to be either officials to whom the administrative arrangements of the Presidency are perfectly familiar, or outsiders who are not concerned with them, so that in neither case will confusion be caused by the redistribution of the Districts. Lastly, their adoption will facilitate the breaking up of India generally into Natural Divisions in the Census Commissioner's report, as was done in 1911, and was expected to be done again this time.

SECTION 4.—MEANING OF "POPULATION".

11. There are two kinds of population for statistical purposes—the *de jure* population and the *de facto* population. The *de jure* population means those persons who are normally resident in any locality, including those temporarily absent and excluding those temporarily present; while the *de facto* population means those persons who are found actually present in the locality at a particular point of time. The Indian Census is a *de facto* Census, and represents on this occasion the persons recorded as present at the final enumeration between 7-0 p.m. and midnight on the 18th March.

12. To this however there is the exception of the non-synchronous tracts, which are regions in which for various causes it is considered necessary either to take the final count in the day times or not to take it at all. These tracts at this Census were (succinctly stated) as follows:—

Final count taken, but not at the usual hours—

(1) Thana	.. Part of Mokhada Petha.
(2) West Khandesh	.. The whole Navapur Petha, and 5 Mevasi villages.
(3) Nasik	.. Parts of Peint and Kalvan Talukas.
(4) Kanara	.. 147 villages in the forest tracts.
(5) Karachi	.. Eight different regions.
(6) Larkana	.. Parts of six Talukas.
(7) Sukkur	.. Parts of three Talukas.
(8) Thar & Parkar	.. Parts of three Talukas.
(9) U. S. Frontier	.. Parts of Shahdadpur Taluka.
(10) Cutch	.. Banni State.
(11) Reva Kantha	.. Parts of Rajpipla State.
(12) Surat Agency	.. The whole of Dharampur State; parts of Bansda; and the whole Dang.
(13) Surgana State	.. Parts.
(14) Khairpur State	.. One Taluka.

Final count dispensed with—

Poona	.. The Mulshi Petha except Paud Town.
West Khandesh	.. The Akrani Petha and Kathi Estate.
Mahi Kantha	.. The Dungri Bhil areas of Polo and Idar States.

No regular Census. Rough estimates framed, but the schedules afterwards filled in by inquiry—

Mahi Kantha	.. The Dungri Bhil area of the Danta State.
-------------	---

13. Exact details are given in the Administrative Volume. The only important departure from previous practice was the inclusion of the whole of the Mulshi Petha owing to its disturbed condition at the time of the Census.

14. The Census of these non-synchronous tracts is not, however, even in the extreme case of the abandonment of the final count, a *de jure* return of the population, but a *de facto* return taken on various dates. In the extreme case the entries for any house will be the persons actually present when

the enumerator called for the preliminary enumeration. Orders were given to remove subsequently all deaths and add all births up to the date of the Census. But this order is not likely to have been exactly attended to. The objection to not taking this precaution is that there must otherwise be a deficiency in the lowest age group and an excess spread mainly over the higher ones. But the resulting error is very small and can be neglected.

15. The true *de jure* Census, which is the type followed in many of the most important countries of the world, records for any person his normal residence, and he is counted in the final statistics to the locality where the normal residence belongs, and not to the locality in which he was enumerated. It is not always an easy task to determine the normal residence, as for instance rich people who have a town and a country house. In the fourteenth American Census it was found that thousands of well-to-do people, who have their usual places of residence in the Northern states, go for the winter to Southern California and Florida, some of them regularly spending several months in these parts.* Apparently the *de jure* Census need not be taken absolutely synchronously.

16. In Portuguese India the method followed is to record for every house, first those normal residents who are present, then those normal residents who are temporarily absent, and lastly those abnormal residents who are temporarily present. To distinguish the last two classes the words "absent" and "transitory" are entered in the margin. But the Census is just as exactly synchronous as our own.

17. The adjusted statistics of temporary migrants, with an analysis of their occupations and ages, should give very interesting results. On this occasion the East Deccan was partially deserted owing to famine; and under the *de jure* system we could have determined the normal population of those parts with fair accuracy. At present we have to rely on birth-place statistics for studying migration. But this, in India, is very unsatisfactory, owing to the constant habit of married women returning to their father's house for their first confinement. On the other hand with an illiterate population, a large number of temporary migrants such as the Bombay mill-hands, and a considerable body of vagrants, mendicants and travellers, it might be a troublesome business to record normal residence. Birth-place is a definite fact. But normal residence is matter of opinion.

18. A *de jure* Census of Bombay City would almost certainly give a much lower population figure than our present *de facto* count; though the figure so obtained would on the other hand be probably a more sound basis for calculating the birthrate.

19. On the whole I am disposed to think that a *de facto* Census is the most suitable kind for India.

SECTION 5.—ACCURACY OF THE CENSUS.

20. Questions are often asked as to the degree of accuracy which can be attributed to the Census figures. So far as the absolute numbers are concerned there is, of course, no doubt whatever that actually, though not necessarily comparatively, large numbers of persons escape enumeration; while on the other hand the converse case of persons enumerated twice must be so rare as in no way to counterbalance the omissions. A point of importance is that omissions occur more and more frequently as we ascend the social scale. In the lonely forest tracts the Census is almost exact. In towns, owing to the rapidly changing population, the degree of inexactitude increases. This must inevitably tend to put our figures for such a factor as Literacy slightly out of gear, omissions being more frequent among the literate who live in towns and travel than among the illiterate, who live in villages and stay at home. But the error in such a factor is probably very small. There is also little doubt that proportionately more Europeans are omitted than Indians. Not only are Europeans

* Quarterly Publ. of the Amer. Stat. Assn. March 1921, p. 572.

more intolerant of State interference than Indians, but the Englishman in this country and especially in Bombay, moves about rapidly, and lives under conditions which render his enumeration especially difficult. For instance the constant stream of passengers passing through Bombay on their way to or from Europe are a type very hard to catch for enumeration. The omissions under the limited head of "Europeans not resident in Bombay but present on the Census night" might, I fear, amount to ten per cent. But of course this error is almost negligible in the figures of Europeans as a whole, and absolutely negligible in the grand total even of Bombay City alone. Travellers by rail are also difficult. The completeness or otherwise of their returns depends on the local efficiency or inefficiency of the Census (and particularly the Railway Census) staff. Theoretically, if everyone did their bit as laid down in the regulations, there would be no omissions. But human nature varies. For instance, to take the instance of two important Railway Stations, which shall remain *in-cognito*.—At one admirable arrangements were made. There was a sufficient number of male and female enumerators invested with badges. And the total of persons enumerated on the platforms throughout the night indicates completeness. At the other, in spite of reminders, the arrangements were bad. The number of enumerators was quite inadequate. And total of persons enumerated clearly indicates numerous omissions. At the same time the wholesale allegations of vast numbers of omissions which is characteristic of a certain type of critic, are certainly unjustified. A fair number of educated gentlemen reported after the Census that they had not been enumerated. In the majority of these cases their names were actually traced on the schedules. One last instance. A gentleman who had travelled by a certain train informed me on the morning of the 19th March that that train had not been stopped for enumeration at 6.0 a.m. as laid down in the Code. Subsequent reference to the Abstraction office concerned showed that there was a regular enumeration book for that train with nearly 200 persons in it. The gentleman in question had, on his own admission, been enumerated at the station of departure and carried a pass. Obviously he had not been woken up by the guard.

21. Nevertheless I have no hesitation in admitting that the present Census was certainly (as seen from the actual schedules) somewhat less accurate *in detail* than those of the past, and must therefore *a priori* have been to some extent less complete in actual numbers. I have already adverted to this point in the note on the preliminary totals, and have discussed it at length in the Administrative volume. The Indian Census System is based on the assumption that Government, Railway and other public servants are perfectly obedient and have ample time. Up to 1901 and even 1911 the docility and devotion to duty of the Indian services was possibly unexampled. This census was taken at a time when discipline has more or less broken down throughout the world, when India is disturbed by political chimeras, and when the cost of living does not induce people to do something for nothing. It would not be in place in this Report to discuss the matter in more detail. For the moment the subject is mentioned only by way of saying that the effect of these world changes and these peculiarities of Indian conditions have probably increased the actual omissions at the 6th Census *by only a very minute fraction of the total population*. This will, I think, be considered a fair deduction from the following salient facts. The net Influenza mortality in the autumn and winter of 1918-19 alone, and in British Districts alone, not counting Bombay City, is estimated for the purposes of this report at 1,006,658. The recorded mortality for 1918 in British Districts exceeded the highest previously recorded mortality for any one year (1901) by 405,891. Yet the actual decrease of population recorded in British Districts at this Census is only 358,382.

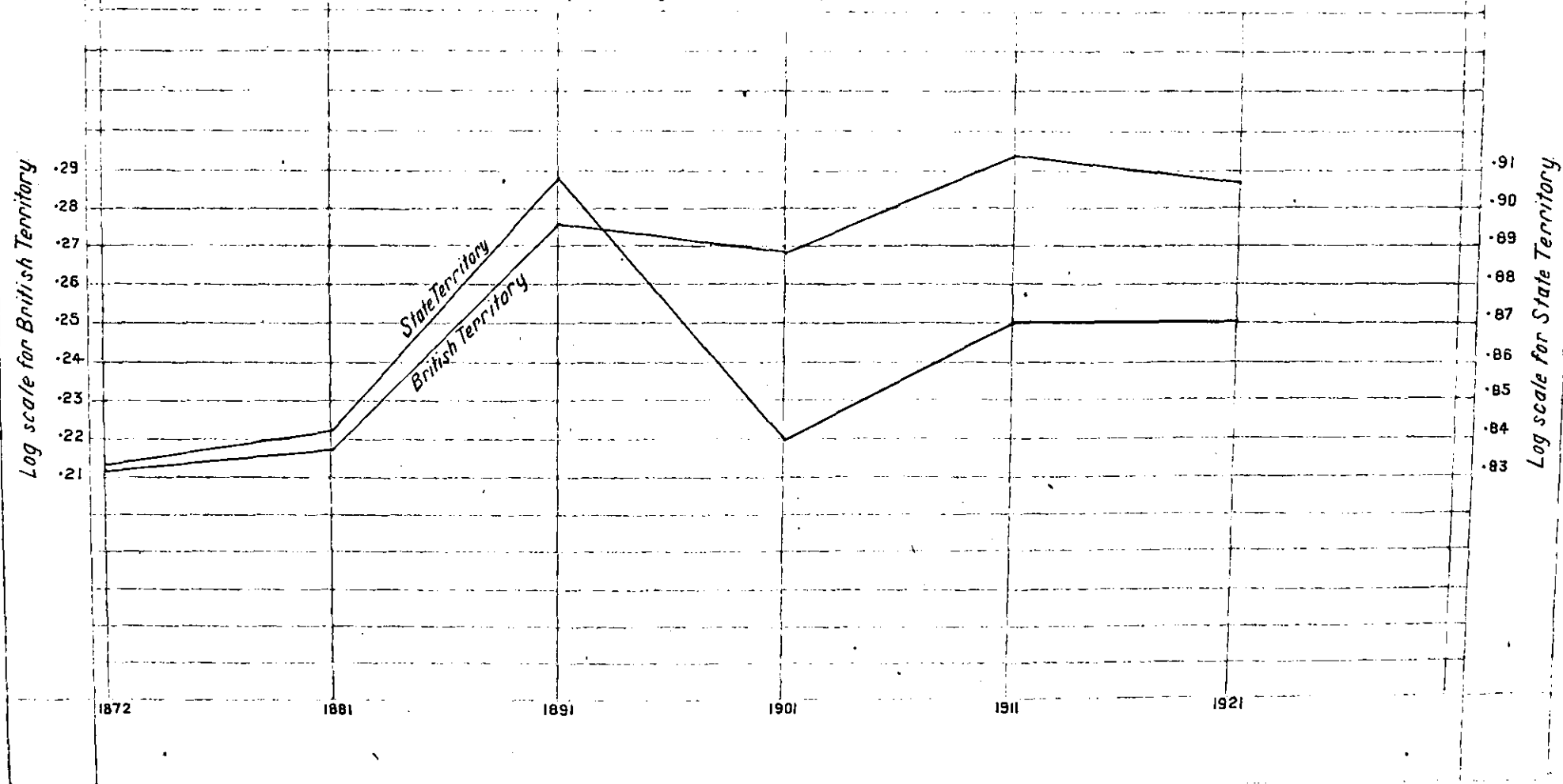
PART II.—POPULATION CHANGES.

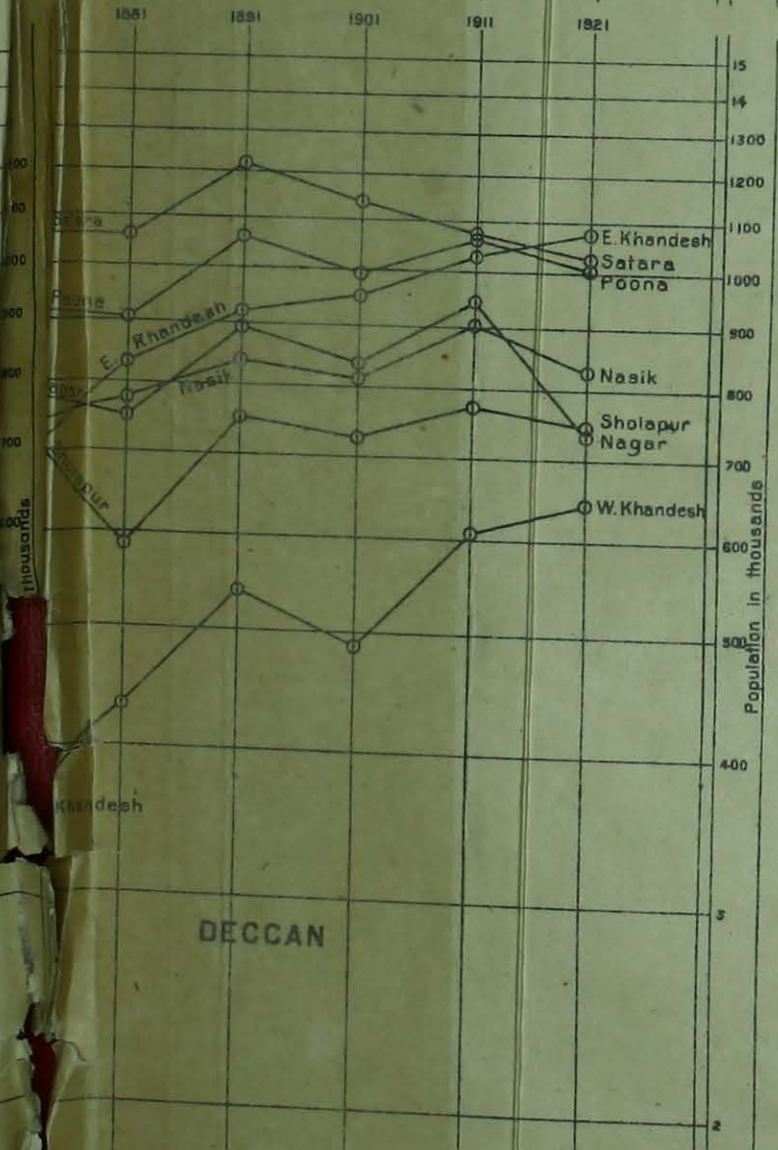
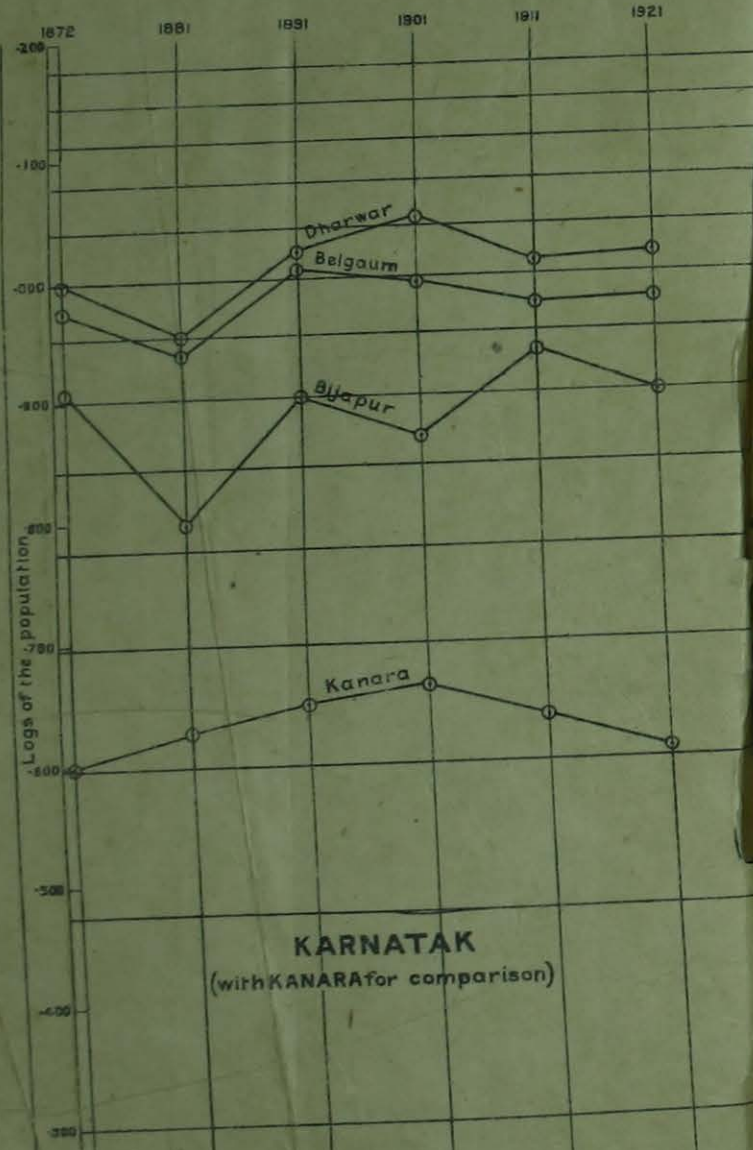
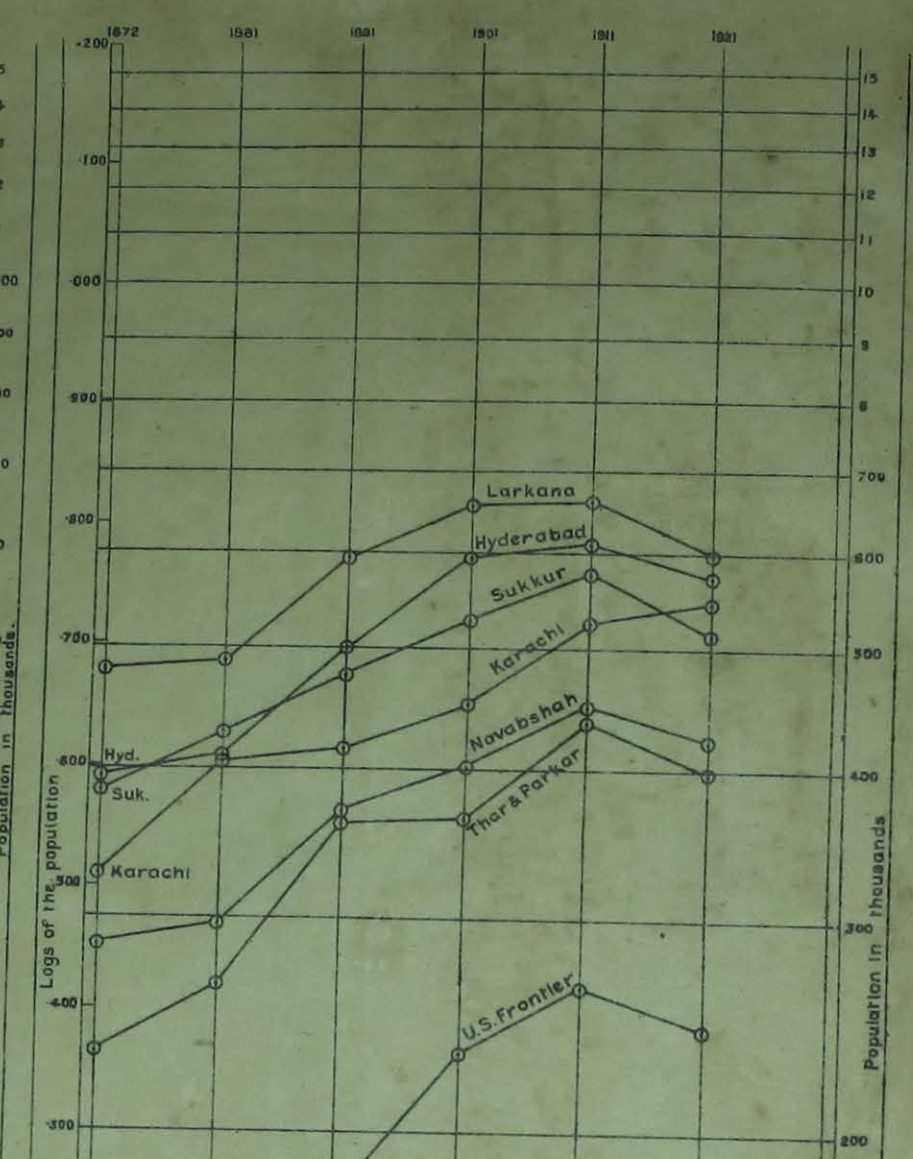
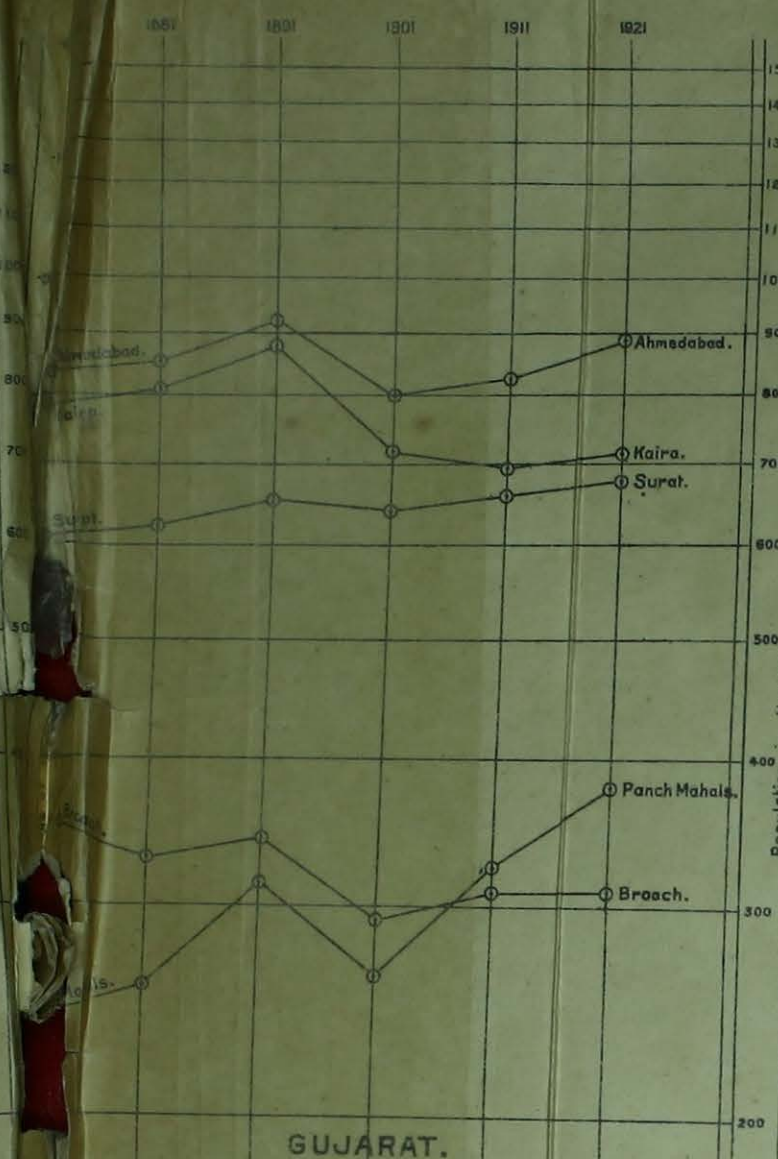
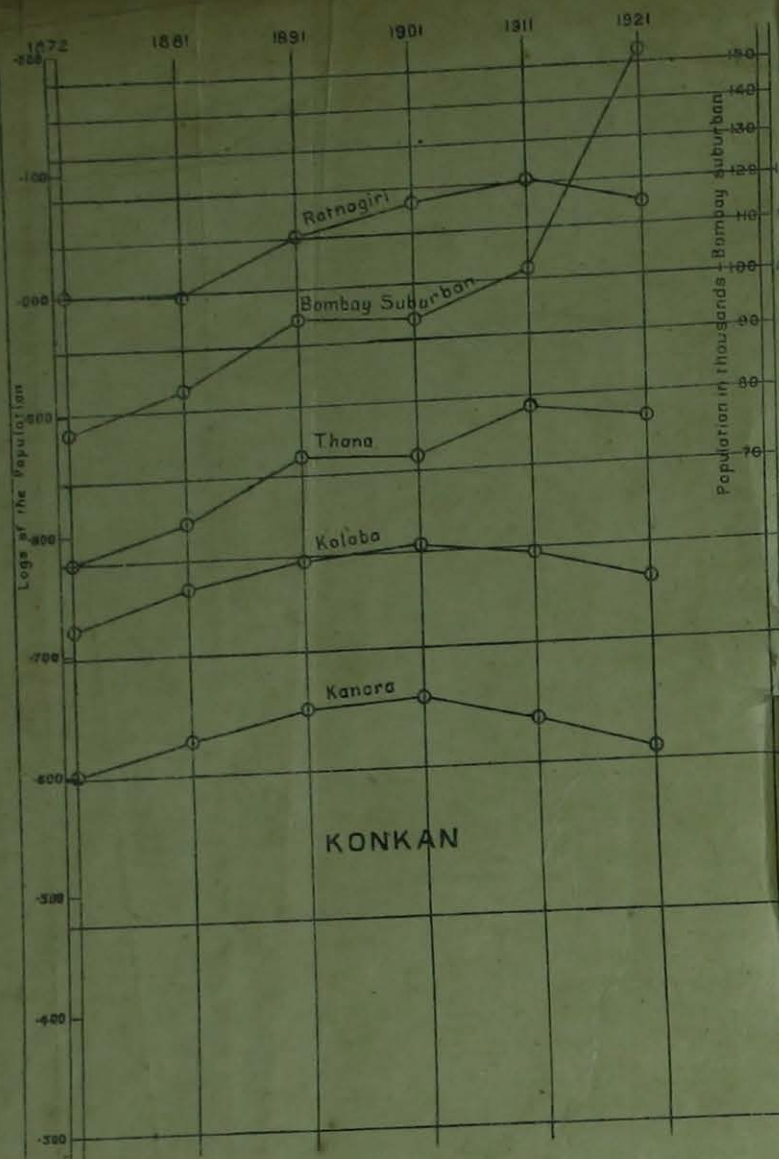
SECTION 6.—CHANGES SINCE 1872.

22. Prior to the war the population of England and Wales had risen with such regularity that it could be safely predicted at each Census not only that the population would be higher than in the Census before, but approximately how much higher. In the case of India the successive Censuses have only shown continuous

PROPORTIONAL CHANGES IN POPULATION OF [I] BRITISH TERRITORY, & [II] STATE TERRITORY 1872-1921.

The scales in the margin show the logs of the population in ten thousands.





PROPORTIONATE CHANGES IN THE POPULATION OF BRITISH DISTRICTS 1872 - 1921

as shown by curves of the logs of the populations.

—◇—

Equal slopes in the curves mean equal proportional increases or decreases. A slope of 45° represents a rate that would double or halve the population in thirty years.

increases after the Provincial irregularities have been eliminated in the grand total. In the case of most Provinces the movement of the figures has not been regularly upwards. The annexed Table shows for comparison the population changes in England and Wales, India, and the Bombay Presidency.

Year.	Population in millions.		
	England and Wales.	India.*	Bombay.
1801	8.2	....	....
1811	10.2	....	....
1821	12.0	....	....
1831	13.9	....	....
1841	15.9	....	....
1851	17.9	....	....
1861	20.0	....	....
1871	22.7	....	23.0
1881	26.0	253.9	23.4
1891	29.0	287.3	27.0
1901	32.5	294.4	28.5
1911	36.1	315.1	27.1
1921	47.9	318.9	26.8

* The figures for India are affected by the addition of new territories at various times.

† Provisional. ‡ 1872.

The course of the changes in this Presidency is directly attributable to obvious and known causes. Between the years 1872 and 1881 came the famine of 1877, one of the worst ever known, but confined to South India. As a result the population at the 1881 Census fell sharply in the Karnatak Districts and States and the adjacent eastern Districts of the Deccan, this fall counterbalancing a rise in other regions. Between 1881 and 1891 was a decade of marked prosperity, with absence of famine or epidemics. Consequently at the 1891 Census every district and every State showed a marked rise. Between 1891 and 1901 came the first assaults of plague and the great famine of 1899-01 which affected mainly Gujarat, Khandesh, the North-East Deccan, and the South-East of Sind. Consequently every District and State in Gujarat showed a marked fall due to famine and some of the Deccan and Karnatak Districts a fall due to plague. Between 1901 and 1911 was a period of prosperity on the whole without any marked famines (moreover by this time famine had ceased to cause direct loss of life by starvation), but with a continuance of plague varying in its severity region by region. As a result there was a rise in most districts, modified by local falls in others, attributable almost with certainty to plague.

23. The diagrams annexed show first the proportionate increase and decrease in (i) British Districts and (ii) State Territory from 1872 to 1921, and secondly the proportionate increase or decrease in all British Districts as compared with one another. It will be seen that while the British Territory as a whole recovered rapidly from the effects of the 1899 famine, the State Territory has never yet recovered. This is due to the fact that the State territory is mainly in the North of Gujarat. When we examine the figures for British Districts in that region we notice that some districts have never recovered. Conspicuous among these is Kaira, which apparently never will recover. Kaira had a population of 8 lacs in 1881, and 8½ lacs in 1891. The "chappanya" famine sent its population down to 7 lacs in 1901 and it has remained at that level ever since. The condition of Ahmedabad is really the same, but is obscured by the deceptive influence of the rise of the city population.

The figures of Kaira and of Ahmedabad (after deducting the City) from

	Kaira.	Ahmedabad.
1872 ..	782,938	703,726
1881 ..	805,005	722,078
1891 ..	871,794	761,841
1901 ..	716,332	596,358
1911 ..	691,744	595,022
1921 ..	710,982	626,904

1872 to 1921 are shown in the margin. The great Agency Territories of Palanpur and Mahi Kantha show the same phenomenon. (Appendix M. entitled "Regions of decay in Ahmedabad and Kaira" should be consulted.)

24. In marked contrast to the region of decline stands the Panch Mahals, Reva Kantha and West Khandesh. A glance at Imperial Table II will show that the 1899 famine came to these regions,—not as a permanent blow as in Kaira, but as a mere temporary set-back in a great era of advance. The two British Districts had recovered from the famine in twenty years, Reva Kantha in thirty years. In round thousands the populations of these tracts in 1872 and 1921 were 1,107 and 1,770 respectively. The cause may be twofold. (i) a greater recuperative power in the Bhils and other hill and forest tribes, and (ii) a natural advance in population in the less settled tracts as the result of peace and prosperity. After the disturbed state of India in the 18th and early 19th Century the plains would settle down and increase their population first, and the hills and forests later.

25. Apart from the contrast between the permanent effects of the 1899 famine on North Gujarat and its fleeting effects on the Bhil country, a further remarkable contrast is afforded by the effects of the 1877 famine on the South-East Deccan. If the 1872 and 1881 figures in Imperial Table II are studied it will be seen that the havoc caused in Bijapur and Sholapur was as great or greater than the havoc caused by the "chappanya" in North Gujarat, while in Belgaum and Dharwar the damage was very serious. Yet Bijapur almost, and the other three districts fully recovered in twenty years. Bijapur had recovered completely in forty.

26. Satara shows a continuous decline since 1891, for which plague is largely responsible. The district would have recovered this time had it not been for Influenza, as is shown by the recovery of Belgaum. The conditions affecting these two Districts seem to be closely similar, and the further fall in the one and the slight rise in the other is due to unequal Influenza mortality, as explained in a later portion of this Chapter.

27. Other interesting facts are brought out by the Log curves of the various districts. For example the curves for Thana and the Bombay Suburban Districts will be seen to be closely parallel until the decade just past, when the Suburban curve leaps up sharply, thus proving that the true suburbanisation of that area set in only during the last ten years, and not, as might offhand be supposed, many years ago.

28. The disturbing effects of bad season on the dry districts are well brought out by the zigzag character of their curves.

29. Interesting also is the close parallelism between the curves for Kanara and Kolaba. It is to be considered whether this parallelism is due to identical factors acting upon each of these two districts, or to diverse factors producing identical effects. This point is too difficult and to a certain extent too controversial to be discussed here. (The Appendix entitled—"Region of decay in the Karnatak and Kanara" should be consulted.)

SECTION 7.—THE PAST DECENNIUM.

30. The above remarks and diagrams dispose of the general long term changes in the district populations. What now follows relates to the changes from 1911 to 1921 only. The regional changes are first given in the form of Maps; and thereafter such facts and figures are presented as may enable any reader to draw his own inferences as to the causes of change.

The maps which follow show by Talukas and Mahals of Natural Divisions the

PERCENTAGE INCREASE (Red)
or DECREASE (Black)
1911 to 1921.

Notes. (I) Where any Taluka or Mahal has no percentage shown on it an increase or decrease, as the case may be, of less than 0.5 per cent is to be understood.

(II) Percentage increase or decrease for Indian States is shown, so far as possible. But the actual figure is not given where either (a) the State is very small, e.g. Savanur or (b) is so scattered territorially that a percentage for the whole would be misleading, e.g. the States of the Southern Maratha Country.



GUJARAT EAST



KONKAN

REFERENCES.

- District or State Boundary
 Taluka & Mahal Boundary
 District Head Quarters
 Taluka or Mahal Headquarters



DECCAN



REFERENCES.

District Boundary	—
Taluka Boundary	- - -
Kolhapur State	1
Solapur State	2
S. M. C. State	3
Part of Hyderabad	4

KARNATAK

31. During the decennium just past the conditions have been very abnormal. It is only necessary to discuss them to the extent to which they may have influenced the figures.

I.—Seasons.

32. The variations in the seasons nowadays exercise a much smaller influence upon the total population figure than formerly, since people no longer die of starvation in lean years. On the other hand, owing to greater readiness to leave home, the effect of the seasons upon temporary distribution of the population is increasing. In any one region a bad season, or a series of bad seasons, may have the following effects: (1) A permanent effect by inducing people to leave their homes, never to return; (2) A semi-permanent effect, by reducing the fertility rate of married women; this is however liable to gradual readjustment; and (3) A purely temporary effect by causing migration in search of work. And such temporary migrations, when, as in this case, they are in operation at the time of the Census, will entirely obscure all other population phenomena.

33. It is of course well known, and also palpable from the figures, that there has been a vast emigration from the east Deccan. What we should like to know is how far that emigration has been permanent. The attempt which has been made in an Appendix to reconstruct the population of the Ahmednagar District by redistributing among its Talukas emigrants (in the Census sense) is only a makeshift. The figures there arrived at are estimates of what the population would have been, had there been no famines; and are only useable for current purposes on the assumption—unavoidable in the circumstances—that all emigrants return. Consequently, although no doubt much nearer to the true figures than those of the 1921 enumeration, they are probably an over-estimate, since the assumption mentioned is probably incorrect. There is only one fully satisfactory way of arriving at the truth. And that is by having a recount in the districts concerned after the first normal season. And such a recount I consider eminently worth taking. No attempt would have to be made to record Religion, Caste, Occupation, Birth-place, Language, Literacy or Infirmities; only the number of persons of each sex, and possibly, ages (though this is not really essential). It goes without saying that such a recount should be taken in March. The population so arrived at, when compared with the 1911 population, and the differences between recorded births and deaths in the interval, would give the figure of loss or gain by permanent migration, subject of course to the influence of an unknown factor, namely, errors in the birth and death records.

34. In order to enable the character of the seasons during the decade to be exactly examined Dr. Mann, the Director of Agriculture, kindly prepared and sent me a table showing for each district and for each year the value of the crops (kharif and rabi combined) in a scale of five classes—

Excellent,
Good,
Fair,
Bad,
Very Bad.

He wrote as follows:—

“I may say that I have taken the anna valuation as published in the annual season and crop reports together with a consideration of the actual area under crop in the years under consideration. Generally speaking, I think the tendency of this Table is to make out the crops rather better than they should be. I have taken 80 per cent. and above as excellent, from 60 to 80 per cent. as good, from 40 to 60 per cent. as fair, from 20 to 40 per cent. as bad, and anything below 20 per cent. as very bad. This of course is only a basis to be checked and modified by consideration of the acreage under crops in any particular year.”

In the percentage valuation 50 is taken as the “average” crop. In the case of Sind the irrigated and unirrigated crops were both taken into consideration.

35. The results of these very careful calculations are shown in the form of a Chart. In the Chart the depth of the horizontal band assigned to each district might have been adjusted according to either area or population. I chose the latter base, since the importance of the seasonal factor from the Census point of view is its effect on population. The question then arose whether to take the 1911 population or the 1921 population or the mean of the two. If the latter had been in any way likely to approximate to the mean year, 1916, it would have been taken. But as that is certainly not the case, the 1921 population was taken for simplicity's

sake. As a matter of fact as between the 1911 and 1921 population the difference would not—on the scale used in this Chart—have been measurable to the unaided eye except in the case of Ahmednagar and the Panch Mahals.

36. The Chart brings out the character of the seasons during the decade very clearly, especially in the way of comparison of year with year. Since, however, the really important question from the point of view of the Census is whether the general character of the seasons is correlated with increase or decrease of population, the five classes were assigned values as follows :—

Excellent	.. 9,
Good	.. 7,
Fair	.. 5,
Bad	.. 3,
Very Bad	.. 1,

and the total values of the decade were summed for each district. The values assigned are more or less arbitrary, but it will be noticed that they coincide with the mid percentage values of the classes as explained in the extract from Dr. Mann's letter quoted above. The following Table shows the values of the seasons for each district together with the increase or decrease of population at this Census.

Subsidiary Table No. 2.—Values of Agricultural Seasons during the Decade, compared with population changes.

District.	Values of the seasons.	Percentage changes in population, 1921 against 1911.	
		Increase.	Decrease.
Thana (including Bombay Suburban)	82	3.5	....
Kolaba	82	....	5.3
Surat	78	3.1	....
Ratnagiri	74	....	4.1
East Khandesh	72	4.0	....
West Khandesh	70	6.2	....
Panch Mahals	66	16.2	....
Belgaum	66	1.0	....
Dharwar	66	1.0	....
Satara	66	....	5.1
Poona	66	....	5.8
Kanara	66	....	6.7
Karachi	64	3.9	....
Bijapur	64	....	7.7
Nasik	64	....	8.0
Upper Sind Frontier	62	....	8.5
Sukkur	62	....	11.1
Sholapur	60	....	3.4
Hyderabad	60	....	6.3
Broach	58	0.3	....
Kaira	58	2.8	....
Ahmedabad	56	7.6	....
Navabshah	52	....	6.4
Thar and Parkar	52	....	8.6
Larkana	52	....	9.5
Ahmednagar	50	....	22.6

		SEASONS											
		11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21		
AHMEDABAD												AHMEDABAD	
BROACH												BROACH	
KAIRA												KAIRA	
PANCH MAHALS												PANCH MAHALS	
SURAT												SURAT	
KANARA												KANARA	
KOLABA												KOLABA	
RATNAGIRI												RATNAGIRI	
THANA (incl: Bombay Suburban)												THANA (incl: Bombay suburban)	
AHMEDNAGAR												AHMEDNAGAR	
E. KHANDESH												E. KHANDESH	
W. KHANDESH												W. KHANDESH	
NASIK												NASIK	
POONA												POONA	
SATARA												SATARA	
SHOLAPUR												SHOLAPUR	
BELGAUM												BELGAUM	
BIJAPUR												BIJAPUR	
DHARWAR												DHARWAR	
HYDERABAD												HYDERABAD	
KARACHI												KARACHI	
LARKANA												LARKANA	
NAWABSHAH												NAWABSHAH	
SUKKUR												SUKKUR	
THAR & PARKAR												THAR & PARKAR	
U.S. FRONTIER												U.S. FRONTIER	

**CHARACTER OF THE AGRICULTURAL
SEASONS DURING THE DECADE.**

*The space in the vertical scale allowed
to each District is proportional to its
population (1921) -*

SCALE OF VALUATION OF CROPS.

Excellent.....	
Good.....	
Fair.....	
Bad.....	
Very Bad.....	

37. On the whole it cannot be deduced from the Table that the general agricultural character of the decade bears any very exact relation to the population changes. But some sort of relationship is certainly suggested.* Now the years 1914-15 and 1915-16 were so good that any effect that the previous four years might have had in the way of inducing emigration and reducing the birth-rate must have been by 1917 largely eliminated. It seemed therefore worthwhile to sum the values of the last four years only; and, in order to give them their due weight, we can multiply the values for 1917-18 and each succeeding year by 1, 2, 3 and 4 respectively. The result is shown in the next Table.

* Dr. Mann points out that if we eliminate Kolaba and Ratnagiri, where the population is kept down by emigration to Bombay, and Karachi and Ahmedabad, where the population is kept up by the increase of the Cities, practically all the pluses come at the top and all the minuses at the bottom of the Table. Only Broach and Kaira come in the wrong half. Of these the Broach population is almost stationary, and the position of Kaira Dr. Mann attributes to the taking up during the decade of a good deal of new land.

Subsidiary Table No. 3.—Values of the last four Agricultural Seasons (weighted as explained in text) compared with the population changes.

District.	Weighted values of the last four Agricultural seasons.	Percentage changes in population of 1921 against 1911.	
		Increase.	Decrease.
Thana (including Bombay Suburban)	80	3.5	....
Ratnagiri	80	....	4.1
Kolaba	80	....	5.3
Kanara	76	....	6.7
Surat	74	3.1	....
Panch Mahals	68	16.2	....
East Khandesh	68	4.0	....
Belgaum	68	1.0	....
Dharwar	68	1.0	....
Sholapur	68	....	3.4
Hyderabad	66	....	6.3
West Khandesh	64	6.2	....
Satara	64	....	5.1
Sukkur	64	....	11.1
Ahmedabad	62	7.6	....
Karachi	60	3.9	....
Bijapur	60	....	7.7
Upper Sind Frontier	60	....	8.5
Kaira	58	2.8	....
Poona	58	....	5.8
Thar and Parkar	56	....	8.6
Larkana	56	....	9.5
Navabshah	54	....	6.6
Nasik	54	....	8.0
Broach	52	0.3	....
Ahmednagar	36	....	22.6

38 The Table just given shows about the same degree of relation between the character of the seasons and the population changes as was shown by the first Table. It may be remarked that in cases where several districts have the same values in the seasonal scale the order of their arrangement makes a considerable

difference to the general appearance of the Tables. To secure uniformity they have in such cases been put in order according to the positive value of their population changes. This has the effect of giving a somewhat more favourable appearance to the possibility of correlation than would have been arisen had they been arranged haphazard. But a glance at any of the larger value groups, for instance, value 66 in the first Table, will show at once how little true correlation there really is.* The most that can be said is that the top half of each Table contains more increases and the bottom half more decreases, and that in each Table Ahmednagar takes its natural position. It is probable that in earlier Censuses the correlation would have been much closer. At the present Census a factor far more powerful than the seasons comes into play, namely, influenza. This will be studied in detail, and afterwards in combination with the factor just discussed. But even Influenza is not the only factor to be considered. It will be shown later on that every district had its own particular local factor, which is often far more powerful than the general factors common to all.

II.—Prices.

39. The diagram which now follows is designed to show the effect (i) of rainfall† on prices, and (ii) of prices on birth rates.

† Dr. Mann has pointed out that absolute rainfall figures are not a fully satisfactory index of the seasons. What is required is to get at the figures of *effective* rainfall; and he has been working out rules by which ineffective rainfall will be excluded from the annual fall. The rules are necessarily arbitrary; but that is inevitable. And the results worked out by him for Poona for past years give a better picture of the seasons than the total recorded falls. The drawbacks to the method are—first, that the rules for exclusion of ineffective falls would necessarily vary, tract by tract, and secondly, that the working out of effective falls for many different recording stations would be excessively laborious.

40. In an agricultural country like India a general rise in the values of agricultural produce, if caused by actual deficient production of the same, causes acute distress; but if caused by external influences without any diminution in production, the effect is unequal on the different classes. The producers benefit; all labourers and all persons, even in the higher classes, on fixed salaries or incomes suffer.

1910	..	..	689,701
1911	..	..	705,090
1912	..	..	684,890
1913	..	..	684,803
1914	..	..	733,076
1915	..	..	726,780
1916	..	..	704,672
1917	..	..	699,823
1918	..	..	619,224
1919	..	..	546,460
1920	..	..	593,175

During the decennium the cost of all articles besides food grains rose sharply after 1914. And the producers, although benefitting by the higher prices obtained for their crops, shared with the general public the disadvantages of the higher cost of other goods. The figures of births, year by year, given in the margin for ready reference, move (up to 1918) in accordance with the combined

effects of seasons, prices of grain, and prices of other goods.

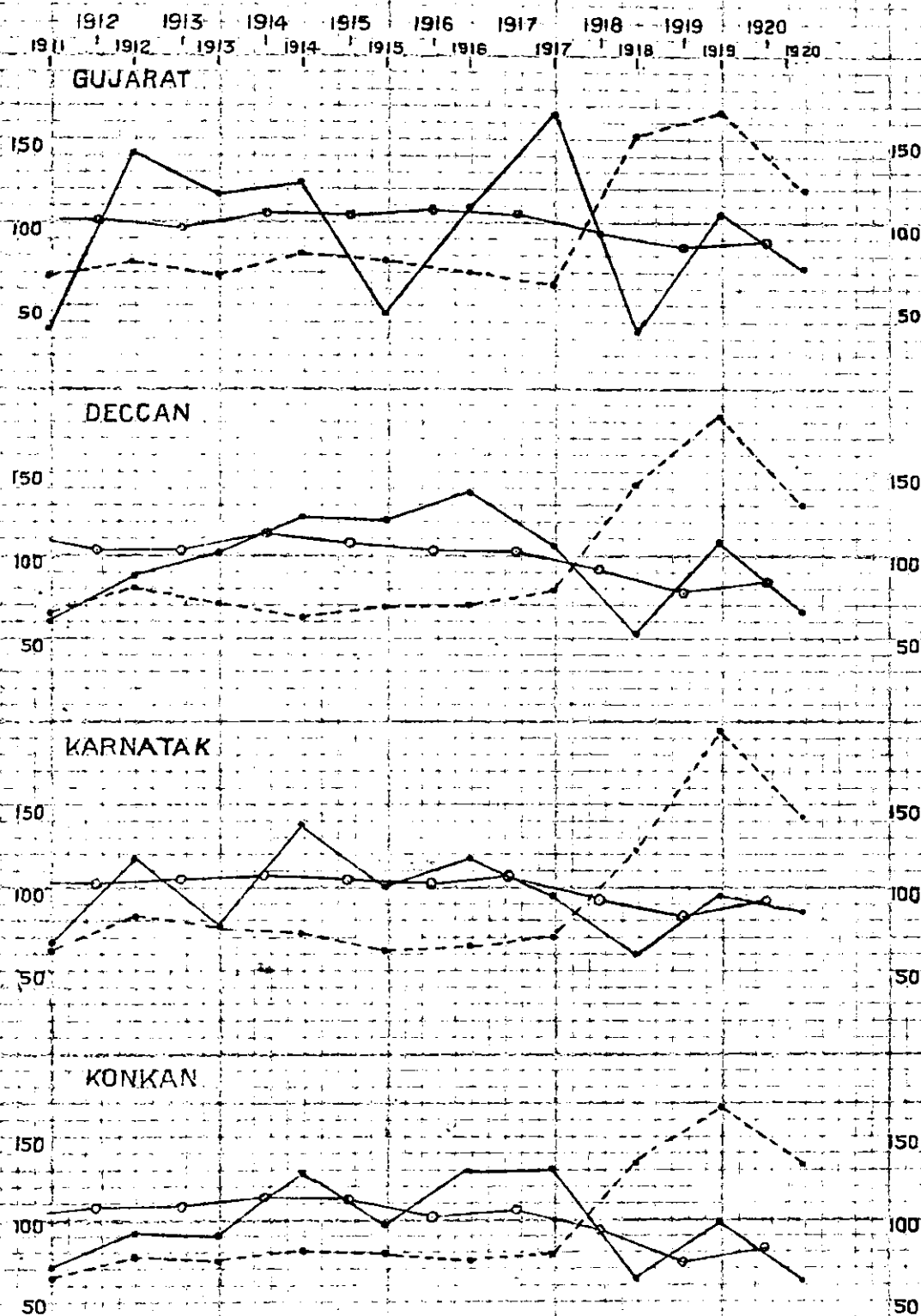
At 1918 comes the sudden effect of Influenza, which obscures all other factors. In considering the effect of seasons on births allowance must be made for the "lag". Thus the bad season of 1911 reduces the births in 1912. The good seasons of 1912-13 increase the births in 1914. The effect of the rise of prices of all commodities, the inordinate enhancement of rentals, and the general rapid increase in the cost of living during the war is well brought out by the gradually falling birth totals during 1915-1917. These were good years from the point of view of seasons, and under ordinary circumstances would have rising or stationary birth total figures.

41. The diagram is published in order to preserve continuity with past Censuses. Similar diagrams so far as Rainfall and Prices are concerned will be found in the Census Reports for 1901 and 1911. Mr. Enthoven showed deviations from the "Normal" without, however, stating what was taken as the normal (p. 22 of the 1901 Report). Mr. Macgregor, not finding any satisfactory criterion for the normal, took the mean for the decade (paragraph 53 of the 1911 Report). I followed Mr. Macgregor in this matter. But there is an objection to taking the mean for the decade, and that is that any individual excessively abnormal year will throw the mean far out from what is really the most approximately normal figure.

42. The plotting on to the same diagram of the deviations of births is an innovation. In order to allow for the "lag" already referred to, the birth curve was plotted six months late against the other two. Strictly speaking, the prices curve ought to be plotted late against the rainfall curve and the birth curve late against the prices curve. But this would make the diagram excessively elaborate.

43. Theoretically there should be a marked inverse correlation between rainfall and prices. But this is not observable even if we go back to the decade 1891 to 1900. The reasons for this seem to be (1) that excessive rainfall will sometimes send up prices, *e. g.*, the Deccan in 1896,

* It was chiefly because of the large number of districts falling in one and the same class that a diagram was not prepared for this Table.



PERCENTAGE DEVIATIONS OF RAINFALL, PRICES OF STAPLE FOOD GRAINS AND ANNUAL TOTAL RECORDED BIRTHS in British Districts of Natural Divisions from their means for the Decade.

STAPLE FOOD GRAINS

Gujarat	Bajri	Rainfall
Deccan	Bajri	Prices
Karnatak	Jowari	Births
Konkan	Rice	

Note: The curve of deviations of births is plotted forward halfway between the annual verticals for the other two curves. This is because any influence of rainfall or prices on births will take some time to have effect.

and (2) that the regions represented by the Natural Divisions are too small for this particular study, since prices are dominated by all-India conditions. The rainfall curve as a Census factor is therefore inappreciable.

44. There should further be a marked inverse correlation between prices and births, after allowing for the lag. And on *a priori* grounds it is justifiable to assume that when living is cheap births rise and *vice versa*. But such a correlation is not at once noticeable from the curves in the diagram under discussion. In the Konkan it would seem that the Birth curve is wholly independent from the Prices curve, which up to 1917 deviates very slightly from the mean. In the other three Divisions, and especially in the Deccan, a careful study of the curves will show that more often than not the inverse correlation exists, the Birth curve rising when the Prices curve falls and *vice versa*. But here again the Natural Division is a doubtfully satisfactory statistical unit.

45. At 1918 we enter into a whirlpool of outside factors. Influenza, even more than Prices, dominates the Birth curve; the Prices curve comes under the influence of world economic conditions rather than that of rainfall; and the importance of the "staple food grain" as the determinant in the cost of living probably diminishes. On the whole, therefore, the diagram is inconclusive, and might with advantage be abandoned at future Censuses. However, in an Appendix the correlation between Prices and Births is studied for a wider area and a longer period.

III.—The War.

46. In contradistinction to Western Countries the direct effect of the war on our population was very small. The numbers recruited during the war were low. Col. Steen, the Recruiting Staff Officer for Dekhani Mahrattas and other castes, informed me that including the Berar and parts of the Central Provinces which come within his territory out of the total recruitable Mahrattas, using this term in its Army sense, the recruitable age limits being 17 to 26, only 1·79 were recruited between 4th August 1914 and 11th November 1918. The proportion of Dekhani Musalmans, Mahars, Lingayats, etc., recruited was much the same. Only the Konkani Mahrattas produced a little over 12 per cent. These recruitments would include many who only served for a short time. And the losses in the field would be much lower proportionately than in the case of the Western nations. At the time of the Census a certain number of persons were absent on Military and *quasi*-military service in Mesopotamia and elsewhere. But as this Presidency had recently come to contain the Head Quarters of both the Western and the Southern Armies and as it is also the gateway for despatch of troops and stores to the regions of military occupation, it is probable that military reasons brought into it nearly as many men as it took out.

SECTION 8.—VITAL STATISTICS.

47. Statistics of births and deaths are not available except for the those areas which for registration are under the control of the Sanitary Commissioner, that is to say, British Districts, including all Inam and Khoti villages, but not including those Mevas Estates which constitute the Akrani Mahal in West Khandesh. Statistics are made out by the Sanitary Department for the population excluding Europeans, Anglo-Indians and Armenians. In the Sanitary Commissioner's annual reports the births and deaths among Europeans and Anglo-Indians are reported separately; but all the general statistics are for the remainder of the population only. This arrangement does not seem to be a happy one. The two communities which are excluded are very much more truly a permanent element in the population than are the Japanese, Chinese, Afghans, Makranis, Arabs, and innumerable other small communities, whose vital statistics are included in those of the general population. The European community is of course an abnormal one consisting of selected lives, an excessive proportion of males, and a deficiency in the lowest and highest age periods. But these remarks apply to the other foreign communities also, and no such peculiarities can be attributed to the Anglo-Indian community. It is always assumed that many Anglo-Indians get included in Europeans, and this is inevitable. But the residue, which comes out as Anglo-Indian in our Tables, is essentially a permanent resident element in the general population. There is of course no guarantee that an Anglo-Indian who gets into the Census Tables as a European will get into the Birth and Death Registers under the same racial head. But in the long run the differences would balance out. It would therefore be possible to include Anglo-Indians in the Vital Statistics as part of the general population. But why exclude Europeans? The abnormalities of their age and sex distribution are a permanent feature of this country.

48. The regions indicated above are divided for registration of vital statistics into Registration Districts, which do not correspond with any other administrative units. Within these Registration Districts the ordinary Administrative Districts are recognised, and treated as units for statistical purposes, but Talukas and Pethas are not. The Taluka or Petha is separated into Rural and Urban circles. The Urban circles are the Municipal limits of each Municipal town; the Rural circle is the remainder of the Taluka or Petha. Birth and Death rates are calculated on the general population, as defined above, of these units as a per mille rate on the figures of the latest Census. It is therefore possible to ascertain the death rate of any District for any period of time, but not of a Taluka or Petha (*i.e.*, without recalculation). To prevent misunderstanding it must be explained that the remarks in this paragraph are a statement of facts only, and are not intended to be taken as a criticism of the methods adopted by the Sanitary Department in the registration and presentation of their statistics.

Actual numbers of births and deaths in British Registration Districts (excluding Europeans, Anglo-Indians and Armenians) in each of the last three decades.

Decade.	Births.	Deaths.
1891—1900	6,427,142	6,668,689
1901—1910	6,187,362	6,394,831
1911—1920	6,697,993	7,223,309

49. The following Table and diagram give the total of births and deaths of the general population in the Registration areas for every year from 1891 to 1920. The totals of the decades are also given in the margin for ready reference :—

Subsidiary Table No. 4.—Total Births and Birth-rates by years from 1891 to 1920 in British Registration Districts (excluding Europeans, Anglo-Indians and Armenians).

Year.	Total No. of births.	Birth rate per mille.	Year.	Total No. of Births.	Birth rate per-mille.
1891	682,677	36·27	1908	660,201	35·72
1892	650,667	34·57	1909	657,685	35·59
1893	664,305	35·30	1910	689,701	37·32
1894	660,268	35·08			
1895	674,304	35·83			
1896	691,847	36·76			
1897	629,693	33·46			
1898	582,371	30·94	Total, 1901—10	6,187,362	....
1899	635,348	36·42			
1900	505,662	26·87			
Total, 1891—1900	6,426,142	....	1911	705,090	
			1912	684,890	36·00
1901	465,647	25·19	1913	684,803	34·97
1902	631,393	34·16	1914	733,076	34·96
1903	576,949	31·22	1915	726,780	37·43
1904	648,594	35·09	1916	704,672	37·10
1905	611,173	33·07	1917	699,823	35·98
1906	625,486	33·84	1918	619,224	35·73
1907	610,533	33·03	1919	546,460	31·61
			1920	593,175	27·90
					30·28
			Total, 1911—20	6,697,993	....

Note.—The rate per mille is calculated on the population recorded at the Census with which each decade commences.

SEC. 8.—VITAL STATISTICS.

15

Subsidiary Table No. 5.—Total deaths and death-rates by years (from 1891—1920) for British Registration Districts (excluding Europeans, Anglo-Indians and Armenians).

Year.	Total No. of deaths.	Death rates (per mille).	Year.	Total No. of deaths.	Death rates (per mille).
1891	513,132	27·26	1908	501,838	27·15
1892	611,742	32·50	1909	505,936	27·38
1893	511,831	27·20	1910	560,003	30·30
1894	607,179	32·26	Total, 1901-10	6,394,831	....
1895	538,540	28·61			
1896	596,472	31·69	1911	555,312	28·35
1897	749,916	39·84	1912	683,210	34·88
1898	548,825	29·16	1913	521,539	26·63
1899	672,269	39·72	1914	577,504	29·48
1900	1,318,783	70·07	1915	511,613	26·12
Total, 1891—1900	6,668,689	....	1916	652,585	33·32
1901	686,134	37·12	1917	798,406	40·76
1902	721,462	39·04	1918	1,724,674	88·05
1903	811,525	43·91	1919	637,170	32·53
1904	764,914	41·39	1920	561,296	28·65
1905	588,394	31·84	Total, 1911-20	7,223,309	....
1906	648,019	35·06			
1907	606,606	32·82			

50. The following Tables, for which no diagrams are prepared, give the distribution of Births and Deaths for each year of the past decade by sex and Natural Division. The most noteworthy feature is the excess mortality among females in 1918, which is due to the selection of that sex by the Influenza epidemic. This will not be further discussed here, as it is discussed in details in the Chapter on Sex :—

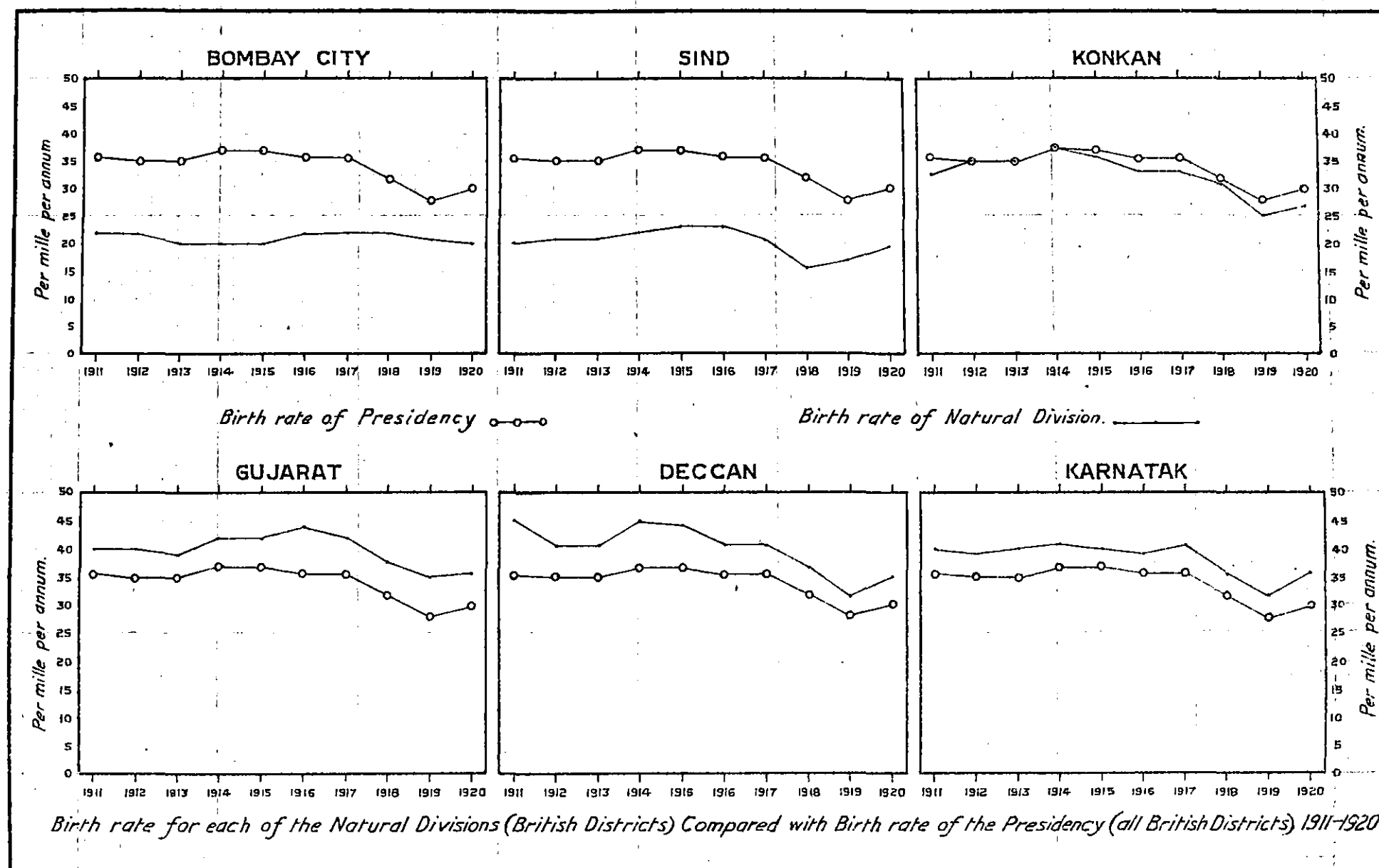
Subsidiary Table No. 6.—Deaths during the decade by Natural Divisions—British Registration Districts only (Excluding Europeans, Anglo-Indians and Armenians).

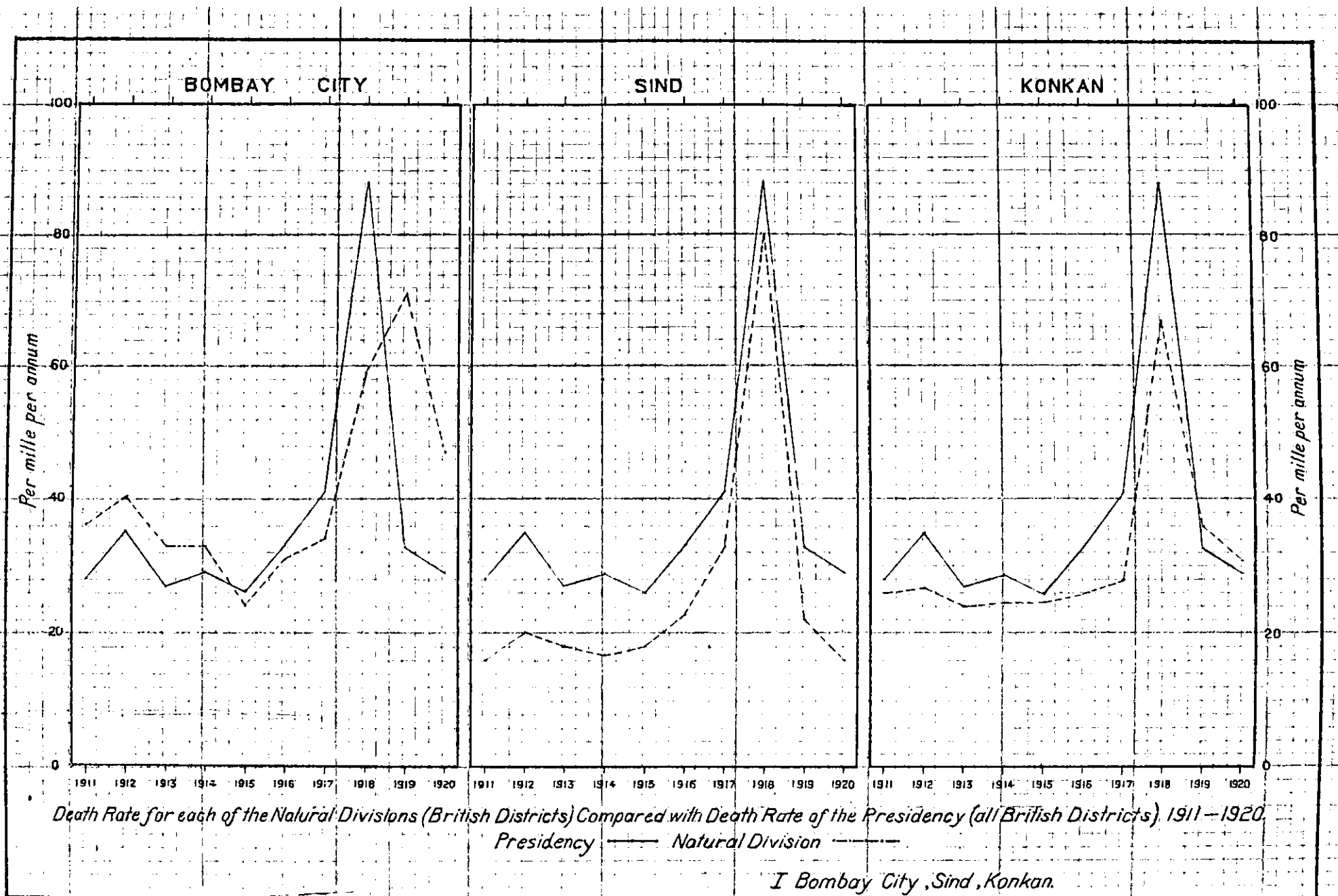
Year.	Natural Division.											
	Bombay City.		Gujarat.		Konkan.		Deccan.		Karnatak.		Sind.	
	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.
1	2	3	4	5	6	7	8	9	10	11	12	13
1911 ..	19,288	15,277	39,644	37,360	41,704	39,169	87,240	82,534	68,026	67,620	31,754	25,798
1912 ..	21,089	17,468	55,604	53,922	42,589	40,883	137,943	133,894	54,877	54,074	39,162	31,705
1913 ..	17,621	13,884	44,784	42,935	37,702	35,970	94,969	89,323	40,746	40,558	33,813	29,234
1914 ..	17,692	13,808	46,685	44,282	40,367	38,418	117,750	111,533	43,788	42,728	32,706	27,747
1915 ..	12,719	10,568	38,042	35,732	39,016	38,082	96,309	92,417	42,864	42,750	34,722	28,392
1916 ..	16,851	12,813	49,194	46,900	42,022	40,156	133,141	128,929	50,607	50,525	43,730	37,717
1917 ..	18,144	14,447	57,865	56,346	44,938	43,481	154,288	154,251	70,804	69,700	59,910	54,292
1918 ..	31,496	25,768	112,720	111,502	97,850	100,006	330,407	362,435	125,537	135,987	149,462	132,504
1919 ..	38,699	29,237	47,691	44,946	57,192	54,355	111,694	101,751	38,885	37,308	41,387	34,025
1920 ..	25,606	19,770	50,233	45,995	49,296	47,507	94,744	85,895	42,946	42,098	32,213	24,908

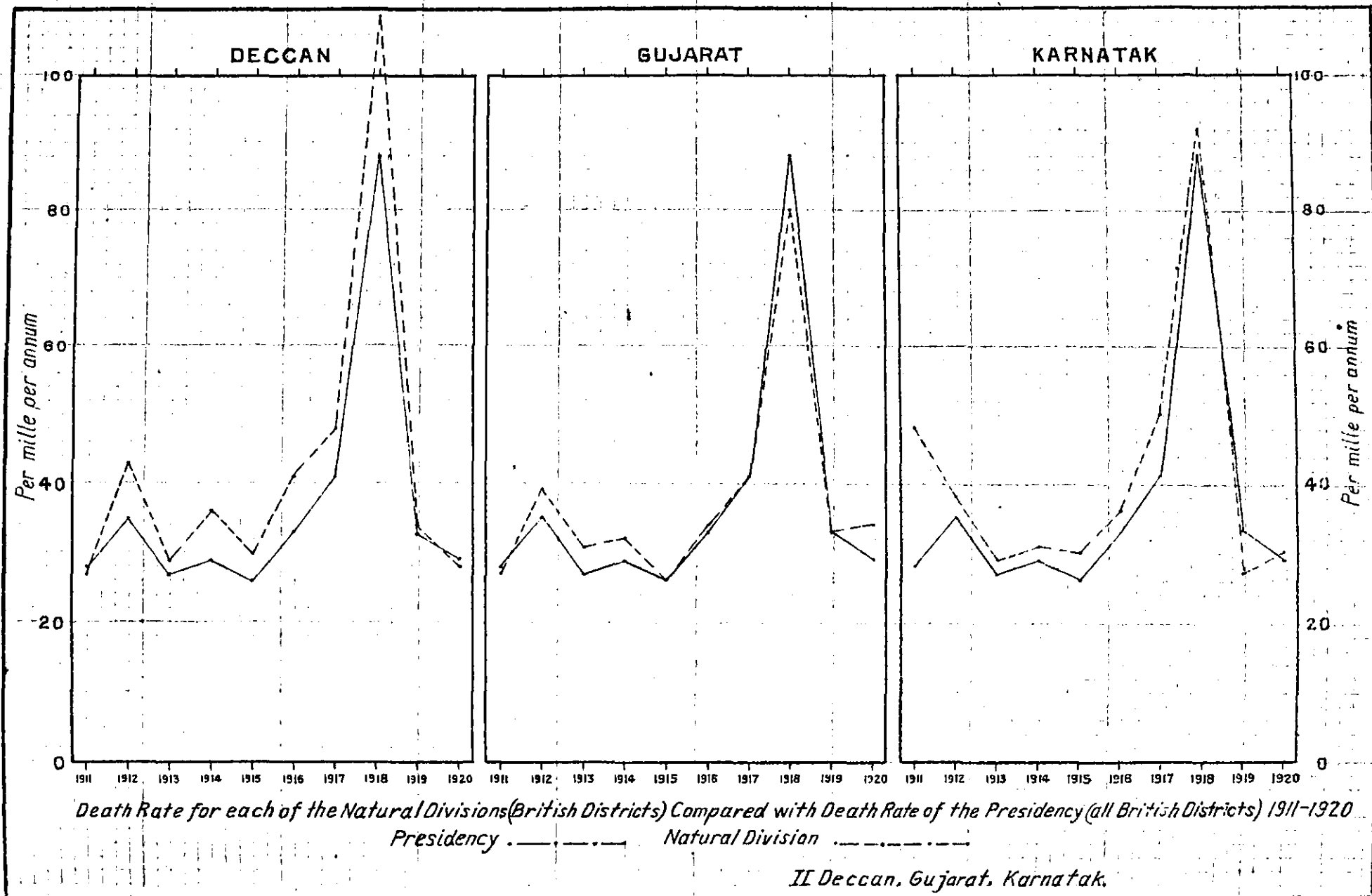
51. The next four Tables show rates by Natural Divisions. Diagrams are also given showing the deviation of the rates in each Natural Division from the general rates for the whole Presidency. These Tables and diagrams are mainly given in order to emphasise the incompleteness of the registration of Births and Deaths in Sind. This cannot be too firmly borne in mind when studying the population changes of the decade. Col. Murphy in the 57th Annual Report of the Sanitary Commissioner for 1920 (paragraphs 11 and 26) draws attention to the faulty registration of vital statistics in Sind. It is also noteworthy that registration of female births seems to be more in defect than of male births.

52. The diagrams are interesting. Excluding Bombay for the moment, it will be seen that Sind is always far below, and the Konkan slightly below, the rates for the Presidency, while Gujarat, the Deccan and the Karnatak are always above them. The extent to which registration is in defect would ordinarily be constant. The curve for any Natural Division would therefore run parallel with, or rather at equal distances from, the curve for the Presidency. And any case in which it approaches or draws more away from the latter must mean that in that year the conditions in the Natural Division concerned were more favourable or less favourable as the case may be, than those prevailing in the Presidency as a whole. The term conditions must be interpreted in a wide sense. Thus in 1917 the heavy plague mortality in the Karnatak causes the death rate to rise more than usually above the rate for the Presidency. Conversely in 1920 the absence of famine emigrants from the Deccan causes the death rate to fall below the general rate.

53. Bombay city stands on a different footing, because its population is not dependent, as is the Mofussil population, on Natural increase and decrease, but is constantly receiving accretions by immigration. This being so the death rate, representing as it does deaths among an increasing population calculated on a fixed base (the 1911 population figures) would have been expected to show year by year a death rate diverging upwards from the general rate. As a matter of fact up to 1918 exactly the opposite is the case. The Bombay rate compared with the general rate shows a steady decline. A possible line of explanation is as follows—(1) although Bombay increased by immigration from 1911 to 1917 the Mofussil population also increased by natural causes at a probably very high rate, those being years of great prosperity, (2) Bombay did not







suffer from plague so much as the Mofussil, and (3) sanitation may have improved in Bombay during those years. In 1918 the divergence is due to the lower Influenza mortality in Bombay. In 1919 and 1920 Bombay was exceptionally unhealthy.

Subsidiary Table No. 7.—Reported Birth-rates (both sexes combined) 1911—20 for each of the six Natural Divisions.

Year.	Bombay.	Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.
1911	22	40	33	45	40	20
1912	22	40	35	41	39	21
1913	20	39	35	41	40	21
1914	20	42	37	45	41	22
1915	20	42	36	44	40	23
1916	22	44	33	41	39	23
1917	22	42	33	41	41	21
1918	22	38	31	37	36	16
1919	21	35	25	32	32	17
1920	20	36	27	35	36	19

Subsidiary Table No. 8.—Reported Death-rates (both sexes combined) 1911—20 for each of the six Natural Divisions.

Year	Bombay.	Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.
1911	36	27	26	27	48	16
1912	40	39	27	43	38	20
1913	33	31	24	29	29	18
1914	33	32	25	36	31	17
1915	24	26	25	30	30	18
1916	31	34	26	41	36	23
1917	34	41	28	48	50	33
1918	59	80	67	109	92	80
1919	71	33	36	34	27	22
1920	47	34	31	28	30	16

Subsidiary Table No. 9.—Reported birth-rate by Sex and Natural Divisions (British Districts).

(Note.—The rates are the rates of births of each sex separately on the total population of both sexes together.)

Year.		Number of births per 1,000 of Total Population (Census of 1911).													
		Province.		Bombay.		Gujarat.		Konkan.		Deccan.		Karnatak.		Sind.	
		Males.	Fe-males.	Males.	Fe-males.	Males.	Fe-males.	Males.	Fe-males.	Males.	Fe-males.	Males.	Fe-males.	Males.	Fe-males.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total 1911—20	..	178	164	109	103	208	192	167	159	207	195	106	189	114	89
1911	..	10	17	11	11	21	19	17	16	23	22	20	30	11	9
1912	..	18	17	11	11	21	19	18	17	21	20	20	19	12	9
1913	..	16	17	10	10	20	19	18	17	21	20	20	20	12	9
1914	..	19	18	10	10	22	20	19	18	23	22	21	20	12	10
1915	..	19	18	10	10	22	20	18	18	23	21	20	20	13	10
1916	..	19	17	11	11	23	21	17	16	21	20	20	19	13	10
1917	..	10	17	11	11	22	20	17	16	21	20	21	20	12	9
1918	..	16	15	12	10	20	18	16	15	19	18	18	18	9	7
1919	..	15	13	11	10	18	17	13	12	17	15	16	16	9	8
1920	..	16	15	10	10	19	17	14	13	18	17	18	18	11	6

Subsidiary Table No. 10.—Reported death-rate by Sex and Natural Divisions
(British Districts.)

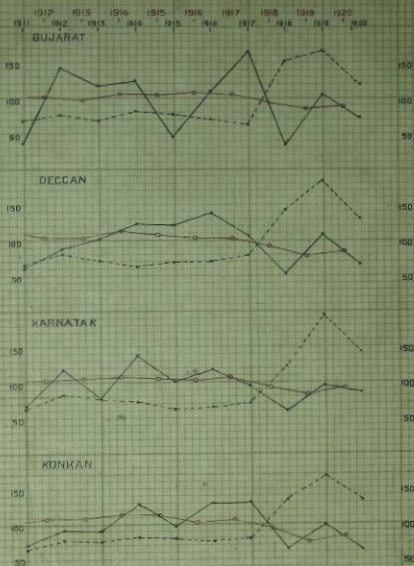
(Note.—The rates are the rates of deaths of each sex separately on the population of that sex only.)

Year.	Number of deaths per 1,000 of total population (Census of 1911).													
	Province.		Bombay.		Gujarat.		Konkan.		Deccan.		Karnatak.		Sind.	
	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total 1911-20	362	370	348	519	373	385	323	308	423	425	404	417	258	271
1911	28	28	31	46	27	28	27	25	27	26	47	48	16	16
1912	34	35	33	52	38	40	28	26	43	42	38	30	20	20
1913	26	27	28	42	31	32	25	23	30	28	28	29	17	19
1914	29	30	28	41	32	33	26	24	37	35	31	31	17	18
1915	26	26	20	32	26	26	26	24	30	29	30	31	18	18
1916	33	34	27	38	34	35	28	25	41	41	35	36	23	24
1917	40	42	29	43	40	42	29	27	48	40	49	50	31	35
1918	83	93	50	74	78	83	64	60	103	115	88	97	77	84
1919	33	32	61	88	33	33	37	34	35	32	27	27	21	22
1920	29	28	41	59	34	34	32	30	29	27	30	30	17	16

54. The heavy mortality from Influenza in 1918 is discussed in detail in the next section of this Chapter. In order to study the effects of the other main Eastern epidemic diseases, Tables are given showing plague and cholera mortality in the whole of the Registration areas during the decade and the distribution of plague by Natural Divisions. In the first of the accompanying diagrams are represented the absolute deaths from plague and cholera, and from plague, cholera and small-pox combined, as well as the mean annual deaths figure for the 14 years 1907 to 1917 and the annual actual divergences from the mean. The three diseases mentioned being the most important epidemic diseases in this part of India it might have been expected that their variations would largely, if not entirely, have determined the divergence of each total annual death figure from the 14 year mean. Quite the reverse is the case. The diagram shows clearly that the two curves are absolutely independent. The second diagram shows that the controlling factor is deaths from other causes, and shows again that the curve of plague, cholera and small-pox combined is independent, and only aligns with the curve of total deaths or of the deviations of the same from their mean, when it happens also to align with the curve of deaths from other causes, as in the case of the period 1915—1917.

Subsidiary Table No. 11.—Total Number of deaths, and deaths from Plague and Cholera in each year of the decade in British Registration districts, -
(excluding Europeans, Anglo-Indians and Armenians).

Year.	Cause.	Actual number of deaths.			Ratio (per mille of each sex).	
		Total.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7
1911 ..	From all causes ..	555,312	287,656	267,656	28	28
	Plague ..	100,399	51,108	49,291	5	5
	Cholera ..	5,817	3,041	2,776	....	....
1912 ..	From all causes ..	683,210	351,264	331,946	34	35
	Plague ..	28,984	14,557	14,427	1	1
	Cholera ..	64,505	32,785	31,720	3	3
1913 ..	From all causes ..	521,539	269,635	251,904	26	27
	Plague ..	25,288	12,621	12,667	1	1
	Cholera ..	5,134	2,651	2,483	....	....
1914 ..	From all causes ..	577,594	298,988	278,516	29	30
	Plague ..	20,060	10,694	9,366	1	1
	Cholera ..	17,779	8,950	8,829	1	1



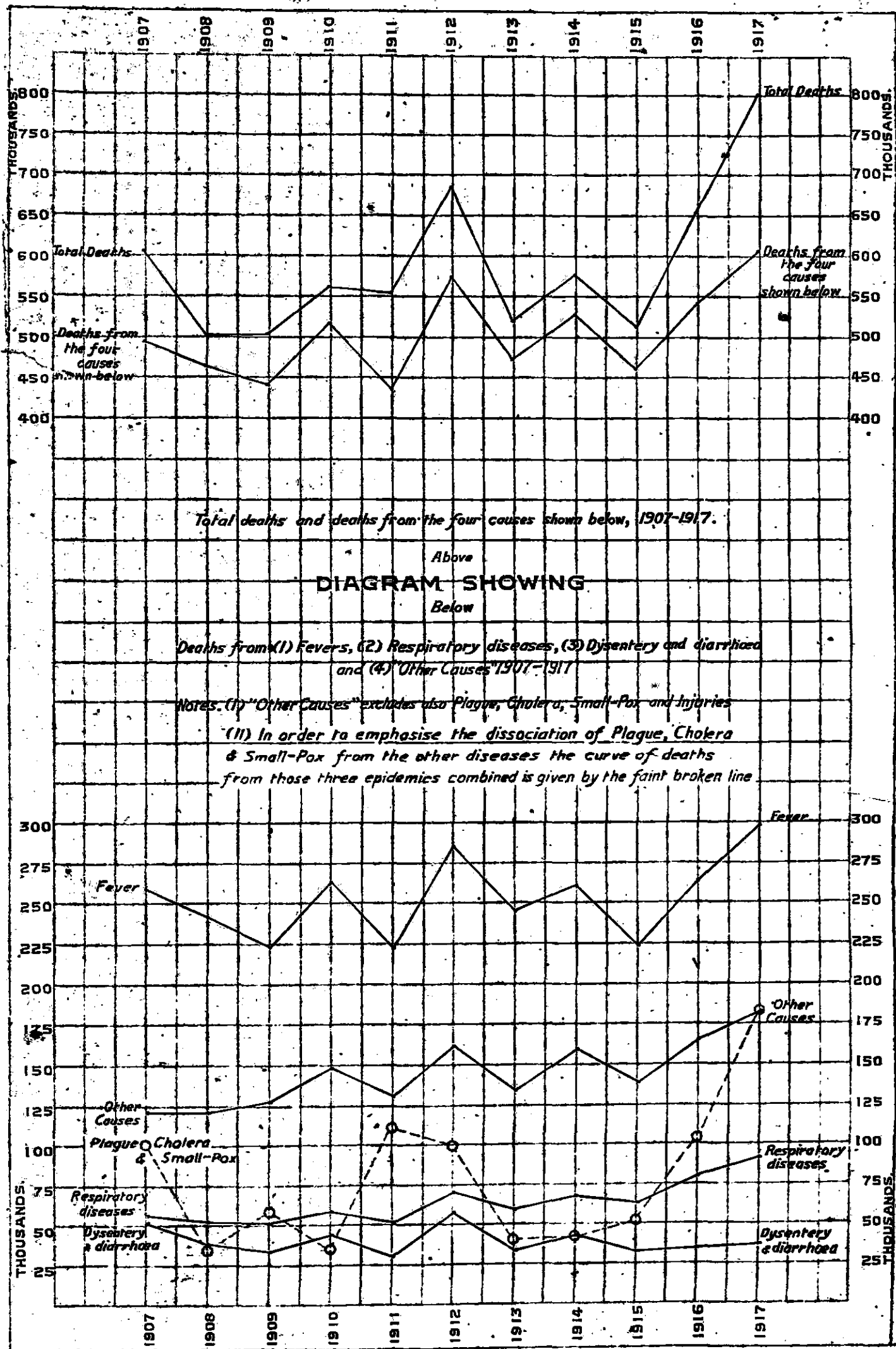
PERCENTAGE DEVIATIONS OF RAINFALL, PRICES OF STAPLE FOOD GRAINS AND ANNUAL TOTAL RECORDED BIRTHS IN BRITISH DISTRICTS OF NATURAL DIVISIONS FROM THEIR MEANS FOR THE DECADE

STAPLE FOOD GRAINS—

Gujarat, Bajri
Deccan, Bajri
Karnatak, Jowar
Konkan, Rice

Rainfall ————
Prices ————
Births ————

Note: The curve of deviations of births is plotted forward half way between the annual verticals for the other two curves. This is because any influence of rainfall or prices on births will take some time to have effect.



Year.	Cause.	Actual number of deaths.			Ratio (per mille of each sex).	
		Total.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7
1915	From all causes	511,613	263,672	247,941	26	26
	Plague	43,824	21,943	21,881	2	2
	Cholera	377	202	175	....	....
1916	From all causes	652,585	335,545	317,040	33	34
	Plague	79,507	39,100	40,407	4	4
	Cholera	19,841	10,331	9,510	1	1
1917	From all causes	798,406	405,949	392,457	40	42
	Plague	162,874	80,246	82,628	8	9
	Cholera	17,003	9,012	7,991	1	1
1918	From all causes	1,724,674	847,472	877,202	83	93
	Plague	79,478	38,386	41,092	4	4
	Cholera	8,834	4,812	4,022	....	....
1919	From all causes	637,170	335,548	301,622	33	32
	Plague	9,626	4,924	4,702	....	....
	Cholera	51,551	27,044	24,507	3	3
1920	From all causes	561,296	295,038	266,258	29	28
	Plague	13,857	6,876	6,981	....	....
	Cholera	2,047	1,116	931	....	....

Subsidiary Table No. 12.—Plague deaths by years and natural divisions for the decade 1911–20.

Year.	Bombay.	Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.
1911	3,997	4,042	2,837	24,946	61,426	3,151
1912	1,714	465	850	7,800	17,034	1,121
1913	2,605	740	1,219	6,610	13,666	448
1914	2,935	1,104	1,277	5,759	7,454	1,531
1915	598	1,600	818	21,202	16,471	3,135
1916	1,982	979	1,028	53,782	21,578	158
1917	1,698	20,935	2,695	105,628	28,903	3,016
1918	1,133	31,980	1,425	25,580	13,775	5,585
1919	697	110	802	4,262	3,270	485
1920	281	2	404	7,329	5,395	286

55. Further discussion is necessary on the second diagram, on which are represented the curves of reported deaths from (1) Fevers, (2) Respiratory diseases, (3) Dysentery and Diarrhœa and (4) "Other causes." In this case the last term has to be put into inverted commas. Its meaning will be clear from the following list which gives the causes among which the Sanitary Department distribute all reported deaths—

Cholera,
Plague,
Small-pox,
Fevers,
Dysentery and Diarrhœa,
Respiratory Diseases,

Injuries—
(i) Suicide,
(ii) Wounding and accident,
(iii) Snakes and Wild beasts,
(iv) Rabies,
"Other Causes",

and also, since 1919, Influenza. Plague Cholera and Small-pox have already been discussed. The deaths from Injuries are few, and their numbers, as would be expected, are fairly constant, varying between 6,500 and 8,000. The remaining causes, namely Dysentery and Diarrhœa, Respiratory Diseases, Fevers and "Other Causes" account for the great majority of deaths.

56. The second diagram shows the curves of deaths from these four causes during the eleven years 1907 to 1917. The curves were not carried on beyond 1917 because of the complete disturbance of all Vital Statistics by the Influenza. The result of this diagram is to prove conclusively two points—(1) that the numbers of deaths reported from the four causes mentioned obey the same laws, their curves rising and falling together, and (2) that the curve of these four causes combined definitely controls the curve of the total deaths.

57. So far as the second phenomenon is concerned it merely illustrates again what was proved by the Diagram of Plague and Cholera, viz. that those diseases are not important enough for their variations to control the variations in the Total Deaths, but that the latter are controlled by the combined effects of other diseases, or rather causes of death. But the first phenomenon, namely, that reported deaths from Fevers, Dysentery and Diarrhoea, Respiratory Diseases and "Other Causes" obey the same laws, and rise and fall together is rather surprising to the layman. I therefore consulted Colonel W. O'S. Murphy, the Sanitary Commissioner on the point.

58. The view taken by that officer is that if the statistics for small areas were examined it would be found that the stated epidemics control the death totals. But these epidemics are never present in all portions of the Province in one and the same year. Hence their influence is masked by the figures for fevers and "Other Causes", and especially the former, since deaths from such causes are not only far more numerous than deaths from the stated epidemics, but occur regularly throughout the whole region. A generally unhealthy year will send up the total deaths right through the province. Moreover he points out that the curves for the four main causes are to a large extent kept parallel by faulty registration of the cause of death, which makes it often a matter of chance into which of the four heads any death will go, whereas the curves for Cholera and Plague are kept clear and defined because the symptoms of those diseases are somewhat more commonly known. Moreover he adds that except when the epidemic becomes severe there is a tendency for cholera to be classed as diarrhoea, partly from ignorance, and partly to save the village officers the trouble of sending special returns. Conversely at the end of a big epidemic there is a tendency to return many deaths incorrectly as cholera. In this way the depressions of the curve are lower and the peaks higher than they should be. And these remarks apply to some extent to Plague also.

59. In order that the effects of plague in the three Census Decades may be studied I give below a table showing mortality from that cause for every year since it first appeared. It is to be remembered that its diagnosis by the village officers who record deaths is likely to have been unsatisfactory in the beginning, so that the figures for 1896 and the next year or two are probably an understatement, the error however rapidly diminishing. It will be noted that the plague mortality in the whole decade 1901 to 1910 carried off only a few more persons than Influenza did in the six months of its height in 1918-19, as will be seen from the discussion of that epidemic, to which we now pass.

Subsidiary Table No. 13.—Actual number of deaths from plague in each year since its arrival (British Registration Districts only).

Year.	Absolute plague-deaths.	Year.	Absolute plague-deaths.
1896	2,086	1909	24,319
1897	46,944	1910	25,043
1898	86,191		
1899	96,596	1901 to 1910 ..	1,111,441
1900	33,196		
Total to 1900 ..	265,013	1911	100,399
1901	128,259	1912	28,984
1902	184,752	1913	25,288
1903	281,269	1914	20,060
1904	223,957	1915	43,824
1905	71,363	1916	79,507
1906	51,525	1917	162,874
1907	93,609	1918	79,478
1908	27,345	1919	9,626
		1920	13,857
		1911 to 1920 ..	563,897
		Grand Total ..	1,940,351

60. It is desirable to make an attempt to reconstruct the figures of the population of the different districts as they would have been had the Influenza epidemic not occurred. But in view of the fact that the disease has lingered on and is still with us the attempt should from the Census point of view be limited to the main, and most destructive epidemic, which occurred in the autumn and winter of 1918-19. It would not be justifiable to eliminate deaths from this cause during any other period, because in this country epidemics of one kind or another are always with us. The death rates fluctuate violently. And if one were to eliminate influenza deaths (even assuming that their numbers could be ascertained) for, say, the calendar year of 1920, it might easily happen that in many localities we might be eliminating a cause of decrease much less potent than some other.

61. For this reason my own figures of Influenza mortality to be eliminated in reconstructing the population figures will be less than those which the Sanitary Department would arrive at as the total deaths from this cause. In the Report of that Department for 1918 Lt.-Col. Murphy, I.M.S., the Sanitary Commissioner, deduced the net influenza mortality for that year in two ways—first by ascertaining the net excess of deaths for each month June to December over the mean of the same month in the preceding five years, and secondly by limiting the figures to deaths recorded from the two causes—fever and respiratory diseases. The second method gave a slightly higher figure. It should obviously be the most accurate, as almost all influenza deaths would be recorded under these two heads, and the means for fever and respiratory diseases ought to be much more normal than those for deaths from all causes, in which plague, cholera and other recognizable epidemics during the previous five years would introduce exaggerating factors. In fact it was pointed out in the Report that this was actually the case with the means for total deaths from all causes in the five years preceding the epidemic. Assuming that the vast majority of influenza deaths are or were at that time attributed to either fever or respiratory diseases, abnormally high means for the previous five years in deaths from all causes as against normal means in deaths recorded under the two special causes should have resulted in the excesses calculated on these two bases being widely divergent, and those calculated on the limited base being noticeably the greatest. As a matter of fact the results were almost equal. For June to December 1918 the excesses in deaths from all causes was 1,036,753 and deaths from the two special causes 1,041,481. For my own argument I have taken deaths from all causes as a base, partly because the figures are easier to ascertain, and partly because they are clearly likely to be the most conservative.

62. Col. Murphy's calculations were carried on to December 1918 only, that being the end of the year for which report was due. His Tables I and I-A were not continued by his successor who wrote the report for 1919. On the other hand as the epidemic was evidently still going strong in Sind in December 1918 I carried on the figures (at Col. Murphy's suggestion) up to February 1919. In Subsidiary Table No. 14 are shown the actual excess mortality figures for every British District from June 1918 to February 1919. It is important to remember that *deficits are not shown*. Certain broad facts emerge from the figures, which when rearranged in Natural divisions are clearer than when arranged by Registration Circles as in Col. Murphy's Table I.

63. In the first place I exclude from consideration Bombay City altogether for the following reasons :—

(1) This is an attempt to reconstruct the population figures as they would have been had influenza not occurred. In Bombay the increase in population depends mainly on immigration. The City absorbs all for whom work can be found. Consequently losses by an epidemic in 1918 would be filled up by fresh immigrants by 1921.

(2) The mortality in Bombay City is very abnormal. The composition of the population is abnormal. And the mortality rates are notoriously jumpy.

(3) In epidemic times there is a tendency for people to leave the city and consequently many persons may have gone away, only to die of the disease elsewhere.

64. In the second place as explained above I am only taking the losses in the main epidemic. This, as seen from the figures, set in at different places at different times. The ratio of deaths in the different months shows the track of the epidemic. Bombay City, Kolaba and Poona come under the influence first, followed by Thana. The order of incidence in time in the Presidency proper is shown by the ratio of excess in September to excess in October. This order is given in the following Table :—

Ratio of excess deaths in September 1918 to the same for October 1918.

Order of Districts.

Bombay City	.. 1	:	1·6	Sholapur	.. 1	:	15
Kolaba	.. 1	:	1·8	Panch Mahals	.. 1	:	24
Poona	.. 1	:	2·4	Belgaum	.. 1	:	28
Thana	.. 1	:	4·3	West Khandesh	.. 1	:	29
Kaira	.. 1	:	5·6	Nasik	.. 1	:	31
Ratnagiri	.. 1	:	8	Bijapur	.. 1	:	38
Broach	.. 1	:	9	Dharwar	.. 1	:	44
Surat	.. 1	:	12	Ahmedabad	.. 1	:	59
Nagar	.. 1	:	12	Kanara	.. 1	:	68
Satara	.. 1	:	14	East Khandesh	..	:	..

This clearly shows how the epidemic travelled. The only real break in the order of outward spreading is Kaira, and the early arrival of the disease in that district probably accounts for its comparatively early arrival in the Panch Mahals, which, as being like East Khandesh and Ahmedabad on the northern marches of the Presidency, might have been expected to come lower in the order. It is highly probable that Kaira received its infection by sea through Cambay a few days before it arrived by land through Broach. Kanara on the other hand was clearly not infected from the sea but by land *via* Dharwar. It will be noticed from the main Table that Sind shows no marked excesses in September, but the disease carries on until January. This co-ordinates well with the low position of Ahmedabad in the above list. In view therefore of the very low ratio of September to October excesses in Sind, Kanara, and Ahmedabad I exclude the figures for September in those Districts as not certainly belonging to the mortality from the main epidemic. In East Khandesh the excess was nil.

65. At the other end the disease palpably lingered on in Sind well into January, and I include the figures for December and January for all Districts in that province. In the Presidency the matter is more doubtful. There is an area embracing Nasik, West Khandesh and the Panch Mahals in which the epidemic seems to have carried on well into December. Unfortunately to prove that this area is homogeneous it would be necessary to include Reva Kantha, parts of Baroda and the Surat Agency, for which figures are not available. But the excess in Surat seems to imply that that district comes in also. And this is well brought out by the Taluka death rates given in Col. Murphy's Table II. If the area suggested is a homogeneous one the Talukas of Surat which would be nearest the centre are the eastern ones. Table II confirms this exactly, the rates being Mandvi 9·75, Chikhli 6·12, Valod 5·13, and Bardoli 4·89 per thousand in December, no other Taluka reaching 4·00. I have therefore counted into my figures the excesses in December in the Districts mentioned, including also the small excess in East Khandesh.

66. The Konkan and Kanara figures and those for Dharwar and Bijapur are much more uncertain. The rates in Table II give no clearly marked clue to a definite region of continuance. In Dharwar the highest rate is an Eastern Taluka. In Ratnagiri the rates are more or less even throughout, and in no case remarkably high. In Kanara the highest rate is on the coast. Moreover from the report we know that a cholera epidemic arose in Bombay in December and spread through the Konkan. The excesses in December are therefore no doubt in large measure due to that disease. In these circumstances I have excluded the December figures for the region mentioned.

67. Lastly as regards the general question of the exclusion of small excesses it must be remembered :—

(1) That there are numerous deficits not taken into account. Thus in June to August there were 52 instances of excess and 32 instances of deficit. In India, where the rates are not nearly so constant as in the West, a certain number of excesses are always to be expected. No doubt the deficits were lower in average value than the excesses. But—

(2) The means taken would normally represent the deaths in the corresponding month of 1915, *i.e.*, three years previous to the epidemic. India had been exceedingly prosperous throughout the years 1913 to 1918. There is no doubt whatever that in June 1918 the population figure stood considerably higher than in June 1915 or than the mean population of June 1913 to June 1918. Consequently an excess of deaths was to be expected in normal circumstances. This expected excess would be lower than the excesses actually recorded, probably lower than the balance of the 52 excesses over the 32 deficits. But it is not a negligible quantity. In such a place as Karachi with its rapidly growing city, and the district not thinned out by famine migration, the excess of 130 in June is by no means remarkable, and by no means conclusive of influenza deaths. Certainly the whole 130 is not a measure of influenza mortality. Consequently for the conservative figures which I require for the attempted reconstruction of the district totals the exclusion of the figures in square brackets seems to be desirable.

68. The map appended shows by districts the ratios arrived at in the last column of the Table.

Subsidiary Table No. 14.—Estimated Net Influenza Mortality 1918-19, British Districts.

District.	Population according to 1911 Census, excluding Europeans, Armenians & Anglo-Indians.	Excess of deaths over mean of previous five years for the same month.										Total excess mortality, June 1918 to Feb. 1919.	Excess mortality after excluding the figures in brackets.	Ratio per 1,000 of the population.
		1918								1919				
		June.	July.	Aug.	Sept.	October.	November.	December.	January.	February.				
Gujarat.	Bombay City ..	903,363	1,111	1,778	302	5,784	9,500	1,053	3,424	8,643	4,734	Not tabulated	28,419	34
	Ahmedabad ..	827,337	..	..	..	(353)	20,509	7,820	....	....	....
	Broach ..	306,667	(57)	(51)	(259)	1,452	12,910	706	....	(82)	(58)			
	Kaira ..	69,642	..	..	..	2,063	16,668	3,943	....	....	....
	Panch Mahals ..	322,653	(103)	(27)	..	220	5,180	5,332	368	....	....	
	Surat ..	653,974	(167)	(138)	..	1,290	15,342	4,803	339	....	....	22,130	21,834	33
Konkan.	Kanara ..	430,434	(109)	..	(178)	(103)	6,785	5,894	(1,095)	....	....	14,164	12,079	29
	Kolaba ..	594,057	(50)	(319)	(615)	9,289	16,296	1,953	(297)	(710)	(1,402)	30,931	27,538	46
	Ratangiri ..	1,203,602	(285)	(486)	(630)	3,204	25,783	7,782	(1,020)	(630)	(650)	40,476	36,769	31
	Thana ..	880,908	(127)	(425)	(154)	5,782	24,702	6,158	(1,306)	(807)	(1,000)	40,611	36,642	42
Deccan.	Ahmednagar ..	943,991	..	..	..	4,477	52,974	6,101	....	....	....	63,552	63,552	67
	Khandesh East ..	1,034,214	(493)	..	..	..	60,206	10,177	33	....	....	70,909	70,416	68
	Khandesh West ..	580,680	(517)	(102)	..	1,004	29,499	10,560	974	....	....	42,650	42,037	72
	Nasik ..	903,644	..	..	..	1,686	53,668	14,935	592	....	....	70,881	70,881	78
	Poona ..	1,064,806	(334)	(433)	(809)	16,167	38,333	3,842	....	....	(470)	60,388	58,342	55
	Sholapur ..	768,017	(42)	(51)	..	3,937	57,670	5,949	....	....	....	67,649	67,556	88
	Satara ..	1,080,798	..	(154)	(265)	4,576	66,385	3,312	....	....	....	74,692	74,273	69
Karnatak.	Belgaum ..	941,948	..	..	..	1,133	31,183	12,386	....	....	....	44,702	44,702	47
	Bijapur ..	862,927	(570)	(358)	(245)	1,307	49,364	14,182	(106)	....	....	66,132	64,833	75
	Dharwar ..	1,025,086	(436)	(420)	(406)	719	30,991	14,943	(273)	....	....	48,188	46,653	45
Sind.	Hyderabad ..	611,110	(80)	(115)	(20)	(242)	7,278	20,811	4,116	2,458	(331)	35,451	34,663	57
	Karachi ..	516,333	(130)	(233)	(169)	(170)	4,976	11,822	2,572	1,488	....	21,560	20,858	40
	Larkana ..	660,828	..	..	..	(204)	12,877	13,869	2,688	1,060	....	30,698	29,494	46
	Navabshah ..	433,365	(99)	(41)	(53)	(171)	6,705	16,006	5,025	2,275	(338)	30,713	30,011	69
	Thar & Parkar ..	448,478	(36)	(42)	(157)	(49)	5,759	19,834	4,820	1,522	(140)	32,359	31,935	71
	Sukkur ..	573,535	..	..	(68)	..	10,357	14,561	2,686	....	....	27,672	27,604	48
	Upper Sind Frontier ..	262,980	..	(9)	(41)	(32)	3,232	8,464	1,841	578	(259)	14,456	14,115	54
Totals excluding Bombay but including the bracketed figures.		18,624,020	3,635	3,404	4,069	60,530	665,722	246,295	30,151	11,676	4,738	1,030,220	....	....
Totals excluding both ..		18,624,020	..	..	..	50,206	665,722	246,295	20,054	9,381	....	....	1,006,658	....

69. The Table which follows shows the Net reconstructed population of each district as it would have been had there been no Influenza epidemic. Though merely theoretical the figures in the fourth column are probably a pretty near approximation, and are not without interest. For example the progressive character of Gujarat, Khandesh and the inland Karnatak are well brought out, as well as the fact that Kanara is declining fast and the North Konkan slowly in any case. The percentage reductions would have been—Kanara 3·7, Ratnagiri 1·0, and Kolaba 0·7.

70. The figures for Sind are not given because of the admitted incompleteness of Vital Statistics in that Province.

Subsidiary Table No. 15.—Showing the reconstructed figures of population for the Districts of the Presidency.

District.	Population recorded, 1921.	Add losses by influenza.	Net recon- structed population.	Population of 1911 for comparison.
1	2	3	4	5
Ahmedabad	890,911	28,419	919,330	827,809
Broach	307,745	15,158	322,903	306,717
Kaira	710,982	23,574	734,556	691,744
Panch Mahals	374,860	11,100	385,960	322,095
Surat	674,351	21,834	696,185	654,109
Thana (with Bombay Suburban) ..	912,756	36,642	949,398	882,309
Kanara	401,727	12,679	414,406	430,548
Kolaba	562,942	27,538	590,480	594,166
Ratnagiri	1,154,244	36,769	1,191,013	1,203,638
Nagar	731,552	63,552	795,104	945,305
Khandesh East	1,075,837	70,416	1,146,253	1,034,886
Khandesh West	641,847	42,037	683,884	604,347
Nasik	832,576	70,881	903,457	905,030
Poona	1,009,033	58,342	1,067,375	1,071,512
Satara	1,026,259	74,273	1,100,532	1,081,278
Sholapur	742,010	67,556	809,566	768,330
Belgaum	952,996	44,702	997,698	943,522
Bijapur	796,876	64,853	861,729	862,973
Dharwar	1,036,924	46,653	1,083,577	1,026,303

Note.—The difference between the figures in Column 5 of this Table and Column 2 of Subsidiary Table 22 is due to the fact that in the former Europeans and Anglo-Indians are included and in the latter excluded. In Column 3 of this Table the losses of Europeans and Anglo-Indians by Influenza are not included. So the figures in Column 4 are slightly too low.

SECTION 10.—DISTRICT VARIATIONS, 1911 TO 1921.

71. The Table which follows shows the Net per mille Influenza mortality compared with the percentage increase or decrease in the decade for each district. And the same facts also represented in the left hand diagram.*

* In the Title of the left hand diagram the figures "1911" and "1921" have been transposed by accident.

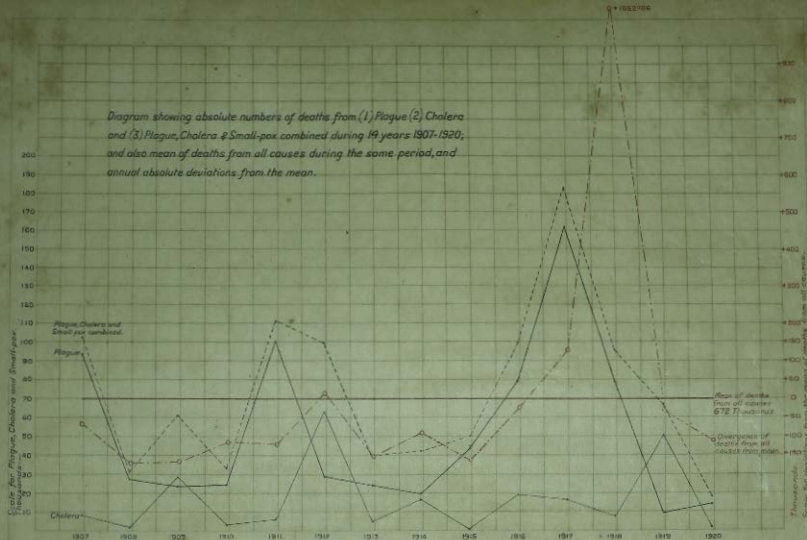
Subsidiary Table No. 16.—Comparison of Influenza Mortality with Population Changes.

District.	Influenza death rate per mille.	Percentage increase or decrease in 1921 population over 1911 ditto.	
		Plus	Minus.
Kanara	29	....	6.7
Ratnagiri	31	....	4.1
Surat	33	3.1	....
Kaira	34	2.8	....
Ahmedabad	34	7.6	....
Panch Mahals	34	16.2	....
Karachi	40	3.8	....
Thana (including Bombay Suburban)	42	3.5	....
Dharwar	45	1.0	....
Larkana	46	....	9.5
Kolaba	46	....	5.3
Belgaum	47	1.0	....
Sukkur	48	....	11.1
Broach	49	0.3	....
Upper Sind Frontier	54	....	8.5
Poona	55	....	5.8
Hyderabad	57	....	6.3
Ahmednagar	67	....	22.6
Khandesh East	68	4.0	....
Satara	69	....	5.1
Navabshah	69	....	6.6
Thar and Parkar	71	....	8.6
Khandesh West	72	6.2	....
Bijapur	75	....	7.7
Nasik	78	....	8.0
Sholapur	88	....	3.4

72. A study of the diagram will show that the correlation between Influenza and the population changes is anything but exact. The disturbing points in the lower curve are (1) the unexpectedly large decreases in the Sind Districts of Larkana, Sukkur and the Upper Sind Frontier; (2) the decreases in the Konkan Districts, especially Kanara and Ratnagiri (and the same remark would have applied also to Thana, had the Bombay Suburban District been separated); (3) the exceptional size of the increase in the Panch Mahals; (4) the increases in both the Khandesh Districts; (5) the upward trend of the end of the curve to Sholapur; and (6) the position of Ahmednagar.

73. In order to see whether these abnormalities were directly attributable to the seasonal factor the next Table was prepared, showing the combined effects of Influenza and the last four seasons. To secure this end the values contained in the second column of Subsidiary Table 3 were deducted from 100, and the remainder, varying from 20 in the case of Thana, Kolaba and Ratnagiri, to 64 in the case of Nagar, were then added to the net per mille Influenza mortality, producing the values in Column 2 of the Table below. These combined values, though essentially arbitrary, probably give a fairly correct index to the combined effects of the two adverse factors. The figures of this Table are represented in the right hand diagram :—

Diagram showing absolute numbers of deaths from (1) Plague (2) Cholera and (3) Plague, Cholera & Small-pox combined during 14 years 1907-1920; and also mean of deaths from all causes during the same period, and annual absolute deviations from the mean.



Subsidiary Table No. 17.—Departures of weighted values of the last four agricultural seasons (Subsidiary Table No. 3) from 100, and net per mille Influenza Mortality combined and compared with the population changes.

District.	Departure of weighted values of last four Agricultural seasons from 100 plus net per mille influenza mortality.	Percentage changes in population, 1921 against 1911.	
		Increase.	Decrease.
Ratnagiri	51	....	4.1
Kanara	53	....	6.7
Surat	59	3.1	....
Thana	62	3.5	....
Panch Mahals	66	16.2	....
Kolaba	66	....	5.3
Kaira	76	2.8	....
Dharwar	77	1.0	....
Belgaum	79	1.0	....
Karachi	80	3.9	....
Broach	82	0.3	....
Sukkur	84	....	11.1
Ahmedabad	87	7.6	....
Larkana	90	....	9.5
Hyderabad	91	....	6.3
Upper Sind Frontier	94	....	8.5
Poona	97	....	5.8
East Khandesh	100	4.0	....
Satara	105	....	5.1
West Khandesh	108	6.2	....
Navabshah	115	....	6.6
Bijapur	115	....	7.7
Thar and Parkar	115	....	8.6
Sholapur	120	....	3.4
Nasik	124	....	8.0
Ahmednagar	131	....	22.6

74. It cannot be said that the second Table and diagram bring out a much higher degree of correlation than the first. Ahmednagar goes to its natural position. And West Khandesh moves to the left nearer to its natural position. But Kolaba by shifting to the left and Ahmedabad by shifting to the right introduce further disturbances. On the whole the effect of the seasons is scarcely more visible when considered in conjunction with Influenza than when considered alone. The first five abnormal features indicated above when examining the first diagram remain to be discussed.

75. The fact that the Sind Districts of Larkana, Sukkur and the Upper Sind Frontier show decreases of population, which their positions in the Influenza scale do not warrant, cannot be wholly explained by the defectiveness of Registration of Deaths in Sind, because the defect referred to exists equally in other Sind Districts. The disturbing factor in this case seems to be immigration. The influx of Baluchis and Punjabis in 1921 was much smaller than in 1911, as the following figures will show:—

Subsidiary Table No. 18.—Numbers of immigrants from all regions into Sind Districts, 1911 and 1921.

District.	Immigrants.		Difference.	Percentage difference between population, 1921 and 1911 + or -
	1911.	1921.		
Karachi	116,401	148,318	+21,917	+3.9
Hyderabad and Navabshah*	96,636	119,988	+20,352	+4.3
Thar and Parkar	76,990	51,836	-25,154	-8.6
Sukkur	41,636	31,327	-10,309	-11.1
Larkana	40,818	33,909	-6,909	-9.5
U. S. Frontier	55,381	35,345	-20,036	-8.5

* In the above table Hyderabad plus Navabshah (1921) is treated as approximately equivalent to Hyderabad (1911).

76. It will be seen that the districts in which the reduction in the number of immigrants is most marked are the three districts under consideration, namely, Larkana, Sukkur and the Upper Sind Frontier, and also Thar and Parkar. The reduction in immigrants is natural having regards to the main lines of immigration. The season preceding the Census was a very bad one in Sind, with scanty rain and poor inundation; there was therefore less attraction than usual, and the political situation may also have contributed to keep strangers away.

77. The following Table shows the reduction in immigrants in greater detail :—

Subsidiary Table 19.—Immigrants from certain adjacent regions into Sind, 1911 and 1921.

District in which enumerated.	Year.	Region where born.				
		Baluchistan.	Panjab and Delhi.	Rajputana.	Afghanistan.	Total.
Karachi	1911	14,812	7,467	3,721	1,444	27,444
	1921	15,399	14,248	5,873	243	35,763
					Increase	8,319
Hyderabad	1911	2,243	6,513	19,731	464	28,951
	1921	1,557	6,883	20,778	169	29,387
					Increase	436
Larkana	1911	18,320	2,315	1,124	668	22,427
	1921	13,466	2,179	1,001	459	17,105
					Decrease	5,322
Sukkur	1911	2,744	9,700	6,957	1,217	20,618
	1921	1,715	8,468	3,448	675	14,306
					Decrease	6,312
Thar and Parkar ..	1911	556	6,236	35,324	124	42,270
	1921	224	6,219	20,446	97	26,986
					Decrease	15,284
Upper Sind Frontier ..	1911	28,830	4,148	2,512	1,557	37,047
	1921	20,298	2,333	1,338	783	24,752
					Decrease	12,295

78. It may be argued that the explanation given for the unexpectedly large decreases in the population of the three Districts of Larkana, Sukkur and the Upper Sind Frontier District, in spite of their high position in the Influenza scale, ought to apply to Thar and Parkar also, which, with an exceptionally marked reduction in immigrants, takes its correct position according to the Influenza scale. The answer to this is that there being hardly any other districts lower in the Influenza scale there was no opportunity for Thar and Parkar to take too high a position. The few districts which come below it in either table are districts in which the causes of increase or decrease will be separately suggested.

79. The Konkan Districts of Kanara, Ratnagiri and Kolaba show decreases that would not have been expected from their position in the Influenza scale. This applies also to Thana, excluding the Bombay Suburban District. It is of course possible here also to assume that in the Konkan the registration of deaths is, or was at the Influenza period, incomplete. And it is certainly noteworthy that in the Diagrams included in the section on Vital Statistics the curves of births and deaths in the Konkan are usually below those for the Presidency. The causes of the decline in Kanara are probably distinct from the causes of the decline in the Konkan proper, as has already been suggested above—(Reference is invited to the Appendix entitled—“Region of decay in the Karnatak and Kanara”). But in all parts of the Konkan emigration is probably the chief cause. The following figures may be of interest.

Subsidiary Table No. 20.—Migration to and from Kanara, Kolaba and Ratnagiri, 1911 and 1921.

Difference 1911 to 1921 in the following figures.				Kanara.	Kolaba.	Ratnagiri.
Population of the district	..	..	..	—28,821	—31,224	—40,394 ✓
Immigrants into the district	..	..	..	—10,580	+431	—7,106 ✓
Emigrants from the district—						
(i) to all parts of the Presidency, including Bombay City	..	..	..	+2,829	+3,898	+14,029 ✓
(ii) to Bombay City	..	..	..	+2,603	+6,061	+19,556 ✓

80. The large increases in the Panch Mahals is probably due to recovery from the 1899 famine, which in that district was exceptionally severe, and also to the generally advancing character of the tract. The following age distribution figures show the first point.

Subsidiary Table No. 21.—Age distribution of the population of the Panch Mahals, 1891 to 1921.

Age Group.	Per mille distribution by age groups.				
	Panch Mahals.				General population
	1891	1901	1911	1921	1921
0—5	159	94	174	150	127
5—10	159	165	142	184	151
10—15	103	137	92	124	116
15—20	87	95	84	71	72
20—40	323	349	333	287	325
40—60	138	137	146	149	160
Over 60	31	23	29	35	49

Famine, it will be remembered, eliminates the very young and the very old. This is clearly shown in the 1901 distribution. The ravages of famine in the age group 0-5 in the 1901 figures are clearly traceable in the age groups 10-15 in 1911 and 20-40 in 1921. The details of the 20-40 group are unfortunately not available. Otherwise the gap would have occurred in the age group 20-25. The general age distribution distinctly suggests a population increasing by natural accretions and not by immigration (see the Chapter on Age). And a further increase in the next decade may be confidently anticipated.

81. It was also expected that the caste figures would show that the Bhils are

Changes in certain contrasted castes in the Panch Mahals, 1891 to 1921.				
Caste.	1891	1901	1911	1921
Bhil ..	97,017	97,672†	98,333	98,515
Brahman ..	6,957	6,601	6,076	7,285
Jains ..	1,738	1,676	1,542	1,813
† This figure is probably kept up by immigration of Bhils from Reva Kantha on to relief works in the Mahals. In Reva Kantha the Bhil figures are not available for 1891, but for the next three Censuses are as follows :—				
1901	..	109,506		
1911	..	190,825		
1921	..	194,437		

recovering from the famine and therefore increasing more rapidly than the higher castes. The marginal figures however do not bear this out. The sudden increase of Brahmans and Jains at this Census is interesting and may possibly indicate that increasing material prosperity is bringing traders and clerks into the district.

82. The increase in both the Khandesh Districts in spite of their low position in the Influenza scale is probably due to much the same causes as the increase in

the Panch Mahals, namely, continued recovery from the 1899 famine and general prosperity. The figures of Bhils in these two districts since 1891 are shown in the margin. Immigration also plays a part. Taking migration within the Presidency only, the excess of immigrants over emigrants in Khandesh was in 1911, 25,502 and in 1921, 26,774.

83. The smallness of the decrease in Sholapur is caused by the rise in the population of the City, which drew strangers from beyond the district.

84. So far as Ahmednagar is concerned the enormous decrease is due, as is well known, to famine emigration. In the case of the other Deccan Districts the figures in the Tables indicate that migration was mainly from East to West within the district. The Taluka figures are, as will be shown, much upset: but the district figure is approximately what might have been expected from the influenza scale.

85. It will be seen therefore that while it may be stated as a simple non-controversial point that the main controlling factor in the population change of the Presidency as a whole from the 1911 to the 1921 Census was the Influenza epidemic, yet, when the changes in a series of districts are considered one against the other the Influenza factor is masked. This is perfectly natural. Reflection will show that had there been no Influenza the different districts would not have exhibited exactly equal rates of increase. There are other factors at work, some at any rate of which have been suggested above. The point of the diagrams comparing Influenza mortality with population changes was to enable both author and reader to perceive exactly *where an extraneous factor has to be looked for*. Otherwise every decrease would have been attributed to Influenza (more especially since there was a tendency for everyone who survived that ghastly period to believe that his own particular region was the most severely hit) while many of the increases would have been liable to be regarded as more remarkable than they really were.

86. The study of the correlation between Influenza and population changes by Talukas has been relegated to an Appendix in order to curtail the length of this Chapter.

87. Lastly I give the following Table, which, although more properly relating to the discussion of Birthplace, which comes later, tends to corroborate a good deal of the discussion which has just preceded.

Subsidiary Table No. 22.—Vital Statistics of the decade in British Districts (Indian Population only), and comparison with results of the 1921 Census.

District and Natural Division.	Population at Census of 1911.*	Births and Deaths, April 1911 to March 1921, inclusive.		Excess or Deficit of births against deaths + or -.	Population of 1911 plus or minus the figures in Column 5.	Population actually recorded in 1921.	Difference + or - between figures in Columns 6 and 7 attributable either to migration or incomplete Vital Statistics.
		Births.	Deaths.				
1	2	3	4	5	6	7	8
I. BOMBAY CITY ..	963,363	203,713	398,679	-194,966	768,397	1,156,404	+ 388,067
II. GUJARAT ..	2,802,273	1,121,221	1,062,869	+ 58,352	2,860,625	2,957,077	+ 97,352
Ahmedabad ..	827,337	320,162	351,268	-31,076	796,261	890,109	+ 94,118
Broach ..	306,667	135,981	126,243	+ 9,738	316,405	307,711	- 8,694
Kaira ..	691,642	281,125	265,599	+ 15,526	707,168	710,905	+ 3,737
Panch Mahals ..	322,653	136,612	87,835	+ 48,777	371,430	374,881	+ 3,451
Surat ..	653,974	247,311	231,924	+ 15,387	669,361	674,127	+ 4,766
III. KONKAN ..	3,109,001	1,010,142	978,393	+ 32,144	3,141,145	3,029,420	- 111,725
Kanara ..	430,434	141,130	145,560	- 4,430	425,978	401,653	- 24,325
Kolaba ..	504,057	214,777	215,551	- 774	503,283	502,488	- 795
Ratnagiri ..	1,203,992	379,074	318,593	+ 60,271	1,263,873	1,154,230	- 109,643
Thana (Including Bombay Suburban).	880,908	275,561	298,458	+ 22,897	858,011	911,051	+ 53,040
IV. DECCAN ..	6,376,150	2,552,342	2,708,032	- 155,690	6,220,460	6,045,893	- 174,567
Ahmednagar ..	943,991	355,173	364,664	- 9,491	934,500	730,481	- 204,019
Khandesh East ..	1,034,214	490,306	450,993	+ 39,313	1,073,527	1,075,122	+ 1,595
Khandesh West ..	580,680	277,010	254,526	+ 22,484	601,664	641,828	+ 40,164
Nasik ..	903,644	382,071	410,529	- 28,458	874,186	828,024	- 46,162
Poona ..	1,064,806	340,195	421,963	- 81,768	983,038	1,002,323	+ 19,285
Satara ..	1,080,798	401,236	437,313	- 36,077	1,044,721	1,025,695	- 19,026
Sholapur ..	768,017	305,451	362,044	- 56,593	711,424	741,630	+ 30,206
V. KARNATAK ..	2,829,561	1,088,552	1,157,138	- 68,586	2,760,375	2,785,609	+ 25,234
Belgaum ..	941,948	376,930	363,354	+ 13,576	955,524	952,158	- 3,366
Bijapur ..	862,927	323,518	363,926	- 40,408	822,510	790,802	- 31,708
Dharwar ..	1,025,086	388,104	429,858	- 41,754	983,332	1,036,580	+ 53,247
VI. SIND ..	3,506,635	713,174	924,570	- 211,396	3,295,239	3,274,601	- 20,738
Hyderabad†	1,402,933	263,823	382,875	- 119,052	1,373,001	1,387,013	+ 14,012
Thar and Parkar† and Navabshah†	510,333	117,719	139,919	- 22,200	488,133	538,248	+ 50,115
Karachi ..	600,828	142,032	173,722	- 31,690	569,138	507,037	- 62,101
Larkana ..	573,535	132,061	163,321	- 31,260	532,275	510,089	- 22,186
Sukkur ..	262,986	56,639	64,231	- 7,592	254,694	240,614	- 14,080
Upper Sind Frontier ..							

* Adjusted according to changes in the limits of the administrative units.

† Adjustment of territory between these three districts renders it impossible to get the birth and death figures separately.

PART III.—DENSITY.

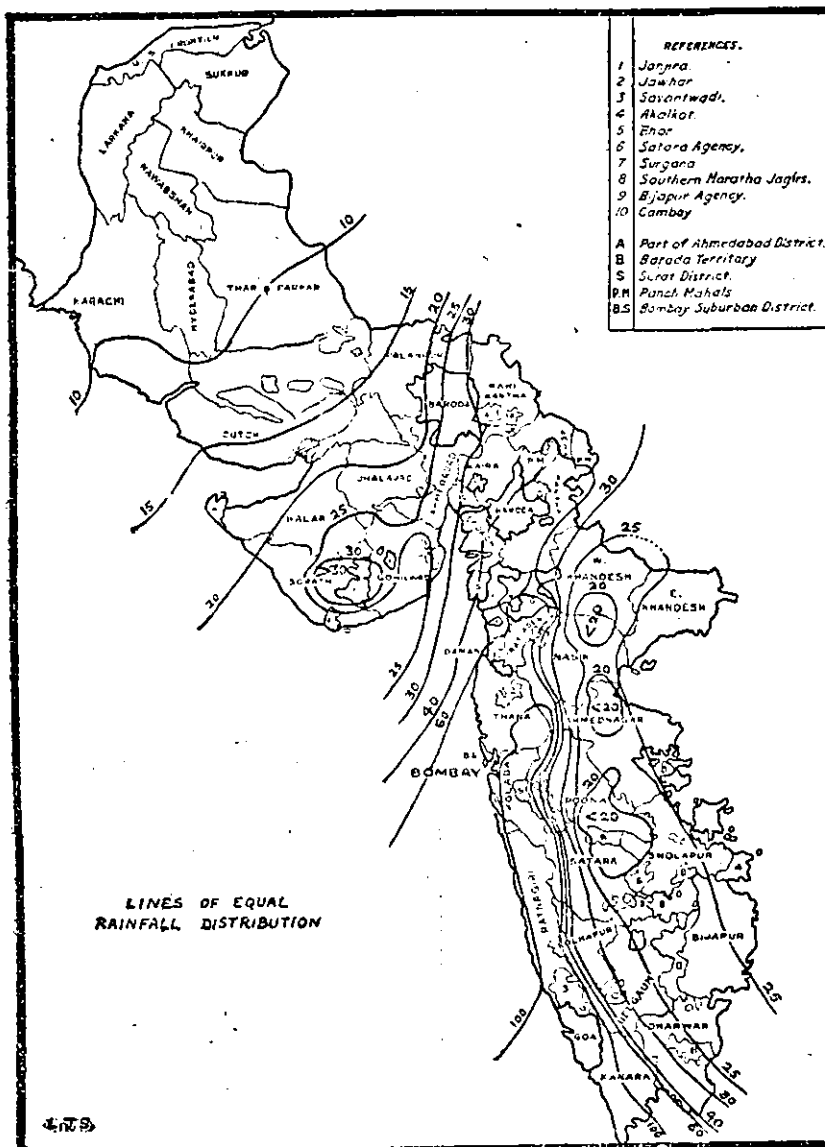
SECTION 11.—TWO KINDS OF DENSITY CALCULATIONS.

88. In Subsidiary Table I to Chapter I of the 1911 Report density was calculated on two different bases. Absolute density (density to total area) explains itself. The second type (density to cultivable area) is both difficult to ascertain and also requires a good many definitions. It is difficult to ascertain because in almost all talukas there are villages which do not send returns to the Agricultural Department, for instance, Khoti villages in Ratnagiri, Talukdari villages in Gujarat and Un-surveyed Inam villages everywhere. Definitions are required because the meaning of the term "cultivable" is not at once apparent; and the matter is complicated by the adoption in 1911 of a different basis for the figures in Sind. It was therefore decided to relegate the discussion of Density on Cultivable area to an Appendix. And the discussion which now follows relates to absolute density only.

SECTION 12.—ABSOLUTE DENSITY.

89. In the Table below Column 9 for Rainfall has been broken up into two, so as to give for each district its wettest and driest stations. This will give a better idea of the general climatic character of the district than the figure of the mean for the Head Quarter Station which is often in a corner. The point is not however of much importance, as this report is written on the assumption that it will be used only by local readers, to whom the general character of the Presidency and its districts is well known.

90. For comparison with the density maps a map is appended showing the



lines of equal rainfall distribution in this Presidency. It cannot be said that there is any very exact correlation between the mean quantity of rainfall and density. Such correlation as there would naturally be is upset by irrigation, which enables a light rainfall tract to be cultivated. Besides this, the absolute amount of the annual rainfall is of much less importance than its variability. If India were not subject to violent fluctuations of the seasons, the Deccan belt, with a rainfall below 25 inches, would be no doubt densely populated, since the soil is good, and excellent crops can be grown with that amount of water. Nevertheless with the exception of the

Subsidiary Table No. 23.—Density, water-supply and

District and Natural Division.	Density per sq. mile on the total area, 1921.	Density per sq. mile of cultivable area, 1921.	Percentage of the total reporting area.		Percentage to culti-vable area of		Percentage of cultivated area which is irrigated.
			Cultivable.	Net culti-vated.	Net Cul-tivated.	Double cropped.	
1	2	3	4	5	6	7	8
Bombay Presidency	156	These figures are given in an appendix.	64	40	61	2	15
Gujarat	292		77	52	68	4	4
Ahmedabad	233		78	50	50	1	7
Broach	210		73	63	83	....	....
Kaira	445		87	67	78	3	6
Panch Mahals	233		69	41	58	11	1
Surat	408		75	44	57	8	2
Kontan	222		39	18	45	2	4
Kanara	102		15	8	55	6	11
Kolaba	259		18	26	45	1	1
Ratnagiri	289		64	25	39	3	6
Thana (including Bombay Suburban District).	255		47	20	42	1	1
Deccan	158		75	60	91	3	4
Ahmednagar	111		77	66	86	2	3
Khandesh, East	236		78	77	94	1	1
Khandesh, West	100		72	55	81	1	1
Nasik	142		67	54	79	2	5
Poona	189		75	66	75	3	7
Satara	209		73	52	68	5	6
Sholapur	163		87	52	81	1	5
Karnatak	187		84	72	86	1	3
Belgaum	207		80	60	75	1	3
Bijapur	140		90	81	90	....	1
Dharwar	225		84	73	83	1	5
Sind	71		52	16	29	3	76
Hyderabad	121		72	21	30	1	89
Navabshah	108		68	24	30	1	99
Karachi	48		27	6	20	1	80
Larkana	118		74	23	38	10	82
Sukkur	91		64	14	22	2	77
Thar and Parkar	29		46	12	26	....	43
Upper Sind Frontier	90		80	32	42	4	100

Notes.—(1) For the Agricultural statistics the year 1914-15 was chosen as being the last fully normal year.

(2) The figures of irrigated area includes all kinds of irrigation, viz., 1. Government Canals. 2. Private canals. 3. Wells. 4. Tanks. 5. Other sources.

(3) The mean annual rainfall is the corrected mean for all recorded years upto 1920. The number of years for which records are available differs at different Stations.

(4) Absolute density (Column 2) is the per square mile density of the 1921 Census population to the area of each unit on the Census date.

(5) Reporting area means those villages for which crop statistics are collected annually. This includes all Government and a large proportion of Inam villages. The only District in which the non-reporting area is large is Ratnagiri, where the Khoti villages mostly do not report. But the inclusion of non-reporting areas, even in that District, would probably not materially alter the figures.

narrow coast strip the most densely populated regions are those with a fall between 30 and 60 inches, probably because, given an equal proportional degree of variability, the fall in the worst years in those regions is sufficient to enable some crop to be reaped. And this result corresponds closely with the conclusions arrived at by Mr. Gait in the India Report of 1911, when studying the density distribution in India as a whole.

crops.—For British Districts and Natural Divisions.

Mean annual rainfall		Percentage of gross cultivated reporting area under								District and Natural Division.
At highest rainfall station in District.	At lower rainfall station in District.	Rice.	Jowari.	Bajri.	Other Cereals.	Pulses.	Other Food Crops.	Cotton.	Other Crops.	
9	10	11	12	13	14	15	16	17	18	19
		9	24	20	12	9	2	15	9	Bombay Presidency.
		10	16	11	20	8	4	22	9	Gujarat.
23·54	18·97	6	23	15	16	5	4	25	6	Ahmedabad.
39·71	27·20	2	25	1	14	10	1	43	4	Broach.
34·07	28·50	13	4	23	27	6	4	6	17	Kaira.
44·31	28·68	14	2	9	38	10	1	7	18	Panch Mahals.
74·10	35·39	19	20	1	13	7	10	24	6	Surat.
		68	..	..	18	4	5	..	5	Konkan.
148·62	44·46	74	..	2	1	3	10	..	10	Kanara.
209·12	85·41	71	..	..	22	2	3	..	2	Kolaba.
151·63	67·88	42	..	..	38	5	7	..	8	Ratnagiri.
104·79	62·03	73	..	..	17	4	3	..	3	Thana (including Bombay Suburban District).
		2	25	30	9	10	2	15	7	Deccan.
25·33	19·13	1	25	38	7	9	3	10	7	Ahmednagar.
29·08	24·19	..	16	16	3	14	1	47	3	Khandesh, East.
63·12	18·25	8	8	26	13	9	1	34	6	Khandesh, West.
128·84	17·74	3	4	42	20	16	2	5	9	Nasik.
167·43	18·41	4	32	27	16	8	4	1	8	Poona.
285·67	19·03	3	32	26	9	13	6	1	11	Satara.
28·86	17·59	..	54	19	2	6	3	6	10	Sholapur.
		4	36	8	13	9	1	23	6	Karnatak.
103·87	24·18	6	32	11	16	10	1	15	9	Belgaum.
25·83	21·50	..	44	13	7	5	1	23	7	Bijapur.
35·66	19·63	7	29	..	20	10	1	27	6	Dharwar.
		22	13	22	16	8	1	7	11	Sind.
7·25	6·89	40	2	28	4	1	2	11	12	Hyderabad.
4·31	4·31	3	23	21	13	5	1	21	18	Navabshah.
9·06	6·73	55	7	3	8	5	2	..	20	Karachi.
5·33	3·61	32	19	1	14	16	1	..	17	Larkana.
3·56	3·09	11	24	5	39	12	1	..	8	Sukkur.
14·60	7·97	11	2	61	9	1	..	14	2	Thar and Parkar.
3·98	3·98	10	18	19	20	15	1	..	17	Upper Sind Frontier.

91. The exact figures of persons per square mile in every taluka and petha will be found in the last column of Provincial Table I. Excluding the four Talukas in which urbanisation seriously upsets the figure (see Note to the next table) the extreme range of density is from 5 persons per square mile in the Kohistan Mahal of Karachi to 745 in Vengurla. Owing to the large extent of their talukas the cities of Karachi and Sholapur are not able to produce an excessive figure. In all such studies there is a certain amount of chance in the figure, because talukas are of irregular extent, and contain towns and cities of varying size. Nevertheless the annexed Table gives some sort of idea of the more prevalent types. It will be seen that in Sind the talukas are large and sparsely populated. In the Presidency proper the most common range is from 100 to 300 persons per square mile.

Subsidiary Table No. 24.—Density per square mile in Talukas and Pethas, 1921.

Number of persons per square mile.				Number of Talukas and Pethas.		
				Presi- dency Proper.	Sind.	Total.
0 — 50	..	..	..	6	21	27
50 — 100	..	..	..	15	13	28
100 — 150	..	..	..	42	12	54
150 — 200	..	..	..	37	8	45
200 — 250	..	..	..	36	3	39
250 — 300	..	..	..	22	..	22
300 — 350	..	..	..	11	..	11
350 — 400	..	..	..	5	3	8
400 — 450	..	..	..	7	..	7
450 — 500	..	..	..	1	..	1
500 — 550	..	..	..	2	..	2
550 — 600	..	..	..	..	..	..
600 — 650	..	..	..	2	..	2
650 — 700	..	..	..	..	..	..
700 — 750	..	..	..	2	..	2
Above 750	..	..	..	4	..	4

These four Talukas are South Salsette (1,876), Chorasi (1,536), North Daskroi (1,824) and Poona Taluka (4,844).

92. The following comparative densities may also be of interest :—

Country.	Persons per square mile. (1921).	Country.	Persons per square mile.
Bombay Presidency ..	137	Europe	108
		Asia	54
		Africa	15
Madras	104	North America ..	15
Punjab	183	South America ..	6
Hyderabad State ..	151		
Rajputana	76		
Kashmir	39		
		England and Wales ..	670
		Scotland	158
		Ireland	133
		Massachusetts ..	419
		Pensylvania ..	171
		Nevada	1

93. The next Table corresponds with Subsidiary Table II to Chapter I of the 1911 Report, and shows the distribution of the population of each district according to the density of each taluka, the density classes however being wider than those in the Table just given. In comparing this Table with that of 1911 it is to be remembered that at that Census talukas and pethas were treated as single units, whereas they have this time been separated. The petha is to all intents and purposes a taluka and the separation seems justified. This change has however rendered it impossible to present the actual and proportional variations in talukas classified by density (Subsidiary Tables IV and V to Chapter II of 1911, p. 38 of the 1911 Report).

*Subsidiary Table No. 25.—Distribution of the population classified according to Density.
For British Districts and Natural Divisions.*

District and Natural Division.	Talukas and Pethas with a Population per Square Mile of											
	Under 150.		150—300.		300—450.		450—600.		600—750.*		1,050 and over.*	
	Area.	Population (000's omitted).	Area.	Population (000's omitted).	Area.	Population (000's omitted).	Area.	Population (000's omitted).	Area.	Population (000's omitted).	Area.	Population (000's omitted).
1	2	3	4	5	6	7	8	9	10	11	12	13
Gujarat ..	2,624 ₂₆	285 ₁₀	4,868 ₄₈	1,054 ₃₆	1,465 ₁₄	569 ₁₉	209 ₂	96 ₃	673 ₇	430 ₁₄	306 ₃	525 ₁₈
Ahmedabad ..	1,997 ₆₂	204 ₂₃	1,635 ₄₃	337 ₃₈	..	..	..	..	..	..	192 ₅	359 ₃₉
Broach ..	347 ₂₄	29 ₉	717 ₄₉	122 ₁₀	404 ₂₇	158 ₅₁	..	..	..	..	..	..
Kaira ..	....	....	752 ₄₇	215 ₃₀	171 ₁₁	66 ₉	..	..	673 ₄₂	430 ₆₁	..	..
Panch Mahals ..	....	....	1,452 ₉₀	326 ₈₇	154 ₁₀	40 ₁₃	..	..	..	..	..	..
Surat ..	280 ₁₇	51 ₈	312 ₁₉	54 ₈	736 ₁₄	297 ₄₄	209 ₁₃	96 ₁₄	..	..	114 ₇	176 ₂₈
Konkan ..	4,192 ₃₁	327 ₁₁	7,227 ₅₃	1,738 ₅₇	1,004 ₁₄	683 ₂₃	155 ₁	82 ₃	65	48 ₁	142 ₁	153 ₆
Kanara ..	3,015 ₇₆	180 ₄₅	931 ₂₄	221 ₅₅	..	..	..	..	..	..	..	..
Kolsba ..	....	....	1,029 ₈₉	458 ₈₂	192 ₉	79 ₁₄	47 ₂	25 ₄	..	..	..	..
Ratnagiri ..	....	....	2,040 ₇₄	751 ₆₅	984 ₂₅	354 ₃₁	..	..	65 ₁	48 ₄	..	..
Thana ..	1,177 ₃₄	147 ₁₉	1,427 ₄₂	207 ₄₀	727 ₂₁	249 ₃₃	108 ₃	57 ₈	..	..	..	..
Bombay Suburban District.	....	....	....	....	..	..	..	..	..	..	142 ₁₀₀	153 ₁₀₀
Deccan ..	21,347 ₅₅	2,171 ₃₆	15,530 ₄₀	3,216 ₅₃	1,339 ₄	449 ₇	..	..	..	..	46 ₁	223 ₄
Ahmednagar ..	5,406 ₈₃	516 ₇₁	1,144 ₁₇	216 ₂₉	..	..	..	..	..	..	..	..
Khandesh, East ..	....	....	4,232 ₉₃	978 ₉₁	319 ₇	98 ₉	..	..	..	..	..	..
Khandesh, West ..	5,130 ₈₀	414 ₆₄	1,265 ₂₀	228 ₃₆	..	..	..	..	..	..	..	..
Nasik ..	4,605 ₇₈	545 ₆₅	1,272 ₂₂	288 ₃₅	..	..	..	..	..	..	..	..
Poona ..	2,215 ₄₁	257 ₂₅	3,096 ₃₈	520 ₅₃	..	..	..	..	..	..	46 ₁	223 ₂₂
Satara ..	1,292 ₂₆	152 ₁₆	2,598 ₆₃	523 ₅₁	1,020 ₂₁	351 ₃₄	..	..	..	..	..	..
Sholapur ..	2,633 ₅₈	287 ₃₉	1,923 ₄₂	455 ₆₁	..	..	..	..	..	..	..	..
Karnatak ..	5,636 ₃₅	696 ₂₅	8,140 ₅₄	1,630 ₆₁	1,148 ₈	401 ₁₁	..	..	..	..	..	..
Belgaum ..	921 ₂₀	113 ₁₂	2,852 ₆₂	568 ₆₀	837 ₁₈	272 ₂₈	..	..	..	..	..	..
Bijapur ..	4,167 ₇₃	513 ₆₄	1,540 ₂₇	284 ₃₆	..	..	..	..	..	..	..	..
Dharwar ..	548 ₁₂	70 ₇	3,747 ₈₁	837 ₈₁	311 ₇	120 ₁₂	..	..	..	..	..	..
Sind ..	40,840 ₈₈	2,101 ₆₄	4,790 ₁₀	848 ₂₆	876 ₂	320 ₁₀	..	..	..	..	..	..
Hyderabad ..	3,522 ₈₀	326 ₆₇	511 ₁₁	96 ₁₇	384 ₉	151 ₂₆	..	..	..	..	..	..
Karachi ..	11,231 ₁₀₀	542 ₁₀₀	....	....	..	..	..	..	..	..	..	..
Larkana ..	2,894 ₅₇	176 ₂₉	1,944 ₃₉	343 ₅₈	219 ₄	79 ₁₃	..	..	..	..	..	..
Navabshah ..	2,028 ₇₅	260 ₆₂	966 ₂₅	150 ₃₈	..	..	..	..	..	..	..	..
Sukkur ..	4,433 ₇₉	236 ₄₆	906 ₁₆	176 ₃₄	273 ₅	99 ₂₀	..	..	..	..	..	..
Thar and Parkar ..	13,636 ₁₀₀	396 ₁₀₀	....	....	..	..	..	..	..	..	..	..
Upper Sind Frontier ..	2,201 ₈₃	166 ₆₉	463 ₁₇	75 ₃₁	..	..	..	..	..	..	..	..

* There are no cases of Talukas with a density between 750 and 1,050.

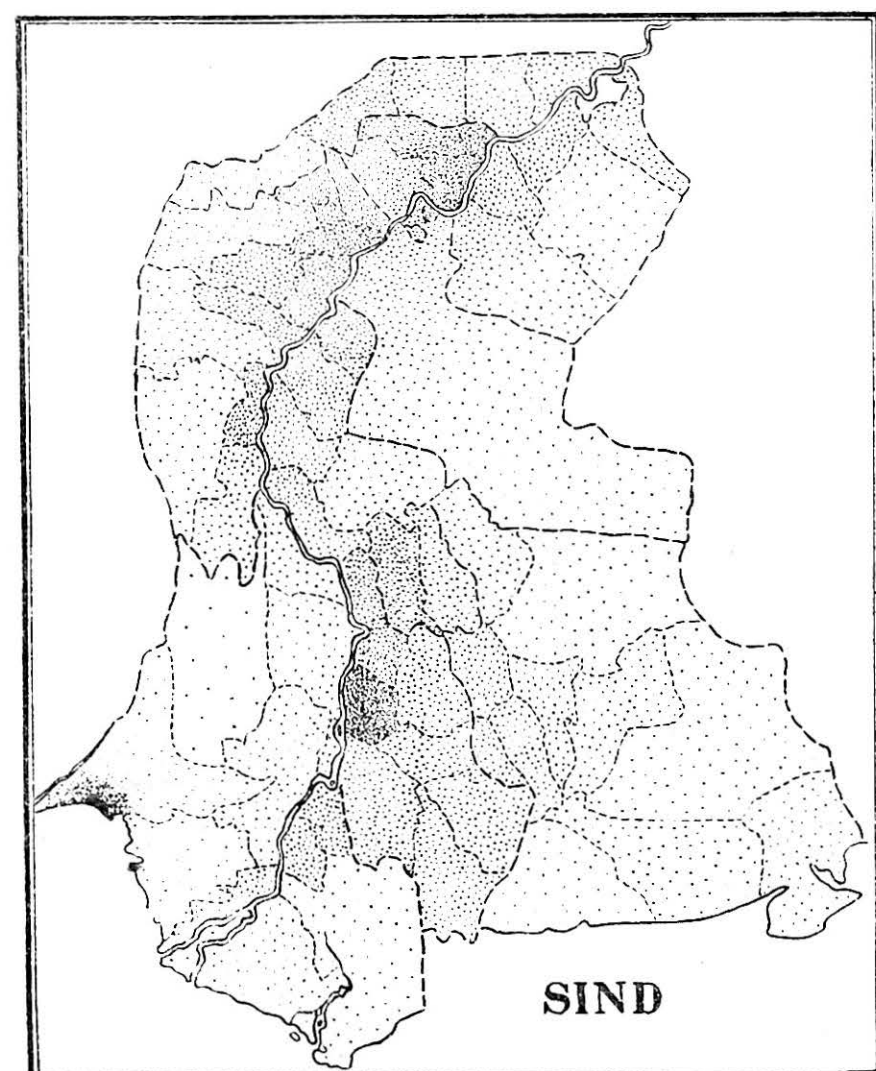
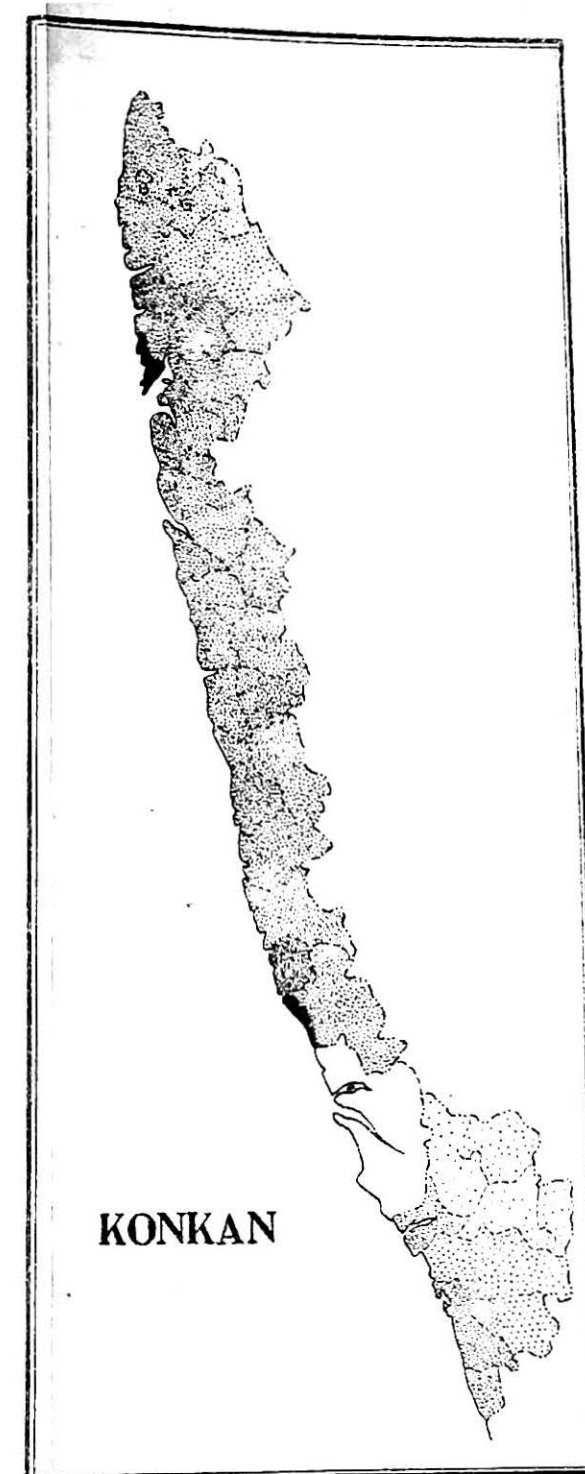
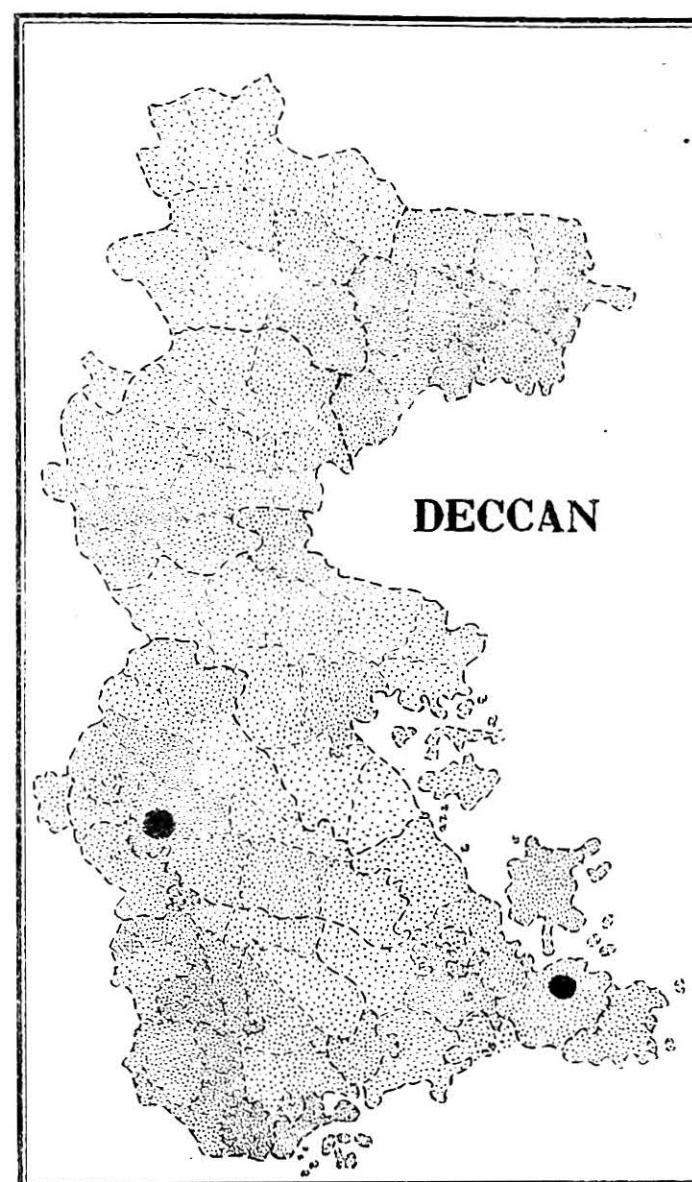
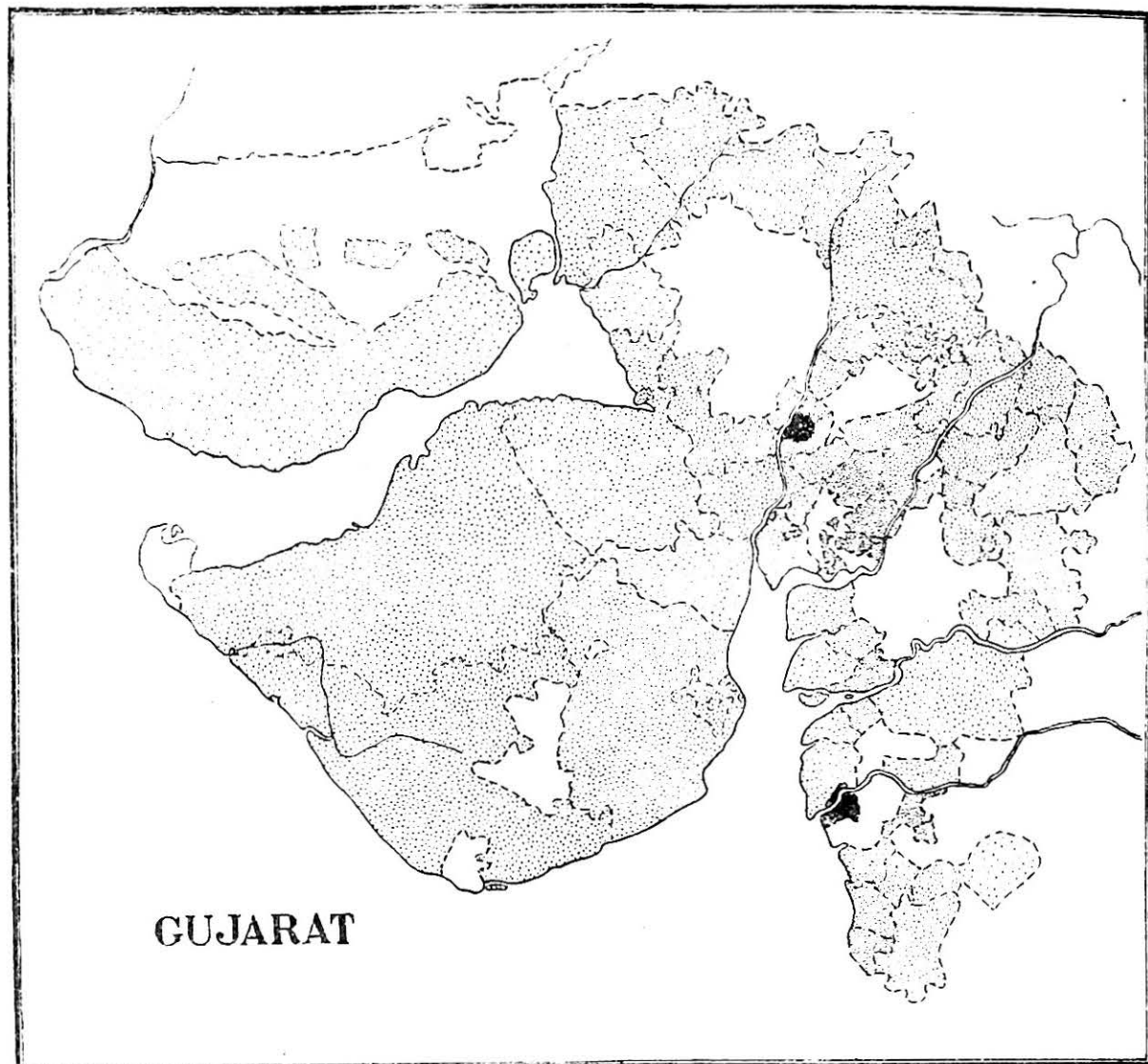
94. The point of the above Table is to enable the density of each district to be analysed down to its component elements. The district as such is an area of administrative convenience and not a natural areal unit; and many districts contain separate portions of very divergent types. The same density figure for the district as a whole may be produced by widely diverse means. Thus in the case of Ahmedabad and East Khandesh the district figure is almost identical. But whereas the latter district is almost a single homogeneous whole the former contains tracts of great density, tracts of medium density and tracts of sparse population.

95. In the dotted map absolute density, *i. e.*, density based on total area, is shown by a method much used in the United States and elsewhere. The method is to take the unit of area and insert dots at the rate of one for a definite number of persons—in this case 500. The result is to produce dark shading in the densely, and light shading in the sparsely inhabited regions. This method has two advantages as against the method of hatching usually employed in India, namely—(i) it is not dependent upon accurate measurements of area, but could be used even if the area of the unit were unknown, and (ii) it does away with the arbitrary character of classes. As an example of the latter point, if hatching is used and the densities are broken up into classes (as is the case with the maps of the Census of 1911), then, taking 100-200, 200-300 and 300-400 persons per square mile as imaginary classes, 199 will go into the first class, 201 and 299 into the second, and 301 into the third. The cases 199 and 201 are separated by a whole class interval, 201 and 299 get into one class, and 299 and 301 are again separated by a class interval. The example chosen is an extreme one, but it exemplifies the main drawback to any method which breaks up a number of individual cases into classes. The dotting method however has certain drawbacks, namely (i) unequal inking in the press or a variation in size of the dots in the drawing as between two regions may produce a misleading impression, (ii) unless the densities of adjacent regions are widely different, as in Sind, the eye does not perhaps readily detect the differences of shading, (iii) it is very difficult to adjust the dots to broken Territory such as that of the Southern Mahratta States.

96. The method has been explained in detail because it is new to Census Reports of this Presidency. The map explains itself. But unequal inking has given a slightly diminished effect of shading in the densely populated parts of East Khandesh as compared with the transition tract of Satara. In the cases of Sholapur, Hubli and Karachi liberty was taken, as explained in the note to the map, to aggregate the dots for those cities in one place first and then fill in those for the rest of the Taluka.

97. It is not proposed to elaborate the reasons for the variations of density, since they are sufficiently well known. Reference is invited to Paragraphs 12 to 34 of Mr. Macgregor's Report on the 1911 Census, where the subject is dealt with in some detail.

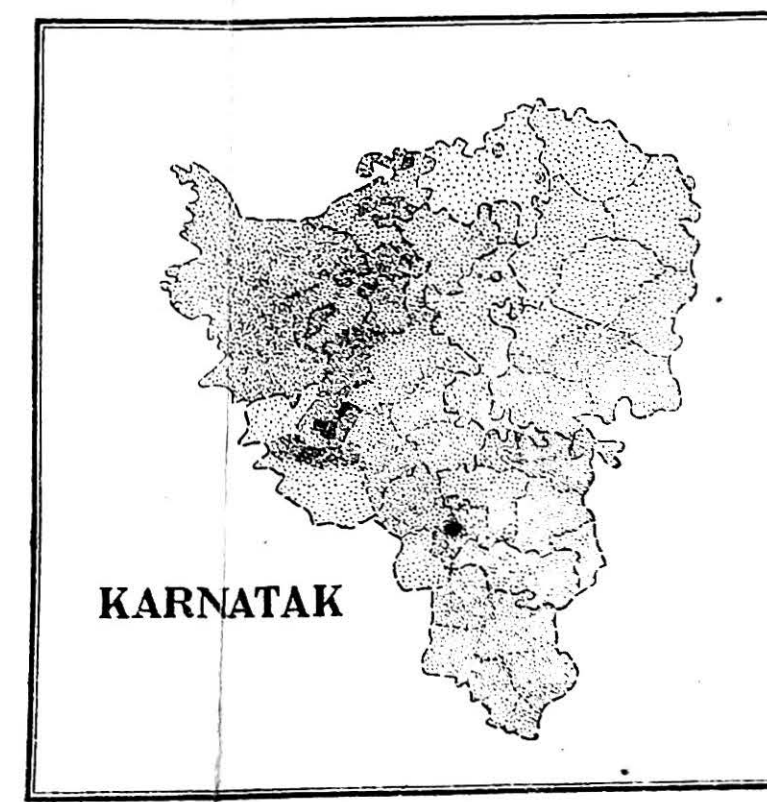
98. The Table which follows shows changes in density for all past Censuses. But it is not proposed to give maps or discussions on these figures, since changes in density necessarily follow changes in population; and the latter point has already been discussed in considerable detail.



DENSITY
BY
NATURAL DIVISIONS.
1921.

Each dot represents 500 persons. The dots are for the most part spread evenly over the entire area of the unit (Taluka or State). But in a few cases, e.g. Karachi, and some of the regions of Sind which lie along the Indus, the dots have been aggregated more to one point in the area than another according to probable distribution of population.

The four Prants of Kathiawar are treated as one unit each. The Southern Mahratta Country States are also taken as one unit, but the dots are arranged in the scattered territory of those States on the assumption that density follows the density of the adjacent British Talukas.



Subsidiary Table No. 26.—Variation in relation to density since 1872.
For British Districts and Natural Divisions.

District and Natural Division.	Percentage of Variation.					Percentage of Net Variations, 1872 to 1921.	Mean Density per square mile.					
	1911 to 1921.	1901 to 1911.	1891 to 1901.	1881 to 1891.	1872 to 1881.		1921.	1911.	1901.	1891.	1881.	1872.
1	2	3	4	5	6	7	8	9	10	11	12	13
Bombay City	+20	+26	-6	+6	+20	-82	48,906	42,585	33,739	35,729	33,617	28,018
Gujarat	+6	+4	-13	+8	+2	+5	292	276	266	305	282	277
Ahmedabad	+8	+4	-14	+8	+3	+7	233	216	208	241	224	218
Broach	..	+5	-15	+4	-7	-12	210	209	109	233	223	239
Kaira	+3	-3	-18	+8	+3	-9	445	433	449	546	504	491
Panch Mahals	+16	+24	-17	+23	+6	+56	233	201	163	195	159	150
Surat	+3	+3	+2	+6	+1	+11	408	396	386	304	372	368
Konkan	-3	+2	+2	+10	+4	+11	222	227	222	217	198	191
Kanara	-7	-5	+2	+6	+6	+1	102	109	115	113	107	101
Kolaba	-5	-2	+2	+5	+8	+7	259	274	279	274	260	242
Ratnagiri	-4	+3	+6	+11	-2	+13	289	302	293	277	250	256
Thana (including B. S. D.)	+3	+9	-1	+13	+8	+36	255	247	227	229	203	188
Deccan	-5	+8	-4	+17	+1	+15	158	168	156	163	139	138
Ahmednagar	-23	+13	-6	+18	-4	-6	111	143	127	134	113	118
Khandesh, East	+4	+8	+4	+11	+20	+55	236	227	211	203	183	152
Khandesh, West	+6	+25	-11	+28	+21	+82	100	94	76	84	67	55
Nasik	-8	+11	-3	+8	+6	+13	142	154	139	143	133	125
Poona	-6	+8	-7	+19	-2	+9	189	200	185	199	168	172
Satara	-5	-6	-6	+15	..	-3	209	224	238	254	220	220
Sholapur	-3	+6	-4	+29	-19	+2	163	169	158	165	128	158
Karnatak	-2	..	-1	+20	-13	+1	187	190	190	192	160	184
Belgaum	+1	-5	-2	+17	-9	+1	207	205	215	219	167	205
Bijapur	-8	+17	-8	+27	-22	-1	140	151	129	140	110	141
Dharwar	+1	-8	+6	+18	-11	+4	225	223	242	228	194	217
Sind	-7	+9	+12	+19	+10	+49	71	75	66	61	51	47
Hyderabad	-6	+3	+20	+23	+4	+47	121	129	135	112	92	88
Karachi	-4	+17	+9	+2	+23	+67	48	44	38	35	34	28
Jarkana	-10	+1	+10	+23	+1	+25	118	131	130	118	96	96
Navabshah	-7	+13	+4	+24	+4	+49	108	115	102	94	76	72
Sukkur	-11	+10	+10	+12	+12	+34	91	103	94	85	76	68
Thar and Parkar	-9	+20	..	+33	+11	+68	29	32	26	26	19	17
Upper Sind Frontier	-9	+12	+33	+20	+27	+109	90	90	88	66	55	44

PART IV.—HOUSES AND FAMILIES.

SECTION 13.—THE CENSUS HOUSE.

99. The Census "House" is always a matter of difficulty. Excluding Bombay, Karachi and Ahmedabad cities the definition in this Presidency up to 1901 was "the residence of one or more families having a separate entrance from the common way." This was abandoned in 1911, mainly because the "wada", which is a large, sometimes very large, courtyard with a single entrance from the street, and a number of separate dwellings opening from it, is so common a feature. In the Gujarat towns we get the "pol", which is an extension of the "wada" principle. One entrance, usually protected by a defensible "Nagarkhana" above the main gateway, leads—not into a courtyard but into a lane or a network of lanes, with numerous houses. Law suits are sometimes instituted to decide whether the lane is or is not a common way. In 1911 the definition adopted was the commensal family. But latitude was allowed to Municipalities to use the old definition. At this Census the 1911 definition was followed, the exact words being "the building or part of a building occupied by one family, that is by a number of persons living together and eating together in one common mess, with their dependents and

resident servants." In towns, by means of a circular, I directed that where there is a Municipality it was desirable that the house should be taken to be the unit separately assessed to house tax. But this direction was not generally followed. Most towns took the commensal family as the house. A few took the City Survey Number, which is a unit of area. Even under the commensal family definition numerous puzzles arise. The Code laid down that where there is a bungalow with separate servants' quarters, the bungalow was to count as one house and each separate block or row of servants' quarters as another. This is not wholly satisfactory. In large establishments there will be several male servants without their families, who usually mess with the cook, and several families such as those of the sweeper, who mess separately. In practice I found that in most cases the enumerator found it convenient to give separate number to each room of the servants' quarters. Again it is impossible not to give numbers to shops, temples, godowns and the like, where anyone *may* be found sleeping on the Census night. The Code directs, for instance, that if a *chaukidar* is passing the night in a shop he is to be counted as present at the shop and not at his home. So his family becomes for Census purposes *two* commensal families. The Census House is therefore a hopeless hybrid between the family and the building. What happens in practice is that the smallest convenient unit of building is given a number, and being the smallest unit it usually contains only one family, at any rate in rural tracts. In the larger towns, unless some special unit such as the City Survey Number is used, the house usually roughly corresponds to the tenement.

100. The problem of the Census house is by no means confined to India. The English Census Report of 1911 mentioned that the satisfactory definition of a house had baffled several generations of Census Authorities. It is obvious that the problem is insoluble. As long as a synchronous Census of the *de facto* population is taken we must have some working definition. If a *de jure* Census is taken in the future we need not trouble about the house at all, but can work on the building and the family. I suggest for the next Census the following definition for Rural Tracts:—"House means and includes the following:—(1) the unit of residence occupied by one family, that is, by a number of persons living together and eating together in one common mess, with their dependants and resident servants; (2) all separate buildings, or separate parts of buildings, which are ordinarily so occupied but at the date of the Census are vacant, and (3) all separate buildings or separate parts of buildings which though not ordinarily so occupied are capable of being utilised at any time for such occupation". And for Municipal towns—"House means every structural unit which either has its own roof separate from the roofs of adjoining structural units, or being possessed of one common roof with them would nevertheless be ordinarily transferable by sale as a single house; each such 'house' shall be given one Census number, and each unit of residence within such house, occupied or occupiable by a separate family, shall be given a sub-number."

101. In Bombay City the house is the whole building under one undivided roof. Really speaking we do not deal with Census houses in Bombay City, but with *buildings*, and tenements. This practice has continued for three Censuses, and on the whole is easy to understand. It is on the Bombay system that the above suggested definition for house in Municipal Towns is modeled. At the present Census for Karachi the Bombay definition was adopted with minor modifications. The Ahmedabad arrangement was more complicated. The reason for the divergence in Census practice in the matter of the house between these cities and the mofussil is that in the former we take out certain statistics of house accommodation, overcrowding, etc., which are not elsewhere required. The matter is discussed in Volume IX, and cannot be further elaborated here. It is necessary to remark only (1) that the collection and tabulation of statistics of buildings and tenements is comparatively easy, and should be done at the next Census in a much larger number of Municipalities, which should not be allowed to escape their obligations to their taxpayers, and (2) that on the other hand in rural tracts and all other towns it will still be necessary to work on the basis of the "house" and not of the building.

SECTION 14.—STATISTICS OF "HOUSES" AND FAMILIES.

102. In the Table which follows the average number of houses per square mile and persons per house are given in continuation of the similar figures given in past Censuses. Bombay City is however excluded, as the definition of house is different and the discussion of the conditions prevailing in that City belongs to the Cities Volume.

103. The number of houses per square mile necessarily closely follows the density figures given in the previous Table. But there are divergencies. Thus Ahmedabad with 233 persons per square mile has 70 houses, while East Khandesh with 236 persons per square mile has only 45. This corresponds with the ratio of persons per house, which is 4 and 5 respectively in the two districts.

104. The calculation of persons per house to a round integer renders the comparison between district and district and between Census and Census of less value. When dealing with figures which range from 4 to 7 only the addition of at least one decimal point would have given more accurate results. The reason however for not doing so is partly to conform with past practice and partly because a much more detailed examination of the constitution of families is attempted in an Appendix.

105. The fact that the ratio of persons per house has shown a slight tendency to decline Census by Census has in the past been attributed to the gradual break-up of the joint family system. But the more correct explanation would seem to be increasing prosperity. Whether we regard the "house" as a family or a building—both of which senses it may sometimes bear—it seems to be correct to say that the tendency would be for the ratio of persons per "house" to fall.

106. Of course as between any two tracts at any one moment local differences of social custom have to be allowed for. Thus East Khandesh is a rich tract, and probably not appreciably poorer than the general average level of Ahmedabad (see paragraph 103 above). The higher ratio of persons per house in the former district must therefore be explained on social and not on economic grounds. But as between any two periods of time in any one district a higher or lower degree of prosperity would almost certainly influence the statistics of persons per house. This would appear to be almost an axiom. In the East customs change very slowly if at all; and the foreign ideas that come in from time to time form, as it were, accretions upon the existing social fabric rather than modify them. There is therefore little reason to suppose that the joint family system has as yet acquired any tendency to disappear. The point is one which cannot be discussed in a Census report. But it may be stated that the figures under consideration do not afford any good basis for such a discussion. The Appendix on the analysis of families provides some evidence of existing conditions, but not material for comparative historical treatment.

107. It was pointed out by the Census Commissioner in his 1911 Report that the number of "houses" corresponds fairly closely to the number of families in the European sense. For the determination of the latter figure he took married females of 15 and over. In India there were at that Census 63·7 million "houses" and 64·6 million married females of the age stated. In this Presidency at this Census there are actually more houses than such married females, the figures being "Occupied Houses" 5,465,899; Married females (15 and over) 5,183,858. From this it may be inferred both that a second or third wife is very rare, and also that the tendency for two married brothers to mess together is not so common as is supposed. But as against this it must be clearly remembered that many an occupied Census "house" is not a family at all, but is a chaulkidar in a shop or a policeman in a chowki or a fisherman in a hut. The selection by Influenza of females of middle age periods will also have sent down the second of the above figures to below its normal point.

108. For further information regarding the composition of families reference is invited to the Appendix entitled—"Analysis of Families".

*Subsidiary Table No. 27.—Persons per house and houses per square mile.
For British Districts and Natural Divisions.*

District and Natural Division.	Average number of persons per house.					Average number of houses per square mile.				
	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
1	2	3	4	5	6	7	8	9	10	11
Gujarat	4	4	4	4	5	70	66	65	68	62
Ahmedabad	4	4	4	4	4	59	57	55	56	52
Broach	4	4	4	4	5	49	49	47	52	50
Kaira	4	4	4	4	4	115	119	119	130	119
Panch Mahals	5	5	5	5	5	47	42	35	40	32
Surat	5	5	5	5	5	90	73	79	76	72
Konkan	5	5	5	6	6	46	45	41	39	35
Kanara	5	5	5	6	6	22	21	22	20	18
Kolaba	5	6	5	5	5	58	58	55	53	48
Ratnagiri	5	5	5	6	6	60	60	54	50	45
Thana	5	5	6	6	6	45	48	40	41	36
Bombay Suburban District	7	7	7	7	7	164	164	164	164	164
Deccan	5	5	5	6	6	33	25	30	27	22
Ahmednagar	5	5	5	7	7	24	30	25	20	18
Khandesh, East	5	5	5	5	6	45	45	45	45	45
Khandesh, West	5	5	5	5	6	18	21	26	24	21
Nasik	5	5	5	6	6	27	31	26	24	21
Poona	5	5	5	5	6	39	38	33	37	29
Satara	4	4	5	6	7	49	51	45	40	30
Sholapur	5	5	5	7	7	32	34	30	24	18
Karnatak	5	5	5	6	6	40	39	36	35	39
Belgaum	5	6	5	5	6	44	41	41	40	38
Bijapur	5	5	5	6	6	30	31	24	24	20
Dharwar	5	5	5	5	5	48	48	44	42	36
Sind	5	5	5	6	6	14	14	12	11	9
Hyderabad	5	5	5	Uncertain	5	25	25	Uncertain	Uncertain	Uncertain
Karachi	5	5	5	5	5	9	9	9	8	6
Larkana	6	6	6	6	6	23	23	23	23	23
Nawabshah	5	5	5	Uncertain	5	21	21	Uncertain	Uncertain	Uncertain
Bukkor	5	5	5	5	5	18	18	18	18	18
Thar and Parkar	5	5	5	5	5	6	6	6	6	6
Upper Sind Frontier	6	6	6	6	5	17	18	14	11	10

109. An interesting point in connection with the Census house is the wide divergence which exists between different regions in the ratio of numbered Census houses to actually occupied houses. In Imperial Table I and Provincial Table I we give the number of occupied houses. The expression is a bad one. The figures represent all Census houses, which in the Enumeration books contain as least one member or inmate. The figures therefore, except for the three Cities of Bombay, Karachi and Ahmedabad, are practically the figures of families. For every case in which two families have got included in one Census House there will be another case in which, as exemplified in the case of the *chaukidar* above, one genuine family has got split into two. But for house numbering purposes there are also the empty buildings such as shops, temples, etc., which have to be numbered. I could have got the figures of total houses from the Enumeration books; but as this would have thrown an extra burden on the Abstraction offices I take the figures from the "Corrected Abstract of the Charge Register", sent in during the winter. The figures in these Abstracts will give us with sufficient accuracy the totals of numbered Census Houses. I give in the following Table the figures for the Natural Divisions, as well as for Kathiawar and Kolhapur.

Subsidiary Table No. 28.—Ratio of "Occupied houses" to numbered Census Houses.

Region	Number of Census houses which were—		Percentage of occupied to total Census Houses.
	reported in the Revised Abstract of the Charge Registers as requiring numbering.	found in the Enumeration books to be "occupied."	
<i>Natural Divisions.</i>			
Sind	731,195	638,970	87.4
Gujarat	848,996	706,139	83.1
Konkan	701,290	630,685	89.9
Deccan	1,358,309	1,241,391	91.3
Karnatak	715,247	595,440	83.2
<i>Selected State Territory.</i>			
Kathiawar	767,394	563,931	73.4
Kolhapur	193,664	166,193	85.7

110. So far as I can judge, the numbered but unoccupied "houses" were proportionately lower in 1921 than in 1911, in which Census Mr. Mead referred to the "enthusiasm of the house-numbering staff who occasionally plastered every empty cowshed or deserted ruin with census symbols". But there still remain considerable differences between the different regions, as well as the curious fact that Kathiawar shows a far higher ratio of unoccupied houses than any region in British territory. So far as the latter goes the percentages in the last column are a rough index of material prosperity. A large number of houses used as godowns, cattle sheds and the like probably denotes a wealthier region. In the poorer regions man cannot afford to pay for many more structures than he actually has to use for his own dwellings. But in the case of Kathiawar there must be some special causes. No doubt that region is very prosperous. But the following are also suggested as causes contributing to the difference of 10 per cent. between Kathiawar and the British Districts of Gujarat—(1) The absence in State territory of many of those conditions which made the Census staff in British territory apathetic, or (2) the deliberate keeping up of the number of houses in order to secure if possible more Census forms. If both these suggested reasons are wrong, and the difference is due to genuine differences in economic conditions then there is material ready to hand for anyone who cares to examine the matter on the spot.

CHAPTER II.—CITIES, TOWNS AND VILLAGES.

PART I.—DEFINITIONS.

SECTION 1.—CITIES AND TOWNS.

111. This Chapter deals with the distribution of the population according to the size of the Census unit which they inhabit, these units being divided into three classes given in the heading of the Chapter. By "Census units" not the enumeration unit are meant, but the smaller units for which the figures are presented in the Tables. For the reasons given in the discussion which follows it will be seen that these Census units correspond neither with geographical areas, nor with administrative areas, nor with residential area, and are not therefore wholly satisfactory.

112. Cities mean (a) places the population of which amounts to one hundred thousand or more, and (b) any other place which the Local Government shall declare to be a city for Census purposes. Under (a) at this Census come—Bombay, Karachi, Ahmedabad, Poona, Surat, Sholapur; and under (b) Hubli. The last mentioned place was included on my recommendation in advance of the figures. These came out rather lower than I expected, and in particular are less than the figure for Hyderabad, Sind. Nevertheless the industrialisation of Hubli seems to justify its inclusion. In 1901, besides the above seven places Belgaum, Broach, Nasik, Hyderabad and Sukkur had been classed as cities, but in 1911, the six shown under (a) only. Further discussion of the boundaries of the cities is reserved for Volume IX.

113. Towns means all Municipalities, Cantonments and Civil Lines and any other place having a population of not less than 5,000, which the Provincial Superintendent may decide to treat as a town for Census purposes. This definition is according to the Imperial Census Code. In this Presidency it has been customary for the Local Government to decide what places are to be taken as towns. Accordingly the 1911 list in Imperial Table V was considered by Collectors and Political Agents, and their recommendations for changes reported to and approved by Government. The names in the present Tables IV and V are according to those orders subject to one or two minor alterations.

SECTION 2.—SUBURBS.

114. In the case of Cities and some Municipalities the population is shown under the separate heads of Municipality, Cantonment (where existent) and Suburbs. The exact areas treated as suburbs are shown so far as possible by notes to the Table IV. The arrangement is not at all simple. In 1911 suburbs were defined in Table IV as "figures of civil population not included within municipal limits but within the revenue jurisdiction of the municipal towns." This is ambiguous. Many Municipalities comprise parts of the lands of several revenue villages, but bear the name of only one. It is not therefore certain whether suburbs comprised the civil population recorded in the non-municipal portions of all villages, any part of which is included in the municipal area, or only in the non-municipal portions of the particular village whose name the municipality bears. The former might not work out right in all cases as there are municipalities whose limits embrace a small corner of the lands of a village, the village site of which is a definite and compact residential unit two miles from the town. Moreover, some villages have isolated and detached fragments of land scattered about as distinct enclaves in other villages, and if such an enclave occurred in some municipal town it might result in the Abstraction Office treating as a suburb the village to which the enclave belonged. Nevertheless the importance of not losing to the town any population which may be found outside the municipal boundary, but within the zone of urbanisation, is shown by the figures recorded in past Censuses for particular towns. For one thing the extension of a Municipality's limits often takes place years after it becomes desirable, and for another owing to plague much of the population may be residing in the fields just outside the boundary. For instance Sinnar (Nasik) 1901 population—7,230; 1911 population—(1) Municipality 3,125, (2) suburbs 3,335; 1921 population—(1) Municipality 7,211, (2) Suburbs 1,549. It is evident that the people were out from plague in 1911. But the fact

that in this case arrangements were made to recognise the existence of suburbs does not mean that they always will be. It is impossible to tell for certain at this distance of time, but there is little doubt that in the case of many towns in 1901 and 1911, the recognition of suburbs, or the adoption of some other definition of that term, would have prevented violent fluctuations in populations from Census to Census, and the same would have been true of 1921, had there been plague. Reflections will show that the arrangement by which suburbs means persons recorded outside municipal limits "but within the revenue jurisdiction of the municipal town" will not in all cases save the loss of plague absentees. At a distance of five yards from the municipal boundary at any given point one may be standing within the lands of a revenue village no part of which is embraced by municipal limits. The only solution which I can suggest is that every Municipality should be assigned a *suburban zone*, delimited by Government Notification in the same way as the municipal boundary is now delimited.

115. This would involve probably an emendation to the District Municipal Act. But there are many reasons why it would be desirable besides the Census reason. Within the suburban zone the Municipal Corporation could be invested with certain powers of controlling building operations, thus avoiding the present danger of the orderly expansion of a town being rendered impossible by haphazard building in the area just outside its boundaries in advance of their extension. In passing I would remark that in a surprisingly large number of cases it came to light during enumeration that the boundary of the Municipality passes right through and across a station yard, thus rendering it necessary for the Station Master to maintain two sets of enumeration books, one for the municipal and the other for the taluka charge.

116. Every effort has been made to give in the footnotes to Imperial Table IV exact information as to the definition of suburbs in the case of all municipal towns. But the matter is not easy. Constant reference had to be made back to districts or talukas, and the replies thus elicited were not always intelligible to any office working at a distance from the spot with papers alone. However it is hoped that the notes will be useful, and will afford a basis for a more correct assignation of suburb population at the next Census. I am inclined to think that all enumeration books of suburbs of any town ought to be stamped with some clear mark, the limits of the suburbs being fixed in advance. But it is difficult to get the local authorities to give attention to refinements like this.

SECTION 3.—SELECTION OF TOWNS.

117. I am not fully satisfied that the list of towns is sound. Too much seems to be left to personal idiosyncrasies. Different Collectors take different views, and presumably took different views at the time when the first list was arranged at the earliest Census, the bias then started continuing to the present day. It is of course mentioned in the Imperial Census Code that no place should be selected merely for size. A large village of over 5,000, possessed of an essentially rural and agricultural character should be rejected, while on the other hands there may be places with a much smaller population which possess an essentially urban character. This dictum is perfectly true; but whenever individuals are asked to classify we get up against the personal equation. It would in the long run quite possibly be better to have some hard and fast rule. The following seems to be the most widely discrepant case:—

District.	Population.	Number of places (towns and revenue villages) with a population over 5,000.	Number of Census Towns.
Belgaum	952,996	12	7
Southern Mahratta Country States ..	608,362	12	29

These figures are interesting because the Belgaum District and the Southern Mahratta Country States are in the same region, and their territories are much intermingled. If the mere numbers of towns were taken it would be imagined that the Southern Mahratta Country States are much more urbanised than the District. But the figures for places over 5,000 disprove this idea. It is evident simply that the conception of a town handed down by the one is quite different from the conception handed down by the other.

118. The general distribution of towns of the different classes between British and State Territory as shown below reveals the same phenomenon.

Subsidiary Table No. 29.—Numbers and proportions of towns of different classes falling in British and States Territory.

Class.	Number of places treated as towns.		Percentages to Class Total	
	British Territory.	State Territory.	British Territory.	State Territory.
I. Above 100,000	6	....	100	....
II. 50,000—100,000	3	2	60	40
III. 20,000—50,000	22	9	71	29
IV. 10,000—20,000	46	22	68	32
V. 5,000—10,000	87	50	63	37
VI. Below 5,000	37	53	41	59
Percentage of population of respective Territories to total population of Presidency			72	28

It will be seen that the States possess none of the real cities. In the class 20,000-50,000 the proportions are roughly equivalent to the proportions of the populations of the two territories. After that the States show an increasing disproportion of places treated as towns; and in the class "Below 5,000" the much laxer criterion adopted in States generally is apparent.

SECTION 4.—THE VILLAGE.

119. This brings us to the question of the village. Taking India as a whole the character of the Census "village" is so varied that the Census Commissioner in his 1911 report found it necessary to define it separately for every Presidency (Chapter I of the India Census Report, 1911, pages 29ff). The Bombay village is described in paragraphs 45, 46 of the Bombay Census Report, 1911. It was there pointed out that while in the open plains the village for the most part has only one village-site, in the jungle tracts as many as nineteen or more hamlets may be grouped into one village. Our villages are therefore emphatically not units of residence, but are the units of area into which in old times the countryside was divided for the purpose of realisation of Land Revenue. It is unfortunate that our forefathers when they adopted English as the official language used the word "village" to translate the word "gaon" and its equivalents in the other vernaculars, when they possessed a word in every way more suitable, namely, "parish." It is noteworthy that in the English Census Report the word village is not used. The smallest unit in rural tracts is the parish. Parishes in England are of several kinds—Ecclesiastical, Civil and others. Our "village" corresponds to the Civil Parish.

120. Imperial Table III contains statistics of towns and villages classified by population. And in the Imperial Table I and Provincial Table I will be found two columns, one headed "Towns and Cities" and the other "Villages." It has been explained what cities and municipal towns mean. Other towns are Revenue village pure and simple, except in rare cases. For instance Bankapur in Dharwar is composed of the contiguous sites of several revenue villages, none of which bears the name of the town; and the population included under Bankapur town is the population enumerated in any portion of the lands of the villages referred to. But this is very exceptional. The remaining Census units—villages—the number of which is given in a special column, can only be defined as follows—"Those separate administrative units of area, known as Revenue Villages, which

on the Census night were neither uninhabited nor wholly or partially absorbed in the limits of any Municipality." It will be seen therefore that villages containing no inhabitants *are not counted*. Consequently the area in square miles given in the first column cannot be divided by the number of villages, or villages *plus* towns and Cities, to obtain the average area per Census unit, because an unknown variable has to be deducted as representing revenue villages uninhabited and therefore not included. This differs from the English practice, according to which the Table of Parishes by Population contain a class—"no inhabitants." The objection to the omission of uninhabited villages can be best seen from Table III. For the reason given above, and discussed below, the village is not a unit of residence, and the distribution into classes according to the number of inhabitants affords no indication of the size of the group of houses within which the population resides, while on the other hand the omission of uninhabited villages gives a fictitious result in the utilisation of the Table to ascertain the distribution of the population per village in its true sense of unit of land surface for the purposes of Revenue Administration. Thus in Table III the Dharwar District is shown as having 1,277 cities, towns and villages. The Statistical Atlas (1906) shows that there are 1,688 revenue villages. Of these a few would have been deducted as included within Hubli or various towns. But the bulk are uninhabited villages.

121. In the case of Sind the inconsistencies noted above are accentuated. In the Presidency proper the "village" is possessed of a certain historic interest. The British administration solidified, and the Survey delimited, the distribution of the land, together with other picturesque features, such as the hereditary rights of the village officers, in the form in which they were handed down. And for that reason the village, even though consisting in fact of several hamlets, does in most tracts possess an almost indefinable sense of solidarity. In Sind on the other hand the Survey was working on a more pliant material, and new villages were created as occasion demanded. The process still goes on especially in colonisation areas. The village is for the most part called a "Deh", or perhaps it may be more correct to say that the Deh, which is the artificial and almost purely utilitarian unit for Land Survey collection, is for the most part treated as a village at the Census. Within the Deh there may be, and usually are several, sometimes innumerable, separate residential units, which in most parts of Sind are called Gots. The word Deh has no residential significance, whereas the word "gaon" and its equivalents in the Presidency are used in two senses.—one the area of the village lands, and the other the collection of houses on the main village-site.*

122. The most glaring example of the divergence between the Deh (Census "village") and the unit of residence is afforded by the Kohistan Mahal in the Karachi District, which had in 1911 an area of 1,806 sq. miles, 3,572 occupied houses, a population of 18,483 persons, but only two villages. I have deliberately quoted the 1911 figures, because at this Census owing to famine migration the Kohistan was partially deserted.† The effect which the above figures exercise on Table 111 "towns and villages classified by population" is obviously highly misleading. This, together with the effect of the depopulation of the Mahal and the other hilly parts of the district at this Census, is shown clearly by the figures below:—

Places with population between 2,000 and 10,000 in Karachi District, 1911 and 1921.

			1911		1921	
			Number.	Population.	Number.	Population.
Class	10,000—20,000	..	1‡	12,205	....	....
Class	5,000—10,000	..	6	48,114	2	17,589
Class	2,000—5,000	..	9	25,036	11	31,008

*An Officer who has served in Sind remarked on this point that "Sindhis thus avoid the miserable confusion which exists in the Presidency" where the word *gaon* has to be used for two distinct facts. This is true when the vernacular is considered and the conditions are a morning ride on inspection duty. But when we come to the use of English only and the presentation of Census figures it will be found that the English word "village" in Sind involves the same confusion as the vernacular word *gaon* in the Presidency.

‡ Population (1921) 8,681.

† This one village is evidently Tatta. The difference between 12,205 and 11,161 probably represents persons found within the Deh, but outside municipal limits. The definition of suburbs explained above was evidently not applied in the Sind Abstraction Office.

The effect of the use of the Table by any one who has not understood the meaning of "village" in Sind is to give the impression of the existence in the Karachi District of certain quite large towns in 1911, which at this Census have been much reduced in size. The actual "towns shown for that district in Table V, excluding Karachi City are—

	1911	1921
Tatta	11,161	8,470
Kotri	7,256	9,119
Manjhand	2,838	3,107
Keti Bandar	1,734	1,409

Actually the Kohistan is inhabited by semi-nomadic graziers, whose usual unit of residence is a few stone huts. The reason for the enormous size of the "villages" is clear from the Statistical Atlas (1906) which shows that in that year the total land revenue of the Mahāl was Rs. 19.

123. But although this instance stands quite isolated in its magnitude the same phenomenon appears also in a less conspicuous and therefore possibly more dangerous form in other parts. In the desert Talukas of Thar and Parkar District we get (again quoting from the 1911 figures) the following—

Talukas.	Area.	Villages.	Population.	Area per village.	Population per village.
	Sq. miles.			Sq. miles.	
Nagar Parkar ..	1,618	31	47,548	52	1,534
Chachre ..	2,795	39	53,501	72	1,375
Mithi ..	1,562	45	41,472	35	922

On the other hand the contrary effect is seen in Jamesabad, which is on the newly colonised Jamrao area, and has an enormous land revenue. There the average population per village in 1911 was only 215 persons. In other words Table III, so far as Sind is concerned, is designed to show, for any given tract, what is the normal population found upon the unit of land-surface, which on the combined considerations of extent and revenue, it is found administratively convenient to treat as a Deh. This is by no means an uninteresting factor, but Table III is not on the face of it intended to exhibit it. Now there are actually certain fair-sized towns in Sind which are genuine residential units. *So that the basis of Table III is necessarily composite, real towns and vast sparsely inhabited areas treated as dehs both contributing to the figures of any class.* This is not entirely satisfactory, statistics which are prepared on a composite basis being almost invariably misleading.

124. It should not, however, be assumed that, because we can frame a definition of what is meant by a village for the purpose of the Census Tables, there is therefore no difficulty in the Abstraction Offices in arriving at the numbers in the column for villages in Imperial and Provincial Tables I and for places for various sizes in Imperial Table III. Quite the reverse is the case. The Taluka Census authorities were found to have been very careless in filling up names of villages in the Enumeration Books and Circle Summaries. The Compilation Office had to make numerous references back to Talukas to ask within what village the population of the place called "_____ " was to be included. In some cases the reply came back simply—"There is no such village,"—but without giving any indication of the identity of the place. This was naturally worst in Talukas where there are numerous small hamlets. Every effort was made to secure the true facts. But in the end I fear it must be admitted that the figures in the Tables referred to are *only an approximation.*

125. Ommitting Sind, the number of revenue villages, and the number of “inhabited towns and villages” at each Census are as shown in the annexed Table :—

Subsidiary Table No. 30.—Revenue villages and inhabited Census units, 1872—1921.

Natural Divisions.	Number of revenue villages.	Number of inhabited towns and villages in					
		1872	1881	1891	1901	1911	1921
Gujarat	3,446	3,312	3,305	3,298	3,364	3,295	3,304
Konkan	6,086½*	5,306	5,482	5,587	5,715	5,680	5,683
Deccan	9,087½*	8,841	8,890	9,076	8,894	8,887	9,135
Karnatak	3,780	3,542	3,503	3,491	3,496	3,487	3,474

The figures of revenue villages in the above Table are taken from the Statistical Atlas, 1906. In the Karnatak the gradual fall may be accounted for by the slow but steady depopulation of the Mallad tract. But this only a guess in the absence of figures by Talukas. In the Deccan the 1911 and 1921 figures include those of the Mehvas Estates. These are not included for 1901 because of the apparent difference in definition. At that Census the number of inhabited villages shown for the Khandesh Agency was 426, of which 424 were below 500 and 2 between 500 and 1,000. In 1911 the figure was given at only 91, of which 86 were below 500, and 5 between 500 and 1,000. This time however the number of inhabited villages leaps up again to 185. The cause of these violent changes is no doubt the absence of regular survey settlements. The rest of the West Khandesh District also shows considerable changes. Of the seven Deccan districts the changes as between the 1911 and 1921 figures are comparatively small in the other six districts. There was a slight rise in East Khandesh set off by a slight fall in Poona. But the rise from 8,887 to 9,135 in the above Table is accounted for by 94 villages in the Mehvas Estates and the remainder in the District of West Khandesh.

126. In view of the diversity of conditions already referred to, whereby one region contains only one inhabited place per revenue village, whereas in another a single village may consist of numerous hamlets, a determined attempt was made by means of circulars to obtain some statistics on the subject. The results of this enquiry, as well as figures of uninhabited villages by districts are discussed in Appendix O.

PART II.—URBANISATION.

SECTION 5.—TOWN *versus* COUNTRY.

127. By far the most important question in connection with towns and villages is the extent to which urbanisation is going on. Everywhere one hears the cry that the people are forsaking the villages for the towns and cities. This widely diffused idea is *not borne out by statistics*. The following is an analysis for British Districts only of Rural and Urban places since 1872 :—

Subsidiary Table No. 31.—Cities, towns and villages since 1872, British Districts.†

Number of	1872	1881	1891	1901	1911	1921
I. CITIES—						
1. Over 1,000,000 .. ..	..	..	..	..	..	1
2. 100,000—1,000,000	3	3	4	5	5	5
3. Below 100,000 .. ..	..	..	..	7	1	1
II. Towns—	3	3	4	..	3	2
1. Over 50,000 .. ..	..	..	..	..	..	..
2. 20,000—50,000	12	13	15	12	14	22
3. 10,000—20,000	43	47	61	53	46	46
4. 5,000—10,000	118	83	97	86	83	87
5. Below 5,000 .. ..	..	18	51	36	43	39
III. Villages—						
1. Over 5,000 .. ..	..	31	69	65	61	49
2. 2,000—5,000	815	864	1,027	949	973	930
3. 500—2,000	6,979	7,935	8,993	8,595	9,761	8,762
4. Below 500	18,681	15,601	14,882	16,190	15,263	16,787

*The half villages represent villages shared with certain States.

†The figures for Mehvas Estates are not included for Censuses prior to 1921.

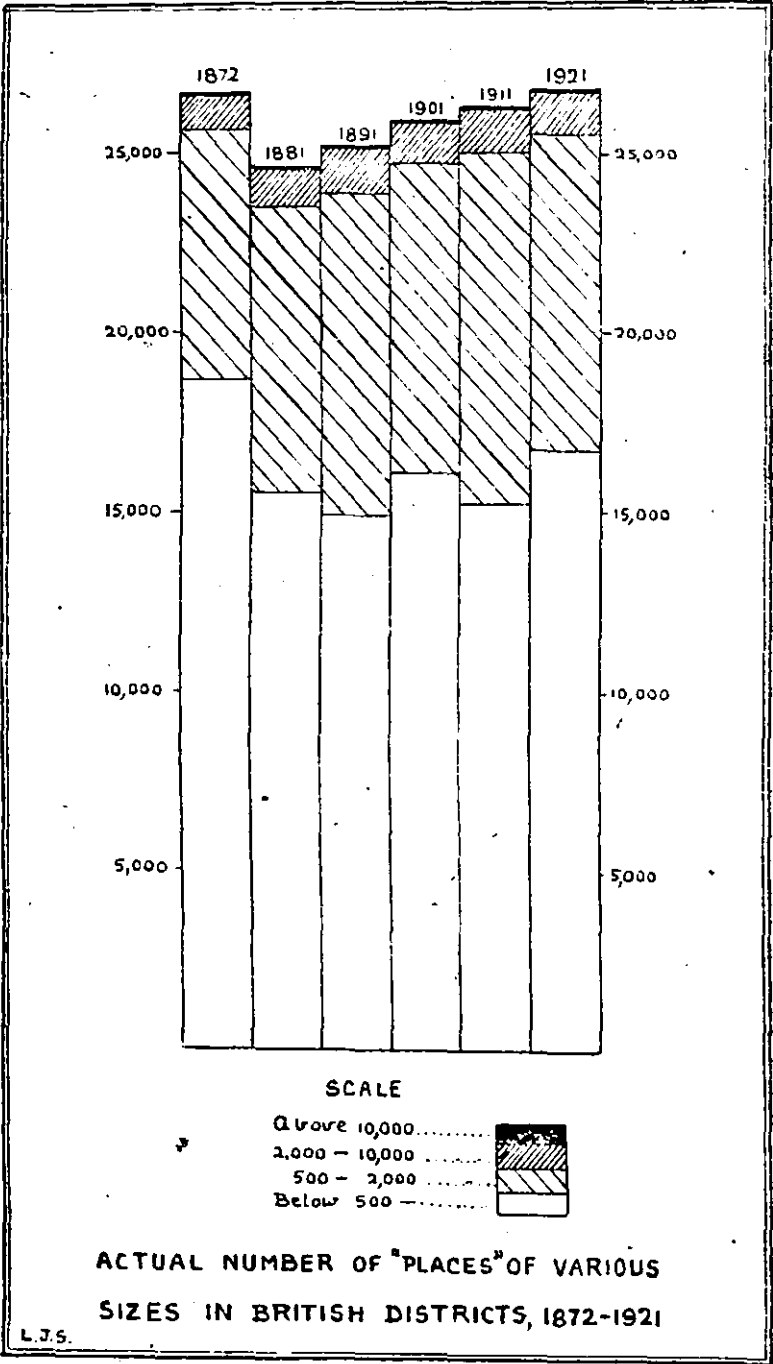
128. In considering the above figures allowance must be made for changes of classification in the case of towns and cities. To secure this allowance cities below 100,000 and towns above 50,000 must be combined, and towns below 10,000 and villages above 2,000 must be combined. The result is shown in the next Table:—

Subsidiary Table No. 32.—Places of various sizes, 1872—1921, irrespective of classification British Districts.*

Number of places having population of	1872	1881	1891	1901	1911	1921
Above 1,000,000	..	..	..	..	..	1
100,000—1,000,000	3	3	5	5	5	5
50,000—100,000	3	3	3	3	4	3
20,000—50,000	12	13	15	16	14	22
10,000—20,000	43	47	61	53	46	46
2,000—10,000	933	996	1,243	1,135	1,154	1,102
500—2,000	6,979	7,935	8,994	8,595	9,766	8,764
Below 500	18,681	15,601	14,882	16,091	15,264	16,788
Totals	26,654	24,598	25,203	25,898	26,253	26,731

*The figures for the Mahrar Estates are not included for Censuses previous to 1921.

129. The same facts are also represented in the annexed diagram.



130. The sudden drop in the bottom class after 1872 is due solely to Sind, where it is evident that the definition of "village" adopted in 1881 differed entirely from that adopted in 1872. In the former year the number of inhabited towns and villages in Sind was given as 5,650, and in the latter year as 3,417. This fact was discovered after the block for the diagram was prepared. But it must be borne in mind in interpreting the appearance of the 1872 rectangles.

131. The details in Table 32 are of much interest. Everything points to the fact that, while the big cities are increasing in size with alarming rapidity, the moderate sized country town is on the decline. The zenith of the country town was in 1891. This can readily be seen from the figures in the classes between 2,000 and 20,000. It is here that the genuine old-world market towns of India fall. They do not attract, and show a marked tendency to decline.

132. In view of the well-known difference between the urbanisation of England and the agricultural character of India a comparison between places of various size in the two countries may be interesting. It is not easy to find a basis for comparison, and it is not certain by any means that the following figures are exactly analogous. But, taking Urban Districts in England as equivalent to Cities and towns in India and Civil Parishes as equivalent to Villages, we get the following :—

Subsidiary Table No. 33.—Places of various sizes in England and Wales, 1911, and Bombay Presidency, including States and Agencies, 1921.

Size of place.	England and Wales Area—58,340 sq. miles. Popn. 36,070,492.		Bombay Presidency Area—186,994 sq. miles. Popn. 26,701,148.	
	Urban Districts.		Towns and Cities.	
Above 1,000,000	1		1	
100,000-1,000,000	44		5	
50,000-100,000	53		5	
20,000-50,000	148		31	
10,000-20,000	231		68	
Below 10,000	661		226	
	Civil Parishes.		Villages.	
Above 500	5,673		13,560	
Below 500	8,941		28,204	

133. Since one part of the Presidency might show a greater tendency to urbanisation than another the figures are now given by Natural Divisions. The year 1891 has been chosen as the most typical year,—a normal Census year before the urbanisation cry commenced. Sind has been excluded, because of the peculiar and rather uncertain character of the Census unit called a "village" in that region.

Subsidiary Table No. 34.—Places of various sizes irrespective of classification, 1891 and 1921, by Natural Divisions, British Districts only.

Number of places with popula- tion of	Gujarat.		Konkan.		Deccan.		Karnatak.	
	1891	1921	1891	1921	1891	1921	1891	1921
Above 1,000,000 ..	..	..	..	1	..	..	..	..
100,000-1,000,000 ..	2	2	1	..	1	2	..	..
50,000-100,000 ..	..	..	..	..	1	..	1	1
20,000-50,000 ..	3	4	..	4	6	9	3	4
10,000-20,000 ..	12	10	15	8	20	18	9	6
2,000-10,000 ..	250	180	155	190	422	369	246	231
500-2,000 ..	1,401	1,336	1,576	1,452	3,113	2,846	1,334	1,305
Below 500 ..	1,630	1,772	3,841	4,029	5,513	5,891	1,898	1,927
Totals ..	3,298	3,304	5,587	5,683	9,076	9,135	3,491	3,474

134. These figures are of considerable interest. Too much importance is not to be attached to the classes between 10,000 and 50,000 because technical reasons connected with the treatment of "suburbs" have caused some towns to shift about between the two classes. But the marked reduction in the class 2,000—10,000 in all regions except the Konkan is noticeable. It is again permissible to draw from this the inference that the market town above Ghats is declining. The reduction in the number of places in the 500—2,000 class and increase in the below 500 class is not readily explicable, especially the striking changes in Gujarat. A certain amount may be due to more care in classification, i.e., the correct counting as separate units of two or more revenue villages which got amalgamated in 1891. In some cases villages deserted in 1891 may have become inhabited since. But the figures for their adequate explanation would require more local knowledge and more time than was available in the Census office.

135. That totals of the four Natural Divisions together come to 21,542 in 1891 and 21,796 in 1921, an increase of 344. The increase between the totals for those years in Table No. 32 is 1,528, showing that the increase in Sind alone was 1,184.

136. But the places are a less reliable guide than the population that resides in them. The changes in classification of towns and cities renders any attempt to show Census by Census the proportion of persons residing in each of the three types of places, cities, towns and villages, uncertain and possibly fallacious. So here again it is best to disregard the classification, and deal with all places (Census units) together according to size.

Subsidiary Table No. 35.—Number per mile of the total Population of the Presidency who were enumerated at each Census 1872—1921 in places of various size.

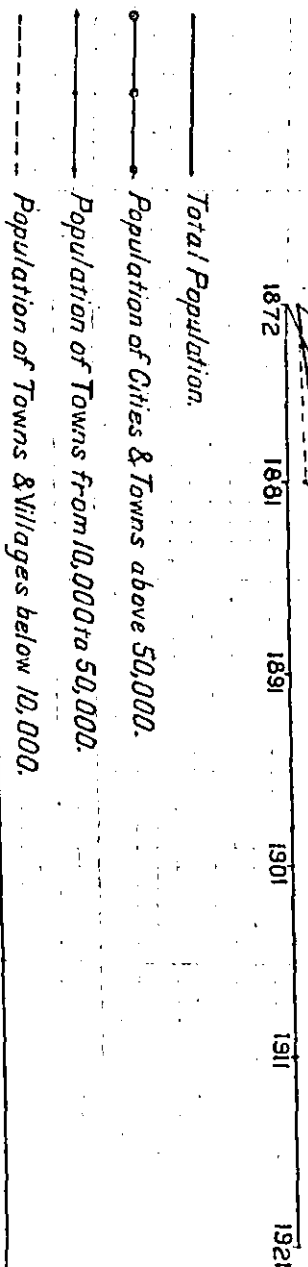
Number per mille enumerated in places with a population of	1872	1881	1891	1901	1911	1921
Above 1,000,000	..	..	..	..	..	44
200,000—1,000,000	28	33	31	31	44	27
100,000—200,000	10	10	14	22	16	8
Total above 100,000	38	43	45	53	60	79
50,000—100,000	9	10	12	15	11	12
20,000—50,000	25	26	29	27	27	36
10,000—20,000	37	38	42	44	34	35
2,000—10,000	..	..	213	208	195	188
500—2,000	891	883	441	417	451	417
Below 500	..	..	218	236	222	233
	1,000	1,000	1,000	1,000	1,000	1,000

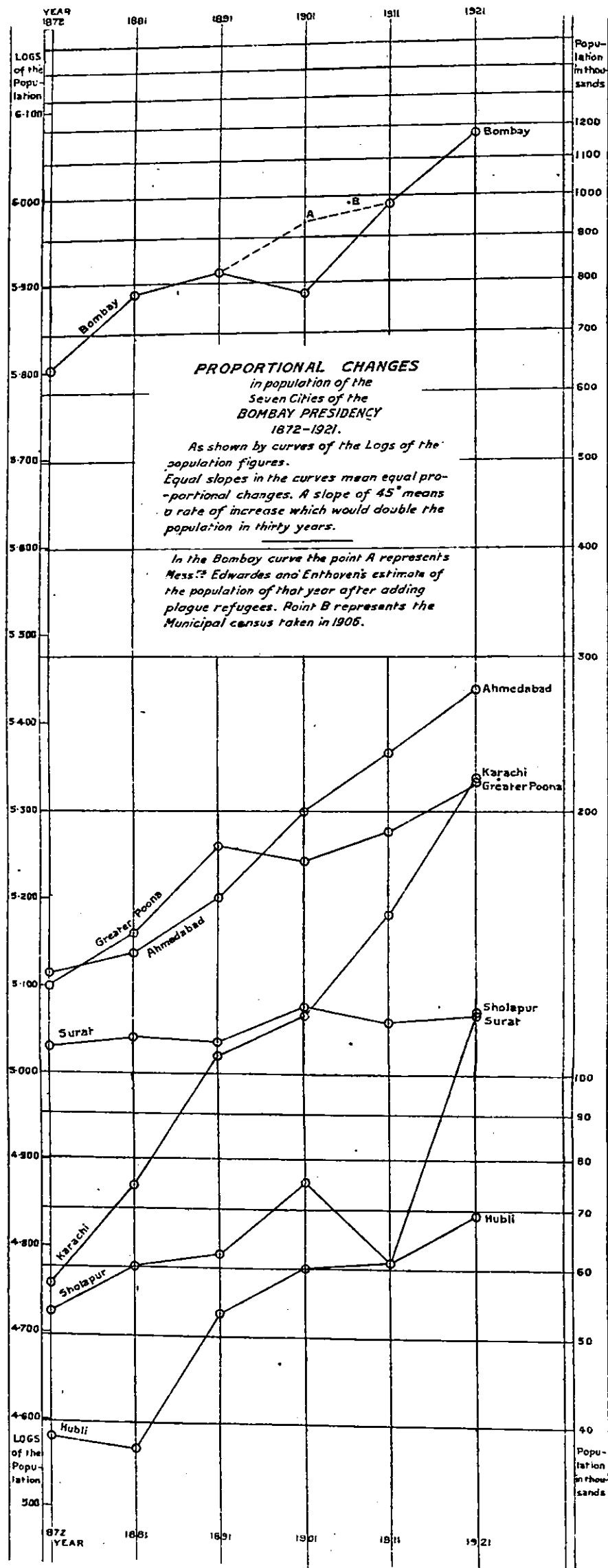
137. These figures are very striking. They show that the urbanisation of Western India is proceeding very slowly. And they demonstrate again that, while the proportions of those residing in the large cities is increasing, the types of places which are losing to the cities are not the smaller villages but the middle-sized country towns. The proportionate figures of population in places between 2,000 and 20,000 since 1891 are very noticeable. Very significant also is the following comparison. In 1891 out of every thousand persons 659 lived in places below 2,000 inhabitants; and the corresponding figure for 1921 is 650. This means that the small village has not appreciably lost ground in thirty years; and the prospect of Western India passing from the mainly agricultural to the mainly industrial condition, as England, is very remote.

138. Attention is also drawn to the annexed diagram giving Log curves for population in places of various sizes. In this diagram a slightly different classification was adopted. The large place was taken as 50,000 and over. The proportionately rapid increase in these large places is shown by the steeply rising

PROPORTIONATE CHANGES 1872 TO 1921 IN THE ACTUAL
NUMBERS OF PERSONS LIVING IN PLACES OF VARIOUS
SIZES.—AS SHOWN BY CURVES OF THE LOGS.

Each division in the vertical scale represents .025 of a Log. The ruled base line represents the following actual Log in the four cases— Total Population 7.360; Population of Towns & Cities over 50,000 6.025; Population of Towns from 10,000 to 50,000 6.155 and Population of Towns & Villages below 10,000 7.310.





curve. The next class taken was 10,000 to 50,000. Here the curve is very curious. Towns between these limits reached their zenith in 1891 and thereafter declined sharply till 1911. They have since recovered. But the more detailed analysis in Subsidiary Table No. 35 shows that the recovery is due to the group 20,000 to 50,000 and not to towns between 10,000 and 20,000.

139. At past Censuses it was the custom to give by districts the average population per town and per village (*vide* Subsidiary Table III to Chapter I of the 1911 Report). This I am not willing to do, because the results seem to me misleading. As regards the village the meaning of that term has already been explained, and it must be clear that any arithmetic mean of the numbers enumerated in certain administrative areas is not of much value. As regards towns it has already been pointed out that the selection of places to be treated as towns in different districts does not certainly follow uniform lines. Moreover in this matter the arithmetic mean is a very bad type of average, because the presence of one large city as in the case of Karachi or Ahmedabad will materially raise the value of the mean, and the presence of one or more very small towns, *e. g.*, Ulvi in Kanara (population 205 in 1911) will materially lower it.

PART III.—RESULTS OF THE 1921 CENSUS.

SECTION 6.—CITIES.

140. The discussion of the population of cities belongs to Volume IX of this series. But for ready reference the population of each of the seven cities since 1872 is given below, followed by the proportionate values of the same, taking the 1872 population in each case as 100.

Subsidiary Table No. 36-A.—Population of cities since 1872.

City.	Population in					
	1872	1881	1891	1901	1911	1921
Bombay (a) ..	644,405	773,196	821,764	776,006	979,445	1,175,914
Ahmedabad (b) ..	128,505	137,041	159,366	199,609	232,777	274,007
Karachi (c) ..	56,753	73,560	105,190	116,663	151,903	216,883
Poona (d) ..	125,613	144,340	182,099	175,463	188,701	214,796
Surat (a) ..	107,855	109,844	109,229	119,306	114,868	117,434
Sholapur (e) ..	53,403	59,890	61,915	75,288	61,345	119,581
Hubli (f) ..	37,961	36,677	52,595	60,214	61,440	69,206

(a) Area unchanged throughout; (b) population of past Censuses adjusted for intercensal changes of boundary; (c) boundaries at past Censuses uncertain; Port population known to have been incorrectly excluded in 1911; (d) population of past Censuses adjusted to represent area now included; (e) suburbs added in 1911; omitting suburbs the population in 1911 and 1921, would be 55,237 and 113,931; (f) suburbs shown in 1901 and 1921, but not other years; omitting suburbs population would be 1901 59,913, 1921 66,772.

Subsidiary Table No. 36-B.—Variation in population of cities since 1872.

City.	Proportional population of each city at each succeeding Census taking 1872 as 100.*					
	1872	1881	1891	1901	1911	1921
Bombay ..	100	120	128	120	152	182
Ahmedabad ..	100	107	124	155	181	213
Karachi ..	100	130	185	206	268	382
Poona ..	100	115	145	140	150	171
Surat ..	100	102	101	112	107	109
Sholapur ..	100	112	116	141	115	224
Hubli ..	100	97	139	159	162	182

* In considering the variations the changes in area or adjustment indicated in the preceding Table should be borne in mind.

141. Proportionate changes are also shown by the diagram on which the logs of the actual population figures are plotted, and curves drawn.

SECTION 7.—TOWNS IN RELATION TO RAILWAY COMMUNICATIONS.

142. The annexed map shows the railway system of the Presidency and the location of the various towns with a population above 10,000. It explains itself, and shows how few towns there are of any size which are not served by the Railway. The relation of Railways and towns is one of interaction, towns attracting commercial enterprise in the shape of railways, and railways attracting population.

SECTION 8.—COMPARISON BETWEEN TOWNS IN BRITISH AND STATE TERRITORY.

143. Not only are the towns in State Territory proportionately smaller than

Increase and decrease in size of towns—British and State Territory compared.

	Increased.	Decreased.
British Territory ..	136	65
State Territory ..	64	72

those of British Districts but they show a

much smaller tendency to increase. The

marginal Table bears out this fact.

SECTION 9.—TOWNS IN CUTCH STATE.

144. The decrease of the towns in the Cutch State is very remarkable. There are nine places treated as towns. Of these three, viz., Mandvi, Bhuj and Anjar, are of fair size (above 13,000). The other six are small (from 3,000 to 6,000). The following percentage decreases on the 1911 figures will show what is going on:—

	Decrease per cent. 1911—1921.
Total population of Cutch State.	6
Three large towns	10
Six small towns	26

Not only, therefore, is no tendency to urbanisation apparent in that State; but the very opposite seems to be happening. The towns are losing to the villages.

SECTION 10.—SUBURBS OF BOMBAY.

145. One of the most conspicuous phenomena is the remarkable rise of Bombay's Suburban towns.

Subsidiary Table No. 37.—Population changes in the Suburban Towns in Salsette and beyond, 1872—1921.

Town.	Population.					
	1872.	1881.	1891.	1901.	1911.	1921.
Bandra	7,227	14,987	18,317	22,075	25,286	29,271
Kurla	4,516	9,715	11,469	14,831	15,081	26,059
Ghatkopar-Kirol ..	Not known		1,506	2,444	3,430	8,094
Santa Cruz	Not known		Not known		1,072	6,953
Thana	14,299	14,456	17,455	16,011	15,591	22,639
Kalyan	12,804	12,910	12,608	10,749	12,300	17,829

146. It will be noticed not only that the suburbanisation of South Salsette is now proceeding with extraordinary rapidity but that the movement has spread as far as Thana and even Kalyan. The rise in Kalyan might be put down to Railway building. But so far as Thana is concerned none could have any doubt on the subject who has seen the passengers crowding into the Up Locals in the morning

Distribution of
TOWNS and CITIES
(excluding towns below 5,000 persons)
in the Bombay Presidency, 1921,
in relation to the
existing Railway Lines.

Railway Lines	—
Towns and Cities—	
5,000 to 10,000	○
10,000 to 20,000	◉
20,000 to 50,000	◻
50,000 to 100,000	◻
100,000 to 1,000,000	⊠
Above 1,000,000	⊠

L.J.S.

in time for business hours in Bombay. And the figures clearly show that Thana as a suburban home for the city clerk is of less than ten years growth.—In the case of Bhivandi and Bassein, towns outside the suburbanisation zone, there is no marked increase. To revert to South Salsette, it must be remembered that the whole Taluka is rapidly becoming suburbanised. Bandra, Kurla and Ghatkopar-Kirol alone are taken as towns because they are the only places of sufficiently compact character. But there are numerous other straggling suburban places such as Andheri, Versova and Vile Parle, and the intervening country is quickly filling up.

SECTION 11.—PROGRESSIVE MOFUSSIL TOWNS.

147. The following is a list of places below Class II, and excluding the places already mentioned as Suburban, in which the increase since 1872, or since the earliest year for which information is available, has been not only very marked but also more or less continuous.

Subsidiary Table No. 38.—Progressive Mofussil towns.

	Population.					
	1872.	1881.	1891.	1901.	1911.	1921.
Bhusaval	6,804	9,613	13,169	16,363	18,312	25,557
Bijapur	12,938	11,424	16,759	23,811	27,615	32,485
Godhra	10,685	13,342	14,691	20,915	22,144	26,979
Jalgaon	6,893	9,918	14,673	16,259	17,867	23,710
Rajkot	11,979	15,139	21,564	27,159	26,412	36,057
Sukkur	13,318	27,389	29,302	31,316	35,294	42,759
Chalisgaon	3,941	4,885	8,138	10,243	9,433	12,007
Igatpuri	2,407	6,306	7,544	7,436	8,380	10,639
Manmad .. ..	.....	4,137	3,953	7,113	6,947	11,929
Tando-Adam	3,457	4,253	5,033	8,664	10,013	12,966
Kurdu-Kurduwadi .. ..	.....	.....	2,418	4,738	5,760	7,616
Pachora	2,723	3,412	5,427	6,473	5,145	7,575
Shahdadpur .. ..	.....	.....	2,323	2,822	4,201	5,991
Palghar .. ..	.....	498	867	1,333	1,847	2,852
Panchgani	468	621	799	1,312	1,042	2,454

148. The places listed above are by no means the only places which have increased, nor even the only ones in which the increase has been considerable. But they are the only ones in which the population has trebled itself or nearly so.

149. The influence of the Railway in the above list is most noticeable. Several are important Junctions, and several Railway Settlements.

150. Panchgani is the only Hill Station which shows a steady increase. The set-back in 1911 was due to plague. Matheran has not increased since 1901, the figures prior to that Census not being available. Mahableshwar (which appears in Table IV as Malcolmpeth) increased in the decade 1891—1901 from 3,442 to 5,299, but has not since then increased at all. So far as this Census is concerned there was a severe epidemic of plague at Mahableshwar in the preceding winter, which not only carried off a good many victims, but caused an evacuation of the bazaar. The epidemic was over before the Census, but its effects probably remained. But there is no reason to expect any noteworthy increase in Mahableshwar in the future, because owing to the excessive rainfall in the monsoon it could never be an all-the-year-round hill station. Moreover, the rents now asked for bungalows appear to be so extravagant as to result in many of them remaining empty. In some Presidencies a special Hot Weather Census is taken of Hill Stations. But it was not considered of sufficient importance to do so at any station in this Presidency. At Panchgani the March population would be fairly typical of the entire year, while at the others the "season" is so short, and the station itself so small that a special count would be liable to be misleading.

SECTION 12.—DECAYING TOWNS.

151. The converse case of places which show a continuous and very marked decrease is naturally rarer. A good many towns have declined since 1872. Still

more have declined since 1891 or since 1901. But the following seem to be the only case of absolute decay :—

Town.	Population.					
	1872.	1881.	1891.	1901.	1911.	1921.
Dholera	12,468	10,301	10,888	7,356	6,050	3,491

152. The original cause of the decline of Dholera was the diversion of the cotton export trade from the Gulf of Cambay ports to Ahmedabad and the Railway. But the prolonged continuance of the decline is remarkable. Dholka also shows a continuous decrease from 20,854 in 1872 to 12,513 in 1921. It is saved from absolute decay by its administrative importance as the Head Quarters of a Taluka. The same applies to Dhanduka, which rises slightly this time. Gogha, which was almost eliminated by the rise of Bhavnagar as a Port, and fell from 9,571 in 1872 to 2,958 in 1911 has risen this time to 4,140. The 1911 figure was possibly due to plague exodus. The interchange of trade as between Bhavnagar and Gogha seems to have been completed long back, since the present population of Gogha is much the same as in 1901, and Bhavnagar reached almost its present level in 1891.

153. Cambay on the opposite shore of the Gulf shows a steady decline, as also Matar and Mehmedabad in Kaira, though the decline in these two cases is not great. Kaira itself increases slightly on this occasion.

154. The towns of Ashta, Islampur, Rahimatpur and Vita in the Satara District show decreases since 1901. These towns seem to have been more or less permanently injured by plague, which has been constantly recurring and often severe.

155. Yeola, Pathardi and some other towns in the Deccan famine area show decreases; but it is impossible to draw any inference of a permanent decline.

SECTION 13.—SOME REGIONAL FIGURES.

156. The following figures were taken out in the first instance in order to see whether the effects of the Influenza factor could be observed in the relative increases or decreases of groups of towns. But as will be seen they demonstrate much that is of interest, and they serve as a general study of the rise and fall of the population of towns.

157. In order to secure reliable data it was necessary to exclude all towns which, for any known cause, are likely to have materially increased in size since 1911. The towns which remain are broken up into groups according to a distribution in territory which does not exactly correspond with the Natural Divisions. The following is a list of regions as adopted and the selected towns :—

Konkan Coast Strip.

Bhatkal.
Honavar.
Karwar.
Kumta.
Malvan.
Vengurla.
Ratnagiri.
Alibag.

Konkan Inland Belt.

Chiplun. ✓
Rajapur. ✓
Mahad.
Panvel. ✓
Pen.
Roha. ✓
Bhivandi. ✓

Karnatak Mallad Belt.

Sirsi.
Haliyal.
Hangal.
Nipani.

Karnatak Black Soil.

Annigeri.
Gajendragadh.
Hebli.
Mulgund.
Nargund.
Navalgund.
Ron.
Bagalkot.
Guledgud.
Hungund.

Karnatak Black Soil—continued.

Ilkal.
Kerur.
Talikota.
Athni.
Saundatti Yellama.

Karnatak Transition Tract.

Gokak.
Byadgi.
Haveri.
Ranebennur.
Tumkatti.

Khandesh open Country.

Erandol.
Faizapur.
Jamner.
Kasoda.
Nagardevla.
Nasirabad.
Pachora.
Parola.
Raver.
Savda.
Shendurni.
Varangaon.
Yaval.
Betavad.
Sindkheda.

West Khandesh Hilly and Forest Tracts.

Nandurbar.
Shahada.
Shirpur.
Taloda.

Deccan Maval.

Trimbak.
Junnar.
Talegaon Dabhade.
Wai.

North Deccan open Country.

Malegaon.
Mannad.
Nandgaon.
Sinnar.
Indapur.
Jejuri.
Sirur.
Kharda.
Pathardi.
Puntamba.
Shrigonda.
Vambori.
Yeola.
Karmala.

South Deccan open Country.

Barsi.
Karkamb.
Pandharpur.
Sangola.
Vairag.
Akalkot.
Mhasvad.
Rahimatpur.
Tasgaon.
Vita.

Panch Mahals.

Dohad.
Godhra.
Jhalod.
Kalol.
Lunavada.
Nandod.
Balasinor.

Gujarat South.

Bardoli.
Anand.
Borsad.
Dakor.
Kapadvanj.
Mahudha.
Matar.
Mehmedabad.
Nadiad.
Umreth.
Anklesar.
Jambusar.

Gujarat North.

Prantij.
Modasa.
Sanad.
Viramgaon.
Patri.
Sadra.
Mansa.
Pethapur.
Vadali.
Mandal.

Gujarat Kathiawar Side.

Dhanduka.
Dholera.
Ranpur.

158. The exact reasons for excluding those towns which are not shown need not be stated. Of course in many individual cases of towns in the above lists there may be special reasons for increase, or for decrease apart from the influenza factor. But except in those groups which are very small the figures of the other towns ought to be sufficient to nullify the local irregularities. Another point which has to be remembered is that in even small towns there is a tendency for the gaps in the population caused by any epidemic to fill up again by the arrival of new persons to take the places of the deceased.

159. The figures actually arrived at by totalling the population of the towns listed above is as follows :—

Subsidiary Table No. 39.—Population of certain towns in selected regions, 1891-1921.

	1891.	1901.	1911.	1921.
Konkan Coast Strip	84,818	102,351	101,665	104,269
Konkan Inland Belt	63,852	56,789	56,145	58,063
Karnatak Mallad Belt	31,073	29,673	27,530	28,600
Karnatak Black Soil	130,513	136,615	126,439	133,698
Karnatak Transition Tract	43,521	45,685	32,693	41,361
Khandesh Open Country	113,342	120,113	114,270	121,158
Khandesh Hilly Tracts	31,416	31,936	27,054	34,498
Deccan Maval	32,982	32,223	23,138	28,437
Deccan Open Country, North	113,760	108,609	111,826	111,115
Deccan Open Country, South	96,443	109,483	94,826	94,840
Panch Mahals	68,688	75,311	68,235	80,454
Gujarat, South	139,313	141,187	124,387	136,236
Gujarat, North	84,767	73,261	67,353	77,096
Gujarat, Kathiawar Side	25,615	24,093	19,845	16,879

160. The 1891 figures are given because that was the last occasion on which the population of these towns may be taken to have been fully normal. In 1901 the Census was taken after plague, which may have thinned out the population without affording time for the gaps to be refilled. In 1911 there were many cases of towns evacuated for plague, and though, as explained above, some of the deserters would come into "suburbs", in others they would escape inclusion in the town and go into the figures of the surrounding villages.

161. The figures are interesting. The last Group—"Gujarat, Kathiawar Side"—is a very small one, consisting of only three towns. It will be seen that the population steadily and noticeably diminishes since 1891. The causes for this are special, and are discussed in Section 12 above.

162. Of the remaining groups it will be seen that only one,—“Deccan Open Country, North”—shows a small but distinct reduction since 1911, while “Deccan Open Country, South” shows a population practically stationary. Many of the towns of these two groups are situated in the heart of the worst Influenza regions: and the reduction may be attributed to that cause rather than to famine. On the whole during a famine, there is a tendency to move into the towns in search of work, though this would be counteracted by the fact that some of the inhabitants of these towns are local agriculturists and may have migrated.

163. All the remaining groups show marked rises. There is no doubt that the Plague was in 1911 a definite cause for the reductions which appear in almost all groups in the period 1901—1911. But it is important to notice that out of 13 groups (*i.e.*, excluding the last group) 8 show population less, and only 5 more, than in 1891.

SECTION 14.—OVERCROWDING.

164. The problem of house accommodation is acute only in cities, and the whole question of overcrowding is reserved for Volume IX. The smaller towns in this Presidency are not seriously overcrowded; nor is it likely that they should be, having regard to the fact already brought out above that they are not on the whole increasing in population. Here and there, in the case of a town which is growing, there may be shortage of houses. But conversely there are many where more houses are available than there are people to fill them. In the case of villages it is stated on good authority that some of the black soil villages, and villages in Central Gujarat are in their own small areas very densely populated. But these villages are so small and the average height of the houses so low, that it is unlikely that the density is able to affect the health of the people. For that reason it was not thought worth while to collect statistics on the subject.

PART IV.—COMPOSITION OF THE URBAN POPULATION
BY RELIGION AND SEX.

SECTION 15.—RELIGIOUS COMPOSITION.

165. This point could have been studied either in the Chapter on Religion or here. The Tables which follow approach the matter from opposite points of view.

*Subsidiary Table No. 40.—Religious composition of Urban and Rural population
in British Districts.*

Natural Division.	Number per 10,000 of Urban Population who are—						Number per 10,000 of Rural population who are—					
	Hindus including Animist.	Musal- man.	Jain.	Zoroas- trian.	Chris- tian.	Others.	Hindus including Animist.	Musal- man.	Jain.	Zoroas- trian.	Chris- tian.	Others.
Bombay Presidency.	7,108	2,136	307	134	285	30	8,169	1,629	147	5	56	3
British Districts ..	7,167	2,009	205	168	355	36	7,911	1,924	83	6	72	4
Gujarat ..	7,047	2,234	462	135	117	5	9,077	667	90	23	134	..
Konkan ..	7,611	1,445	74	81	761	28	9,280	409	23	13	180	5
Deccan ..	7,898	1,568	179	47	296	12	9,472	383	97	1	47	..
Karnatak ..	7,471	2,168	156	8	195	2	8,816	953	207	..	24	..
Sind ..	5,412	4,234	23	53	210	68	2,025	7,957	1	..	1	16
Bombay City ..	7,124	1,571	203	444	580	76	..	..	..	..	..	..

*Subsidiary Table No. 41.—Number per mille of each Main Religion who live in
Towns. For British Districts and Natural Divisions.*

Distict & Natural Division.	Hindu.	Musalman.	Christian.	Jain.	Zoroastrian.
1	2	3	4	5	6
Gujarat ..	213	539	235	620	675
Ahmedabad ..	316	773	561	686	963
Bronch ..	210	254	289	497	840
Kaira ..	140	361	144	547	883
Panch Mahals ..	94	777	138	634	838
Surat ..	192	573	688	474	593
Konkan ..	30	260	339	279	426
Kanara ..	139	330	269	127	923
Kolaba ..	72	193	417	266	715
Ratnagiri ..	60	127	451	87	444
Thana ..	76	385	205	172	188
Bombay Suburban District ..	404	740	515	654	721
Deccan ..	159	482	590	296	941
Ahmednagar ..	104	291	232	177	884
Khandesh, East ..	199	467	896	397	897
Khandesh, West ..	107	442	364	334	533
Nasik ..	135	668	919	207	953
Poona ..	242	631	862	415	972
Satara ..	79	308	650	202	980
Sholapur ..	242	497	863	461	918
Karnatak ..	139	302	605	125	903
Belgaum ..	96	221	458	80	990
Bijapur ..	109	247	454	264	833
Dharwar ..	202	384	781	267	872
Sind ..	352	96	979	824	995
Hyderabad ..	415	96	990	988	947
Karachi ..	792	293	996	1,000	999
Larkana ..	207	36	237	....*	....
Navabshah ..	152	22	175	....	667
Sukkur ..	486	128	925	563	992
Thar and Parkar ..	41	12	120	209	375
Upper Sind Frontier ..	217	24	667	....	....*

*There are no Jains in the Larkana District and no Zoroastrians in the Upper Sind Frontier District.

166. The Tables bring out well the essentially urban character of the Northern as opposed to the Southern Jains. They reveal the essentially urban character of the Parsees. And they show how in Sind the tendency is for the Hindus to be of the town rather than of the country whereas in the Presidency proper the position is exactly the opposite. The fact is that in any region with a pronounced majority of one religion it will be found that persons *not* of that religion are mainly to be found in the towns. This is natural. A Parsee or a Christian, unless by accident brought up in a village, will not find himself at home in rural conditions. This sort of phenomenon is no doubt common all over the world. Everywhere the country is homogeneous and native, the town heterogeneous and cosmopolitan. Hence all minorities find their way to and flourish in towns.

SECTION 16.—MUSALMAN ELEMENT IN TOWNS.

167. The riots at Malegaon revealed the fact that that town is essentially a Musalman town; and this fact occasioned a good deal of surprise. The composition of the Malegaon population is very abnormal. The following is a list of the towns in the Presidency proper showing what proportion of the population is Musalman.

Towns in which the Musalman population is 75 per cent. of the total—

Nil.

Towns in which the Musalman population is from 50 to 75 per cent. of the total—

Bhiwandi.	Mundra.	Kutiyana.
Malegaon.	Bantva.	Pattan.
Bhatkal.	Dhoraji.	Wanthali.

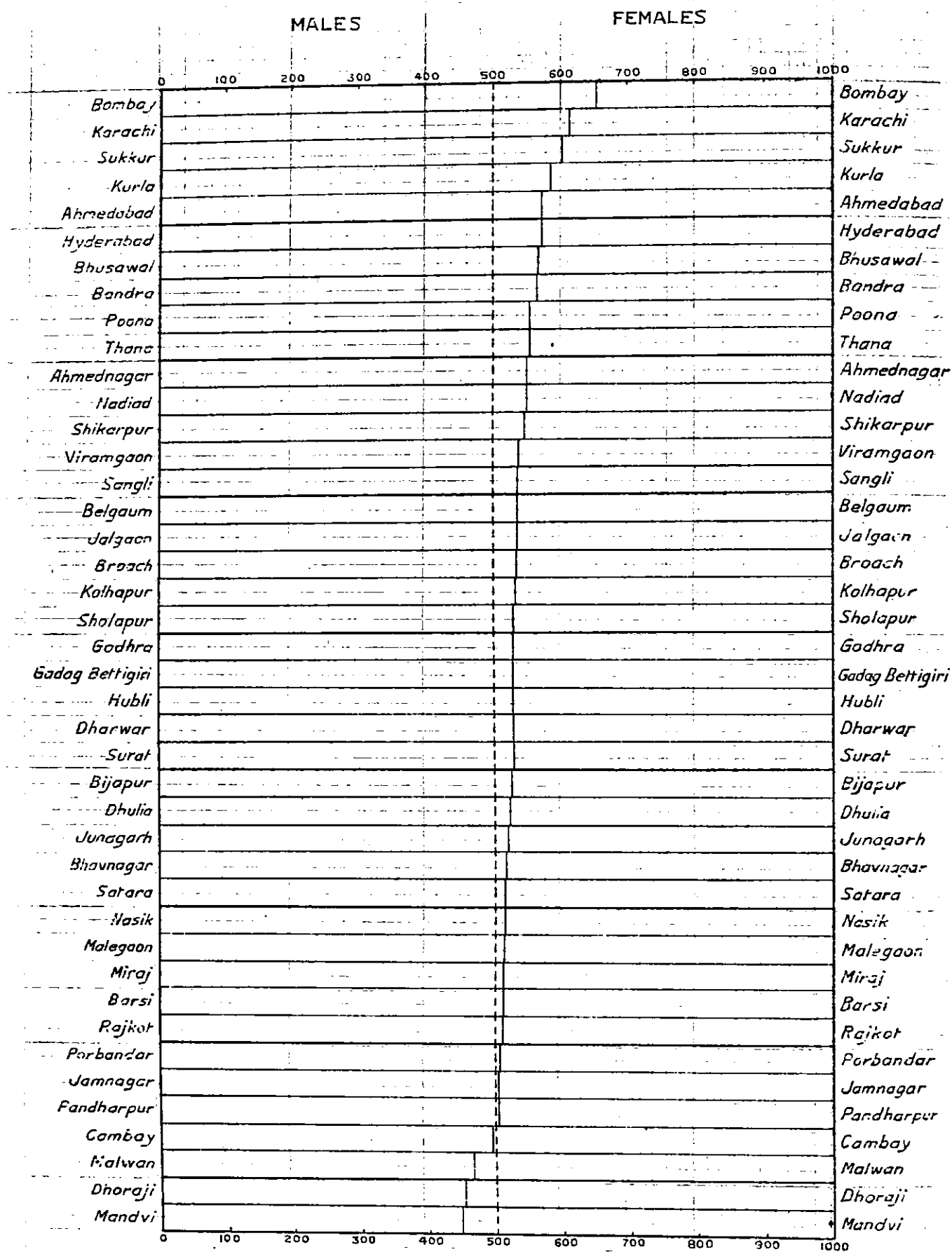
Towns in which the Musalman population is from 33 to 50 per cent. of the total—

Dhandhuka.	Jamner.	Jodiya.
Gogha.	Kasoda.	Junagadh.
Modasa.	Bankapur.	Mangrol.
Kapadvanj.	Hangal.	Una.
Mahudha.	Bhuj.	Upleta.
Dohad.	Jakhau.	Veraval.
Godhra.	Mandvi.	Palanpur.
Jhalod.	Himmatnagar.	Radhanpur.
Rander.	Jetpur.	Balasinor.
		Savanur.

In all other towns the Musalman population is less than 33 per cent.

SECTION 17.—SEX PROPORTIONS IN CITIES AND TOWNS.

168. The figures of the sexes in Bombay City having revealed a very noticeable disparity the following Table was taken out to show the sex-proportions in every Town or City of more than 20,000 inhabitants. For the most part the position of the Town or City in the Table is determined by the sex-proportions prevailing in the region. Thus the Sind Towns come high, and the Karnatak towns low. The existence of a Cantonment necessarily causes an excess of Males; and these places have been distinguished by the letter (C). The influence of the Cantonment is slight at Ahmedabad, but is considerable at Ahmednagar and Belgaum. Suburbanisation causes the high position of Kurla, Bandra and Thana, and the large Railway settlement the high position of Bhusaval. It will be seen that the prominent disproportion in Bombay (656 to 344) descends rapidly until the position of 567 to 433 is reached at Ahmedabad and Hyderabad, Sind. Thereafter the changes are gradual. A diagram is also annexed, showing the proportions revealed by the Table.



PROPORTIONS OF THE SEXES IN ONE THOUSAND
OF THE POPULATION IN TOWNS OVER
20,000 INHABITANTS-1921.

SEC. 17.—SEX PROPORTIONS IN CITIES AND TOWNS.

59

Subsidiary Table No. 42.—Proportions of the sexes in every thousand of the population in towns over 20,000 Inhabitants—1921.

Notes.—(1) The towns are arranged in serial order according to deficiency of females, (2) The letter (C) indicates the existence of a Cantonment.

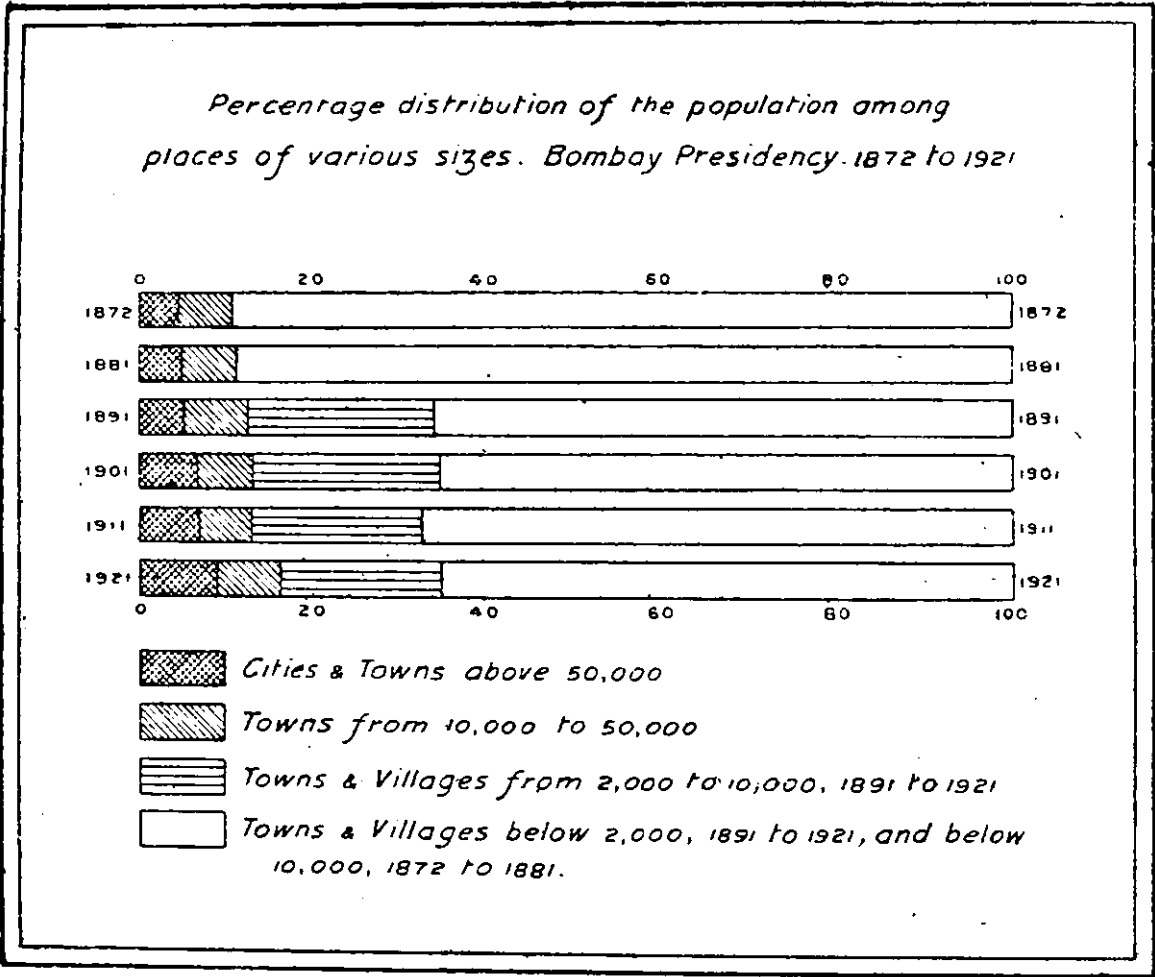
Name of Town.	Population—1921.			Proportions per mille.	
	Males.	Females.	Total.	Males.	Females.
1 Bombay	771,332	404,582	1,175,914	656	344
2 Karachi	133,084	63,799	216,883	614	386
3 Sukkur	25,708	17,051	42,759	601	399
4 Kurla	15,217	10,842	26,059	584	416
5 Ahmedabad (C) ..	155,372	118,635	274,007	567	433
6 Hyderabad (C) ..	46,387	35,451	81,838	567	433
7 Bhusaval	14,422	11,135	25,557	564	436
8 Bandra	16,491	12,780	29,271	563	437
9 Poona (C)	118,473	96,323	214,796	552	448
10 Thana	12,497	10,142	22,639	552	448
11 Ahmednagar (C) ..	27,257	22,621	49,878	546	454
12 Nadiad	17,435	14,504	31,939	546	454
13 Shikarpur	30,212	25,291	55,503	544	456
14 Viramgaon	14,094	12,168	26,262	537	463
15 Sangli	11,325	9,787	21,112	536	464
16 Belgaum (C)	25,915	22,405	48,320	536	464
17 Jalgaon	12,687	11,023	23,710	535	455
18 Broach	22,608	19,980	42,648	532	468
19 Kolhapur	29,502	26,092	55,594	531	469
20 Sholapur	63,115	56,466	119,581	528	472
21 Godhra	14,243	12,736	26,979	528	472
22 Gadag-Bettigiri ..	21,708	19,500	41,208	527	473
23 Hubli	36,392	32,814	69,206	526	474
24 Dharwar	18,258	16,492	34,750	525	475
25 Surat	61,711	55,723	117,434	525	475
26 Bijapur	16,951	15,534	32,485	522	478
27 Dhulia	15,946	14,659	30,605	521	479
28 Junagarh	17,255	15,966	33,221	519	481
29 Bhavnagar	30,785	28,607	59,392	518	482
30 Satara	11,547	10,907	22,454	514	486
31 Nasik	21,974	20,782	42,756	514	486
32 Malegaon	12,156	11,555	23,711	513	487
33 Miraj	10,941	10,483	21,424	511	489
34 Barsi	11,267	10,807	22,074	510	490
35 Rajkot	18,369	17,688	36,057	509	491
36 Porbandar	14,434	14,265	28,699	503	497
37 Jamnagar	21,307	21,188	42,495	501	499
38 Pandharpur	12,631	12,579	25,210	501	499
39 Cambay	13,547	13,704	27,251	497	503
40 Malwan	10,315	11,900	22,215	464	536
41 Dhoraji	11,654	14,012	25,666	454	546
42 Mandvi	10,122	12,516	22,638	447	553

CHAPTER III.—BIRTHPLACE.

[NOTE.—As the completion of this Chapter depends upon the receipt of returns from all the other Provinces, and as some of those returns had not been received in time, this Chapter has been relegated to a later position in the Volume.]

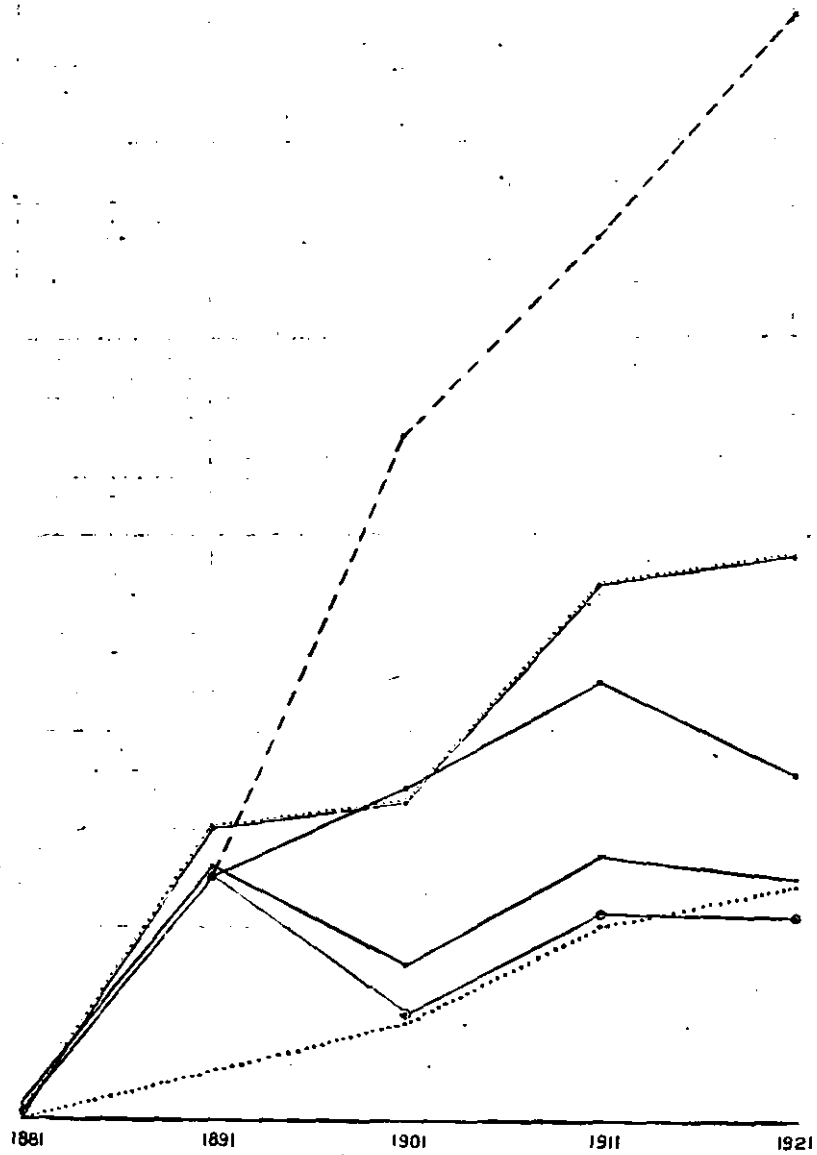
ADDENDUM TO CHAPTER II.

With reference to paragraph 138 above, as an alternative to the diagram showing curves of the logs of the populations dwelling in places of various size, a second diagram was prepared showing the percentage distribution of the whole population among places of various size, 1872—1921. This is printed below.



RELATIVE INCREASE OR DECREASE OF THE DIFFERENT MAIN RELIGIONS - AS SHOWN BY THE CURVES OF THE LOGS OF THE NUMBERS IN EACH RELIGION-1881 TO 1921

Each division in the vertical scale represents .025 of a Log. The ruled base line represents
the following actual Log in the four cases-Total Population 7.365,
Indo-Aryan 7.285, Musulman 6.575 Christian 5.160, Zoroastrian 4.870 and Jew 3.955.



- Total Population
- Indo-Aryan
- Musulman
- - - Christian
- Zoroastrian
- Jew

CHAPTER IV.—RELIGION.

SECTION 1.—INTRODUCTORY.

169. For the reasons given in the introduction we were at this Census directed not to investigate or describe the different forms of religious belief. Consequently no attempts have been made, as in the last Census report, to describe the religious practices of the different strata of Hinduism.

170. In the Tables religion appears as the main factor in Table VI and as a cross factor in many other Tables, *i.e.*, where the figures for the factor under presentation are shown separately for the different religions. In the present Chapter only Table VI is discussed, that is to say the actual numbers recorded under each religion, and not the religion element in the other tables. For example the discussion of the comparative educational standards of the different religions will be found in the Chapter on Literacy and so on.

SECTION 2.—THE BASIS OF THE FIGURES.

171. Before discussing religion in general and the different religions in particular it is desirable to explain the methods adopted to obtain the figures. Column 4 of the General Schedule was headed "Religion",—in the vernacular "*dharma*". On the Cover of the Enumeration book the following instruction was printed:—

"Enter here the religion which each person returns, as Hindu, Musalman, Sikh, Jain, Christian, Parsi. In the case of Christian the sect also should be entered. In the case of aboriginal tribes who are not Hindus, Musalmans, Christians, etc., the name of the tribe should be entered in this column."

and in Chapter V, Part A of the Code the following supplementary instructions:—

"Lingayats are to be entered as Hindus. Jains should be entered as Jains and not as Hindus, even though they themselves regard themselves as such. Similarly Sikhs should be entered as Sikhs and not as Hindus. If any person returns his religion as Nanakshahi or Nanakpanthi you should ascertain whether he is a Sikh or a Hindu and enter whichever is the case. Bhils and other jungle tribes should be entered as Hindus if they worship at the ordinary Hindu temples and are accepted as Hindus by the villagers. Some are also Mahomedans. For the rest you should enter the name of the Caste in column 4 as well as in column 8. In the case of Mahomedans you are to enter whether Sunni or Shia, and also the name of the sect if any. In the case of the Jains you should distinguish the three sects, Digambar, Svetambar and Sthanakvasi. In the case of Christians you should enter the sect. Instructions as regards Christian sects will be issued by districts, and you should consult your Supervisor when necessary. Besides the main religions some persons will return themselves as belonging to special beliefs such as Theosophists, or Atheists, or even as having no religion at all. You should accept the statement made by them."

The above instructions are of considerable importance in discussing the results of the Census under the head of religion, the particular form of the instructions in the case of any particular religion having had a variable but in no case negligible influence on the figures.

172. In the Abstraction stage the instruction was:—

"If column 4 is blank, it may be filled in with reference to the caste of the person concerned, the religion of other persons on the same page, etc. In the case of Indian Christians, if the sect is not shown, it should be assumed to be that of the Mission at work in the district of enumeration. But if the caste entry shows "Goanese" the sect should be entered as "Roman Catholic".

SECTION 3.—RELIGION IN GENERAL.

173. Before considering particular religions it might be interesting to consider what religion is. At first sight on reading over the General Schedule one might remark that in contradistinction to the heading "Caste, Tribe or Race" in column 8, the heading "Religion" in column 4 required no amplification. But apart from the numerous particular difficulties explained below in the case of the separate religions, the whole question of what constitutes religion is most difficult. Anyone can prove this for himself by attempting a definition of religion.

174. A number of different definitions by past writers are given by Hopkins,* but it would be beyond the scope of this report to quote them. Certainly belief in a God or gods is not an essential of religion, since one of the most important of the world's religions—Buddhism—denies (or at any rate in its purest and earliest form denied) the existence of a Deity. Neither is belief in a future life essential, since several of the Polynesian and North American religions believe in extinction at death. Further it is open to question whether to regard as religions the various atheistic and agnostic beliefs of modern times. For instance the materialistic monism of Haeckel, would probably be admitted by few for inclusion under the term religion. Yet it is just as much an attempt to explain the unseen and unknown as is Buddhism or Christianity. And if coupled with definite ethical standards and held by a considerable body of men it would apparently come within Hopkins' own definition "Squaring human with superhuman life"—a definition with which however few are likely to be in accord. Still more difficult is the case of pure agnosticism. Even this form of philosophic doubt might, so far as I can see, under the subsidiary conditions mentioned above for materialistic monism, come within Hopkins' definition. Lastly we have the case of a man who returns his religion as "nil"; and such returns were actually made. Such a person might be taken as belonging to no religion, the fact which he intended to convey. The difference between "Nil" and "Agnostic" is that among individuals belonging to no religion and admitting no form of philosophic belief there could be no community in their attitude to what Hopkins calls "super-human life". Community, if nothing else, seems to be a *sine qua non* of religion. The treatment of these returns is explained in the next paragraph.

SECTION 4.—INDEFINITE BELIEFS.

175. In past Censuses the various modern philosophical types of "free-thinking" were classed as a Christian Sect under the title "Indefinite beliefs", the inclusion of such persons under Christians being justified by Mr. Gait, the Census Commissioner of 1911, on the ground that persons holding these beliefs would be either Europeans probably baptised as, and brought up as Christians, or Indians who have derived their ideas from Western influences. At the present Census these indefinite beliefs were, in response to the opinion of Christian bodies, removed from Christianity, and segregated as a separate religion. The exact terms which were classified as indefinite beliefs are given below :—

Agnostic.	Positivist.
Atheist.	Rationalist.
Deist.	Sceptic.
Freethinker.	Theist.
Nil.	Theosophist.
No religion.	Unitarian.

The numbers returning these terms are quite negligible. But at the same time it is almost certain that numerous Europeans and probably also numerous Hindus and Mahomedans returned their religion as Christian, Hindu or Mahomedan although their adherence to those religions is a matter of nationality or politics rather than of belief.† Actually 1 Indian returned himself as an Agnostic in Bombay City, and 24 as Theosophists from a single village (Weral) in the Ratnagiri District. This isolated return is surprising, but it is in accordance with isolated returns of Arya Samajists from villages in the Surat District.

SECTION 5.—ANIMISM.

176. To turn to the particular religions found in the Table it is desirable to deal with *Animism* first. The term Animism was invented by Tylor as a general term suitable to the primitive religions of all savage peoples, and was chosen on the assumption that (in the words of a later writer) all such peoples believed in "the presence on earth of a shadowy crowd of powerful and malevolent beings, who usually have a local habitation in a hill, stream, or patch of primæval forest,

* The History of Religions, E. W. Hopkins, 1918.

† As a matter of fact a few Europeans who returned themselves under one or other of the above terms were converted into Christians in some of the Abstraction Offices. This was incorrect. But the number was very few.

and who interest themselves in the affairs of men".* Since the time of Tylor much research has been done among savage and primitive peoples, and it has been found that belief in spirits or entities dwelling in natural objects is by no means the most primitive of beliefs. The most primitive savage does not distinguish between spirit and matter. The danger from the tree is not danger from the tree-spirit, but simply from the tree itself, which, as an object that sways about and makes a noise, is necessarily possessed of a vague potency, a "mana" (to use a Polynesian word which has become the technical term among Anthropologists for the primitive idea outlined above). Nor does he distinguish natural from artificial objects. The attitude of such peoples is that of the child, who, when it knocks its leg against a chair, exclaims "naughty chair"! and kicks it. When we hang up over our door a horse-shoe to bring luck we are unconsciously reverting to the most primitive savage beliefs. The belief in "mana" of natural and artificial objects has been called by some writers "Animatism", though this word is perhaps not generally accepted. This "Animatism" can, and does, in the case of some peoples, continue to exist side by side with a belief in spirits and even gods. The extent to which it exists among the jungle tribes of this Presidency, either by itself or in combination with Animism or other forms of primitive religion, is possibly not fully known. A description of some of the beliefs and practices of the Bhils was given by Mr. Enthoven on pp. 63-65 of the Report of 1901.

177. The condition of the religious mentality of the Bhils as presented by Mr. Enthoven reveals a stage of religious development considerably beyond Animatism. Thus—"They worship female deities known as Mátás, represented by symbols rather than images, by wooden posts, earthen pots, toy horses, wicker baskets and winnowing fans". Originally perhaps the wicker basket was an animated and potent object, possessed of "mana". Now it has become the symbol of one of the Earth Mothers, a form of worship common to many and various peoples, and particularly a feature of Dravidian cults. Ancestor-worship also plays a conspicuous part; and various large and formidable objects, such as the tiger, big trees, large and irregular shaped stones, are treated as godlings.†

178. Now it will be noticed that whereas in almost all other returns the enumerator is bound to accept the reply of the individual, except in so far that he may explain to him what is wanted, should he think that the question has been misunderstood, in the case of Animism the enumerator is left to decide whether any member of a jungle tribe is a Hindu or an Animist. It is necessarily a matter of doubt whether a Bhil is "accepted as a Hindu by the villagers", and it would be quite impossible for any enumerator to call the villagers together and question them as to the religious status of every Bhil. Consequently it is almost a matter of luck what the numbers returned as Animists will be. To the chance of being returned or not returned as such by an enumerator is to be added the chance of being classified or not classified as such on the ground of caste by the head of the Abstraction office. In 1911 Mr. Gait, the Census Commissioner, when visiting this Presidency on tour, converted 70,000 Bhils in Reva Kantha from Hindus to Animists by a stroke of the pen. At this Census it was my intention that the Schedules themselves should decide—that is to say, that the caprice of the enumerator should not be further complicated by idiosyncrasies of the Abstraction Officers. But this was not always fully understood by the latter, and in a few cases classification was carried out irrespective of what was entered on the schedules.

179. But even if we eliminate the opinion of the Abstraction Officer and rely on the opinions of the enumerators alone there is little hope of consistency, Census to Census, in our statistics. Mr. Enthoven well pointed out that when the Bhil worships a big tree or a stone, he is only doing what the Hindu of the plains does, when he girds the *pipal* tree with the sacred thread or paints red lead on a *lingam* stone. Moreover, Hinduism of to-day is not the Vedic religion; nor is it the Puranic religion; nor is it the philosophical pantheism of the highly educated Brahman. It is a vast mixture, in which the Vedic worship of the great forces of nature, the Puranic *avatars*, the philosophical doctrine of *karma*, and—be it noted—the

*E. A. Gait, Indian Census Report, 1911, p. 129.

†A contribution on this subject kindly supplied by the Rev. Enoch Hedberg, D.Litt., of Dhanora, West Khandesh, is printed as Appendix N.

pre-Aryan reverence of trees, stones, animals and tribal *totems* are inextricably intermingled. Consequently most enumerators would regard the Bhil, whose person-objects of worship are his ancestors, a particular tree, a particular stone, the boundary god, the small-pox mother and a winnowing fan, as no less a Hindu than the *kunbi* of his own village, who worships his ancestors, the *pipal* tree, the circle of stones known as *Vetāla*, the boundary deity, the small-pox mother, and a plough, even though the latter may be told *puranic* stories a few times a year by his *guru*, have some vague ideas of the doctrine of *karma*, and employ a Brahman to perform his ceremonies. The old question "What is a Hindu?"—is one which has been discussed in full many times, and the reader is referred in particular to Mr. Gait's discussion on pp. 115 to 117 of the India Census report of 1911. The latest definition is given by Mr. Farquar, who makes Hinduism depend on "birth and conformity".* By birth he means birth into one of the recognised Hindu castes. But if some Bhils are Hindus then Bhil is a recognised Hindu caste. It is particularly to be noted that a Bhil does not enter any new caste when he gradually passes into a Hindu and worships *puranic* gods.

180. In pointing out, as has been hinted above, that the Hinduism of the highly educated Brahman is something totally distinct from the Hinduism of the lower strata of Hindu society, it is not intended to imply that this variation is confined to this one religion. The Christianity, and especially the eschatology, of a Browning is equally far removed from the Christianity of a devout old agricultural labourer; and the reverence paid to the Virgin by a high class French lady is equally far removed from the Mariolatry of the Marseilles fish-woman.† In some parts of the world, and particularly in South America, there are Christian cults which are only by the laxest use of the term classifiable as Christian at all. This being so, and the jungle tribes being, as it were, non-puranised Hindus (one cannot use the term "primitive Hindus", since Hinduism is not derived from the pre-Aryan cults, but has absorbed them), no justification for continuing to treat Animism as a distinct religion exists, *unless we can obtain figures which show rational changes from Census to Census*. How far this is from being the case is shown by the following Table, in which are shown the numbers recorded as Animists from the chief Animistic tracts during four successive Censuses.

Subsidiary Table No. 43.—Recorded number of Animists in certain areas, 1891 to 1921.

Area.	1891.	1901.	1911.	1921.	
Broach	17,805	25,294	38,860	2,432	
Panch Mahals ..	11,086	26,523	22,475	9,793	
Surat District ..	....	6,394	4,051	34,897	
Khandesh East and Khandesh West	86,688	11,000	92,535	66,962	Including "Khandesh Agency" of past Censuses.
Nasik	12,612	32	1,486	22	
Sind	78,621	....	9,224	8,022	Including Khairpur State.
Mahi Kantha .. ..	....	6,367	4,211	4,341	
Reva Kantha	64,856	18,148	143,653	51,605	
Surat Agency	11,402	....	70	8,901	Sachin, Bandsa, Dharampur and the Dangs.

181. But the above figures do not tell us all that we require to know. Throughout the whole of the discussion I have referred exclusively to Bhils. That is because the Animist figures are mainly composed of that caste. It is important however for a full consideration of the question to know exactly what other Castes are included and to what extent. The following Table shows the Castes included.

*A Primer of Hinduism, by J. N. Farquhar, M.A., Oxford, 1920, p. 177.

†This is denied by a learned authority on the Catholic religion, who explains that the doctrinal position of the two types of Catholic is the same, and such difference as exists is merely a question of personal education and different standards of refinement of thought. But this seems to me to be merely a statement of the same idea as is expressed in the text but in a different form.

Subsidiary Table No. 44.—Animists by Castes, 1921.

Caste.	Number of Animists returned.	Regions.
BHILS.		
Bhil	148,809	West Khandesh (65,846), Reva Kantha (47,570), Panch Mahals (7,961), Surat District (5,372), Surat Agency (8,882), Mahi Kantha (4,341), Thar and Parkar (3,895), Broach (2,389), and smaller numbers from other districts.
Marwari Bhil	35	Ahmedabad. These should have been included in Bhil.
Vasava	899	Surat. These are probably Bhils. See note on Vasava in the Glossary of obscure language names in Appendix B.
Dhanka	139	Reva Kantha (except 1 from Surat). This is probably a tribal name of Bhils. See the Glossary of obscure language names in Appendix B.
Vagadia	16	Panch Mahals. Probably a name for Bhils from further west.
Dhori	53	Reva Kantha. Probably a tribal name of Bhils. See Glossary of obscure language names in Appendix B.
Jamrala	36	Reva Kantha. Probably another tribal name of Bhils.
CASTES ALLIED TO BHILS.		
Chodbra	23,462	Surat.
Naikada	5,583	Reva Kantha, Panch Mahals and Surat.
Gamit	4,251	Surat.
Dhodia	202	Surat and Panch Mahals.
Kokna	24	Surat.
Dubla	40	Surat.
Talavia	90	Kaira and Broach. These are considered by the Ethnographic Survey to be identical with Dublas.
Kotvalia and Vitolia	528	Surat District, with a few from the Surat Agency and Reva Kantha. These people have a tradition of Khandesh origin, and are probably racially Bhil.
Vaghri	96	Larkana (67) and the rest from Gujarat.
KONKAN ABORIGINAL TRIBES.		
Katkari	2	Kolaba.
Varli	3	Surat Agency.
WANDERING TRIBES.		
Phanse Pardhi	6	Satara.
Vaidu	4	Satara.
Waddar	10	Poona.
Charan	836	East Khandesh (except 2 from Nasik).
WANDERING MENDICANTS AND MUSICIANS.		
Turi	6	Palanpur Agency.
Nandivale	7	Satara.
Dankin	8	Savantvadi. Probably an occupational name of some wandering musicians.
Pingle Joshi	9	Satara.
Trimali	9	Satara.
Bajania	120	Palanpur Agency (105), Reva Kantha (15).
Vadi	17	Reva Kantha.
RECOGNISED CASTES.		
Koli	435	Cutch (377), Reva Kantha (56), Surat (2).
Bhoi	7	Reva Kantha.
Chambhar	13	Panch Mahals and Surat Agency.
Gowli	11	Satara District and Agency.
Raval	26	Reva Kantha and Panch Mahals.
Me	638	Cutch.
Menghwar	3,406	Thar and Parkar (2,183), and the rest in small numbers from other Sind Districts.
Chamtha	2	Panch Mahals.
Ravat	5	Panch Mahals.
OBSCURE NAMES.		
Valoda	13	Surat. Nothing known of this.
Mayala	7	Cutch. Possibly a misspelling for Miana.
Dongri	1	Thana. The word means simply "of the hills".
Naga	2	Panch Mahals.
CASTE NOT RETURNED	9	Kathiawar.

182. One of the interesting points brought out by the above Table is the great divergence between different districts in the variety of castes brought under the term Animist. Thus Reva Kantha and the Panch Mahals between them return Animists under 19 different castes, Surat and Surat Agency 14, Satara 7, Cutch 4, Palanpur and Broach 3 each, and no other district more than 2. In the case of the 19 names from the Panch Mahals and Reva Kantha only 3 are common to each. Seven districts and a number of States returned no Animists at all.

183. Another point is the trivial number of persons classed as Animists out of certain castes. The occurrence of an Animist entry at all would often seem attributable to a single-energetic enumerator of pronounced views. The following Table gives the numbers of each caste as compared with the number of Animists returned. Where possible the 1921 figures are given, and failing that the 1901 figures. A few of the caste names in the previous Table are not known, and are therefore not entered.

Subsidiary Table No. 45.—Comparison of the number of Animists returned in certain castes with the strength of that caste in the Presidency.

Caste.	Number returned as Animists 1921.	Strength of the caste.	
		1921.	1901.
Bajania	120	10,085	....
Bhil	148,809	786,726	....
Bhoi	7	64,131	....
Chambhar	13	282,324*	....
Chamtha	2	....	190
Charan	836	31,537	....
Chodhra	23,462	43,277	....
Dhodia	202	108,966	....
Dubla and Talavia	130	132,539	....
Gamit	4,251	12,599	....
Gavli	11	38,967	....
Katkari	2	80,830	....
Kokna	24	71,077	....
Koli	435	1,617,044	....
Me	638	31,842	....
Menghwar	3,406	....	3,526 †
Naikada	5,583	84,969	....
Nandivale	7	....	218
Phanse Paradhi	6	12,240 ‡	....
Pingle Joshi	9	....	23,671 §
Raval	26	51,707	....
Ravat	5	....	360
Trimali	9	....	2,126
Turi	6	....	3,195
Vaddar	10	98,940 ¶	....
Vadi	17	....	734
Vaghri	96	86,114	....
Vaidu	4	....	1,103
Varli	3	177,391	....
Vitolia and Kotvalia	528	....	502

184. It may be argued that there are castes or tribes more primitive than the Bhils, and that, even though the latter are classed in future as Hindus, other castes should be kept under Animists. This argument is not without force.

185. It will be seen that after the Bhils the Chodras contribute most to the Animist figures. An account of their religion will be found on p. 292 of the " Tribes and Castes of the Bombay Presidency " by Mr. R. E. Enthoven, C.I.E. From that passage it seems that they worship Nature deities, as well as the usual Boundary

* Including Mochi, etc.

† The 1911 figure. The approximation of the number of Animist Menghwars to the total strength of the caste is due to the fact that classification in this case was done in the Abstraction Office, the figure 3,406 being the total strength of the caste in 1921.

‡ Including Pardhi, Shikari, Haranshikari, Advichinchar and Chigarigar.

§ Under the name Gidbidki or Pingle. The number seems impossibly high, and suggests that persons returning the occupational term Joshi instead of caste were taken to this caste.

¶ Including Od.

Gods, and ancestors. It is stated that they do not worship the regular Hindu deities. This is at variance with the Bombay District Gazetteer, Vol. IX, Part I. Gujarat Population—Hindus, where it is stated that they worship Rama.

186. Of the Naikadas, who contribute largely to the Animist figures, the Draft Monograph of the Ethnographic Survey states that they follow the Hindu law of inheritance,* and are Animists by religion. The two statements are somewhat contradictory. The District Gazetteer (*loc cit.* p. 327) says "except that they sometimes pour oil over Hanuman, and though they are not allowed to enter her temple, worship the mother or Mátá on Pavgad Hill, and at other local fairs, their objects of worship are spirits and ghosts".†

187. Gamta or Gamit is not given in the "Tribes and Castes of Bombay". The District Gazetteer (*loc cit.*, p. 319) simply says—"They worship Vagh Dev, Samla Dev and Devli Mata".

188. No other castes contribute large numbers to the figures. The Kolis are certainly Hindus. The Mes are followers of a mixed Hindu-Musalman cult, like several other Castes in West Gujarat (for which see below).

189. Of all the tribes the Katkaris are probably the least Hinduized. Reports from Jesuit Missionaries who work among them near Khandala speak of a state of religious mentality exceedingly primitive. But it would not be justifiable to retain a main religion head for the Katkaris alone.

190. In short I suggest that our returns of Animists are *absolutely worthless*. They represent nothing, and are entirely a matter of chance. The vast decrease between 1891 and 1901 and the vast increase between 1901 and 1911 cannot be attributed to losses by and recovery from famine. Any such idea is completely disproved by the regional figures. The Bhils, who contribute most to the figures, are practically Hindus, and the other castes seem to be so also. I have therefore no hesitation in saying that Animism as a religion should be entirely abandoned, and that all those hitherto classed as Animists should be grouped with Hindus at the next Census, Hinduism being defined as including the religious or semi-religious beliefs of those jungle tribes who have not definitely embraced Islam or Christianity. In saying this I am of course to be taken as discussing the conditions of this Presidency only. There may be regions such as Chota Nagpur where the boundary between Hinduism and Animism is clear and definite.‡

SECTION 6.—INDO-ARYAN RELIGIONS.

191. *Hinduism* in this Presidency presents five main problems. The first is the question of Animism discussed above. The second is the problems of how to get over the fact that Jains are often regarded as Hindus. The third is caused by the obscurity of the boundaries between Hinduism and the Sikh religion, and the fourth the same phenomenon in connection with Islam, where these two religions meet and blend into one another in some of the special sects of Gujarat and Sind. These three problems will be discussed later. In the next paragraph the fifth problem will be mentioned, namely, the Lingayat sect, and its position. This is also discussed in the Chapter on Caste.

192. The *Lingayat* religion is developed from a reforming sect whose origin is placed by some as far back as the twelfth century. In its original form it denied both the supremacy of the Brahman and the validity of the Caste system, tenets which are usually considered corner-stones of the Hindu religion. Its single object of devotion was, however, the puranic deity Shiva, from which the caste often call themselves Virshaivas. In its modern form the first of the two heterodox

* No authority cited.

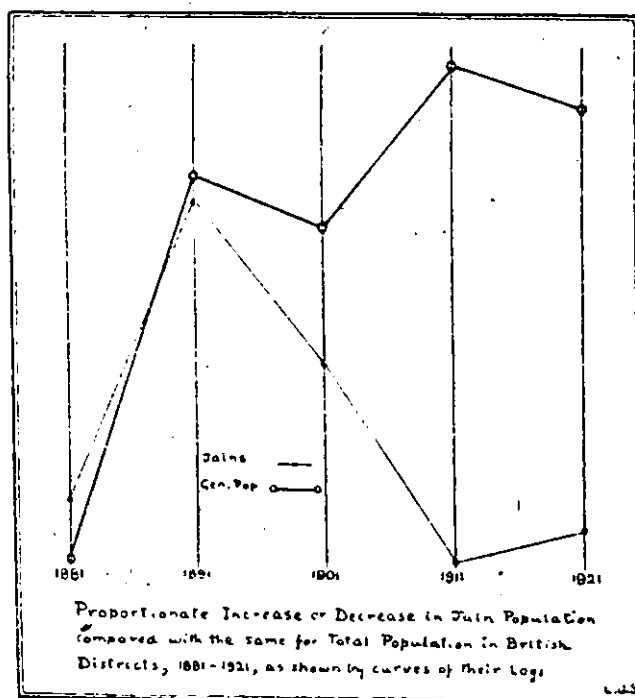
† This is copied but misquoted in the Draft Monograph of Ethnographic Survey. The passage may be corrected in the final work, which was not out at the time of going to Press.

‡ On the occasion of the reading of the above Section of this Chapter at a meeting of the Anthropological Society of Bombay a learned Sanskrit scholar who was present drew attention to the curious fact that this very question was really settled long ago at the time when the Atharva Veda, which is nothing but a mass of Animistic magic, was received into the Canon of the "Sruti". Certainly if Animistic mantras are a recognised portion of the Hindu Canon there is very little justification for excluding Animists from the definition of Hinduism. As a matter of fact it is believed that the relegation of the Bhils and other similar tribes to the head of Animism is more or less an artificial classification of the early Census authorities, and was not dictated by any strong feeling on the part of educated Hindus.

tenets survives, all ceremonies being performed by Jangams, who are the Lingayat priests, and considerable enmity persisting against Brahmans, not only in religious, but also in social and political life. The second tenet has, however, been entirely abandoned. In the case of the descendents of the earliest converts caste may have been lost. But later accretions were compelled to retain their caste structure, there being today within the Lingayat fold not only separate and distinct castes, but castes that are touchable and castes that are untouchable. The Lingayats are therefore a sect and not a caste. It is probable that few would assert that they should be excluded from the figures of Hindus. The correct solution for future Censuses seems to be to record them as Hindu-Lingayat in the religion column and as Panchamsali, Banjig, Devang, etc., in the caste column. But it will be difficult to record Lingayat as a sect unless we record Hindu sects generally.

193. In the case of *Jainism* it is doubtful whether any student of comparative religion could possibly class Jainism as a sect of Hinduism. Yet it is a fact that many Jains regard themselves and are regarded as Hindus. This can be seen from the instructions which it is found necessary to issue (quoted above) and will be demonstrated from the figures below. It is to be noted that the close relationship between Hinduism and the other religions which have segregated off from it is not lost sight of in Table VI, where Hindu Brahmanic, Buddhist, Sikh and Jain are all classed as Indo-Aryan. It therefore comes to this that Indians often use the term Hindu for what we call in the Census Indo-Aryan. Yet as a religion Jainism is definitely distinct. It was one of the many heretical beliefs which arose in the 5th Century B.C., and is slightly older than Buddhism—the only other of those beliefs which has survived.

194. The fact that Jains regard themselves and are regarded as Hindus necessarily vitiates our figures and obscures the increase or decrease of the religion from Census to Census. On some occasions more and on others less Jains will be incorrectly returned as Hindus. It is not likely that the converse case of Hindus returned as Jains would ever extensively occur. At the same time I have heard it stated—though it is difficult of credence—that some Lingayats regard themselves as identical with Jains. The annexed diagram illustrates the rise and fall in the numbers of Jains. As pointed out in the 1911 Report Jains do not suffer from famines and although some part of the irregularities in the curves may be due to losses from and recovery from plague, incorrect enumeration probably remains the dominant factor.



195. *Buddhism* is of course not a religion indigenous in this Presidency, but is returned by a few immigrants only.

196. The *Sikh* religion is mainly confined to Sind. The figures for Sikhs at successive Censuses show extraordinary fluctuations, as will be seen from the marginal table. Commenting on the figures up to 1911 Mr. Macgregor remarked that people who in 1881 had called themselves or been classified by the enumerators as Sikhs were returned in 1891 and 1901 as Nanakshahi Hindus. He continued "In Sind those that are returned as Sikhs are most of them Lohanas by caste and call themselves Hindus of the Nanakshahi sect." And he then gave an example of a family of four brothers, with details of their practices, showing how difficult classification is. In 1901, while in the Imperial Table VI only 1,502 persons in the Presidency were returned as Sikhs, and none of those from Sind, Mr. Enthoven in his report (p. 72) recorded as his opinion that the 157,577 persons returned as Hindus of the Nanakshahi sect were in reality Sikhs. At the present Census, as will be seen from the supplementary instructions re-printed from above, enumerators were instructed, in the case of Nanakshahi or Nanakpanthi being returned, to ascertain whether the individual was a Sikh or a Hindu. This instruction was based on the assumption that some followers of Nanak are Hindus and some Sikhs. Neither the correctness of this assumption nor the extent to which the instruction was attended to are known.

197. The figures of the *Arya Samaj* and *Brahmo Samaj* and the discussion of the same will be found in an Appendix.

SECTION 7.—BORDERLAND BETWEEN HINDUISM AND ISLAM.

198. We now come to the borderland sects between Hinduism and Islam, which are difficult to allocate to either of the two religions. In 1911 these sects, which are principally in Gujarat and Sind, were treated as follows.

Those who returned themselves as Hindu or Mahomedan were entered as such by the enumerator, while those who gave a sect name or denied adherence to either of the main religions were entered under their caste name in the Schedules and classified as "Hindu-Mahomedans", in the Report and Tables. The caste names thus returned were—Matia, Momna, Sheikh, Moleslam, Sanghar and Sanjogi. A full account of these sects will be found on pp. 59, 60 of the 1911 Report. This arrangement was objected to by the Census Commissioner, who remarked that these persons ought to have been relegated to one religion or the other according to precedent. In 1901 the Sanjogi sect had been treated as a separate religion under the general head "Others", while in the case of the rest the question does not seem to have arisen. But Pirana, the cult to which the Matias and Sheikhs belong, had been returned as a sect of Mahomedanism, though with only 1,049 adherents, a number which was impossibly small. Reference is made to this point in Appendix F. In accordance with the 1911 Census Commissioner's expressed opinion I issued orders to Abstraction Offices that the first five, if returned as religion, should be treated as Sectarian names of Mahomedans, and Sanjogi should be counted as "Others". The Sind Sanjogis were almost all returned as such, refusing point blank to be classed as either Hindu or Mahomedan and denying adherence to either religion. They were therefore classed as "Others" as in 1901. The main reason why the arrangement of having a separate "Hindu-Mahomedan" religion as in 1911 is unsound is that in this borderland the two religions merge into one another in an indefinite and gradual way, some Hindus leaning more and others less to the Islamic cult, and *vice versa*. Moreover, the Pirana "sect" (it is too diffused to be properly called a sect) and the non-sectarian castes of mixed religion partially included in 1911 under "Hindu-Mahomedan" are not the only examples of the borderland. There are the important Kabirpanthi and Dadupanthi Sects, the Panchpirya sect and others. Thus in 1901 Kabirpanthi was returned as a sect name by 8,000 who gave their main religion as Hindu and 1,300 who gave their main religion as Mahomedan. But these Kabirpanthi Mahomedans were all classed as Hindus and transferred to that head. For further information regarding the Borderland Sects at this Census see Appendix F.

SECTION 8.—ISLAM.

199. The diagram at the head of this Chapter demonstrates how the Mahomedan religion has suffered in this Decade. This is due mainly to regional distribution. It will be sufficiently apparent from the discussion of Vital Statistics that in Sind the Influenza epidemic was severe and certainly more severe than the figures indicate, this discrepancy being due to the inadequacy of registration in that Province. In Sind there was no region of very light Influenza incidence such as the Konkan and Gujarat in the Presidency proper. The Musalmans of Sind constitute 55 per cent. of the total Musalman population of the Presidency. The

actual decrease in the Musalman population of the Presidency as a whole is 349,135. and the decrease in the Musalman population of Sind including Khairpur is 260,056. That is to say of the total loss 74 per cent. occurs in Sind alone. In addition to Influenza the reduction in the number of immigrants into Sind (discussed in Chapter I) may also contribute. But too much importance is not to be attached to this factor, since many of the immigrants and especially those from Rajputana and the Punjab would be Hindus. Of the Musalman decrease in Sind 117,024 is in males and 143,032 in females. This clearly indicates Influenza losses, as shown in the Chapter on Sex. Had the loss been due to diminished immigrants the sex proportions would have been the other way, since immigrants usually consists of an excess of males.

200. Musalman Sects are discussed in Appendix F.

SECTION 9.—CHRISTIANITY.

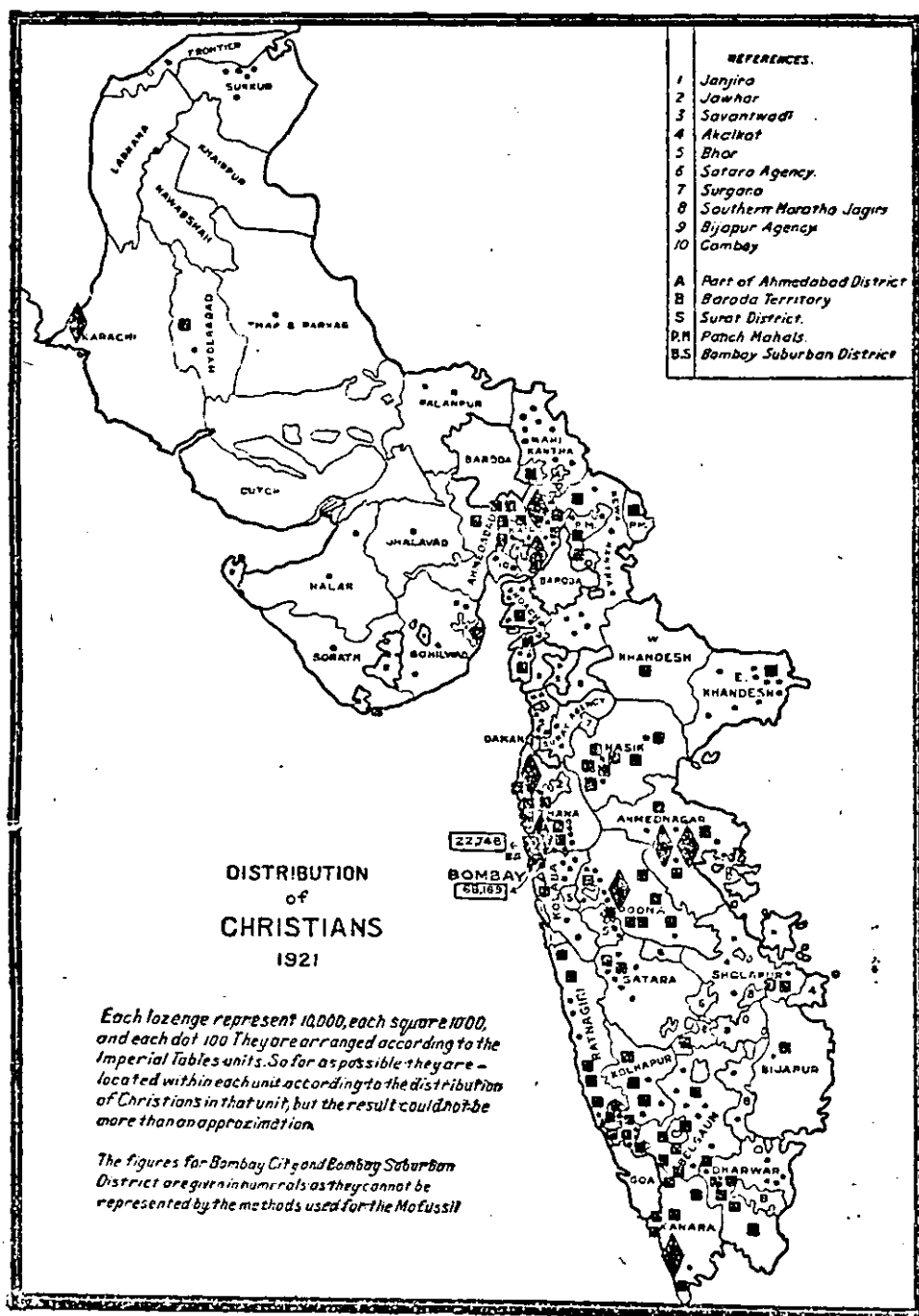
201. The discussion regarding Christian Sects is to be found in Appendix G.

Percentages of Christians to
Total population of the Bombay
Presidency, 1881 to 1921.

1881	..	..	0.62
1891	..	..	0.62
1901	..	..	0.85
1911	..	..	0.90
1921	..	..	1.04

As regards the total figures of that religion there is as usual a considerable increase in spite of the fact that the general population has declined. How rapid, proportionally, is the increase of Christians since 1891 is clearly seen from the diagram which begins this Chapter. Nevertheless in spite of this rapid proportional increase the Christian religion is by no means yet an important element in the country, as the percentage in the margin will show.

202. The regional distribution of Christians, which is very irregular, is shown in the annexed map.



203. The Christian religion is more prominent in British Territory than in Indian States. The percentages of Christians to Total population at this Census are — British Districts 1·36, States and Agencies 0·19. To this result the much larger number of Europeans necessarily to be found in British Territory is not, as might be at first supposed, the main contributory cause. It is true that out of 31,889 Europeans and Anglo-Indians in the Presidency 31,619 are recorded from British Territory and only 270 from State Territory. But even after eliminating these the percentages of remaining Christians to total population are only modified to the following — British Districts 1·19, States and Agencies 0·18. It is clear therefore that Missionary enterprise has been much more vigorous in British territory.

204. The regional distribution in British Districts only is shown in the following Table :—

Subsidiary Table No. 46.—Christians—Numbers and Variations (for British Districts).

District and Natural Division.	Actual Number of Christians in					Variation Per cent.				
	1921.	1911.	1901.	1891.	1881.	1911-1921.	1901-1911.	1891-1901.	1881-1891.	1881-1921.
1	2	3	4	5	6	7	8	9	10	11
Bombay Presidency ..	276,765	245,657	220,087	170,009	147,751	+13	+12	+20	+15	+87
Bombay City ..	68,169	67,355	45,176	45,310	42,327	+19	+27	..	+7	+61
Gujarat ..	38,331	31,787	30,977	4,626	3,349	+21	+3	+570	+38	+1,045
Ahmedabad ..	5,056	4,056	3,450	1,592	1,528	+25	+18	+117	+4	+231
Broach ..	2,618	1,102	719	128	115	+138	+53	+462	+11	+2,177
Kaira ..	25,580	23,592	25,210	2,282	1,041	+8	-6	+100	+119	+2,358
Panch Mahals ..	3,210	1,852	506	84	44	+73	+266	+502	+91	+7,195
Surat ..	1,858	1,185	1,092	540	621	+57	+9	+162	-13	+199
Konkan ..	73,721	68,557	65,148	63,063	57,634	+8	+5	+2	+11	+28
Kanara ..	16,119	16,843	16,199	15,639	14,509	-4	+4	+4	+8	+11
Kolaba ..	1,560	1,258	1,261	823	305	+24	..	+53	+170	+411
Rannagiri ..	5,431	5,714	4,981	4,206	3,276	+13	+15	+18	+28	+96
Thana (including Bombay Suburban District) ..	49,611	44,742	42,707	43,295	39,545	+11	+5	-1	+10	+25
Deccan ..	56,332	48,194	43,130	24,436	19,622	+17	+12	+77	+25	+187
Ahmednagar ..	28,402	24,036	20,864	6,333	4,821	-6	+20	+220	+31	+385
Khandesh, East ..	1,858	1,420	*1,398	*1,174	*1,146	{ +31 }	*+47	*+10	*+2	*+150
Khandesh, West ..	1,011	*629				{ +61 }				
Nasik ..	7,270	3,253	2,935	3,083	2,644	+23	+11	-20	+39	+175
Poona ..	17,737	14,936	14,484	11,262	9,500	+19	+3	+29	+10	+87
Satara ..	2,552	1,295	1,504	903	886	+97	-14	+67	+2	+188
Sholapur ..	2,502	1,725	1,945	1,081	625	+45	-11	+80	+73	+300
Karnatak ..	14,336	13,728	12,713	12,666	9,303	+4	+8	..	+36	+54
Belgaum ..	6,716	7,185	7,080	7,617	6,322	-7	+1	-7	+20	+6
Bijapur ..	1,077	1,098	901	827	625	-2	+22	+9	+32	+72
Dharwar ..	6,344	5,445	4,732	4,222	2,356	+20	+15	+12	+79	+178
Sind ..	11,731	10,911	7,817	7,764	6,082	+8	+40	+1	+28	+93
Karachi ..	9,990	9,013	6,486	6,314	4,674	+11	+30	+3	+35	+114
Hyderabad ..	1,034	†1,130	†747	†778	†423	†-3	†+31	†-4	†+82	†+156
Navabshah ..	40									
Larkana ..	59	72	492	522	736	{ -18 }	+34	-6	-29	-27
Sukkur ..	481	585								
Thar and Parkar ..	83	†80	‡30	‡21	‡14	‡+4	‡+167	‡+43	‡+50	‡+493
Upper Sind Frontier ..	15	31	62	120	230	-52	-50	-52	-44	-93

205. It will be seen that the Districts which show a decline are Kanara, Ahmednagar, Belgaum, Bijapur, Larkana, Sukkur and the Upper Sind Frontier. In all others there is an increase sometimes slight, sometimes considerable. To these changes the variations in the Christian population of Cantonments are an

* Does not include Mewas Estates for past Censuses.
† Does not include Singhoru Taluka, but includes Digri Taluka for past Censuses.
‡ Includes Singhoru Taluka, but does not include Digri Taluka for Past Censuses.

important contributory cause, the Christian population of Cantonments being subject to violent fluctuations, through alterations in the distribution of troops, hospitals, etc.

206. The figures of Christians at the last two Censuses in the various Cantonments is given in the annexed Table. Bombay City has no Cantonment, and it is not therefore possible to isolate the changes due to the above causes in the case of that city. Moreover in Bombay the troops, and other persons connected with them, are only a very small element in the total number of Christians in the City. The case is different with some of the Mofussil Districts, where troop movements may quite upset the ratio of Christians from Census to Census. The most conspicuous instance is Nasik, where the marginal figures show how entirely the Military population controls the total number of Christians in the District. This is however the only district in which the effect of Military changes is so large.

Christians in Deolali Cantonment and the whole of the Nasik District, 1911 and 1921.

	Deolali Cantonment.	Total Nasik District.
1911 ..	90	3,253
1921 ..	3,364	7,270

Subsidiary Table No. 47.—Christian populations of Cantonments, 1911 and 1921.

	1911			1921		
	Persons.	Males.	Females.	Persons.	Males.	Females.
Ahmedabad	34	25	9	281	242	39
Santa Cruz	36	27	9	1,846*	1,030	816
Ahmednagar	2,103	1,717	386	2,166	1,637	529
Deolali	90	50	40	3,364	2,880	484
Poona	6,612	4,285	2,327	7,228	4,437	2,791
Kirkee	2,178	1,614	564	2,525	1,802	723
Purandhar	91	72	19	34	29	5
Satara	227	101	126	283†	152	131
Belgaum	3,365	2,250	1,115	2,491	1,349	1,142
Hyderabad	898	744	154	878	730	148
Karachi	3,978	3,045	933	3,152	2,057	1,095
Deesa	167	120	47	135	94	41
Total	19,779	14,050	5,729	24,383	16,439	7,944

207. The effect of Cantonments does not however entirely cease even with the above figures. In the Upper Sind Frontier the reduction in Christians from Census to Census is no doubt due mainly to the disappearance of the Cantonment from Jacobabad. And it is also to be noted that Ahmedabad would have shown a more rapid increase in Christians in the long term variation since 1881 had it not been for the reduction in the size of that Cantonment with the removal of the Artillery prior to 1911.

208. For the rest it is to be noted that Gujarat, and especially Kaira, continues to be the most important field for Missionary enterprise. There seems reason to think that in Ahmednagar the field has been worked out. But it is to be remembered that new arrivals are counterbalanced by the dispersal of the older converts of the American Marathi Mission, who go far a field, and often to Bombay or Poona, now that they are of age to earn their livings. The Deccan Missions, and especially this one, are believed to be older than those working in Gujarat; and a decline in the Christian population of Kaira may therefore be anticipated in the next or following decade. However it is on the other hand believed that the American Marathi Mission and other earlier missions brought their converts up to professions in which openings are not available except in large cities, whereas the new Gujarat Missions have worked more on the lines of retaining their converts in their own villages at hand-loom weaving and similar village occupations. The remarks in this paragraph are however made subject to correction by persons better acquainted with Missionary work.

* In the case of Santa Cruz it is believed that the area included under Cantonment on this occasion differs considerably from the area included in 1911.

† In the case of Satara the Cantonment as such has been abolished since 1911. The figures shown for 1921 are therefore not strictly comparable with the figures for 1911 in that case. They are arrived at by taking all population apparently military, or connected with the military.

209. The quality of Christianity in India is scarcely a subject which the Census ought to touch were it not for the fact that on the quality of any religious movement depends its permanence. Various Provincial Reports in the past have discussed the subject in detail. Many writers are of opinion that the Christianity of the low-caste converts is scarcely more than a thin veneer. Without wishing either to adhere to or secede from this opinion I should like to cite two cases in which the Hindu tradition reasserted itself beneath the Christian exterior.

210. It is well known that in many of the Christian communities the caste distinctions are still observed. In a small mofussil village composed mainly of converts of the Jesuit mission it was the recognised custom for descendents of untouchable converts to sit on one side of the aisle and the rest on the other side. A new pastor arrived at some date during the present decade, and at once took his congregation to task for exhibiting feelings and prejudices antagonistic to the Christian doctrines. He therefore proposed to abolish the distinction of the two sides of the aisle. He was warned by his congregation of the probable consequences, but persisted, with the result that a considerable body of the touchable Christians seceded, and were readmitted as Hindus by the local members of their original castes.

211. In the winter of 1920 a letter had appeared in the *Chronicle* from a Konkan correspondent, describing himself as a Christian Koli, definitely foreshadowing the return of himself and others to the religion of their ancestors. The Rev. A. Goodier, S. J., Archbishop of Bombay, was kind enough to furnish me with some further information regarding this movement. He writes—

“During the early part of 1920 a distinct effort was made by a Hindu Society to win the Christian Kolis of Bombay Island. At first the movement threatened to be very far-reaching, but in the end resulted in a Hindu ceremony at Mandvi, Bombay, in which about five families, consisting of altogether 20 persons, were formally received from Christianity to Hinduism. The reports of this event were much exaggerated, and one heard of wholesale conversions to Hinduism, for which, so far as I know, there was no foundation in fact.”

Dr. Goodier also mentioned that attempts were again being made by certain persons to win over those Kolis who were losing their tenements as the result of the Improvement Trust's efforts, tenements in other localities being guaranteed in the event of their re-embracing Hinduism. It is well known that these Christian Kolis combine the worship of idols with the worship of the Christian Trinity, figures of Hindu godlings being kept behind the altar, and covered with a cloth when a priest comes to celebrate Mass. As Dr. Goodier says—“though we call them Christians, one has to give a very broad definition in order to include them”.

SECTION 10.—ZOROASTRIANISM.

212. This religion, rather contrary to expectations, increased at this Census. The actual increase of 2·3 per cent. shows that the supposed decadence of the Parsees is possibly exaggerated.* The contrast between the increase of Zoroastrians and the decrease of Hindus and Mahomedans is explained by the distribution of the former, which is shown in the annexed map.



213. It will be seen that this religion more than any other is confined to Bombay City and the Gujarat Coast, where the Influenza mortality was slight. The increase of 1,868 is composed of males 1,516 and females 452, the unequal sex increase being no doubt again due to the loss of females by Influenza.

214. Zoroastrian includes Iranis, a point possibly not fully known to the public. The following extract from a letter of Dr. Jivanji J. Modi, C. I. E., explains the point.

“The religion of all Iranis is Zoroastrian. They form a part of the Parsee community, the only difference being that the present Iranis are Parsees who have recently come to India, or whose ancestors came here within the last hundred years or so. Those who are at present known as Iranis will in about a century at the most be absorbed in the general community of the Parsees.”

* The question cannot however be studied except by reference to age distribution, and is therefore discussed in Chapter V.

At this Census I had the Bombay City Zoroastrian slips sorted into Parsees and Iranis according to the entries in the schedules. The result was as follows :—

Subsidiary Table No. 48—Parsees and Iranis in Bombay and Suburbs.

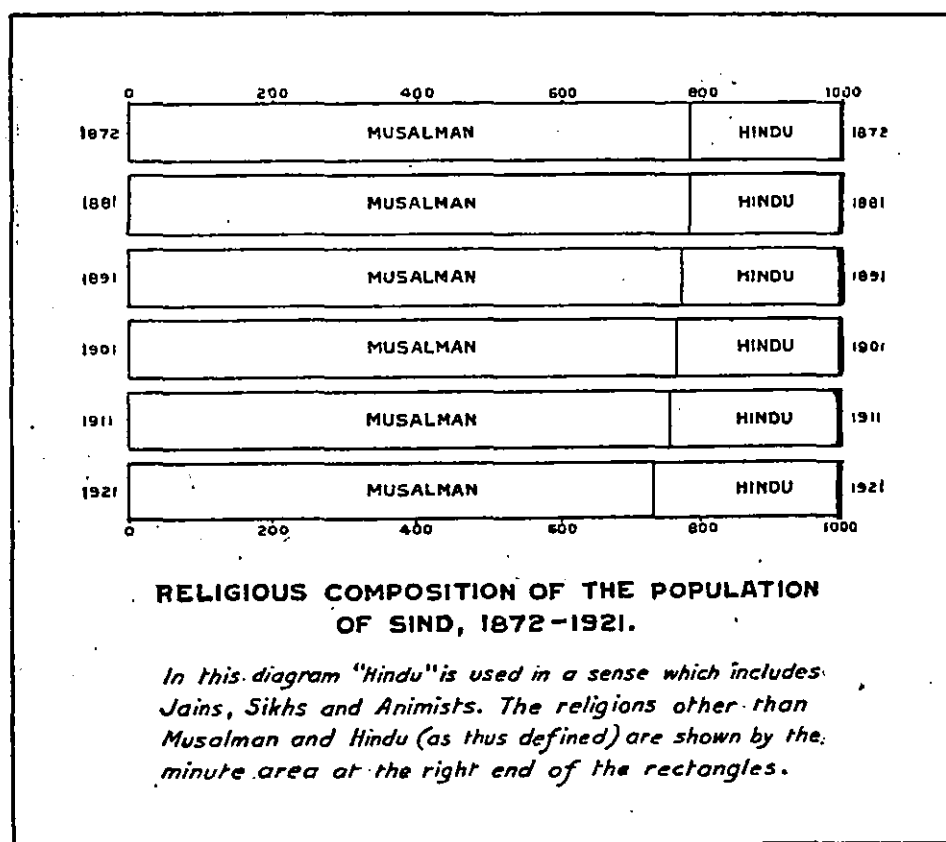
					Males.	Females.	Total.
Bombay City—							
Total Zoroastrians	..	..	..	..	27,948	24,286	52,234
Parsees	..	..	..	..	27,005	23,828	50,833
Iranis	..	..	..	..	943	458	1,401
Bombay Suburban District—							
Total Zoroastrians	..	..	..	..	1,246	1,199	2,445
Parsees	..	..	..	..	1,180	1,159	2,339
Iranis	..	..	..	..	66	40	106

SECTION 11.—JUDAISM.

215. This religion affords an example of the advantage of excluding Aden. In 1911 the number of Jews was 16,109 ; but of these 3,747 were returned from Aden, where this religion is an important element. Excluding Aden the 1911 figure was 12,362, and the 1921 figure is 12,564. Bombay City contains the majority of these, and Kolaba, Thana, Poona and Karachi most of the remainder. The Jews of India consist of several diverse elements, of which the community called Bene-Israel is one of the most interesting. This community is confined almost exclusively to the coast villages near Bombay. Taking the returns from Kolaba, Thana and the Bombay Suburban District as roughly covering the community we find that there is a loss of 157 males and 177 females at this Census—in all 13 per cent. of the community. This very large decline may quite possibly be attributed to emigration of the Bene-Israelis in search of work elsewhere. But a phenomenon like this can best be explained by accurate local study, and the community has an organisation and a journal of its own. A full and fairly up-to-date account will be found in the Castes and Tribes of Bombay, Vol. I.

SECTION 12.—RELIGIOUS COMPOSITION OF THE POPULATION.

216. It is interesting to note that Islam is being encroached upon in Sind by Hinduism, using that term to include Sikhs and Jains. The annexed diagram* shows the point, and illustrates the continuity of the movement. The fact seems to be fairly well known, and is apparently usually attributed to the superiority of the Hindu in all intellectual occupations, which with advancing civilisation must be of necessity of increasing importance.



* In the diagram the areas at the end of the main rectangles representing the proportionate numbers of other religions have not only been made solid instead of hollow by the draftsman, but have also been drawn rather too large. The religions other than Musalman and Hindu (including Jain and Sikh) are of very little importance in Sind.

217. The general religious composition of the population is shown by the following Tables. Sind being in religious composition wholly dissimilar from the rest of the Presidency has been kept distinct.

Subsidiary Table No. 49.—Distribution of the population by religion, 1921, including States.

	Proportion per 10,000 of each religion.							
	Hindu and Animist combined (including Arya and Brahma Samaj).	Musalman.	Jain.	Sikh.	Zoroastrian	Christian.	Jew.	All others and unspecified.
Presidency proper ..	8,754	884	207	..	35	114	5	1
Sind ..	2,548	7,380	5	23	8	34	2	..

218. In the Table which ends the Chapter is shown the distribution of the population of each district by religion since 1881.

Subsidiary Table No. 50.—Distribution by Districts of the Main Religions (for British Districts).

District and Natural Division.	Number per 10,000 of the Population, who are									
	Hindu.					Musalman.				
	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
1	2	3	4	5	6	7	8	9	10	11
Bombay Presidency ..	7,047	7,863	7,858	8,061	8,015	1,720	1,810	1,807	1,629	*1,627
Bombay City ..	7,124	6,760	6,554	6,612	6,504	1,571	1,881	2,007	1,889	2,063
Gujarat ..	8,552	8,550	8,405	8,716	8,666	1,073	1,073	1,080	1,001	1,035
Ahmedabad ..	8,410	8,381	8,364	8,559	8,542	1,115	1,112	1,095	982	980
Borach ..	7,472	7,557	7,582	7,708	7,730	2,274	2,209	2,173	2,087	2,057
Kaira ..	8,632	8,647	8,573	8,977	8,959	917	915	952	888	906
Panch Mahals ..	9,147	9,196	9,081	9,343	9,295	712	690	818	595	629
Surat ..	8,821	8,803	8,750	8,814	8,689	834	846	851	805	904
Konkan ..	9,100	9,134	9,147	9,156	9,162	601	594	585	579	574
Kanara ..	8,928	8,910	8,964	9,021	9,040	657	667	645	593	576
Kolaba ..	9,403	9,429	9,424	9,412	9,436	504	465	464	497	469
Ratnagiri ..	9,228	9,227	9,228	9,224	9,237	702	708	709	720	713
Thana (including Bombay Suburban District) ..	8,883	8,919	8,927	9,002	9,024	508	476	447	445	467
Deccan ..	9,180	9,228	9,208	9,312	9,283	603	575	585	563	545
Ahmednagar ..	8,983	9,065	9,032	9,215	9,200	516	507	522	530	527
Khandesh East ..	8,897	8,929	*9,064	*9,143	*9,161	907	961	*835	*767	*746
Khandesh West ..	9,410	*9,381				506	*539			
Nasik ..	9,252	9,338	9,327	9,358	9,412	558	527	537	499	452
Poona ..	9,206	9,255	9,252	9,270	9,282	461	456	460	460	467
Satara ..	9,470	9,509	9,467	9,491	9,497	351	339	357	353	346
Sholapur ..	9,071	9,022	9,065	9,151	9,101	791	721	756	719	755
Karnatak ..	8,602	8,642	8,646	8,670	8,732	1,146	1,112	1,071	1,049	980
Belgaum ..	8,646	8,665	8,618	8,616	8,637	843	817	789	794	767
Bijapur ..	8,742	8,778	8,794	8,836	8,898	1,206	1,171	1,148	1,112	1,051
Dharwar ..	8,453	8,507	8,573	8,507	8,714	1,379	1,334	1,271	1,246	1,140
Sind ..	2,589	2,408	2,340	2,245	1,818	7,337	7,514	7,619	7,705	7,808
Karachi ..	2,561	2,138	1,896	1,833	1,505	7,124	7,597	7,954	8,023	8,149
Hyderabad ..	2,794	†2,423	†2,454	†2,230	†1,545	7,181	†7,532	†7,529	†7,761	†7,878
Navabehab ..	2,328					7,671				
Larkana ..	1,626	1,538	2,149	2,030	1,163	8,354	8,435	7,837	7,959	8,022
Sukkur ..	2,022	2,702				7,023	7,226			
Thar and Parkar ..	4,595	†4,382	†4,169	†4,442	†4,534	5,368	†5,565	†5,807	†5,530	†5,370
Upper Sind Frontier ..	1,002	1,007	981	1,078	893	8,988	8,972	9,015	8,903	8,792

SEC. 12.—RELIGIOUS COMPOSITION.

77

District and Natural Division.		Number per 10,000 of the population who are														
		Jain.					Christian.					Zoroastrian.				
		1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881
1		12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Bombay Presidency	..	180	181	211	206	213	104	91	86	63	63	32	31	31	28	32
Bombay City	..	203	209	184	307	223	580	586	582	551	547	444	520	506	577	628
Gujarat	..	193	203	233	212	229	130	113	115	15	12	52	59	64	55	58
Ahmedabad	..	398	434	475	430	449	57	49	43	17	18	20	20	17	9	8
Broach	..	106	100	112	105	115	85	36	25	4	4	72	90	107	96	93
Kaira	..	89	96	118	106	119	360	341	352	26	13	1	1	3	2	2
Panch Mahals	..	48	48	64	55	73	86	57	19	8	2	0	6	5	4	1
Surat	..	152	150	185	176	190	28	18	17	8	10	164	180	197	196	206
Koukan	..	29	24	27	24	26	243	220	214	216	213	21	18	18	14	12
Kanara	..	28	29	34	35	40	401	391	356	350	344	..	..	1	..	..
Kolaba	..	29	24	28	25	30	28	21	21	16	8	6	5	5	3	1
Ratanagiri	..	14	16	20	18	17	57	47	43	38	33	..	..	..	..	..
Thana (including Bombay Suburban District)	..	47	34	30	25	28	544	506	528	479	435	64	58	64	43	36
Deccan	..	112	111	124	119	126	93	75	73	39	37	9	8	7	6	..
Ahmednagar	..	178	162	194	182	206	320	265	249	71	64	2	2	2	2	..
Khandesh East	..	81	90	*86	*77	*81	{ 17	13	*10	*8	*0	{ 4	3	*4	*4	*1
Khandesh West	..	64	*65				{ 16	*11				{ 3	*4			
Nasik	..	90	87	93	93	97	87	36	36	44	34	11	9	6	5	4
Poona	..	116	109	108	116	121	176	139	145	105	105	30	25	24	10	17
Satara	..	149	137	161	146	148	25	12	13	8	8	5	2	2	1	..
Sholapur	..	100	99	117	112	129	34	22	27	14	11	4	4	5	3	3
Karnatak	..	199	195	237	235	244	51	48	45	44	39	1	1	1	1	1
Belgaum	..	439	440	521	512	521	70	76	71	75	78	1	2	1	1	1
Bljapur	..	38	33	45	42	42	14	13	12	10	9	..	..	1	..	..
Dharwar	..	102	101	111	116	119	68	53	43	40	27	2	2	1	1	..
Sind	..	5	4	8	3	5	36	31	24	27	25	9	7	6	5	4
Karachi	..	21	12	2	2	..	184	173	107	112	98	50	42	30	25	20
Hyderabad	..	1	{ 11	{ 11	{ 1	{ 12	{ 18	{ 10	{ 7	{ 9	{ 10	{ 1	{ 1	{ 11	{ 11	{ 1
Navabshah	..	..					{ 1									
Larkana	..	..	{ 1	{ 1	{ 1	{ 1	{ 1	{ 1	{ 1	{ 5	{ 6	{ 9	{ ..	{ ..	{ 1	{ 1
Sukkur					{ 0						{ 10				{ 2	{ 2
Thar and Parkar	..	7	{ 11	{ 18	{ 27	{ 51	2	{ 2	{ 1	{ 1	{ 1	..	{ 1	{ 1	{ 1	{ 1
Upper Sind Frontier	..	2	..	1	..	..	1	1	3	8	19	..	..	..	..	1

* Does not include Mewas Estates.

† Does not include Sinjhoro Taluka but includes Digri Taluka.

‡ Includes Sinjhoro Taluka, but does not include Digri Taluka.

CHAPTER V.—AGE.

SECTION 1.—THE BASIS OF THE FIGURES.

219. In the Indian Census “age” means “age last birthday”. The instructions on the Cover of the Enumeration Book were—

“Enter the number of years each person has completed. For infants less than one year old enter the word “infant”.”

220. In the Code the following were the supplementary instructions—

“The Age is to be reckoned as it will be on 18th March. In the case of infants less than one year old be careful to enter “infant”, and not the number of months or days of its age, which might be mistaken for years in the Census Offices. Absurd replies about age should not be accepted. In such cases you should enter what seems to you to be the correct age.”

221. The following is also important, as showing how unspecified ages are dealt with,—

(From the Chapter of the Code on Slip Copying)—“If column 7 is blank persons who are literate should be assumed to be some age over 12, and those who are workers some age over 15. The married and widowed should be assumed to be between the ages noted above, unmarried under 12.” The ages referred to are—for Indians married 12-50, widowed over 50; for Europeans and Eurasians married males 30-55, married females 22-50; widowed above those ages.

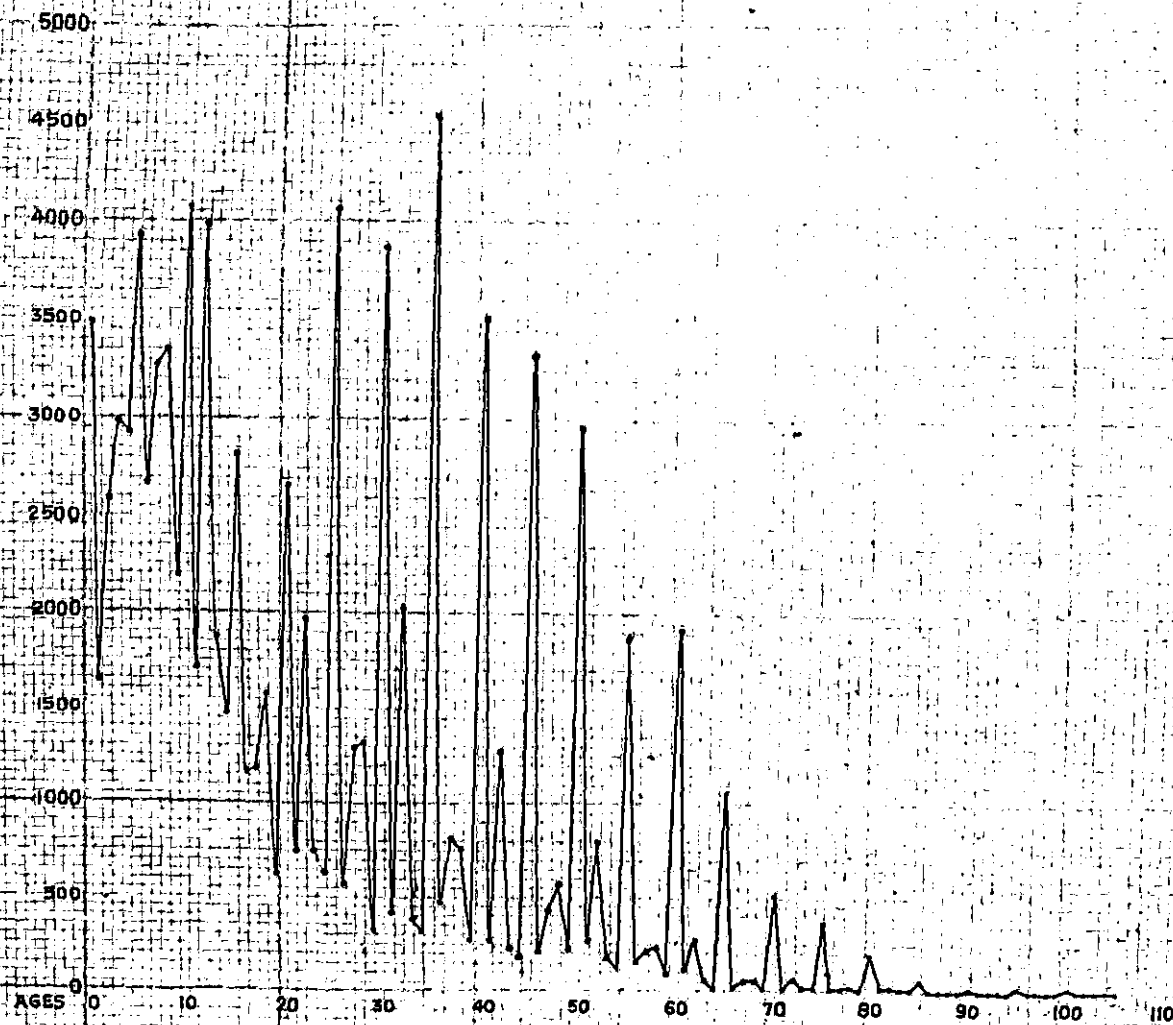
222. The necessity for the note about “absurd replies” will be apparent to anyone who has officiated as a Magistrate in India. The ordinary reply of the witness to the question—“What is your age?” is “How do I know?” And when an answer is given at all, it not rarely happens that the age stated is impossible, sometimes wildly impossible.

SECTION 2.—SAMPLE AGE RETURNS AT INDIVIDUAL YEARS OF AGE.

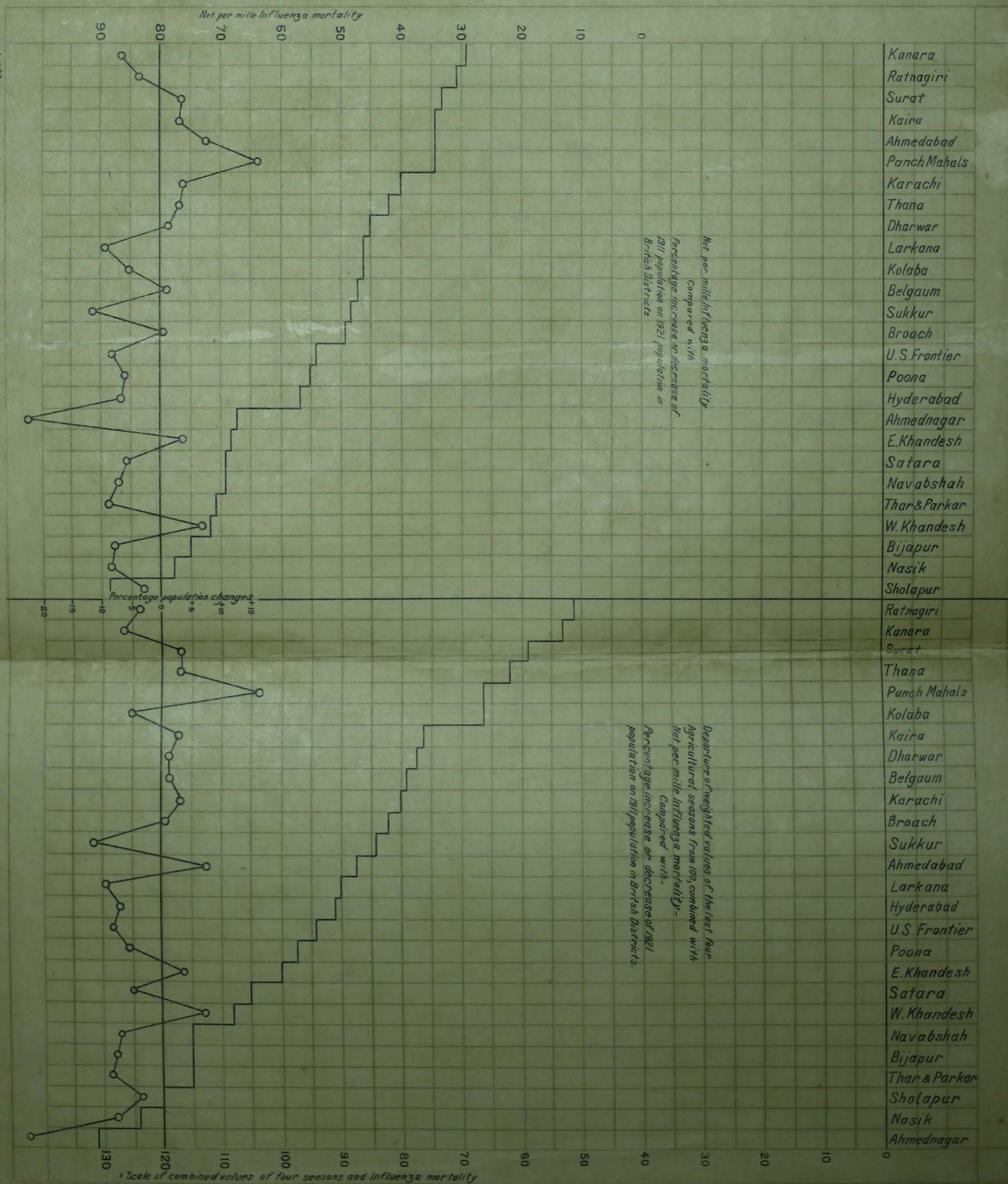
223. At every Census the actual ages returned in one or more batches of 100,000 slips for males and 100,000 slips for females are counted and tabulated for each year of age. The standing order is to make up these batches of slips by taking those for circles in regions where the natural distribution of the population by age periods is not likely to have been much disturbed by famine, epidemics or other causes. In 1901 the Report gives no indication of the areas selected. In 1911 it is mentioned (paragraph 143) that the Talukas of Indi (Bijapur), Nasik, Larkana, and Broach were selected. On the present occasion to find regions which had not been disturbed by the factors mentioned was virtually impossible. I chose two tracts, one in Surat District, and one in Dharwar. In Surat the slips of the Chikhli, Jalalpur and Olpad Talukas were taken, the balance to be made up by adjacent circles of Bulsar. In Dharwar the slips of Ranebennur and Karajgi, the balance to be made up from Kod. The actual ages recorded are shown in the Summation Tables (Subsidiary Tables Nos. 62-63). And those for males in Surat are shown in the graph opposite. It was not worth while making out a graph for any of the other three batches, as the general appearance would have been the same. The hopeless inexactitude of the Indian age returns is well brought out by the graph, which, if the ages had been correctly recorded, would have exhibited a smooth curve falling away gradually from about 3,500 at age 0 to the base line at age 100, the divergences from an absolutely straight line caused by unequal death-rates at different ages being only slight. It is obviously utterly impossible to smooth the curve actually obtained.

SECTION 3.—CONCENTRATION ON AGES WHICH ARE MULTIPLES OF 10 OR 5.

224. Before passing on to a further discussion of the same figures it would be interesting to make some attempt to ascertain whether the actual ages recorded from Census to Census give any indication of improvement in the accuracy of the returns, whether due to any change in the attitude of the Indian people towards the question of age or to the effects of increasing literacy. In the first five columns of the annexed Table the order of preference for particular terminal digits is shown—for this Presidency 1901, 1911 and 1921, and for the means of the six major Provinces in the whole of India in 1911 (Census Report, India, 1911, p. 156). The order of preference in 1911 varied slightly Province by Province; but in all Provinces the order of the first four was 0, 5, 2, 8; and 9 occupied the last place. 1 occupied the last place but one in all provinces except the U. P., where 7 took its place. The fact



Actual number of males returned at each individual year of age out of 100,000
Examined-SURAT Dist. - 1921



that 2 and 8 occupy such high positions is usually attributed to the Rupee currency, with its division into sixteenths. This view is liable to be exaggerated, since, if the rupee system had so much influence, we should expect to find concentrations on the returns of numbers which are multiples of a rupee. This is not the case,—32, 48, 64 and 80 showing no conspicuous selection. What would seem to be the case is that the enumerator estimates a man's age in tens. If he seems to be anywhere in the middle between any two tens he puts the intermediate number ending with 5 ; but if he seems to be nearer some particular ten than the intermediate point above or below he adds or deducts a round 2. If all ages were returned exactly correct to a year the totals of ages ending with each of the digits 0 to 9 would approximate to 10,000. The effect of incorrect returns is to cause concentration on particular digits. In considering whether the tendency to concentration is increasing or diminishing the exact order of preference is less important. In the second part of the Table the effect of concentration is shown in this Presidency for the three Censuses, and for the means of the six major Provinces of India in 1911. In connection with the latter figures it must be remembered that the concentration was kept down to some extent by the returns from Burma, where the age returns are considerably more accurate than in India proper. Besides entering the actual figures for each digit I have grouped the figures in various ways. The grouping by four, four and two is the most important, owing to the constant position of the first four and the last two in the order of preference. After making allowance for the error introduced in the 1911 India means by the inclusion of Burma it will be seen that the concentration in this Presidency approximates to the concentration in India as a whole.

Subsidiary Table No. 51.—Analysis of terminal digits in the actual ages recorded in batches of 100,000 slips, 1901, 1911 and 1921 males only.

80

Order of preference of particular digits.					Actual numbers per 1,000 at each digit in order of preference.																			
1901	1911	1921 Surat.	1921 Dhar- war.	India 1911 means.	1901				1911				1921—Surat				1921—Dharwar				India —1911— Means			
					indivi- duals digits	in pairs.	four four & two	in fives	indivi- dual digits	in pairs	four four & two	in fives	indivi- dual digits	in pairs.	four four & two	in fives	indivi- dual digits	in pairs.	four four & two	in fives	indivi- dual digits	in pairs.	four four & two.	in fives
0	0	0	0	0	235	434	634	703	202	507	695	761	232	452	661	734	270	448	684	776	262	445	646	725
5	5	5	5	5	109				215				220				169				183			
2	2	2	2	2	119	200			110	188			130	209			120	236			112	201		
8	8	8	8	8	81				78				79				116				89			
6	6	7	6	6	69	137			66	126			73	138			92	176			79	147		
4	4	3	4	4	68		259		60		229		65		249		84		257		68		263	
3	3	4	3	3	63	122			56	103			57	111			49	81			62	116		
7	7	6	7	7	59		207		47		239		53				32		224		64			275
1	1	1	1	1	57	107	107		43	76	76		52	90	90		32				50			
9	9	9	9	9	50				33				38				27	59	59		41	91	91	

It will be seen that the tendency to concentration shows emphatically no signs of diminishing.

225. Whipple (op. cit.) mentions an "Index of concentration" devised by the United States Census Bureau. This is obtained by summing the age returns between 23 and 62 years inclusive, and finding what percentage is borne by the sum of the returns at years ending with 5 or 0 to one-fifth of the total sum. Obviously a percentage of 100 will indicate no concentration on the two digits mentioned, while 500 would be the maximum concentration, only attainable if no returns at all are recorded for any digits other than the two mentioned. I give below the Index of Concentration for this Presidency in the three last Censuses, and beside them some indices of other countries (from Whipple).

Country.	Year.	Index of concentration.
Bombay males	1901	309
" " (Surat)	1911	354
" " (Dharwar)	1921	325
	1921	314
United States	Not stated	120
Belgium	1900	100
England and Wales	1901	100
Sweden	1900	101
German Empire	1900	102
France	1901	106
Canada	1881	110
Hungary	1900	133
Russian Empire	1897	182
Bulgaria	1905	245

It will be seen that the errors in India are much more pronounced than in the most backward European countries. The alleged westernization of India in the past three decades has had no effect on this particular phenomenon. And the character of the "Changeless East" is once again well demonstrated.

SECTION 4.—EXAMINATION OF THE SAMPLE RETURNS.

226. The sample age returns are shown in the form of Cumulative or Summation Tables (at the end of the Chapter). In these Tables the figure at age 0 is the number of persons returned as "Infant", *i. e.*, less than one completed year. The figure at age 1 is the sum of the returns for 0 and 1; the figure at age 2 the sum of the returns at ages 0, 1 and 2; and so on.

227. The cumulative figures are also shown by the diagram. In this diagram the points plotted are the cumulative values of each five-year group.* The Surat curves, and especially the curve for females, are more regular than those of Dharwar. In the Dharwar curves there is a lack of smoothness between 44 and 69,† which is due to a greater concentration on ages ending with 0 than on ages ending with 5. It will also be seen that the Dharwar curve for males shows a somewhat smaller number of persons up to age 19 and the female curve up to 9. But in all other parts of both curves the Surat curve shows the lower values. The more the curve bulges to the left the lower the survival value of the population. This will be appreciated better if the summation curves for the Presidency population compared with that of England and Wales are examined in the diagram which comes further on in the Chapter.

228. The median age, that is the age at which there are an equal number of persons alive both above and below, will be seen from the Summation Tables to be in all cases between 19 & 10, approximating sometimes more to the one and sometimes

* The point marked 9 in this diagram is the completion of the 10th year of life, *i. e.*, all ages up to 9 year and 364 days. In the cumulative curves in a later portion of this Chapter this point is marked 10. But the age represented is the same. In the same way in Age Tables the terminology 0—4, 5—9, 10—14 etc. means the same thing as the alternative terminology 0—5, 5—10, 10—15 etc.

† As a matter of fact the draftsman who copied the diagram on the stone has obscured this point by enhancing the irregularities of the Surat curve and diminishing those of the Dharwar curve.

to the other. The uncorrected returns for 1911 and 1901 gave the same median points estimated in whole years. The actual values at age 20 were as follows —

1901, Males .. ..	..52,925
Females .. ..	..51,723
1911, Males .. ..	..50,379
Females .. ..	..50,247
1921, Males, Surat .. ..	..52,133
Males, Dharwar .. ..	..51,517
Females, Surat .. ..	..50,539
Females, Dharwar .. ..	..53,816

Except in the case of the Surat females therefore the median age is slightly more unfavourable this time. At the same time comparison between samples taken from one district at one Census and another at the next are scarcely justified. There are, as will be seen from this Section, considerable differences between the age composition of Surat and Dharwar, and as will be seen from Section 11 every district has its own type. It is not very difficult to sort by individual years of age. And it is suggested therefore in passing that at the next Census either the sorting by ages should be by individual years throughout, or that a sample batch of 100,000 should be taken from a much larger number of regions than now.

229. The median age in our uncorrected returns is between 19 and 20, while the corrected Tables of the Actuary in 1911 showed the median between 18 and 19, the cumulative values at age 19 being males 51,294, females 50,988. The median age in England and Wales in 1911 was, apparently, just below 25 for males, and just above 26 for females.

SECTION 5.—THE TABULATED 5-YEAR AGE GROUPS.

230. In the Imperial tables the age groups are as follows :—

	0—1
	1—2
	2—3
	3—4
	4—5
Total	0—5
	5—10
	10—15
and so on by five-year groups up to	65—70
	70 and over.

The Actuary who examined the 1911 age returns recommended that the age groups should be so fixed as to put the multiples of five in the middle of the group instead of at the beginning. This, which has a certain amount to recommend it, was ruled out on the ground that it is desirable to secure comparison with past Censuses.

231. In tabulation the age 0—1 means all persons recorded as “ infant ”, or recorded, in defiance of instructions, as a multiple of months or days. 1—2 means all persons recorded as 1. 5—10 means all persons recorded as 5 to 9, and so on. The reason for putting 5—10 instead of 5—9 is the assumption that an age return 9 means anything from the first to the 365th day of the 10th year of age, i.e., 9 years completed but 10 full years not completed.*

232. Apart from the general inaccuracy of our age returns by individual years of age, there are certain general errors or biases, which appear also in the figures when aggregated by five-year groups. It is partly with a view to detecting and eliminating these that the figures are turned over to an Actuary for readjustment.

* It would be incorrect, even in theorising, to carry the refinement below the day, because, unless a person is enumerated in the same house in which he was born, it would be necessary for any person, in order to ascertain the number of odd minutes, or even hours of his life, not only to know the time of his birth, but also to know the exact correction for real sun time against the standard time in use both at the house at which he was born and the house at which he is enumerated.

SECTION 6.—METHODS OF READJUSTING THE FIGURES.

233. Various methods for readjustment are possible, when working on the unadjusted sample age returns described in the last section. Bloxam's formula is mentioned by Mr. Enthoven in the 1901 Report. But it is not clear to me to what extent he used it. He wrote—

"Some tables are given at the end of the chapter showing for 100,000 of the population, and for a like number selected from areas seriously affected by famine, less seriously affected, and comparatively immune."

(Some word or words seem to have dropped out of this sentence.) He continued—

"The method of adjustment adopted is that known as smoothing by Bloxam's method."

(He then described the method.)

The tables at the end of the chapter were I. Unadjusted Age Returns of 100,000 of each sex, with a footnote that areas comparatively unaffected by famine had been selected; and Tables II, II—A, II—B, II—C, III and III—A, all of which are headed "Statement showing age periods of 100,000 persons selected from the Talukas of the District etc." It is not clear whether these statements gave ages after adjustment, or unadjusted. But if the former, then the method seems unsatisfactory, since the smooth progression of figures which would be expected in adjusted tables is lacking.

234. The method used by the Actuary who examined the 1911 figures of the Indian Census is explained on p. 157 ff. of the India Report for that Census. The method involves several processes. First the samples, if of more than 100,000 are reduced to 100,000. Next the total figures as given in five-year groups in Imperial Table VII for the Province concerned are distributed over the individual years according to the proportions for any given year in the 100,000 sample figures. The figures so obtained are then readjusted into corrected five-year groups by a process devised to eliminate irregularities. So far the processes are all simple, though laborious. But after the quinary or five-year groups have been obtained the numbers for any particular year as they ought to have been returned are obtained by the use of a formula which differs province by province according to deductions from the data, in some cases involves the use of the Calculus, and in all cases expert actuarial knowledge. The result is to produce "that smooth progression of figures, which would certainly be in evidence, where a large body of facts is dealt with, if the real numbers were recorded at each age." The graduated figures for Bombay for 1911 are shown in Table D on p. 176 of the 1911 India Census Report.

SECTION 7.—CHARACTER OF THE GRADUATED TABLES OF THE ACTUARY.

235. The graduated tables are however not intended to be the corrected tables of any particular year, but represent the probable normal age distribution of the population as it would be if there were no disturbing outside factors such as famine and epidemics. Unfortunately such a condition of things never is, and apparently is never likely to be, true of any part of India. This is clearly recognised by the Actuary, who remarked—

"The effect of these disasters upon the birth-rate, and upon the death-rate.....will remain in evidence like permanent scars from old wounds, so long as the populations in the age-groups originally affected, are in existence." (Para 216 Census of India Report, 1911.)

The age distribution in the Actuary's tables is therefore a pure abstraction, and is intended mainly for the computation of tables of mortality, such as are used by Insurance Companies, who can only deal with a normal course for future events, and cannot foresee that any particular individual will be more adversely affected than another of a different age by reason of possible future famines or epidemics.

236. Nevertheless by comparing our actual distributions with the distributions arrived at by the Actuary some idea can be gained both of the direction and the extent of the regularly recurring errors.

237. Before examining the age distributions as actually recorded and comparing them with those of the Actuary so as to find out where the tendency for generally recurring errors comes in, it is necessary first to isolate those genuine causes of irregularities already alluded to.

238. It is necessary in this connection to emphasise that although age is very incorrectly returned in India, nevertheless if the errors are approximately constant from Census to Census both in direction and extent, the uncorrected age group-figures are of value, and can be used to compare the age composition of the population, Census by Census, District by District, Religion by Religion and so on. It is only when Census errors are inconstant in direction and extent (as for example in the figures of Animists referred to in the last chapter), that the Census figures are useless. This is far from being the case in the matter of age.

SECTION 8.—EFFECT OF DISTURBING FACTORS, SUCH AS FAMINE, ON THE AGE COMPOSITION OF THE PEOPLE.

239. The effect of famine being to eliminate young children and aged persons, as well as to reduce births, and such calamities having occurred in the past in this Presidency just in advance of the second and fourth Censuses, their effect can be traced through the subsequent Censuses, by segregating ages in groups of ten years.

The following table will demonstrate the point—

Subsidiary Table No. 52.—Number of persons (in millions) in four ten-year age groups 1881—1921.

	1881	1891	1901	1911	1921
0—10	6.36	7.84	6.65	7.34	7.42
10—20	4.77	4.72	5.27	4.94	5.02
20—30	4.29	4.90	4.53	5.08	4.59
30—40	3.39	3.93	3.84	4.03	4.06

Per cent increase or decrease at each Census in each of the four ten-year age groups.

	1881 to 1891	1891 to 1901	1901 to 1911	1911 to 1921
0—10	+ 23	—15	+ 10	+ 1
10—20	— 1	+ 10	— 6	+ 2
20—30	+ 14	— 7	+ 12	— 8
30—40	+ 16	— 2	+ 5	+ 1
	General population increased by 15%	General population decreased by 5%	General population increased by 6%	General population decreased by 1%

240. The percentage table is very striking. The 1877 famine is shown through age group 10—20 in 1891, 20—30 in 1901 to 30—40 in 1911. The 1899 famine is shown through age group 0—10 in 1901, 10—20 in 1911 to 20—30 in 1921. The reactional recovery from each famine is also clearly marked by the plus values in the squares above the minuses.

241. But the general rise or fall of the population at each Census, which rise and fall must extend (though unevenly) to all age periods, modifies the traces of the famines. In these four age periods combined the net-percentage changes are +52, —14, +21 and —4 for the four decades, the variations in the total population being +15, —5, +6 and —1. The effect of a general rise is to enhance the plus values and diminish the minus values in the individual age groups, and the effect of a general fall is to enhance the minus and diminish the plus values. This phenomenon can be traced right through the table, and, though obvious, is worth noting.

242. The same phenomenon can be also studied by taking the Natural Division as the unit. The following Gujarat percentage changes by age groups.

show the effect of the 1899 famine, and to a less extent the 1877 famine, which was, not however a true famine in Gujarat.

			1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.
0—10	..	..	+ 12	— 29	+ 24	+ 9
10—15 *	..	..	— 6	+ 10	— 26	+ 38
15—40 *	..	..	+ 9	— 6	..	— 6
Total population	..	..	+ 8	— 13	+ 4	+ 6

The same famines can be traced in the Deccan figures.

			1881 to 1891	1891 to 1901	1901 to 1911	1911 to 1921
0—10	..	..	+ 22	— 14	+ 13	— 4
10—15	..	..	..	+ 20	— 11	+ 9
15—40	..	..	+ 17	— 4	+ 8	— 10
Total population	..	..	+ 17	— 4	+ 7	— 5

The Karnatak figures are as follows :—

			1881 to 1891	1891 to 1901	1901 to 1911	1911 to 1921
0—10	..	..	+ 50	— 7	— 7	+ 1
10—15	..	..	— 24	+ 52	— 12	..
15—40	..	..	+ 16	— 9	+ 7	— 2
Total population	..	..	+ 20	— 1	..	— 2

243. The actual age distributions by five-year groups also bring out the same phenomena. In the following table the actual figures are given since 1881. The figures in large bold type represent those in which the effects of the two great famines can be traced. It will be noticed that at this Census, the combined effects of Influenza and high prices having materially lowered the birth-rate, a fresh "scar" occurs in the lowest age group, which will be visible at the next Census in group 10-15 and at the 1941 Census in group 20-25. It is also to be noticed that whereas the 1877 famine occurred at such a time in relation to the Census that its effects are seen wholly in one age group at each successive Census, the 1901 famine was in actual continuance at the time of the 1901 Census, so that its effects are spread over two five-year groups, namely those born between 1896 and 1901 and those born between 1901 and 1906.

* In this case different age periods are given because the percentage changes for these age periods (10—15 and 15—40) happened to be available for past intercensal periods from Subsidiary Table VI of the Age Chapter in the 1911 report. In Subsidiary Table No. 52, where the changes are given for the whole Presidency the age period figures had to be made up from 1881 onwards and fresh percentages taken out. This was too laborious to do by Natural Divisions in view of the great mass of other figures worked out in this Report. It may sound a simple thing to take the figures for any age period for a past Census. But, up to 1901 the ages were shown separately for males and females *without totals for the two sexes together*. And in the case of 1881, as the figures for years below 5 are not summed, it involves summing 12 separate totals to get the grand total for age group 0—10 for any territorial unit.

Subsidiary Table No. 53.—Actual recorded age-distribution of 1,000 of each sex, 1881 to 1921, British Districts.

Age-period.	Males.					Females.				
	1881	1891	1901	1911	1921	1881	1891	1901	1911	1921
0	27	34	21	33	28	29	36	21	35	30
1	19	16	15	18	14	21	19	16	20	15
2	22	30	25	29	23	25	34	28	33	27
3	25	31	25	29	26	29	36	28	33	30
4	29	32	29	29	28	30	34	30	31	32
0—5	(a) 122	143	(b) 115	138	(c) 116	(a) 134	159	(b) 128	152	(c) 132
5—10	145	141	141	(b) 126	145	143	139	144	(b) 127	151
10—15	130	(a) 106	132	(b) 108	121	119	(a) 89	115	(b) 92	106
15—20	85	80	86	84	(b) 74	82	75	81	79	(b) 71
20—25	86	85	(a) 81	88	(b) 79	93	93	(a) 89	97	(b) 87
25—30	94	94	94	96	97	94	93	93	94	94
30—35	86	88	89	(a) 86	92	84	87	88	87	88
35—40	62	62	65	66	70	58	55	60	59	59
40—45	51	63	63	65	(a) 62	49	64	65	66	63
45—50	40	36	38	40	39	41	32	35	35	36
50—55	38	42	41	44	42	41	44	43	45	44
55—60	18	16	18	17	18	19	15	16	16	16
60—65	36	43	37	24	25	46	54	47	30	30
65—70				7	7				7	8
70 & over				11	13				14	15
Unspecified	7	1	..	..	..	6	1	1	..	..

244. The Influenza epidemic also caused a disturbance by selecting females proportionately more than males, and certain age periods proportionately more than others. The following figures bring out this selection.

Subsidiary Table No. 54.—Selective death-rate of Influenza.

In this Table "Specific Death-rate" means the death-rate per mille per annum in each age group as calculated from the Actuary's Tables 1911.

"Estimated Influenza mortality" means net mortality from Influenza June-December 1918, shown as a per mille rate on the number of persons in each age group from the 1911 actuals. These Influenza rates are taken straight from Col. Murphy's Table in his 1918 Report.

	0—5	5—10	10—15	15—20	20—30	30—40	40—50	50—60	60&over
MALES.									
Specific death-rate	275	36	20	25	47	73	103	150	302
Estimated Influenza mortality.	62	28	27	39	61	63	56	61	81
FEMALES.									
Specific death-rate	271	34	19	26	49	75	100	145	335
Estimated Influenza mortality.	60	36	42	56	80	77	56	61	84

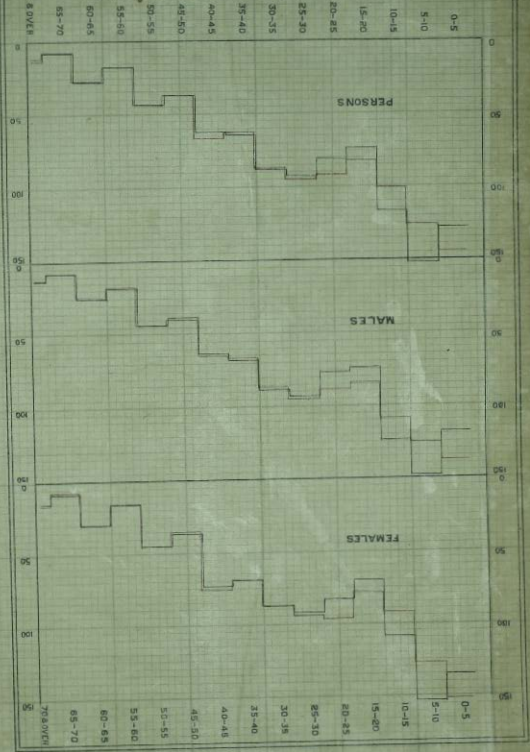
245. It will be seen that the Influenza showed selection in the case of both males and females for periods between 10 and 30, with a very slight selection at 5—10 and 30—40 in the case of females only.

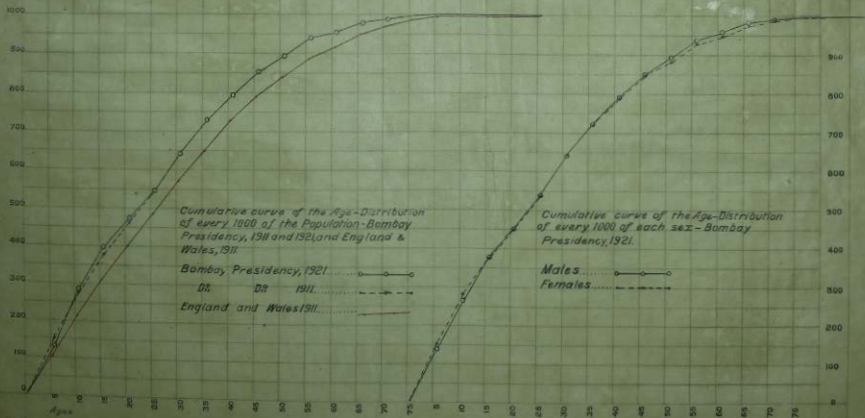
246. Yet a careful examination of the age distribution figures for ages between 10 and 30 in Subsidiary Table No. 53 will reveal no reduction of the figures below what they otherwise would have been. This is best seen in the figures for age groups 25—35, both sexes, 1921. The effect of the Influenza selection of these middle age periods is very much slighter than the disturbances caused in the lowest age group by the combined effect of Influenza and high prices. Thus although Influenza, as a killing agent, showed not only no selection of the ages 0—5, but even a strongly marked aversion from those ages, yet the low birth-rate of the last few years leaves a very definite scar.

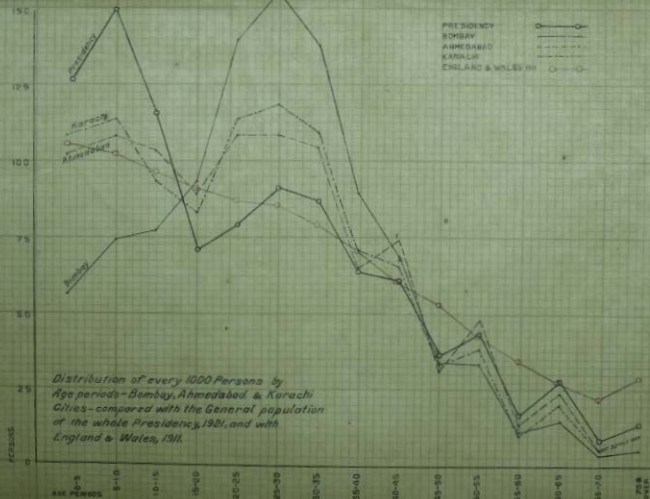
247. The extreme caution which has to be exercised in attempting to diagnose the causes of changing age distribution is well shown by stating the figures as follows.

(a) Figures influenced by the 1877 famine. (b) Figures influenced by the 1899-01 famine. (c) Figures influenced by the low birth-rate of 1918-20.

Age Distribution of every 1000 of the Population, Bombay Presidency
1911 (red) and 1921 (black)







Age composition of every thousand of each sex in the Bombay Presidency 1881 to 1921, British Districts.

Age-group.	Males.					Females.				
	1881	1891	1901	1911	1921	1881	1891	1901	1911	1921
0—15	399	391	388	373	382	388	387	382	371	389
15—50	508	508	516	524	513	504	500	511	518	498
50 and over	93	101	96	103	105	108	113	107	111	113

Any person suddenly faced with the above figures and informed that Influenza had selected the middle age periods especially in the case of women, would at once assume that this was the cause of the smaller proportion at 15—50 at this Census. But we know from the five-year Table above that the real cause is the passing down the age groups of the age periods disturbed by the 1899 famine. The effect of Influenza selection is not non-existent but is almost negligible by comparison.

248. The changes in the age distribution of each sex at this Census are shown in the two diagrams, one showing the actual numbers in each of the 5-year periods, and the other showing the cumulative curves of the same. In this diagram the cumulative values of the population of England and Wales, 1911, are also shown by the red curve. The general low survival value of the Indian population is marked by the strong upward bending of the black curve. The more the cumulative curve is straightened the higher the survival value.

249. In a third diagram are shown the distribution by ages of 1,000 persons in—(i) The Presidency, 1921 (ii) each of the cities of Bombay, Karachi, and Ahmedabad, and (iii) England and Wales, 1911. The discussion of ages in the three cities is relegated to Vol. IX. of the Report series. But, in passing, attention may be drawn to the excess in the wage-earning periods in all the three cities, but especially Bombay, and to the irregularity of the Presidency curve when compared with the smooth curve for England and Wales.

SECTION 9.—MEAN AGE.

250. In Section 4 above the values of the median ages were discussed. The median age was the point at which there were an equal number of living persons above (older) and below (younger). Another method of finding a comparative index of age distribution is to take out the *Mean Age*. By mean age is meant the arithmetic mean of the summed ages of every individual composing the population, just as one might say that in the case of three individuals, aged 37, 40 and 43 respectively, their average age is 40.

251. In the 1911 Report, Subsidiary Table II to Chapter V (p. 81) the Mean age is given for Males and Females in that year, and at each Census back to 1881. The means were stated as follows—Males, 1911, 24·08; Females, 1911, 24; and for each sex at all the previous Census 27. It is certain that the same formula cannot have been used in 1911 as in the previous Censuses. The divergence is too great, and seems to be wrong in direction. I am not quite clear as to the method used in 1911, which was stated to be Bloxam's formula. But I have taken out the mean ages for this and for the three previous Censuses afresh by a method employed in certain French Statistical enquiries, and communicated by the Census Commissioner. It may be stated in the following formula.

$$M = \frac{\frac{5}{2}P + 5(P - lx_1) + 5(P - lx_1x_2) + \dots + 5(P - lx_1x_2\dots x_{n-1})}{P}$$

where M is the Mean Age sought, P is the Total Population under consideration, l is the number of persons recorded in each of the five year age groups x_1, x_2, \dots, x_n . The first item in the numerator, $P \times 2\frac{1}{2}$, gives the total years lived by all persons recorded in ages 0—5, taking the average at $2\frac{1}{2}$, while it also serves to raise the number of years lived by all persons in the higher age groups by $2\frac{1}{2}$. The second item in the numerator considers the persons in age group 5—10, as well as all persons in the higher age groups. The mean age of the group is $7\frac{1}{2}$, but of this

2½ have already been assigned by the first item. The total population less those already disposed of in age group 0—5 is therefore multiplied by 5, and so on. The sum of all these items is the total number of years lived, and has therefore to be divided by the total population (denominator) to give the average or mean age.

252. By this formula we get the following—

Subsidiary Table No. 55.—Mean ages of Males and Females whole Presidency, 1891—1921, compared with the Mean ages of the graduated five-year group Tables of the Actuary (1911).

				1891	1901	1911	1921	Actuary.
Males	..	..	..	24·0	24·2	24·6	24·8	22·6
Females	..	..	..	24·2	24·5	24·6	24·7	22·8

This method could never give more than an approximation, because, for one thing, the mean age in the first group will never be exactly 2½, nor of the following groups exactly 7½, 12½, etc. Moreover it is necessary, in order to use the formula properly, to have the figures of recorded ages up to the very end. At this Census, and in 1911, we stopped our age groups at 70 years and over, which means that every person over 70 was assigned the age of 72½, whereas those who lived into group 75—80 should have average ages of 77½, those in group 80—85 ages of 82½, and so on. Not only so but in the Censuses of 1891, 1901 and in the Actuary's Graduated Tables the age groups stop at 60 and over instead of 70 and over. I calculated the mean age as above for Males, 1921, combining the last groups into one as 60 and over, with the result that the mean age dropped from 24·8 to 24·6. It is necessary therefore to allow for an increase of ·2 on all the means given in the Table except those for 1911 and 1921. And, in order to allow for the ages above 75 it is necessary to add a further unknown correction, which may be assumed to be certainly below ·1, since the number of persons returned as over 74 is very small.

253. Even after making these allowances we see (i) that our recorded ages show a gradually rising mean, and (ii) that the Actuary's researches again indicate that in his opinion our recorded ages were too high. The second point is fully discussed in Section 10 following. As regards point (i) it has to be remembered that an increasing mean age can be brought about either by a genuine rise in the survival values of the population, or by a decrease in births. Probably in this case both factors are at work.

SECTION 10.—DIRECTION AND EXTENT OF GENERAL ERRORS.

254. We can now return to an investigation of the generally recurring errors in our five-year group figures. This can best be studied by calculating the proportion borne by the actual group figures to the theoretical group figures of the Actuary. Any regular directions of error can be detected in this way in spite of the special disturbances already discussed.

Subsidiary Table No. 56.—Proportion borne by the distribution values of the uncorrected five-year group figures, 1881—1921, to the distribution values of the same groups in the Actuary's graduated Tables, 1911, British Districts.

Age-group.	MALES.						FEMALES.					
	Per mille distribution in the Actuary's table 1911.	Percentages of the values of each age group in Subsidiary Table No. 53 to the values in Col. 2.					Per mille distribution in the Actuary's Table 1911.	Percentages of values of each age group in Subsidiary Table No. 53 to the values in Col. 8.				
		1881	1891	1901	1911	1921		1881	1891	1901	1911	1921
0-5	164	74	87	70	84	70	162	83	98	76	94	82
5-10	127	114	111	111	99	114	127	113	109	113	100	119
10-15	115	113	92	115	94	106	116	95	77	99	79	94
15-20	106	80	75	81	70	70	106	77	71	76	75	87
20-25	96	90	89	84	92	82	96	97	97	93	101	91
25-30	85	111	111	111	113	114	84	112	111	111	112	112
30-35	73	118	121	122	118	126	72	117	121	122	121	122
35-40	61	102	102	107	109	115	60	97	92	100	98	98
40-45	49	105	129	129	133	127	60	98	128	130	132	126
45-50	39	103	92	97	103	100	40	102	80	88	88	90
50-55	30	127	140	137	147	140	30	137	147	143	150	147
55-60	22	82	73	82	77	82	22	86	78	72	73	73
60 & over	33	109	130	112	127	133	35	131	154	134	146	151

Note.—In the above Table the unspecified ages in 1881, 1891 & 1901 are neglected.

255. It is necessary first to assume that the Actuary's distribution, though admittedly theoretical, *i.e.*, representing ideal conditions that never do arise, was as *theory* correct. For example, it will be seen that in the highest age group we always show a marked excess. It is necessary to assume that this is a Census error and that the Actuary's calculations did not underestimate the survival values of the middle and later ages. Accepting this condition we find the following:—

(1) *A regular deficit at ages 0—5, coupled with an excess at ages 5—10*, which is best explained by the assumption (i) that there is a slight tendency to omit infants from the Census and (ii) that there is a marked tendency to overstate the ages of children of 3 and 4. There is a definite slewing forward of this group. This is natural when the natural tendency to return a child of four years as 5 is remembered.

(2) *An excess of males in age group 10—15 coupled with a deficit in group 15—20*. This is caused by the return of children of 9 as 10, and the return of youths of 19 as 20.

(3) *A marked deficit of females in both these groups, but especially in group 15—20*. This deficiency is strongly marked both among Hindus and Mahomedans, but slightly more among the latter. The following figures explain the point.

Per mille distribution values of the first seven five-year age-groups in the case of Hindus and Mahomedans, 1921.

Age-group.	Per mille of each sex in each religion.			
	Hindus.		Mahomedans.	
	Males.	Females.	Males.	Females.
0—5	121	135	119	134
5—10	150	153	151	155
10—15	126	110	117	99
15—20	74	70	72	67
20—25	74	83	79	89
25—30	93	90	95	97
30—35	88	86	96	95

The explanation cannot very well lie in greater mortality among females at these ages, because that would enhance the values of the lowest age groups and would not raise the values of the age groups above 20. Whereas it will be seen that in the lowest age groups the values for the two sexes are more or less even, while after 20 the values for females rise sharply as compared with males. Moreover according to the Actuary it is only after 18 that female mortality exceeds male. The explanation must therefore lie in one of two causes, (i) misstatement of age, and (ii) concealment of females at the period 10-20. The slight excess values for females in group 5—10 does not seem to indicate a very strongly marked tendency to *under-state* age, though it may indicate some *slight* tendency that way. But the rise in the values after 20 seem to imply overstatement of age. And this is perhaps a more natural explanation than actual concealment. Concealment in India is not easy, in view of the conditions, where families reside in very small houses, every detail of their home-life intimately known to their neighbours in the next small houses, and every word spoken heard through the thin walls. Concealment by the richer classes living in larger houses is no doubt often *possible*. And females between the stated ages are the one case in which a tendency to concealment might arise, for instance where a man does not wish his mistress' name to appear in the schedules. But overstatement is also natural having regard to the early age at which cohabitation commences in this country, and the probable tendency to deny it in individual cases.

The Census Commissioner in 1911 discussed this point at considerable length (paragraph 268 of the India Census Report 1911) and recorded his opinion emphatically against the idea of extensive concealment. It will also be seen in the Chapter on Sex, which follows this one, that the evidence as a whole is quite against the concealment theory.

(4) *A deficit of both sexes but especially of males in the group 20-25.* A glance at the high values of the two following groups will show that the explanation here lies in overstatement. There seems to be a jump in the mis-statements of age. From 15-20 in the case of males and from 10-15 in the case of females there seems to be a tendency to under-state; and, as soon as those ages are passed, a tendency to over-state. The position is rather curious, but is possibly in accordance with the natural inclinations of Indian life and especially Indian village life. The cause of the tendency in the case of females has been suggested already. In the case of males it is an advantage to avoid the youth stage, that period at which the indulgence accorded to childhood and the respect accorded to manhood are alike lacking. The Indian villager lives in a rather hard world, surrounded by encroaching field-neighbours, harrassing creditors or slippery debtors (most men are either one or the other, many both) and grasping merchants. The youth whose father is dead and who has to maintain the property will be glad to be accepted as a man and take his place in the village panchayats. Hence the skipping over of the period 20-25. This is a rather speculative explanation of the phenomenon discussed, but one not impossible of acceptance to those who know the Indian village.

(5) *A second deficit of females in age group 35-40.* In this case excess mortality of females may possibly be given as a cause. In his Report the Actuary in 1911 deduced from the figures the following comparison between female mortality and male mortality at the different age-periods.

Periods of life at which female mortality is less than, equal to, or more than male mortality.

Less	Equal	More	Equal	Less
0—16	17	18—35	36	37—end

(6) Lastly, in the case of both sexes a deficit in each of the groups commencing with a 5 as against groups commencing with a 0. This is due to the concentration on ages which are multiples of 10 being greater than on those which end with a 5.

256. When we make up the same comparative table with ten-year instead of five-year groups we get the following :—

Subsidiary Table No. 57.—Proportion borne by the distribution values of the uncorrected ten-year group figures, 1881—1921, to the distribution values of the same groups in the Actuary's graduated tables, 1911, British Districts.

Age-group.	MALES.						FEMALES.					
	Per mille distribution in the Actuary's Tables 1911	Percentages of the values of each group 1921 to the value in col. 2.					Per mille distribution in the Actuary's Tables 1911	Percentage of the values of each group 1921 to the value in col. 8.				
		1881	1891	1901	1911	1921		1881	1891	1901	1911	1921
0—10	291	92	98	88	91	90	277	96	103	92	97	102
10—20	221	97	84	99	87	88	222	86	74	88	77	80
20—30	181	99	99	97	102	97	180	104	103	101	106	100
30—40	134	110	112	115	113	121	132	108	108	112	111	111
40—50	88	103	113	115	119	115	90	100	107	111	112	110
50—60	52	108	112	114	117	116	52	116	113	113	118	116
60 and over	33	109	130	112	127	133	35	131	154	134	146	151

257. I have given these figures combined in this way into ten-year instead of only five-year groups because they seem to me, when thus presented, to raise a serious question whether the Actuary in 1911 did not underrate the general survival values in this Presidency. If his figures are correct we have to assume a considerable tendency to overstate ages *right through life*. It is open to question whether such an absolutely general tendency at all age periods can really be postulated. The actual number of persons over 60 is so small that merely to correct the heavy percentage excesses in that group could not effect any readjustment in the

lower ages. Of course the tendency to concentrate on the numbers which are multiples of ten necessarily slews forward the values of all age groups arranged in ten-year groups with the age ending with 0 as the first year. So in order to test the matter still farther we can arrange the figures to be compared in ten-year groups beginning with the fives. The result is given below.

Subsidiary Table No. 58.—Proportions as in Subsidiary Table No. 57, but arranged in the groups beginning with ages ending with digit 5.

Age-group.	Actuary's values.	MALES.					Actuary's values.	FEMALES.				
		1881	1891	1901	1911	1921		1881	1891	1901	1911	1921
0—5	164	74	87	70	84	70	162	83	98	76	94	82
5—15	242	114	102	113	97	110	243	104	94	105	90	105
15—25	202	85	82	83	85	76	202	87	83	84	87	78
25—35	158	114	115	116	115	120	156	114	115	116	116	117
35—45	110	103	114	116	119	120	110	97	108	114	114	111
45—55	69	113	113	115	122	118	70	117	109	111	114	114
55 and over	55	98	107	100	107	113	57	114	121	111	118	121

258. This new arrangement brings out again the avoidance of the period 15-25. As for the general excess values through the whole of the later periods very little change is effected; and the doubt regarding the justification for the Actuary's distribution still remains.

SECTION 11.—TYPES OF POPULATION.

259. Whipple (op. cit. p. 178) cites the theory of Sundbärg on the subject of age distribution. Sundbärg found that in all normal cases examined by him about one-half the population were between the ages of 15 and 50. He then distinguished three types, which he called *Progressive*, that is where the proportion below 15 is high and the proportion above 50 low, *Regressive*, where the proportions are the other way round, and *Stationary*, where the proportions are between the two extremes. To these three types Whipple (op. cit.), in order to cover cases where the distribution is disturbed by migration, added two others, *Seccessive*, that is where a proportion much below 50 between ages 15 and 50 indicates large losses by emigration, and *Accessive*, that is where a proportion much above 50 between the same ages indicates gains by immigration. We thus have five types, which are illustrated below—

*Theoretical types of population according to age distribution.**

Age-group years.	Progressive.	Stationary.	Regressive.	Seccessive.	Accessive.
0—14	40	33	20	40	25
15—49	50	50	50	40	60
50 and over	10	17	30	20	15

260. In the following table the percentage age distribution is given for the above age-groups for the Bombay Presidency since 1891.

Age distribution of the population of the Bombay Presidency at the last four Censuses.

Age-group years.	Per cent. of population.			
	1891	1901	1911	1921
0—14	39	39	37	39
15—49	50	51	52	50
50 and over	11	10	11	11

* In this table Sundbärg's figures are quoted direct from Whipple. Whipple's own figures of his *Seccessive* and *Accessive* types are inferred from his argument, and from some special examples given by him. But it is clear that one could have a combination of either of Whipple's types with any one of Sundbärg's,—that is to say, an *Accessive* population might be also *Progressive* or *Stationary* or *Regressive*. Thus, if we write in the *Accessive* column 35, 60 and 5, the type though *Accessive* through immigration would also be markedly *progressive* through natural causes.

Judged therefore by Sundbärg's theory our population is, as will be seen, always of the "progressive" type. We must however be careful about comparing phenomena in an eastern country with those of the west. The reason why our lowest group 0-15 is always so high is because of the high birth rate *coupled with high infant mortality*. This last point is very important. No doubt in a western country, whose population has a high survival value a percentage like 39 in the lowest group would indicate a very high rate of increase of the population, in other words a "progressive" population. But in the east, or at any rate in India, a high rate of increase demands a higher percentage than 40 in the lowest class to compensate for the elimination of infants by infantile mortality, and to allow for the low survival value generally.

261. It is therefore desirable to analyse down to districts. We know from general considerations discussed in Chapter I which districts have a really progressive population, and which have a stationary or receding population. And the following district distributions fall into their places according to expectations. They are samples only.

Type of population in some sample Districts and States.

	Percentage distribution of the population by age periods.		
	0-14	15-49	50 & over
PROGRESSIVE—			
West Khandesh	46	46	8
Panch Mahals	46	45	9
STATIONARY—			
Thar and Parkar	41	49	10
Upper Sind Frontier	40	49	11
Surat	40	49	11
Kaira	39	40	12
REGRESSIVE—			
Kanara	37	53	10
Larkana	37	52	11
Cambay	37	50	13
REGRESSIVE AND ALSO RECESSIVE THROUGH EMIGRATION—			
Ratnagiri	40	45	15
Cutch	40	46	14

262. The really *accessive* type is of course seen mainly in the cities, Bombay being the extreme instance. There the percentages are—21, 72, 7. Accessive types in districts, when found, will usually be due to the admixture of a City population with a rural, as for example Ahmedabad, which gives the following :—

District Total	..	38	52	10
(1) City	..	32	58	10
(2) Remainder	..	41	49	10

It is therefore fallacious to calculate the district percentages for any district in which there is a large and growing city.

263. It may be argued that if we attribute the distribution in the case of the Ahmedabad District to accession through the city, what justification is there for attributing the almost identical distributions in the case of Larkana and Kanara to quite different causes, namely to the population being of a recessive type? The answer to this is that each case has to be judged on its merits; and the whole problem presents a striking example of the difficulty of isolating the real causes of statistical phenomena, where identical results can be brought about by entirely different causes. In the case of Kanara it may be stated as a fact not likely to be challenged that there is no general movement into the district of a large number of able-bodied men in the prime of life, such as are found in the cities. There is therefore no explanation of the figures except to assume that the population is decaying. Gaps are not being replaced. The supply of children is not sufficient to maintain the population even at its present level. In the case of Cambay also it is extremely unlikely that there is any large immigration of the wage-earning ages. In the case of Larkana it is more difficult to judge. Undoubtedly, even though the present Census

showed a reduction in the number of immigrants, there was nevertheless a *fair* number of Baluchi and Brahui strangers in the District, and an excessive proportion of these would be in middle life. It is therefore possible that the district percentages are due to a mixed type partly regressive and partly accessive.

264. The examples given of the Progressive type may also conceal fallacies. The Panch Mahals and West Khandesh consist largely of those backward jungle tribes which sometimes do and sometimes do not get into our Religion Table as Animists. We know from the next section of this chapter that the age distribution of the Animists is as high as 48, 44, 8. The fact that the district population is largely composed of a particular class which is of a very Progressive type is no bar to describing the whole district population as progressive. But the question is—Is the type represented by the Animist distribution of 48, 44, 8 a genuinely Progressive type? Or is it merely either (i) that the very high infant mortality keeps the distribution apparently Progressive while actually Stationary, or (ii) that the Animist distribution was more than ordinarily disturbed by the famine of 1899-1901?

265. As regards (i) the distribution of the three main religions in the Panch Mahals is as follows :—

Age-group.	Hindu.	Musalman.	Animist.
0—14	46	43	49
15—49	45	47	42
50 and over	9	9	9

The Hindus of that District of course include numbers of persons of the same class as the Animists. The Mahomedan figure however contrasts favourably with the distribution of that religion in the whole Presidency, which is—38, 51, 11. In West Khandesh on the other hand the Mahomedan distribution is 41, 49, 10, which though more progressive than that of the Presidency is far behind the Panch Mahals.

266. As regards (ii) we cannot compare the 1911 distribution because the age periods adopted in Table VII Part II of that Census do not enable the Sundbärg groups to be taken out. But the percentage of the first group 0-14 was only 41 against 46 this time. Analysis of the first four five-year age groups in 1911 and 1921

Per mille values of the first four five-year age-groups, Panch Mahals, 1911 and 1921.			
	1911	1921	
0—5	174	149	..
5—10	142	183	..
10—15	92	124	..
15—20	84	71	..

gives per mille rates as noted in the margin. The reason for the change from 41 to 46 in the first Sundbärgian group at this Census is therefore clear. It is solely a matter of the passing down the age-groups of the values which are disturbed by famine. In 1911 the two five-year periods which had been disturbed by the 1901 famine were in the first Sundbärgian group, and this time they are in the second. The population of the Mahals was really of as progressive a type then as now but the fact was masked by the famine disturbance. The passing of the disturbed five-year groups into the second Sundbärgian group this time must have sent the value of that group down below its normal. The true normal Sundbärg distribution of the Mahals is therefore probably about 44, 46, 10. The Animist distribution in the same way may be rendered more than ordinarily progressive this time by the passing down of the disturbed five-year groups. It would be dangerous to test the Animist distribution Census by Census, because of the vagaries of the Animist figures (for which see Chapter IV); the whole district is therefore examined for this point. But what is true of the district as a whole may be true of the Animists also. So that the normal Sundbärgian distribution for Animists may really be not 48, 44, 8 but 45, 46, 9 or thereabouts.

267. In this study of the population according to the Sundbärg types we have been dealing with the uncorrected figures throughout. The changes introduced by

the Actuary are somewhat drastic. Comparing the 1911 actuals and the Actuary's graduated figures we get the following for the whole Presidency :—

Age-group.	MALES.		FEMALES.	
	Uncorrected Actuary's.		Uncorrected Actuary's.	
0—14	37	41	37	40
15—49	53	51	52	51
50 & over	10	8	11	9

In comparing these it must again be emphasised that the Actuary's figures are theoretical and independent of any particular point of time. The 1911 group 0—14 was much reduced because of the legacy of the 1901 famine, which as shown above affected two successive five-year groups, represented in 1911 by groups 5—9 and 10—14. The Sundbärgian distribution at all other Censuses has been nearer to the Actuary's theoretical distribution.

268. We might perhaps say that so far as this Presidency is concerned, when dealing with the uncorrected figures, the three Sundbärg types of age distribution should be re-stated as follows :—

Age-group.	Progressive.	Stationary.	Regressive.
0—14	43	40	37
15—49	50	50	50
50 & over	7	10	13

The above are so adjusted as to keep the middle value as 50. But really speaking, having regard to the examples given from West Khandesh and the Panch Mahals it would seem that the first part of Sundbärg's theory, namely that the percentage at ages 15—49 is always about 50 per cent., does not really hold good with us, at any rate for small areas.

269. We might follow up the argument by suggesting that in the case of all Districts, States or other areas, in which there are no migration factors to be considered, the population at the next Census may be estimated to increase or remain stationary or decrease, according as the age distribution this time approximates to one or other of the types stated above. But here again we are always defeated in India by the possibility of epidemic diseases and famine. It is really useless to attempt a forecast at this stage. But the authority who takes the next Census of this Presidency, by which time the course of the seasons and of epidemics will be known, would probably not go far wrong if he drew out pre-Census estimates of the population of each tract on the above lines. But in so doing it is clearly necessary to make allowances for the religious composition of the population. Thus in a district which is largely Animist the distribution must be better than 43 in the lowest group to be really Progressive, whereas a value of even 42 in the lowest group in a settled and rich tract with many Jains and Zoroastrians would indicate a distinctly progressive type.

SECTION. 12.—AGE COMPOSITION OF THE DIFFERENT MAIN RELIGIONS.

270. This brings us to the question of the age distribution in the different religions. In India the different Religions are of different degrees of education and social position. That is to say, the Zoroastrians can be separated off as especially advanced, the Jains as considerably advanced and the Animists as necessarily backward. The other three contain mixed social strata. Analysis by ages shows that here, as in the West, the advanced social strata have a higher survival value than the lower.

The following gives the Sundbärgian distribution :—

Percentage distribution by the Sundbärg age groups of the population of each main religion.

Age-group.	Hindu.	Jain.	Zoroastrian.	Musalman.	Christian.	Animist.
0—14	40	36	27	38	34	48
15—49	49	51	57	51	57	44
50 & over	11	13	16	11	9	8

And the detailed distribution by five-year groups is given in the following Table:—

Subsidiary Table No. 59.—Distribution by age groups of 1,000 persons in each main Religion, whole Presidency, 1921.

Age-group.	Hindu.	Jain.	Zoroastrian.	Musalman.	Christian.	Animist.
0—5	128	111	77	123	107	161
5—10	152	129	92	152	123	199
10—15	118	122	97	109	106	126
15—20	72	82	89	70	85	66
20—25	78	84	95	84	116	63
25—30	91	88	90	96	108	79
30—35	87	83	92	96	93	76
35—40	63	65	78	62	73	64
40—45	62	65	74	65	60	53
45—50	38	42	54	34	40	35
50—55	44	49	58	44	37	33
55—60	18	23	33	14	16	14
60—65	28	31	33	29	20	18
65—70	8	10	16	6	7	6
70 & over	13	16	22	16	9	7

271. The case of the Zoroastrians is the most noticeable. The survival value of the Parsees is very high. It was found when studying the Bombay City population that, whereas in the city population as a whole the Zoroastrian percentage is 4·4, in the age groups 55 and over it is 8·8, and in the age groups 65 and over it is 17. The Parsee community has been gradually changing in age distribution during several decades as will be seen by the next Table.

Subsidiary Table No. 60.—Per mille distribution of Zoroastrians by age periods at the last four Censuses.

Age-group.	1891	1901	1911	1921
0—5	111	94	86	77
5—10	119	109	98	92
10—15	114	116	100	97
15—20	100	106	99	89
20—25	100	101	103	95
25—30	79	88	94	90
30—35	70	81	85	92
35—40	58	64	72	78
40—45	61	60	71	74
45—50	44	45	50	54
50—55	47	46	48	58
55—60	30	29	29	33
60—65	67	61	30	33
65—70			15	16
70 & over			20	22

272. But though the survival value is high, and though the number of Zoroastrians increased at this Census, yet the values of the lowest age groups distinctly suggest a danger ahead. The age distribution for all the important European countries is given at p. 63 of the Report of the 1911 Census of England and Wales. From the figures there given it will be seen that the Parsee age distribution (even assuming that the deficiency in Group 0—5 is temporary only) is more unfavourable in the lower age groups than that of any European country except France. So long as the community holds its own as it did at this Census it is all right. But the point of equilibrium might be passed some day, and the community begin to diminish in numbers.

273. The Christian age distribution, both in the Sundbärgian Table and in the Table by five-year periods being highly abnormal, it is worth while to try to examine it in detail. In Imperial Table VII, Part II, I had the figures given for Indian Christians only, since the mixing up of Indian Christians with European immigrants gives misleading results. The following districts, in which there are more than 10,000 Indian Christians, give the following Sundbärgian distributions:—

Age-group.	Kaira.	Thana.	Nagar.	Poona.	Kanara.
0—14	44	39	46	36	40
15—49	47	50	44	57	50
50 & over	9	11	10	7	10

274. In Thana and Kanara, where the Indian Christian population is of very old standing, and represents a settled community, the age distribution approximates to or coincides with that of the General Population. In Nagar and Kaira we have a Progressive type, due possibly partly to the "converts" being drawn from those strata of the Hindu social fabric which have a low survival value. The Poona figure indicates an Accessive type, many of the Indian Christians in Poona City being wage-earners without families.

275. In Imperial Table XVI we have age distributions of Europeans and

Age distribution of Anglo-Indians.		
0—14	..	34
16—49	..	58
50 and over	..	8

Anglo-Indians. The Anglo-Indian figures give us the Sundbärgian distribution shown in the margin. In the case of Europeans the age periods given in that Table are somewhat peculiar. Age 15 does not appear, the periods being 0—10, 10—16, 16—18, 18—30, 30—40, 40—50 and 50 and over. These age periods, which are

designed to help the Army Department, are a distinct hindrance to the Census

Percentage age distribution of European British Subjects.		
0—15	..	14
16—49	..	80
50 and over	..	6

Officer. But the age distribution is so abnormal that even if we take 0—15 instead of the usual 0—14 we get the marginal distribution.

Looking back to the main Table of age distribution for each religion by five-year periods we can see why there is a sudden jump at period 20—25 in the Christian figure.

SECTION 13.—RATIO OF CHILDREN TO ADULTS, AND OF MARRIED FEMALES OF CHILD-BEARING AGE TO TOTAL FEMALES.

276. It is customary to study the ratios of (i) children up to age 10 to persons aged 15—40, (ii) the same to married females 15—40, (iii) persons over 50 to persons aged 15—40, and (iv) married females aged 15—40 to total females. The changes in the percentages in these cases necessarily follows the changes in the age grouping as already set forth in detail in Subsidiary Table No. 53.

277. The ratios up to 1911 will be found in detail in Subsidiary Table No. V to Chapter V of the 1911 report. In the first column in the case of Ratnagiri the figure 91 for percentage of children to adults at that Census should have been 71. This time the proportion of children to adults rises in all British Districts combined from 65 to 67. The reason for this rise is the passing into the adult class of the disturbed five-year groups, of which one (5—10) last time came into the children class. All districts show a rise. The Panch Mahals, which last time led with 76, this time rises to the high percentage of 92. West Khandesh rises from 76 to 86. These figures are again entirely due to the passing down of the disturbed age groups. This will be understood best by the following comparisons.

Percentage borne by the numbers in certain age-groups, Panch Mahals 1921 to the same age groups in the same District, 1911.

Age-group.	1911		1921	
	Males.	Females. (taken as 100)	Males.	Females.
0—10	..	100	126	122
10—15	..	100	154	160
15—40	..	100	101	99
40 & over	..	100	123	120

The whole population has risen by 16 per cent. But owing to the passing into the adult (15—40) group of the two five-year groups disturbed by the 1899 famine that group remains almost stationary, while the groups above and below it rise steeply. If the reader finds the constant harping on the famine disturbance of the age distribution wearisome I can only plead necessity, since this phenomenon dominates everything connected with age, at any rate in this Presidency. Writers of future reports will have in the same way to refer constantly to the low birth-rate in the five years preceding this Census.

278. For exactly the same reasons the ratio of married females aged 15—40 to total females falls everywhere. In the British Districts generally the fall is from 35 per cent. to 33 per cent. Except in a few districts, as Ratnagiri (where it rises from 32 to 33), and Kanara (where it remains constant at 31)—both districts free from famine in the past—the fall is general in the Presidency proper and extends to Thar and Parkar in Sind (a district affected in 1901). In other Sind districts the ratios are more or less constant.

SECTION 14.—AGE DISTRIBUTION BY CASTES.

279. Subsidiary Table No. 61, at the end of this Section, is compiled from Imperial Table XIV. But the Castes are re-arranged in such a way as to bring together those which are more or less of the same social level and have more or less the same types of occupations.

280. A certain amount of danger is involved by the method of preparing Imperial Table XIV. It will be seen that instead of sorting the slips for the selected Castes in the all offices, *i. e.*, for all regions, only certain districts are selected. Consequently, where the districts selected do not contain a normal sample of the Caste, the age distribution figures are liable to be disturbed. This has happened this time in the case of Bhatia. The peculiar character of the age distribution is due to the omission of Cutch from the regions selected. It is evident that the Bhatias enumerated in Cutch must contain a high proportion of children up to 15. The Bhatias in the selected districts being largely immigrants, and having left their families in their homes in the Cutch State, show an excess in group 15—40 and marked deficiency in the lower and higher groups.

281. The same has happened, though not so clearly marked, in the case of Brahman-Audicch and Vani-Osval (Jain). These castes are strong in Kathiawar or Cutch, and it is clear that the abnormal age distribution is due to an excess of wage-earning ages in the Districts selected, and not to caste peculiarities. It has been the custom not to have any work for this Table done in State or Agency Offices. But this practice evidently requires modification if correct figures are required for Castes which are stronger outside than inside British Territory.

282. It is unfortunately not possible to put one's finger with certainty on any other cases of this disturbance of the figures owing to migration. But the abnormal distribution of Madig is possibly also due to influx of wage-earners from Hyderabad and Mysore.

283. Excluding the above cases it is evident from the Table that Castes higher in the social scale tend to show high proportions in the lower age periods and *vice versa*. This is already a well-known fact, has been commented on in this Chapter before, and discussed in previous Reports.

Subsidiary Table No. 61.—Age distribution of 1,000 of each sex in certain castes.

Caste.	Districts.	Males, number per mille aged—					Females, number per mille aged—				
		0-5	5-12	12-15	15-40	40 and over.	0-5	5-12	12-15	15-40	40 and over.
1	2	3	4	5	6	7	8	9	10	11	12
I.—Hindu and Animistic.											
A.—PROFESSIONAL CLASSES AND TRADERS.											
Brahman-Audlech	All Gujarat Districts	86	146	68	453	247	103	160	54	411	272
Brahman-Desbhashi	Deccan Districts (except West Khandesh), Belgaum, Bijapur, Dharwar.	112	166	78	407	239	126	186	58	389	241
Brahman-Chitpavan or Konkanasthi.	Poona, Satara, Kolaba, Ratnagiri.	124	191	87	368	240	125	194	59	379	243
Brahman-Gaud Saraswati.	Belgaum, Ratnagiri, Kanara.	128	188	80	359	245	127	177	65	389	242
Bhatia	Bombay City, Karachi, Sukkur.	105	116	47	531	198	113	149	72	343	323
Lohana (including Amli).	All Sind Districts	110	180	78	444	198	129	195	63	419	194
Vani-Shrimali	Ahmedabad, Kaira, Broach, Panch Mahals.	108	164	70	415	243	113	177	72	393	240
B.—ARTISAN CLASSES.											
Darji, Shimpi	East Khandesh, Poona, Satara, Dharwar.	124	189	77	400	210	133	190	61	400	216
Dhobi, Parit, Agasa, Madival.	East Khandesh, Poona, Satara, Kanara.	121	202	79	385	213	129	205	63	387	216
Hajam, Nhani, Nadig.	Poona, Kaira, Ratnagiri	123	203	78	370	224	124	190	59	391	236
Koshti	Nasik, Poona, Satara, Sholapur.	113	186	81	379	241	137	192	62	386	223
Sali	Ahmednagar, Satara, Poona.	110	183	78	403	220	127	181	52	419	221
Kumbhar	Satara, Ratnagiri	139	225	69	331	236	131	205	53	369	242
Sonar, Soni and Dalvadnyu Brahman.	Ahmedabad, Surat, East Khandesh, Ratnagiri.	120	196	82	389	213	127	183	59	403	223
Sutar	Poona, Ratnagiri	132	228	70	344	226	130	210	54	386	220
Teli	East Khandesh, Ratnagiri.	129	210	77	366	218	133	192	61	382	232
Ghanchi	Ahmedabad, Surat	124	192	77	421	186	140	184	64	404	208
C.—OPEN AIR LABOURING AND CULTIVATING CLASSES.											
Bedar, Berad	Belgaum, Dharwar	138	197	77	395	193	141	209	61	389	200
Bharvad	Ahmedabad, Kaira	134	237	72	373	184	143	242	71	365	179
Dhangar	Poona, Satara	122	210	70	364	231	127	207	59	376	231
Kurub	Bijapur	122	201	82	383	212	137	206	63	355	239
Rabari	Ahmedabad, Kaira	122	222	74	378	204	129	217	73	388	193
Vaddar	Bijapur, Dharwar	142	227	80	355	190	154	229	60	375	182
Agri	Thana, Kolaba	137	221	64	384	194	144	201	49	397	209
Kunbi	Satara, Ratnagiri	142	232	67	320	239	129	191	59	331	249
Mali	Poona	127	214	70	364	225	142	200	50	389	219
Maratha	Satara, Ratnagiri	122	216	72	341	219	120	191	54	378	257
D.—SECTARIAN CASTE OF MIXED OCCUPATIONS.											
Lingayat	Dharwar	116	173	81	416	214	126	188	66	398	222
E.—FOREST TRIBES.											
Bhil	Khandesh	156	268	72	317	157	175	258	63	363	141
Dhodla	Surat	139	231	71	353	206	129	218	58	345	250
Dubla	Surat	144	210	69	352	225	154	205	57	382	202
Katkari	Thana	136	238	63	386	177	149	216	51	437	147
Naikada	Surat	130	235	70	343	222	137	200	70	385	208
Vaghri	Ahmedabad	146	234	70	330	170	177	232	66	377	148
Varti	Thana	134	234	63	334	180	151	230	62	395	164

SEC. 14.—AGE DISTRIBUTION BY CASTES.

99

Caste.	Districts.	Males, number per mille aged—					Females, number per mille aged—				
		0-5	5-12	12-15	15-40	40 and over	0-5	5-12	12-15	15-40	40 and over
1	2	3	4	5	6	7	8	9	10	11	12
I.—Hindu and Animistic—continued.											
F.—DEPRESSED CLASSES.											
Dhed ..	Gujarat Districts ..	136	219	72	379	194	143	202	57	355	213
Mahar ..	Central Division ..	136	239	66	348	211	140	218	50	361	211
Heliya ..	Karnatak Districts ..	137	218	68	372	205	140	215	49	379	217
Mang ..	Deccan Districts ..	134	233	62	349	222	150	219	50	373	208
Madig ..	Karnatak Districts ..	104	216	76	401	203	130	210	52	395	213
Bhangi ..	Gujarat Districts ..	134	243	69	378	170	161	210	60	382	178
Chambhar ..	Deccan Districts ..	138	219	74	347	222	143	219	59	378	201
II.—Jain.											
Vani-Oval ..	Ahmednagar, Nasik, Poona.	89	166	77	423	235	125	102	59	408	216
Chaturth ..	Belgaum Dharwar ..	120	183	74	301	232	134	203	57	372	234
III.—Mussalman.											
Baluch ..	Larkana, Navabshah ..	111	191	58	410	230	135	183	51	403	228
Bohra (Shia) ..	Gujarat Districts, Bombay City.	114	183	68	409	226	129	201	76	427	167
Bohra (Sunni) ..	Surat, Broach ..	131	223	84	347	215	132	201	69	372	226
Sheikh ..	Khandesh East, Ratnagiri, Bijapur, Dharwar.	133	214	78	369	200	134	200	63	389	214
Other Mussalman.	....	176	148	75	385	216	179	159	54	370	238
IV.—Christian.											
Indian Christian	All Gujarat Districts, Thana, Bombay, Suburban, Ahmednagar, Poona, Belgaum.	128	200	70	388	202	142	201	67	395	195

Subsidiary Table No. 62.—Cumulative numbers of persons returned at each individual year of age out of 100,000 examined, 1921—1.—Males.

Age.	Surat.	Dharwar.	Age.	Surat.	Dharwar.
0	3,469	2,957	60	96,799	97,707
1	5,110	4,443	61	96,933	97,716
2	7,701	6,852	62	97,207	97,839
3	10,683	9,317	63	97,269	97,871
4	13,614	12,345	64	97,310	97,969
5	17,545	15,059	65	98,397	98,527
6	20,214	18,522	66	98,424	98,569
7	23,490	20,520	67	98,482	98,583
8	26,859	24,335	68	98,534	98,692
9	29,031	26,022	69	98,572	98,713
10	33,104	30,068	70	99,080	99,357
11	34,809	31,126	71	99,095	99,364
12	38,805	35,851	72	99,175	99,406
13	40,626	37,045	73	99,192	99,416
14	42,102	39,541	74	99,205	99,430
15	44,938	41,106	75	99,573	99,618
16	46,104	43,602	76	99,585	99,627
17	47,287	44,077	77	99,601	99,635
18	48,844	46,791	78	99,625	99,660
19	49,473	47,285	79	99,637	99,664
20	52,133	51,517	80	99,834	99,877
21	52,884	51,943	81	99,845	99,878
22	54,847	55,966	82	99,858	99,885
23	55,599	54,672	83	99,862	99,887
24	56,235	55,262	84	99,866	99,891
25	60,294	60,811	85	99,923	99,922
26	60,860	62,189	86	99,923	99,930
27	62,153	62,620	87	99,926	99,932
28	63,475	65,158	88	99,926	99,940
29	63,812	65,378	89	99,926	99,940
30	67,081	71,019	90	99,959	99,976
31	68,087	71,141	91	99,961	99,977
32	70,109	72,927	92	99,965	99,981
33	70,506	73,240	93	99,966	99,981
34	70,829	73,855	94	99,967	99,982
35	75,377	77,647	95	99,984	99,994
36	75,857	78,766	96	99,984	99,995
37	76,602	78,946	97	99,986	99,996
38	77,414	80,192	98	99,987	99,997
39	77,697	80,335	99	99,990	99,998
40	81,207	84,579	100	99,998	99,999
41	81,491	84,646	101	99,999	99,999
42	82,779	85,182	102	99,999	99,999
43	82,996	85,300	103	99,999	99,999
44	83,191	85,591	104	99,999	99,999
45	86,531	87,852	105	100,000	100,000
46	86,733	88,158			
47	87,179	88,225			
48	87,752	88,995			
49	87,977	89,057			
50	90,947	92,580			
51	91,221	92,610			
52	92,018	92,979			
53	92,205	93,063			
54	92,334	93,317			
55	94,158	94,538			
56	94,332	94,868			
57	94,543	94,920			
58	94,777	95,298			
59	94,878	95,329			

Subsidiary Table No. 63.—Cumulative number of person returned at each individual year of age out of 100,000 examined, 1921—11 Females.

Age.	Surat.	Dharwar.	Age.	Surat.	Dharwar.
0	3,367	3,197	60	96,715	97,933
1	4,994	4,780	61	96,830	97,951
2	7,695	7,511	62	97,144	98,037
3	10,857	10,191	63	97,220	98,062
4	13,841	13,583	64	97,274	98,143
5	17,492	16,438	65	98,276	98,595
6	20,084	20,023	66	98,302	98,629
7	23,277	22,124	67	98,354	98,638
8	26,451	26,201	68	98,423	98,722
9	28,674	28,150	69	98,452	98,740
10	32,058	32,743	70	98,989	99,434
11	33,640	34,236	71	99,012	99,441
12	36,928	38,003	72	99,101	99,477
13	38,519	39,055	73	99,111	99,478
14	39,819	40,817	74	99,127	99,488
15	42,262	42,096	75	99,533	99,654
16	43,481	44,331	76	99,543	99,665
17	44,637	44,833	77	99,556	99,666
18	46,391	47,900	78	99,573	99,674
19	46,989	48,329	79	99,579	99,678
20	50,539	53,816	80	99,808	99,897
21	51,241	54,179	81	99,813	99,897
22	53,642	56,375	82	99,827	99,902
23	54,503	56,986	83	99,829	99,902
24	55,290	58,533	84	99,832	99,906
25	59,749	63,725	85	99,902	99,933
26	60,382	64,891	86	99,903	99,935
27	61,613	65,276	87	99,905	99,936
28	63,290	67,403	88	99,906	99,938
29	63,717	67,576	89	99,907	99,938
30	67,986	73,649	90	99,960	99,976
31	68,382	73,729	91	99,963	99,977
32	70,543	75,056	92	99,970	99,980
33	71,013	75,261	93	99,970	99,982
34	71,430	75,773	94	99,971	99,982
35	75,469	78,968	95	99,986	99,990
36	75,876	79,697	96	99,987	99,992
37	76,554	79,813	97	99,988	99,992
38	77,492	80,702	98	99,989	99,993
39	77,794	80,795	99	99,989	99,993
40	81,509	85,487	100	99,998	99,998
41	81,792	85,539	101	99,998	99,998
42	83,026	86,025	102	99,998	99,998
43	83,284	86,115	103	99,998	99,998
44	83,496	86,370	104	99,998	99,999
45	86,688	88,471	105	99,999	100,000
46	86,901	88,679	106	99,999	....
47	87,327	88,744	107	99,999	....
48	88,006	89,292	108	99,999	....
49	88,243	89,346	109	99,999	....
50	91,146	93,300	110	99,999	....
51	91,363	93,326	111	99,999	....
52	92,043	93,581	112	100,000	....
53	92,203	93,617	....	....	....
54	92,326	93,829	....	....	....
55	93,953	94,872	....	....	....
56	94,098	95,136	....	....	....
57	94,261	95,155	....	....	....
58	94,531	95,446	....	....	....
59	94,629	95,487	....	....	....

CHAPTER VI.—SEX.

SECTION 1.—THE BASIS OF THE FIGURES.

284. It is hardly necessary to discuss this point, since alone of all the headings of the schedule sex admits no possibility of doubt. Nor is any difficulty experienced in the Abstraction stage. Sex, when omitted, can be identified from the name; and, although name is the one Census head the filling up of which is optional, it is as a matter of fact the only one which is practically always filled.

SECTION 2.—DEFICIENCY OF FEMALES IN INDIA A GENUINE FACT.

285. The main interest of the sex figures centres round the question—why are there always more females than males in Western Europe and more males than females in India?

The following figures illustrate the point:—

Proportion of females to 1,000 males.

Country.	Year.	
	1911.	1921.
Great Britain	1,066	1,093
All India	954	951
Bombay Presidency	933	919

India is not however the exceptional country. It is Western Europe that is exceptional, as was pointed out in the India Census Report, 1911, p. 209, where the sex-proportions were given for several East European countries, and for the U. S. A., Canada and New Zealand.

286. The idea (strongly advocated by German critics) that omissions of females is the main cause of the deficiency of that sex in India was fully trounced by Sir Edward Gait on pp. 210, 11 of the India Census Report, 1911. It would be supportable only if it could be shown that among Mahomedans the deficiency* is greater than among Hindus, since the tendency to conceal females would be stronger in the case of the former. In this Presidency, *as a whole*, the deficiency among Mahomedans is much the more strongly marked. But this, as pointed out by Sir Edward Gait, is *entirely a question of territorial distribution*, the Mahomedans being in marked excess in Sind, where the deficiency of females is the greatest. The following figures for 1911 and 1921, by Natural divisions, are given for ready reference:—

Females per 1,000 males among Hindus and Mahomedans by Natural divisions, 1911 and 1921.

Region.	1911.		1921.	
	Hindus.	Mahomedans.	Hindus.	Mahomedans.
Whole Presidency	953	860	933	812
Gujarat	924	941	913	912
Konkan	1,038	1,111	1,063	1,144
Deccan	989	929	977	913
Sind	804	816	792	785

A glance at these figures will show at once that the matter is territorial rather than due to religion. In the Konkan, of course, the Musalman population is small, only 168 thousand. But in Gujarat it amounts to 317 thousand, a figure quite large enough for differences of social custom to reveal themselves in the figures, were they a genuine factor.

287. Sir Edward Gait also pointed out that in the North-Western Regions of India the deficiency of females was a well-known social fact, resulting in actual traffic in brides. And this is true of Sind and also of Gujarat in this Presidency. In the latter region it is characteristic of certain castes, and especially the higher Kanbi groups. Magistrates in Gujarat are constantly called upon to try cases of cheating where a girl has been brought and sold as a bride to a Kanbi (more commonly a Leva Kanbi) but afterwards discovered to be of Koli caste. The cause of this is amply illustrated by the figures in the margin. If the Leva Kanbis concealed their females and the Census figures were incorrect, there would be no reason for this constant traffic in Koli girls.

Females per 1,000 males in certain Kanbi groups in Ahmedabad, Kaira and Broach—

Leva Kanbi	772
Kadava Kanbi	906

SECTION 3.—INEQUALITY OF THE SEXES PRIMARILY A RACIAL CHARACTER.

I.—Statement of the Theorem.

288. So far as permanent conditions are concerned I am strongly in accordance with those writers who believe that the main permanent factor in producing and maintaining inequality of the sexes is the Racial factor, though this is liable to permanent modification by (1) geographical or climatic conditions, and (2) Social customs, and to temporary modification by causes which will be mentioned later.

289. By the "*Racial factor*" I mean that the proportions of the two sexes is probably a "character" of the line. The Indian endogamous Caste with its exogamous divisions is a perfect method of preserving what is called in Genetics the "pure line". The endogamy prevents external hybridisation, while the exogamy prevents the possibility of a fresh pure line arising within the old one by the isolation of any character not common to the whole line. With the preservation of the pure line the perpetuation of all characters common to it necessarily follows. And there is no reason why sex-ratio should not be a transmissible character. An excess of either sex may in this view be caused either by (1) the birth of more of that sex than of the other, or (2) the possession by the children of that sex of some character which tends to their preservation, probably greater resistance to certain diseases. We have no figures of births by castes; but it is doubtful whether there are likely to be any in which more female children are born than male. But we are only concerned with comparison of caste with caste. And as between any two castes a higher female index in the one can be brought about either by (1) the birth of *proportionately* more females than in the other, the resistance to diseases and adverse conditions being equal, or (2) by a greater resistance on the part of females in the one, the proportions at birth being equal. It is immaterial to the argument which of these causes is predominant in any particular case.

290. In the matter of *geographical situation and climate*, it would seem probable that a low damp climate is more favourable to females and dry uplands to males.

291. In regard to *social practices* it is possible that any long continued female infanticide, even though discontinued for many generations, may have reacted adversely to females, either by reducing the proportion of females born, or by rendering children of that sex specially delicate.*

292. There are also three factors of a temporary character tending to unequal sex ratios, namely, *migration, famine, and incidence of diseases with a definite sex-selection*.

293. In order to make the matter quite clear it will be well to state the causes of sex inequality once again in a tabular form.

	A. Permanent.	B. Temporary.
Of primary importance	Racial character ..	Migration.
Of secondary importance	Climate ..	Famine.
Of tertiary importance	Social customs ..	Diseases with sex-selection.

* This of course is a flagrant violation of the doctrine of the non-transmissibility of acquired characters. But that doctrine seems to have been placed on too high a pedestal. And there are signs that it will ultimately require modification—which indeed seems always to be the case, when any one law is claimed to be of universal application in the field of genetics.

This section of the Chapter deals with the permanent causes only, and is an attempt to prove that Racial Character is the dominant cause. The temporary factors have to be considered later when discussing the changes in the sex-ratio for various regions from Census to Census.

II.—General Proof.

294. In order to prove that the sex-ratios are primarily a matter of race it is necessary to show that in particular castes, when taken over a wide enough area, the female index remains more or less constant from Census to Census. The castes in the sub-joined Table were selected as being castes which are possessed of a nomenclature more or less fixed, have no occupational synonym, and are likely to be fairly pure in race, *i.e.*, either pure absolutely *ab origine*, or, if containing admixtures, then pure since the time when the particular admixture was crystalized into an endogamous caste. The figures are obtained from the general Caste Tables of each Census, and not from the Selected Caste Tables—IX, XIV, etc., since there is a danger, in using those Tables, of neglecting migration factors.

Subsidiary Table No. 64.—Females per 100 males in certain Castes, 1891—1921.

Caste.	Regions where found.	1891	1901	1911	1921
A. Normal ratio above 101.					
Bhandari ..	Konkan Coast ..	102	103	102	103
Mang and Madig ..	Deccan and Karnatak plateau ..	102	102	103	101
B. Normal ratio 101-100.					
Berad ..	Karnatak plateau ..	102	100	100	102
Mahar, Holiya and Dhed ..	Whole Presidency ..	99	101	101	101
Naikada ..	Forest country in South-East Gujarat ..	100	101	102	100
Dhodia ..	Forest country in South-East Gujarat ..	101	100	100	99
Katkari ..	Ghat forests east of Bombay ..	99	103	101	96
C. Normal ratio 99-98.					
Dhangar ..	Deccan plateau ..	101	98	100	98
Agri ..	North and Central Konkan Coast ..	99	95	98	101
Chodhra ..	Forest country in South-East Gujarat ..	99	100	98	94
Varli ..	Ghat forests and Konkan forests, Thana. ..	97	98	98	98
D. Normal ratio 97-96.					
Kurub ..	Karnatak plateau ..	99	97	97	95
Dubla and Talevia ..	Surat and Broach ..	97	97	96	97
Maratha ..	Whole Konkan and Deccan ..	96	98	96	94
E. Normal ratio 95-94.					
Bhoi ..	Whole Presidency ..	95	96	94	95
Brahman-Audiech ..	North Gujarat and Kathiawar ..	94	94	93	95
Kayasth Prabhu ..	Bombay ..	96	96	95	90
Brahman-Chitpavan ..	Konkan and Deccan ..	94	95	93	92
Vanjari ..	Khandesh and North Deccan ..	92	95	93	99
F. Normal ratio 93-92.					
Lamani ..	West Karnatak ..	92	94	89	95
Brahman-Deshashth ..	Deccan, Konkan, Karnatak ..	94	92	93	90
Kathi ..	Kathiawar ..	94	94	93	90
G. Normal ratio 91-90-89.					
Bharwad ..	Gujarat ..	91	87	88	92
Brahmin-Havik ..	Kanara—above ghats ..	92	89	92	91
Charan ..	Kathiawar, Cutch, Panch Mahals ..	93	90	91	88
Rabari ..	North Gujarat, Kathiawar ..	92	92	89	90
Waghri ..	North Gujarat, Kathiawar ..	91	92	87	86

Caste.	Regions where found.	1891	1901	1911	1921
H. Normal ratio 88-87-86-85.					
Brahman-Nagar	North Gujarat, Kathiawar	87	87	92	86
Lohana (Sind)	Sind	86	88	87	85
K. Normal ratio below 85.					
Mihrbahr or Muhana	Sind	86	88	82	76
L. Uncertain.					
Halepaik	Kanara	90	94	95	98
Corresponding ratios in whole Population of Presidency		94	94	93	92

295. I feel that a perusal of this Table will satisfy the reader that when we set out the castes examined in order based upon their sex-ratios they do not fall exactly into territorial groups, still less into climatic groups. Thus we start off with a pair of castes clearly characterised by a high female index* one confined exclusively to the Konkan coast, and the other to the plateau. And the same mixture of climate and geographical distribution will be found all through. It is true that on the whole there is a tendency for the northern castes to come low in the Table, and the southern ones higher. But certain indications exist that the cause of this is racial, and not truly geographical at all, in other words that the population of the North has a low female index not because it is of the North, but because it is composed of racial elements characterised by that peculiarity. The two castes Lamani and Vanjari are particularly noticeable. These are believed to be of common racial origin, hailing within historical times from Rajputana, and probably neither Aryan nor Dravidian, but descended from some one or other of the Central Asian invaders of post-Aryan times. They have split into two bands, so far as this Presidency is concerned, one settled in the North Deccan and Khandesh, and the other in the West Karnatak—the edge of the Mallad forest country. These two regions are far removed from one another and climatically different. Yet the two castes come close together in the Table, and are only prevented from coming into the same group by the sudden and probably temporary rise in the Vanjari female index at this Census. Interesting also is the fairly wide interval separating the extremes of the jungle tribes, the Naikadas with a clearly marked index of 100·5 and the Varlis with an index of 98. And it is noticeable that of these two tribes the Naikadas are the more Northern. Interesting again are the positions of the Brahman castes examined. The Haviks in particular with their low index are referred to elsewhere. The Nagars, who come the lowest in the Table, have been clearly traced to a Scythian origin by Dr. D. R. Bhandarkar, in a paper published some years ago in the Indian Antiquary.

296. I wish particularly to emphasise that the Castes entered in the Table were chosen *before* their sex ratios were examined. It is not a case of taking a large number of castes, working out their ratios, and then selecting those which serve to prove the theorem. Quite the reverse is the case. Those chosen have been left in the Table, even where (as in the case of Katkari) the females index is highly inconstant, and where (as in the case of Halepaik) no normal index can be postulated from the figures.

297. If the theory that racial character is the main determinant, but that it is liable to modification by climatic conditions is correct, we should expect to find the two following phenomena—(1) *that a single caste when spread over a large area will show some modification according to its geographical position*: and (2) *that within any one defined area there will be wide variations in the female indices of different castes.*

* I use the term "female index" as a convenient name for the number of females to any given number of males, usually either 100 or 1,000.

III.—*Subsidiary influence of Locality (climate) in modifying the Racial Factor.*

298. To test the former of these postulates I chose the caste—"Mahar, Holiya and Dhed". These are taken together by the Ethnographic Survey. It cannot be said for certain that this great caste is of a homogeneous racial origin throughout. If this could be definitely stated the whole theory could be firmly established. But unfortunately we know little of caste origins. And since a mixture is almost certain, it follows from considerations of history and geography that the caste in question will contain more "Scythian" element in the north and more Dravidian in the South. The figures are as follows :—

Subsidiary Table No. 65.—Ratio of females to males in Caste, "Mahar, Holiya and Dhed", by Districts.

	Number of females per 100 males.		
	1901.	1911.	1921.
Bombay City	73	66	74
Ahmedabad	96	94	92
Broach	99	96	98
Kaira	97	101	102
Panch Mahals	96	96	96
Surat	120	120	122
Kathiawar	100	99	101
Mahi Kantha	95	91	98
Palanpur	97	97	93
Reva Kantha	97	101	97
Ahmednagar	109	105	103
East Khandesh	104	104	107
West Khandesh	104	101	104
Nasik	101	103	104
Poona	106	106	108
Satara	104	104	106
Sholapur	103	101	100
Kolhapur	104	100	98
S. M. C. States	105	104	108
Belgaum	108	105	105
Bijapur	111	106	107
Dharwar	104	102	106
Kanara	86	84	82
Kolaba	102	104	107
Ratnagiri	108	111	113
Thana (with Bombay Suburban)	97	95	94
Thar & Parkar	80	85	83

299. The abnormal figures of Bombay and Surat, are due to migration, immigration of males in the one and emigration of males in the other. The cause of the peculiarly low index in Kanara is uncertain. The caste is not there important. But it exists mainly in the above-ghat tract, where, as we know, the female index is very low (see the map and discussion later). The most important point brought out is that while the female index for this caste follows the general trend of the District indices, being high in regions where the general index is high and low in regions where the general index is low, *it does not fall or rise to the full extent of the District index.* Thus the caste index in the Gujarat districts is always above the district index, while in Ratnagiri it is below it. This can easily be seen by comparing the figures in the above Table with those in Subsidiary Table 73. We can therefore deduce that the *geographical and climatic factors modify but do not eliminate the racial factor.*

300. An attempt was also made to find castes not widely spread but occurring in two or more defined and separate localities. This was not possible. But the following cases are interesting :—

Caste.	Region.	Female Index.		
		1901	1911	1921
Gavli	Kolhapur	104	101	112
	Kolaba	109	115	115
	Ratnagiri	115	117	118
Gurav or Hugar	Satara	97	96	95
	Kolhapur	98	102	104
	Ratnagiri	111	115	115

Migration alone does not seem to be sufficient to explain the divergence between the sex-ratios in one and the same caste in the regions indicated. Adding in the emigrants to Bombay we get for caste Gavli the following female indices :—

Kolaba ..	(1911)	105	—	(1921)	108
Ratnagiri ..	(1911)	109	—	(1921)	109

There seems therefore to be some factor in the Konkan which favours females more than on the plateau and some factor in Ratnagiri which favours females more than in Kolaba. It is impossible to say that it is not entirely racial. But if so it involves the assumption that one and the same modern caste contains absolutely different racial admixtures in different localities. A certain degree of difference may be assumed to be usually a fact, as suggested above in the case of Mahar, Holiya and Dhed. But the differences in the above cases are excessive.

301. The following comparative indices for *Bhandari* again bear out the above :—

Region.	Female Index.		
	1901	1911	1921
Kanara	94	97	104
Kolaba	91	85	98
Ratnagiri	117	122	124
Janjira	105	103	108
Savantvadi	105	113	121

Adding the Bombay City emigrants to the Kolaba and Ratnagiri figures we get—

Kolaba ..	(1911)	81	—	(1921)	90
Ratnagiri ..	(1911)	104	—	(1921)	105

On the whole the most probable explanation is that in the case of any one caste as also of the whole population there are factors in the climates of different regions which favour one sex more than the other, and therefore modify the main racial character of the sex-ratios.

IV.—Racial Factor dominant over Climatic Factor.

302. For the study of the second point I took the Kanara District, and found the female index for those castes which are definitely distinctive of the district. The sex-ratio for castes studied in this way in a small area was found to be much more variable than the same when studied for castes in the Presidency as a whole. (Subsidiary Table No. 64.) And this is of course natural and inevitable. Nevertheless, even through the variable figures given below it is possible to determine which castes have a normally low and which a high Index.

Subsidiary Total No. 66.—Number of females per 100 males in certain castes typical of the Kanara District, 1901-1921.

Caste.	Female Index.			Regions in which caste chiefly found.
	1901	1911	1921	
<i>A.—Castes with an Index apparently normally clear above 100.</i>				
Bandi ..	109	126	102	Mainly below Ghats.
Gan Vakkal ..	103	115	105	Mainly in Honavar & Kumta.
Mukri ..	104	107	111	About half in Honavar, some in Kumta, and the rest scattered.
Kharva, Kharvi ..	108	110	109	Almost entirely on the coast.
Harkanta ..	110	102	106	Almost entirely below Ghats.
<i>B.—Castes with an Index somewhere round about 100.</i>				
Komarpaik ..	100	106	95	Mainly in Ankola & Karwar.
Ambi or Ambig ..	87	103	103	Honavar, Karwar, Kumta.
Bhandari ..	94	97	104	Mainly in Karwar & Kumta.
Gaud Sarasvat Brahman ..	101	97	104	Mainly below Ghats.
Padti ..	95	93	108	Ankola and Karwar.
<i>C.—Castes with an Index apparently always clear below 100.</i>				
Havik Brahman ..	89	92	92	Sirsi, Siddhapur, Yellapur, Honavar & Kumta.
Halepaik ..	98	95	94	Honavar, Bhatkal, Siddhapur, Sirsi, Kumta Ankola.
Halvakki Vakkal ..	?	93	95	?
Komti or Vaishya ..	83	85	99	?
Gabit ..	87	95	95	Kumta, Ankola.
Nador ..	77	88	93	?

303. The last column is filled up after a perusal of the Talukwar Caste figures in the 1901 Volume of Provincial Tables. Halvakkī Vakkal was not tabulated at all at that Census. Komti or Vaishya was tabulated only by the district. Owing to some undetected mistake in those tables the Talukwar figures for Nador do not sum up to the District Total. For the rest it will be seen that geographical position is not the *main* determinant. We can, for instance, compare Gamvakkal (109), Padti (99) and Gabit (92), all of which are essentially coastal castes.

304. The following castes peculiar to Kathiawar also appear to prove the point :—

Caste.	Female Index.		
	1901	1911	1921
Bava	81	79	84
Kathi	93	92	90
Khavas	103	103	99
Sagar	94	92	92
Me	94	95	99
Sathvara	98	97	95

Khavas is evidently a caste in which the female index is always high, Bava a caste in which it is always low. The others fall into their places, and exhibit varying types. If the climatic factor were of dominant importance we should not get such wide variations within an area of the size of Kathiawar. Nor do we get any different result by analysing down to smaller territorial units. The Mes are almost confined to the Sorath Prant. But the female index for the other five castes by Prants is as follows :—

Prant.	Female index by Castes, 1921.				
	Bava.	Kathi.	Khavas.	Sagar.	Sathvara.
Jhalavad	64	83	102	..	99
Gohilvad	83	91	103	101	84
Halar	90	83	99	94	93
Sorath	84	92	99	88	97

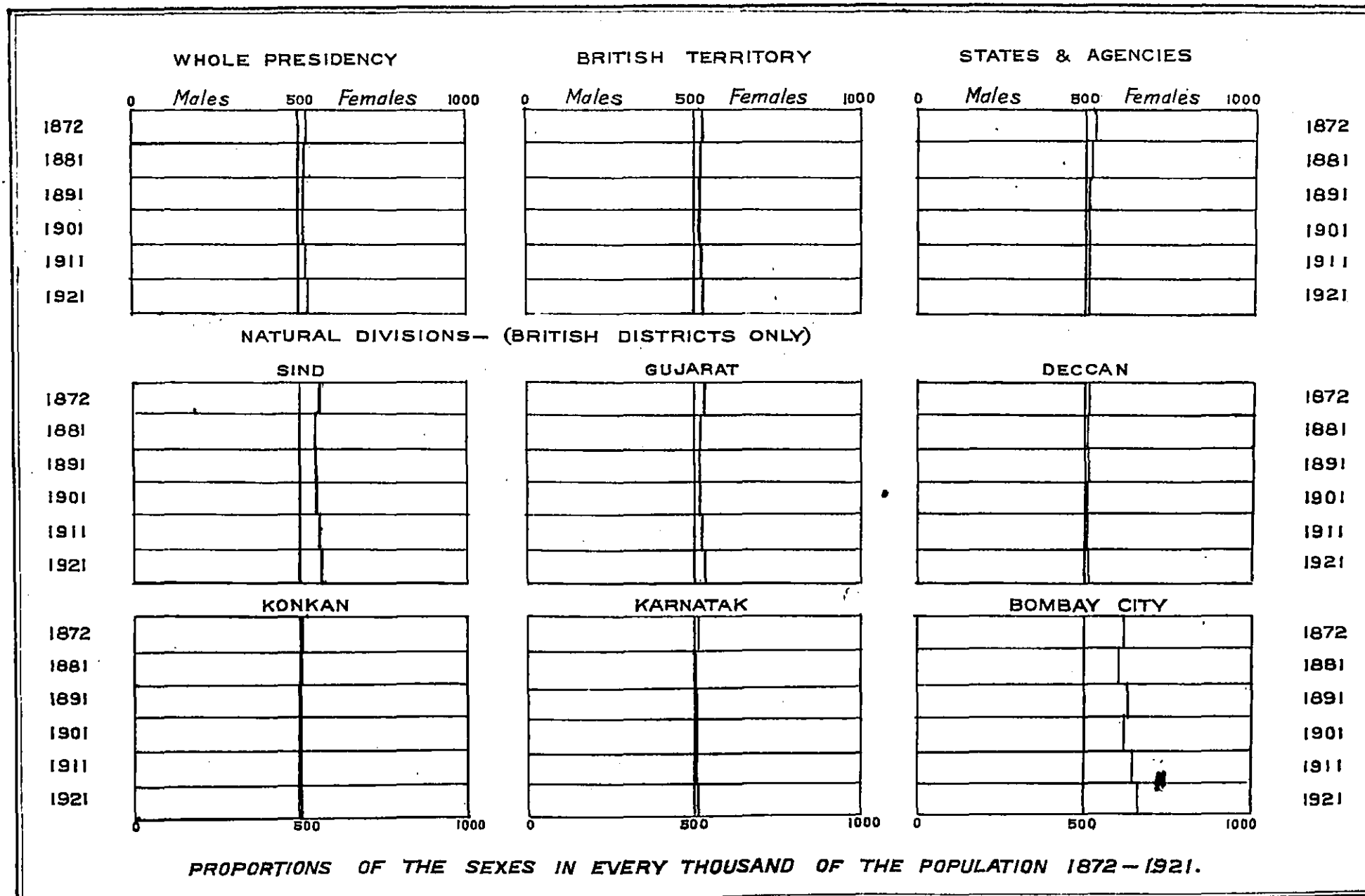
Territorial variations occur, but they are not constant for all the Castes. The Prant which shows the highest index for Bava shows the lowest for Kathi. The Prant which shows the lowest index for Bava shows the highest for Sathvara. And the Prant which shows the highest index for Sathvara shows the lowest for Bava and Kathi.

SECTION 4.—DECREASE OF FEMALES AT THIS CENSUS.

305. At the present Census the divergence between Great Britain and India is much accentuated. The cause of the increased ratio of females in the former country must be partly, if not wholly, due to the loss of male lives in the Great War. The cause of the diminished ratio of females in Bombay Presidency will be discussed in detail.

306. The proportion of females with us rose from 1872 to 1901, and has since then been falling. The changes in the Presidency as a whole, as well as in its various component parts is shown in the following Table and Diagram* where (instead of the number of females per 1,000 males) the sex-composition of every 1,000 of the population is given.

*The diagram is not very satisfactory, because of the difficulty of drawing on stone in their correct places lines adjusted to so fine a scale. For instance the difference between the ratios in States and Agencies 1911 and 1921 is clear enough in the Table. But a change from 508.0—492.0 to 508.8—491.2 involves the shifting of the line in the diagram by 1/500th part of an inch. General tendencies only are therefore brought out by the diagram. For finer differences the Table must be consulted.



Subsidiary Table No. 67.—Changes in Sex Proportions, 1872—1921, in the Bombay Presidency and its various component parts.

Region.	Proportion of each sex in every 1,000 of the population.											
	1872		1881		1891		1901		1911		1921	
	Males.	Fe-males.	Males.	Fe-males.	Males.	Fe-males.	Males.	Fe-males.	Males.	Fe-males.	Males.	Fe-males.
Whole Presidency..	522.0	477.1	515.0	484.1	515.8	484.2	518.9	486.1	517.0	483.0	521.2	478.8
British Districts ..	523.2	476.8	516.4	483.6	517.2	482.8	515.9	484.1	520.4	479.6	525.5	474.5
States and Agencies	522.4	477.6	514.6	485.4	511.2	489.8	508.5	491.5	508.0	492.0	508.8	491.2
Sind ..	555.0	444.4	545.5	454.5	546.2	453.8	548.6	451.4	551.9	448.1	560.3	489.7
Gujarat ..	523.6	476.4	515.0	485.0	514.1	485.9	511.5	488.5	518.7	481.3	522.3	477.7
Deccan ..	512.6	487.4	506.8	493.2	508.3	491.7	502.6	497.4	504.8	495.7	507.6	492.4
Konkan ..	502.7	497.3	500.6	499.4	497.1	502.9	496.9	503.1	490.5	509.5	490.7	509.3
Karnatak ..	511.8	488.2	500.6	499.4	502.7	497.3	503.5	496.6	506.3	493.7	510.1	489.9
Bombay City ..	620.3	379.7	601.1	398.9	630.5	369.5	618.3	381.7	643.5	355.5	655.0	344.1

307. The general enhancement of the female ratio from 1872 to 1901 may with fair certainty be attributed to the famines which were such a constantly recurring feature of those three decades. It is a quite well established fact that famine differentiates adversely to males, the other sex showing stronger resisting capacity. It would be out of place to give any elaborate demonstration of this fact here, since famine has ceased to affect us. There have been since 1901 crop failures equal to or greater than those of the great famines of the past. But, as is well known, deaths due directly to famine have ceased to occur. (For a demonstration of the famine factor in affecting the sex ratios reference is invited to the following—p. 89 of the Bombay Census Report for 1901, and pp. 220-222 of the India Census Report for 1911.)

308. To turn to the consideration of the decade just past it will be seen from the Table that the position of the line between the two sexes in every sample of 1,000 persons has shifted adversely to females at this Census by the amounts shown in Column (b) in the Table below. There is no marked tendency for those regions which are apparently always adverse to females to be specially adverse to them in the decade just passed, or *vice versa*. The following figures will show the meaning of this remark.

Region.	Average departure of the dividing line from the 500 line in every 1,000 persons at the five previous Census excess of males (+) of females (—)	Amount by which the dividing line has shifted adversely to females at this Census.	Ratio (b) (a)
	(a)	(b)	(c)
Presidency ..	+ 17.1	4.2	.244
British Districts ..	+ 18.6	5.1	.270
States and Agencies ..	+ 12.9	0.8	.062
Sind ..	+ 49.6	8.4	.169
Gujarat ..	+ 16.6	3.6	.192
Deccan ..	+ 6.9	3.3	.479
Konkan ..	— 3.1	0.2	.065
Karnatak ..	+ 5.0	3.8	.769
Bombay City ..	+ 123.3	12.4	.101

309. In other words the decade has been absolutely more unfavourable to females in Sind than in any other of the Natural Divisions. But proportionately it has been less unfavourable to females in Sind than in any Divisions except the Konkan, and most unfavourable in the Karnatak and the Deccan.

SECTION 5.—VITAL STATISTICS AS BEARING UPON THE SEX COMPOSITION OF THE POPULATION.

I.—Long Term Changes.

310. Vital Statistics, though admittedly very incomplete, bear out both the long term changes in the sex proportions, and also the changes during the decade. They are available of course only for British Districts. The Table below was taken out to illustrate this point. It will be seen that in decades in which the balance as between births and deaths is in favour of males the Census figures show a change in favour of males and *vice versa*. The proportions between these two sets of figures are not exact, but it will be seen that the tendency is for any apparent movement in favour of females to be diminished in the actual Census results, and any apparent movement in favour of males to be enhanced. This is probably genuine and is due to the steady influx of strangers from other parts of India into Bombay and Karachi cities, this inflowing stream being mainly composed of males.

Subsidiary Table No. 68.—Actual excess of males over females at the last three Censuses compared with Vital Statistics, British Registration Districts.

			1891 to 1901	1901 to 1911	1911 to 1921
Male Deaths	..	..	3,507,739	3,303,504	3,690,767
Male Births	..	..	3,338,237	3,206,853	3,479,453
Difference (Males)	..	..	—169,502	—96,651	—211,314
Female Deaths	..	..	3,161,237	3,092,826	3,532,542
Female Births	..	..	3,091,891	2,970,679	3,218,540
Difference (Females)	..	..	—69,346	—122,147	—314,002
Net Balance in favour of—					
Males	..	..	..	25,496	102,688
Females	..	..	100,156	..	..
Excess of males over females at each Census since 1891:—					
1891	..	669,441			
1901	..	590,635			
1911	..	803,353			
1921	..	985,431			
Changes in the excess of males, in favour of—					
Males (<i>i.e.</i> , increase in excess of males)..	..		..	212,718	182,078
Females (<i>i.e.</i> , decrease in excess of males).			78,806	..	..

II.—The Past Decade, Whole Presidency.

311. During the decade under review we had both plague and influenza selecting adversely to females. In spite of this the number of male deaths exceeded the number of female deaths. The figures for individual years show the following excess deaths of either sex—

Year.	Excess of deaths—	
	Male	Female
1911	20,000	....
1912	19,318	....
1913	17,731	....
1914	20,472	....
1915	15,731	....
1916	18,505	....
1917	13,492	....
1918	....	29,730
1919	33,926	....
1920	28,780	....
	187,955	29,730
	29,730	
Net Male excess	158,225	

The reason why, in spite of plague, the male deaths exceeded in all years except one is that the population of males at any given time is greater than of females. The 1911 figures were 10,188,455 males and 9,398,928 females. In order to bring about an equal number of deaths in each sex the death rate among females would have to be in the ratio of 10·8 to 10·0 males. And this large difference was only once passed. In that year (1918) Col. Murphy's Table V (pp. 44, 45 of the Report of the Sanitary Commissioner for 1918) shows excess of total mortality during the whole year over the means of the previous five years to have been 532,200 males and 584,265 females, a difference adverse to females of 52,065. The effect of this influenza selection was to produce the female excess shown above. In the case of plague the excess of females was only 2,987 out of a total death roll of 563,897, which was not sufficient to produce an excess of female deaths in any given year. For Plague deaths by sexes reference is invited to Subsidiary Table No. 11 in Chapter I.

312. In considering the Table now given, and especially the last line of figures, it has to be remembered that incompleteness of Vital Statistics will not affect the total population by every single omission but only by the extent to which deaths are less completely recorded than births or *vice versa*. If in any decade there are in any given area 10,000 births and 11,000 deaths, then, if only 9,000 births and 10,000 deaths are recorded, the omissions, though seriously vitiating the rates, and introducing many misleading results from the Sanitary point of view, do not affect the study of the Census figures in this particular way. But if 9,000 births and 10,500 deaths are recorded, then there is a deficiency of 500 births in excess of the deficiency of deaths and the study of the Census figures is affected. Also, when studying the sex composition in comparison with Vital Statistics, even such an excess deficiency of births will not affect the ratio of the two sexes to one another provided that the deficiency is divided between the two sexes in proportion to the actual number of births in each.

Subsidiary Table No. 69.—Comparison between Vital Statistics and Population changes by sexes for the whole Registration area (British Districts) 1911—20.

	Males.	Females.
Births (reported)	3,479,453	3,218,540
Deaths (reported)	3,690,767	3,532,542
Net gain (+) or Loss (—) by difference between births and deaths as reported ..	—211,314	—314,002
Population, 1911 (actual)	10,188,455	9,398,928
After adding or subtracting for Net gain or loss (as above)	9,977,141	9,084,926
Population, 1921 (actual)	10,138,575	9,153,144
Difference, to be accounted for by migration or by incomplete registration of vital statistics or by both	+161,434	+68,218

III.—The Past Decade, Natural Divisions.

313. A study of Vital Statistics by Natural Divisions reveals some interesting points. The ratio of female to male deaths does not always follow the ratio of females to males in the population. The following Table will illustrate the point.

Subsidiary Table No. 70.—Total deaths by sexes in Natural Divisions (British District), and comparison with the sex composition of the population.

	Bombay.	Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.
Male deaths	219,205	542,462	492,676	1,358,485	599,080	498,859
Female deaths	173,040	519,820	487,027	1,342,962	583,348	426,345
Excess (+) or deficiency (—) of male against female deaths ..	+46,165	+22,642	+5,649	+15,523	—4,268	+72,514
Number of females per 1,000 males in the population, 1911 ..	530	928	1,039	983	975	812
Number of female deaths per 1,000 male deaths in the decade	789	958	989	989	1,007	855

314. The marked divergences between the sex composition of the people and the sex composition of the deaths in the different Natural Divisions are explicable on a consideration of the character of their populations. Thus in Bombay, while there is a great excess of males, that excess is chiefly in the middle age periods,—in other words there is an excess of selected lives. It is therefore natural that the deaths of females should approximate much more to the deaths of males than the proportions of the sexes in the population would at first sight lead one to expect.

315. In the Konkan the exact reverse is found. There is an absence of males of the middle age periods. Consequently, while there is an excess of females in the population, that excess is largely an excess of selected lives, and the death ratio moves accordingly adversely to males. This would have been the case probably in the Deccan also, from which a good many selected male lives are always absent. But the high mortality from influenza and plague, with their female selection, introduced an opposite factor, and caused a slight balance adverse to females. In the Karnatak, where influenza and also plague was severe, with no compensating emigration, the deaths are noticeably adverse to females. In Gujarat the plague and influenza factors were both slight, and the presence of selected male lives in Ahmedabad City may account for most of the divergence. In Sind there is an excess of selected male lives in Karachi City, and probably also in 1911 and in most of the succeeding years in the immigrant Baluchi, Punjabi and Rajputani population.

316. Birth figures corresponding to the Deaths figures in the above Table are given below. The fourth line of the former Table is not reproduced, because the proportion of the sexes at birth is independent of the sex-composition of the population. The last line of the Table is however interesting, as showing once more the believed incompleteness of registration of Vital Statistics in Sind. It is a remarkable fact that as we go further north-west in India we are faced with an increasing deficiency of females both at birth and in the Census population. Sir Edward Gait in the India Census Report for 1911 (p. 214) wrote—

“The very unusual figures for the North West Frontier Province attracted considerable attention during the first half of the last decade; and in each of the years 1903 to 1906 steps were taken to test the returns in small selected areas. The final conclusion arrived at by the Sanitary Commissioner was that the reported deficiency of female births was due largely to defective registration. The net result of testing was to raise the proportion of female per 1,000 male births from 819 to 832. Calculated on the original returns the omissions amounted in the case of males to 10, and in the case of females to 12, per cent. In one or two of the annual Sanitary reports the testing was described as perfunctory, so that even the latter figure cannot be relied on.”

317. “It is true that in practically all known countries of the world male births predominate. But there is no case in which the preponderance is anything like so marked as in North West India, including Sind. Nevertheless we are faced with the following confirmatory phenomena,—(i) a marked deficiency in recorded female as against recorded male births, (ii) a marked deficiency of recorded female as against recorded male deaths (see the last Table), (iii) a marked deficiency of females in the enumerated Census population, (iv) the known habit of trafficking in brides in the same regions (see p. 88. of Mr. Enthoven’s 1901 Bombay Census Report, where there is a detailed account of this traffic).

318. Consequently it is impossible to deduce that the defect of female birth registration, if corrected (*and if the females born survive*), would bring the ratios of females to male births in Sind into line with the rest of India (and indeed of the world) because all the other three correlated phenomena would thereby be upset. There would have to be an equivalent defect in the record of female deaths and in the enumeration of females at the Census. Both these demands might for the sake of argument be conceded. But we can never get over the solid fact that deficiency of brides is a known social phenomenon. Consequently, either there really is in this part of India an extraordinary and unparalleled excess of male births, or, if the excess is roughly in line with the rest of India (and of the world), then female births are concealed, *and* female children are destroyed. *Both* deductions are absolutely necessary. That female infanticide used to be prevalent is too well established to need discussion. Whether it exists still is not known. But if it does not, then the unparalleled excess of male births is a genuine fact. Its explanation is unknown, but it has already been suggested in paragraph 291 that (in spite of Weissmann’s doctrines) continued female infanticide, and consequently a long established dread of giving birth to a female child, may have modified the racial character of the sex proportions at childbirth.

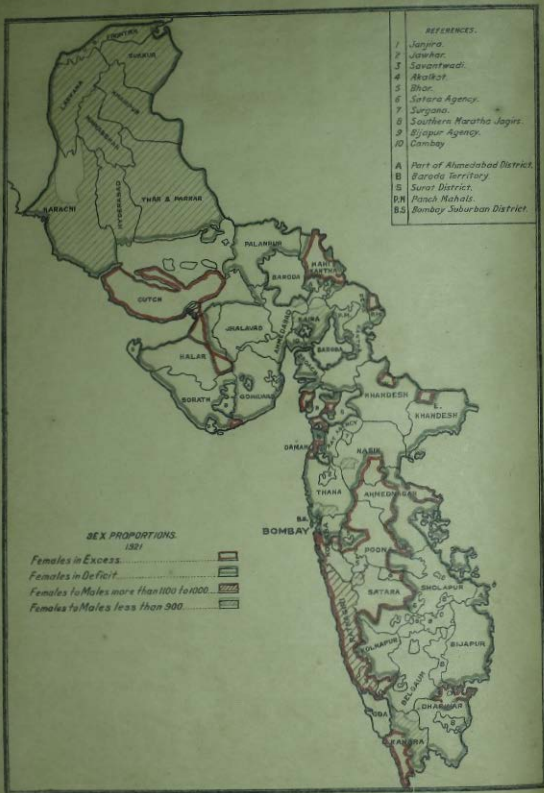
Subsidiary Table No. 71.—Total births by Sexes and Natural Divisions, 1911–20.

	Bombay.	Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.
Male births	104,831	583,094	520,200	1,318,188	553,875	399,265
Female births	99,360	538,273	490,839	1,242,246	534,021	313,795
Total	204,197	1,121,367	1,011,039	2,560,434	1,087,896	713,060
Excess (+) or deficiency (–) of male against female births	+5,465	+44,821	+29,361	+75,942	+19,854	+85,470
Number of female births per 1,000 male births in the decade	948	923	944	942	964	786

319. We are now ready for a Table by Natural Divisions, similar to subsidiary Table No. 69 above. Item (7) and (8) are of course the important ones, to which the Table leads up. I think that migration will explain the final figures, item (8). Bombay, Karachi and Ahmedabad draw males, and the Konkan and Deccan supply them.

Subsidiary Table No. 72.—Comparison of Vital Statistics with population changes by sexes and Natural Divisions 1911—1921.

	Males.						Females.					
	Bombay.	Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.	Bombay.	Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.
(1) Deaths	219,205	542,462	492,676	1,358,485	579,080	408,859	173,040	519,820	487,027	1,342,962	583,348	420,345
(2) Births	104,831	583,094	520,200	1,318,188	553,875	399,265	99,366	538,273	400,830	1,242,246	534,021	313,795
(3) Net gain (+) or loss (—) by difference between births and deaths according to Vital Statistics	—114,374	+40,632	+27,524	—40,297	—25,205	—99,594	—73,674	+18,453	+3,812	—100,716	—49,327	—112,550
(4) Population, 1911 (actual)	629,854	1,453,258	1,525,191	3,213,444	1,432,319	1,934,389	333,509	1,349,015	1,583,810	3,162,706	1,397,042	1,572,246
(5) After add or subtract for Net gain or loss (as above)	515,480	1,493,890	1,552,715	3,173,147	1,407,114	1,834,795	259,835	1,367,468	1,587,622	3,061,990	1,348,315	1,459,696
(6) Population, 1921 (actual)	771,332	1,545,376	1,487,510	3,075,530	1,421,562	1,837,265	404,582	1,413,473	1,544,159	2,983,584	1,365,234	1,442,112
(7) Difference to be accounted for by migration or by incomplete registration of vital statistics or both	+255,852	+51,486	—65,205	—97,617	+14,448	+2,470	+144,747	+46,005	—43,403	—78,406	+16,910	—17,584
(8) Net balance of differences in favour of—												
Males	111,105	5,481	....	....	....	20,054						
Females .. ..	....	....	21,742	19,211	2,471	....					



REFERENCES.

1. Janjira.
 2. Jawhar.
 3. Savantwadi.
 4. Akalkot.
 5. Bhar.
 6. Satara Agency.
 7. Surgana.
 8. Southern Maratha Jagirs.
 9. Bijapur Agency.
 10. Cambay.
- A. Part of Ahmedabad District.
B. Baroda Territory.
C. Surat District.
D. Panch Mahals.
E. Bombay Suburban District.

SECTION. 6.—TERRITORIAL DISTRIBUTION OF THE SEXES AT THIS CENSUS.

320. This is shown in the red and blue map. The map is prepared *on the basis of the Taluka as unit*, although the boundaries of talukas do not appear in the black outlines.

321. Before considering the map it is desirable to recapitulate the factors (including both permanent and temporary) which can produce excess of one or the other sex. A. *Permanent* (1) Racial Character, (2) Climatic conditions, and (3) Social customs; B. *Temporary* (4) Migration, (5) Famine, and (6) Incidence of diseases with a sex-selection. Consequently the isolation of the particular causes in any individual area is excessively difficult.

322. It is possible to pick out here and there tracts where one cause may be considered to be predominant. Thus the deficiency of females in North Daskroi (Ahmedabad) is migrational, and due to the influence of the city with its abnormal sex-proportions. The patches of excess of females along the marches of the Presidency from East Khandesh to Mahi Kantha are probably racial, and due to presence of a high proportion of certain hill tribes. But migration enters in also. The Brahmans of Mahi Kantha for instance show signs of a deficiency of males owing to their going to the cities for work. The figures of Brahmans in Mahi Kantha at this Census were—Males 11,014, Females 14,237.

323. The deficiency of females in Kaira is due to social traditions. Hypergamy is well established in that District among some castes. (For this reference is invited to paragraph 175 of the 1911 Report.) The female index by Talukas at the last two Censuses has been as follows :—

Taluka.	Female index.	
	1911.	1921.
Anand	83	85
Nadiad	86	86
Borsad	86	87
Thasra	86	87
Matar	89	88
Mehmedabad	95	92
Kapadvanj	93	92

and in adjacent Districts—

Taluka.	Fomal index.	
	1911.	1921.
Amod	95	95
South Daskroi	Unknown.	90
Dholka	95	90
Dhandhuka	95	94
Viramgam	95	92
Godhra	91	91
Kalol	92	92
Halol	87	91

324. The deficiency of females in Nasik Taluka is probably migrational, due to the city and to the special influence of the Sinhasth festival at this Census.

325. The deficiency in Bombay, Bombay Suburban, North Salsette and Kalyan is also migrational, and demands no explanation.

326. The excess of females in Cutch is probably partly migrational,— the males of that region going far afield for purposes of trade.

327. The excess of females in Surat is due probably to a mixture of causes, racial (*i.e.*, the presence of forest tribes with a high female index) climatic (as already suggested), and migrational (the Suratis go far afield, often to South and East Africa).

328. The abnormally high female index in Ratnagiri cannot be entirely attributed to migration, although that factor no doubt enhances the inequality of the sexes. The female index for Natural Population proves that even if there were no migration to or from any district, the female index for Ratnagiri would always be higher than anywhere else in the Presidency. Territorially the centre of greatest inequality is the Guhagar Petha, and the range of high female index spreads thence

in all three directions, diminishing as it goes, but with a slight recrudescence in Malvan. Unfortunately in the absence of statistics of birthplace by Talukas it is impossible to say how far migration enters into the distribution by smaller areas. In all probability the rise of the female index in Malvan is due to migration. But on the other hand in Vengurla it is much lower. The figures for 1911 and 1921 are:—

Taluka.	Female Index.	
	1911.	1921.
Guhagar	125	127
Ratnagiri	120	123
Dapoli	116	121
Mandangad	118	121
Sangameshwar	117	120
Rajapur	117	119
Chiplun	120	118
Khed	115	114
Devgad	115	114
Malvan	117	121
Vengurla	106	106

The causes of this abnormal sex-ratio in Ratnagiri have already been discussed.

329. The contrast between the coastal and the inland Talukas of Kanara is remarkable. There is apparently no other region in which such sudden and wide difference between two adjoining tracts is to be found. The phenomenon is a permanent one, and the 1911 ratios show the same sharp contrast.

Taluka.	Female Index.	
	1911.	1921.
Bhatkal	113	112
Honavar	108	107
Kumta	109	104
Ankola	100	102
Karwar	107	107
Sirsi	76	79
Sidhapur	76	80
Yellapur	73	75
Supa	81	80
Mundgod	85	80
Halyal	91	89

The Khanapur Taluka, which borders the Ghats to the North shows 96. The Chandgad Mahal has a slight excess of females. North of that comes the Kolhapur State, which being an area as large as a British District does not afford the information necessary to isolate the sex-proportions in the tracts immediately above the Ghats. North of that State the above ghat talukas show excess of females, Patan with an index of 101 and Javli with 111. The Bhore State also shows 101. The sharp contrast in Kanara is therefore apparently unique. I am inclined to attribute it mainly to the racial factor. This has already been fully discussed above. It cannot I think be attributed to influx of labourers on forest works, because the indigenous castes, and especially the Havik Brahmans, show such low indices. There cannot be any seasonal influx of Havik Brahman labourers.

330. The cause of the difference between the deficiency of females on the Thana Coast and their excess both north and south is probably partly racial. But unequal migration is also a factor. The immigrants to Bombay from the four districts of Surat, Thana (including Bombay Suburban), Kolaba and Ratnagiri give the following percentages to their Census population:—

Surat	..	5.9	Kolaba	..	7.7
Thana	..	1.6	Ratnagiri	..	20.4

This corresponds with the female indices, which are:—

Surat	..	100	Kolaba	..	101
Thana	..	91	Ratnagiri	..	120

331. On the face of it there might be grounds for expecting that a high female index would be correlated with increase of population and *vice versa*. But actually there seems to be no correlation whatever. Thus Ratnagiri, with an abnormally high

and increasing female index, shows declining population. The Panch Mahals and Khandesh, the two regions of specially advancing population have low and even declining female indices. Nor is it apparently more than a coincidence that the two regions singled out for treatment in Appendices as regions of decay, namely, the above ghat tract of Kanara and Dharwar and certain portions of Kaira, both appear in the map as regions with blue cross-hatching, indicating an abnormally low female index. Closer analysis will show that this coincidence is not so exact as it seems. In the case of Kanara the region indicated in Appendix Q as the decaying core does not by any means coincide with the region of lowest female index. Kalghatki Taluka is shown to be the worst affected Taluka, but the Kalghatki female index is 90, considerably higher than Yellapur (74), Sirsi (79) and Siddhapur (80), all three further removed from the decaying core. In the case of Kaira the worst talukas of decay are Mehmedabad and Matar, the indices for which (92 and 88) are higher than that of Borsad (87) which lies well outside the decaying area; while the Mehmedabad index (92) is equal to or better than those of Godhra (91), Kalol (92) and Halol (91), all three talukas of marked advance.

SECTION 8.—CHANGES IN THE SEX PROPORTIONS AT THIS CENSUS, BY DISTRICTS.

332. The first three columns of the Table which follows set forth succinctly the extent and direction of the changes in the number of females per 1,000 males in each district at this Census. Small changes are of course inevitable and require no explanation. Marked increases, which occur only in Ratnagiri and Kanara, can unusually be attributed to increased emigration of males. Conversely marked reductions will often be due to immigration, as for instance in Ahmedabad. But the large decreases in the Deccan Districts (other than Satara, West Khandesh and Nagar), and in the Karnatak districts, can be attributed to selection of females by Influenza and Plague. In the case of Nagar the vast migrational disturbances in that district upset everything. And generally speaking, where the reduction in the female index is less than would be expected from the Influenza mortality, or is even changed into a plus, as in Satara, we can suspect the counteracting influences of (i) disease clearing out females and (ii) migration clearing out males. In Sind the reduction of females is probably due to the Influenza, and this Table leads to the supposition that the Influenza mortality in that province was incompletely recorded.

Subsidiary Table No. 73.—Ratio of Females to Males by Districts, with changes, at this Census; and comparison with Vital Statistics.

District.	Number of females per 1,000 males.		Increase or decrease in decade.	Number of reported births and deaths of females per 1,000 births and deaths of males in decade.	
	1911.	1921.		Births.	Deaths.
Bombay City	530	525	—5	946	790
Ahmedabad	915	871	—44	905	959
Broach	938	938	....	940	982
Kaira	868	872	+4	904	922
Panch Mahals	945	940	—5	951	971
Surat	1,001	1,000	—1	945	985
Kanara	956	968	+18	948	953
Kolaba	1,013	1,012	—1	944	987
Ratnagiri	1,175	1,198	+23	938	1,044
Thana (including Bombay Suburban)	930	908	—22	947	948
Ahmednagar	985	978	—7	941	976
East Khandesh	983	971	—12	938	987
West Khandesh	980	975	—5	950	986
Nasik	985	963	—22	943	991
Poona	973	952	—21	929	968
Satara	1,006	1,007	+1	945	1,019
Sholapur	963	938	—25	950	997
Belgaum	967	957	—10	962	994
Bijapur	989	964	—25	962	1,017
Dharwar	971	960	—11	967	1,009
Hyderabad	813	780	....	733	823
Navabshah		790	....	721	844
Karachi	773	737	—36	862	813
Larkana	840	806	—34	789	881
Sukkur	834	808	—26	800	913
Thar and Parkar	789	793	+4	790	920
Upper Sind Frontier	807	793	—14	773	893

333. The last two columns of the Table give the number of Female Births per 1,000 Male Births, and of Female Deaths per 1,000 Male Deaths. The question of sex-ratio at birth in Sind has been discussed in paragraphs 316—318 of this Chapter. But the figures of the individual Districts are not there given separately. It will be seen that the central portions of the Province show a lowest ratio than the peripheral regions, and that the Karachi ratio is much higher than the others. This might be due either to (i) a difference in racial composition,

Birth Rate and Death Rate in five Sind Districts during the decade 1911—20, expressed as an annual per mille rate.			
		Birth rate.	Death rate.
Karachi	..	22·5	26·7
Larkana	..	21·8	26·3
Sukkur	..	23·7	28·6
Thar and Parkar..	..	19·0	27·2
U. S. Frontier	..	21·4	24·4

or (ii) more complete registration. The marginal birth and death rates for the decade in the five Sind Districts that have not changed their boundaries do not bear out the second alternative, especially when it is remembered that with the steady growth of Karachi City the rates should have come out higher than those of other districts when calculated on the 1911 population. It is therefore suggested that the reason is genuinely racial, and is due to the

admixture in the Karachi City population which constitutes 2/5ths of the whole district of a large mass of strangers from other parts of India, such strangers belonging to races with the racial character of a high female index.

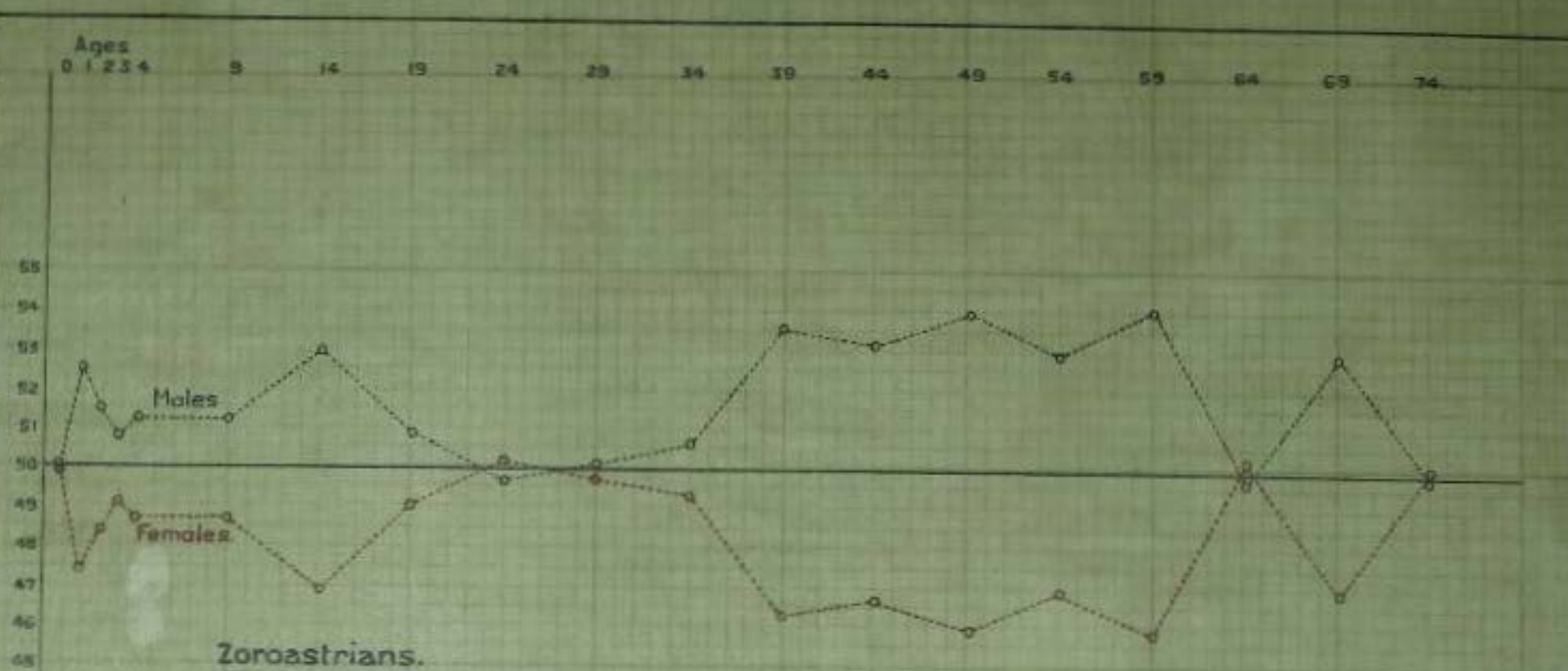
334. Racial character is brought out also both by the low female birth indices of Kaira and Ahmedabad, with their strong admixture of Kanbis of the groups with deficiency of females, and also by the high female birth indices in the Panch Mahals and West Khandesh, with their admixture of Bhils, and in the mainly Dravidian regions of the Karnatak.

335. In the case of Bombay City the fact that the ratio of female to male deaths far exceeds the ratio of females to males in the population is due to the fact that the male population consists, much more than the female, of selected lives in the wage earning periods. The same remark applies to some extent to Ahmedabad. Conversely when we examine what we may call the emigration districts, Ratnagiri, Kolaba, Kanara and Surat, we find that the female death index is lower than the ratio of females in the population, because the selected male lives are absent but the selected female lives present.

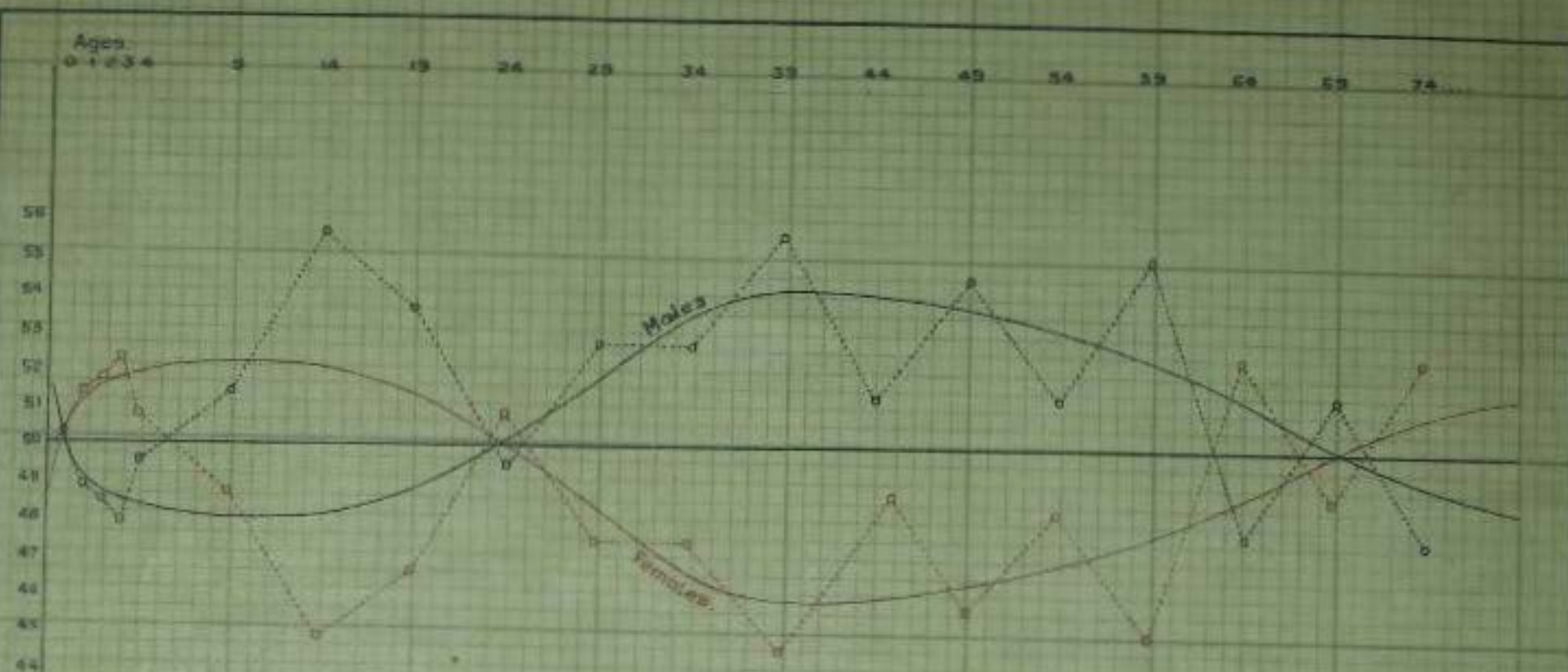
336. In order to test the effect of Influenza mortality on the sex ratios the following Table has been prepared. The Districts are arranged in accordance with their values in column (c), which is a purely arbitrary set of values arrived at by combining (i) the value of each district in the Influenza Scale (Net Influenza mortality per mille, Subsidiary Table No. 16, on page 26), and (ii) the departure of the 1911 Female Index from 1,000. The Districts being thus arranged the difference between Female and Male deaths in 1918 (the Influenza year) are set down in column (d). The Sind Districts are not shown.

337. It will be seen that, with certain exceptions, the figures in column (d), discussed in the next Paragraph, especially after making allowances for the relative sizes of the different districts, follow approximately the positions of the districts in column (c). On the other hand, if the values in either column (a) or column (b) alone are examined and compared with the figures in column (d) the correlation is not noticeable. In other words, there are two factors at work, (i) the relative proportions of the sexes, and (ii) the degree of severity of those diseases which select females. For example, Influenza was about equally severe in Ratnagiri and Kaira. But, since there is a marked excess of females in the former and a marked deficiency in the latter, the sex selection exerted by the epidemic is necessarily masked. From the opposite point of view the sex proportions in Kanara and Sholapur are more or less equal. But, since the severity of Influenza in these two Districts was widely different, a wide difference necessarily results in the difference between male and female deaths during the period.

338. The exceptions, or disturbing items in the Table, are Surat, Thana and Ahmedabad. The lowness of the Surat figure in column (d) is explained by the migration factor. Selected male lives being absent and selected female lives present



DEPARTURES OF THE PROPORTIONS OF THE NUMBERS OF EACH SEX IN EACH AGE PERIOD
FROM 50 PER CENT OF THE TOTAL RECORDED PERSONS IN THAT AGE PERIOD,
ZOROASTRIANS, BOMBAY PRESIDENCY. 1921.



DEPARTURES OF THE PROPORTIONS OF THE NUMBERS OF EACH SEX IN EACH AGE PERIOD FROM 50 PER CENT OF THE TOTAL RECORDED PERSONS IN THAT AGE PERIOD, WHOLE POPULATION, BOMBAY PRESIDENCY. 1921.

Males Black. Females Red. The dotted lines are the proportions of the actual recorded numbers. The plain curves are a rough approximation to the proportions as they should be, having regard to the mortality of each Sex at the different age periods.

the deaths among females are less in excess of males than the value in column (b) would have led us to expect. In Ahmedabad the excess in the value in column (d) is due to exactly the opposite cause, namely the presence of an extra number of selected male lives. The larger excess in Thana I cannot satisfactorily explain.

Subsidiary Table No. 74.—Difference between Female and Male Deaths in 1918, compared with Influenza Mortality Scale, and Female Index (1911), for Districts of the Presidency proper.

Note.—The Districts are arranged in serial order according to the positive value of Column (c).

District.	Value in the Influenza Scale (Sub-Table 16).	Departure from 1,000 of number of females per 1,000 males (1911).	(a)+(b).	Excess (+) or Deficiency (−) of actual numbers of female deaths against male deaths in Calendar year 1918.
	(a)	(b)	(c)	(d)
Ratnagiri	31	+175	+206	+6,773
Satara	69	+6	+75	+6,863
Bijapur	75	−11	+64	+5,285
Nasik	78	−15	+63	+6,837
Kolaba	46	+13	+59	+2,718
Ahmednagar	67	−15	+52	+3,310
West Khandesh	72	−20	+52	+2,654
East Khandesh	68	−17	+51	+5,708
Sholapur	88	−37	+51	+3,307
Surat	33	+1	+34	+1,078
Poona	55	−27	+28	+3,349
Dharwar	45	−29	+16	+3,740
Belgaum	47	−33	+14	+1,425
Broach	49	−62	−13	−114
Kanara	29	−44	−15	−73
Panoh Mahals	34	−55	−21	−496
Thana (including Bombay Suburban)	40	−70	−30	+1,738
Ahmedabad	34	−85	−51	+622
Kaira	34	−132	−98	−2,308

SECTION 8.—SEX PROPORTIONS BY AGE-PERIODS.

339. The diagrams facing this paragraph show (i) for the General population, and (ii) for Zoroastrians, the distribution of the numbers in each age period by sex, expressed as the departures of the percentages of the number of each sex in each age period from 50 per cent. of the total persons in that age period. Thus the greatest individual departure is in the age period 35—40, where males constitute 55·7 per cent. and females 44·3 per cent. of the whole. The percentages of recorded male and female births are approximately 51·9 and 48·1, respectively. But owing to higher mortality of male children the numbers left alive at the end of one year are very nearly the same. Thereafter male mortality continues in excess, so that, in the case of children of 2, 3 and 4, females are increasingly in excess. After about 7 the mortality rates begin to draw together, and after 15 the rate of mortality of females increases rapidly. At about 35 or later the mortality becomes approximately equal, and from 36 onwards mortality among males exceeds that of females. These remarks are based entirely on the Actuary's findings in 1911. It would be useless to argue from the Registration statistics, since the same errors in stating ages as occur in the Census will appear in Vital Statistics also.

340. The dotted lines are the proportions according to the actually recorded figures. The smooth curves are a possible approximation to the state of affairs as it would be if ages were recorded correctly. Too much attention not be laid to these smoothed curves which are not intended to be more than a general guide.

341. As regards the actual age returns it will be seen that, judging from the general direction of the smoothed curves and the above notes on mortality incidence, either the ages of females are markedly understated or the ages of males markedly overstated in age periods 10—15 and 15—20, and the opposite in age period 20—25. Either one or other of these causes, or a combination of both can bring about the noticeable departures of the proportions from what they probably

should be. Reference is therefore invited to section 9 of the Age Chapter, where the direction and extent of general errors is fully discussed. It may however be noted that these errors only affect the proportions of the sexes in any given age period to the extent to which one sex is mis-stated more than the other. Thus we know from that discussion that in age periods 15—25 both sexes are displaced by mis-statements so as to come into other periods. But, so far as that displacement is equal, it cannot affect the sex-proportions. In age group 10—15 there is an excess of males and a deficit of females, and this acts as a double disturbance of the sex-proportions, producing the greatest divergence from the smoothed curve observable in any portion of the diagram. In age group 20—25 on the other hand, while both sexes show deficits these deficits are nearly equal, and the consequent disturbance of the sex-proportions is slight.

342. After 30 the zigzags in the dotted lines are brought about by the greater inaccuracy of returns of female ages, resulting in a higher selection of ages ending with digit 0 than in the returns for males. This again has already been commented on in the same discussion referred to.

343. In the second diagram are shown the similar curves for Zoroastrians, which as being an educated community was expected to and does show smoother results. Generally speaking the errors are much the same in general direction, but less marked in degree than those of the general population. It was impossible to draw smoothed curves for Zoroastrians since the mortality incidence by age periods for that community is not known, and will not necessarily be the same as for the general population.

344. In both these diagrams, as the percentage can be read off from the diagram itself if required, they are not put in the form of a Table.

CHAPTER VII.—CIVIL CONDITION.

SECTION 1.—THE BASIS OF THE FIGURES.

345. Civil condition means whether married, unmarried or widowed. The instructions on the Cover of the Enumeration book were :—

“Enter each person, whether infant, child or grown up, as either married, unmarried or widowed. Divorced persons should be entered as widowed.”

The last sentence is important, and the divergence in the matter of treating divorced persons between the Census practice of various parts of the empire is referred to in Appendix K.

In the Code the following were the supplementary instructions :—

“A woman who has never been married must be shown as unmarried, even though she be a prostitute or a concubine. This included cases of women who have been married to a god, or to a sword, or to a tree, etc. Such marriages are not reckoned as marriages for Census purposes. On the other hand women who have been married to men, and are recognised by custom and Civil law as married, are to be entered as married or widow as the case may be, even though they have not been through the full ceremony, for instance widows who have taken a second husband by the rites known as ‘pat’, ‘natra’, ‘udki’, etc. The test is Civil law and not religious authority.”

The supplementary instructions will at once reveal certain difficulties which have to be contended with in India. There is a danger in both directions.

346. In some cases women who are not married may be shown as married. Thus the Murlis, who are prostitutes dedicated to the god Khandoba of Jejuri, are sometimes regarded as married to the god, since a regular marriage ceremony is gone through at dedication. Cases of marriage to inanimate objects occur in both sexes. Sometimes the motive is to avert danger.

The act is one of magic. A dangerous marriage is guarded against by marrying the woman or man to a tree or a bunch of flowers, which object thereafter receives the attention of the evil influence instead of the human being concerned. In other cases, where castes, such as some in Gujarat, marry only at long intervals of years, or where a bridegroom cannot be found for a girl, the girl is married to the inanimate object, which is then destroyed, leaving her free to marry as a widow by the widow-remarriage ceremony. Reference is only made to these customs as indicating a possible source of error in our figures. For a full account of Indian marriage customs the Indian Census Report of 1911 should be consulted, as well as those of earlier Censuses. There are also some interesting notes in the Bombay Census Report of 1911.

347. The danger in the other direction is chiefly the danger of very strict Hindu enumerators refusing to regard a remarried widow as married at all. The danger is partly one of language as well as of religious belief. The word “*lagna*”, meaning marriage, is commonly restricted to regular first marriages of virgins, and the corresponding vernacular terms which we use to translate “married” are in consequence also sometimes restricted in use to persons married in that way.

348. However the errors just referred to are probably small in either direction, and are likely to balance one another. A more potent source of unbalanced error arises from the danger that a woman, who, being unmarried or a widow—usually the latter—is living with a man, will get herself returned as married. In the Karnatak, where sexual relations are very lax, and a large proportion of the educated classes keep a concubine either alone or in addition to a wife, the danger of this error is considerable. It is not however possible to obtain statistics showing its frequency. And since some of the concubines, if widows, will be correctly returned as such, and others will be actually married women, who have deserted their husbands, or been deserted by them, the resulting error, though unbalanced, is not likely to be large.

SECTION 2.—THE MEANING OF “MARRIED” IN INDIA.

349. The interest of the figures of Civil condition centre round the proportions of the three classes, whether considered *en masse*, or by religions, castes or age groups.

350. It cannot be too strongly emphasised that our figures, especially in the lower age groups, are not comparable with the figures of Western Countries, since marriage in India on the one hand, and in Europe on the other, means totally different things. "Marriage" in this country includes the contracts and contractual states of both "betrothal" and marriage, using these terms in their English sense. The main ceremony in India is really the betrothal ceremony, although there may be various preliminary minor functions when the marriage is arranged between the two fathers-in-law. After marriage (especially among Hindus) the bride does not leave her father's house. There is a second minor ceremony on the occasion of her departing for her husband's or, in popular parlance, her father-in-law's house. But this is a private ceremony restricted to relatives. It is true that cohabitation usually begins at the earliest possible moment. But, although this is known, we have no definite statistics of the ages of women at cohabitation, and our Census figures do not supply them.

351. In passing I may say that it would on the face of it seem possible to obtain these statistics at future Censuses, by adding in all cases of married women the supplementary question—"Are you living at your father's house or at your father-in-law's?" The exact terms would differ in different localities. Sometimes the terms are "mother's" and "mother-in-law's"; and among some castes and strata of society it might be best to put the question—"Are you living with your husband?" But with reasonable care the statistics ought to be obtainable without an abnormally high degree of error. And Social Reformers and Eugenists would then have something definite to work on.

SECTION 3.—MARRIAGE CUSTOMS.

352. Restrictions on marriage selection are numerous and varied. It is not possible in this Report to give any elaborate details of the different kinds of restrictions prevalent in this Presidency, because they do not seem to affect the figures. Students of marriage customs will find much of interest in the last few India Census reports which supplement the standard works of Anthropologists like McLennan, Westermarck, Fraser and others. The restrictions are all variants of the three principles of endogamy, exogamy and hypergamy. Endogamy and exogamy usually exist side by side. The endogamous groups are either castes or sub-castes within the caste. There are few castes which have not their endogamous groups. The exogamous divisions are—among the Brahmans "*gotras*", and among the lower caste-strata "*nukhs*" or "*devaks*" or "*balis*" according to language. The last two are usually loosely referred to as *totems*, although that word (itself due to an original mispronunciation) is strictly applicable only to certain customs of the North American Indians.

353. It seems most reasonable to suppose that the "*devak*" or "*bali*" system of classifying exogamous divisions was a Dravidian custom, indigenous in India, and imitated by the Aryan and later invaders, who named their divisions after reputed ancestral saints. The exact meaning of the word "*bali*" is unknown. It may mean a "creeper". But it is much more likely that it is an original word having no other significance than that which it now bears. "*Devak*" is probably a late word, adopted as a term to replace "*bali*" among castes using Sanskritic languages.

354. Although the arrangements of an endogamous group with a number of exogamous divisions within it has already been mentioned as tending to secure the continuance of what is called in genetics the "pure line"; yet on the other hand endogamy presses rather severely on very small castes. We have not since 1901 tabulated castes in detail. If the caste column in the schedules is retained at the next Census I suggest that the complete tabulation of every caste would be of interest. If the figures are compared with those of 1901, I expect that it will be found that some of the smaller castes have died out or been absorbed in others. And this will be mainly due to the difficulty of maintaining the endogamous group when reasonable limits of smallness are passed.

355. Hypergamy would seem to be quite different in principle from the other two kinds of prohibition. It is essentially a custom of an aristocratic race, in which, within the single endogamous group, and without compulsory exogamy, the higher social strata wish to maintain their social prestige. For this reason, together with

its prevalence among the Rajputs, it is probable that it is neither Aryan nor Dravidian in origin, but was an introduction of one or more of the later invaders, usually loosely referred to as Scythians and Huns. In contradistinction to endogamy and exogamy, hypergamy would seem to be liable to exercise a direct effect on the figures. Assuming equality or approximate equality of the sexes at birth, or at any rate at the marriage age, it follows that for every male in the highest stratum who marries down, one female in that stratum must go without a husband; while for every female in the lowest stratum who marries up, one male in that stratum must go without a wife. The point is not however of much importance in this Presidency, where the most noticeably hypergamous caste, the Rajputs, are not of much importance, and where our figures of Rajputs are so vitiated by the return under that caste name of a heterogeneous collection of Kolis, Kanbis, Kathis, members of artisan castes, and even Dheds, that it was not thought worth while to include Rajput in the Castes selected for Table XIV.

SECTION 4.—DISTRIBUTION OF THE POPULATION BY CIVIL CONDITION.

356. The changes which have taken place in the distribution of the population by Civil Condition at the last five Censuses are shown in the lower half of the following Table:—

Subsidiary Table No. 75.—Comparison between Age Composition and Distribution by Civil Condition of every 1,000 of each sex, 1881—1921, British Districts.

	MALES.					FEMALES.				
	1881	1891	1901	1911	1921	1881	1891	1901	1911	1921
0—15 ..	309	391	388	372	382	388	387	382	371	389
15—20 ..	508	508	516	525	513	504	500	511	518	498
50 and over ..	93	101	96	103	105	108	113	107	111	113
Unmarried ..	478	473	483	472	481	317	319	330	314	333
Married ..	470	480	458	473	451	504	515	486	509	484
Widowed ..	52	47	59	55	68	179	166	184	177	183

357. In this Table the first three lines relate to age distribution only and the last three to distribution by Civil Condition only. They are quite independent of one another. The idea in showing them side by side is that in the long run changes in the proportionate number of persons in the different age periods is bound to affect the proportionate number of persons in the three Civil Conditions; and these three age periods are those in which the three Civil Conditions are mainly found.

358. It is almost certain that this idea is correct, and that there ought to appear some degree of correlation between the rise or fall in the proportion of any of the three age periods and the rise and fall of the corresponding group for Civil Condition. But the correlation does not appear in even half the number of possible chances. Thus in 1891 the proportion of widowed males and widowed females falls although the corresponding age period rises. In 1901 the proportions of unmarried and widowed in both sexes rise in spite of a fall in each case in the corresponding age periods. Altogether there are 24 possible chances of correlation, that is to say cases in which the rise or fall in the age proportion can be compared with a rise or fall in the proportion for the corresponding Civil Condition. In only 11 cases is their correlation. In 7 cases the age proportion falls but the proportion for Civil Condition rises, and in 6 cases the age proportion rises but the proportion for Civil Condition falls. Nevertheless I feel sure that if a longer series of samples could be obtained a fair degree of correlation would be found to exist. In 1891 the fall in the number of widowed in spite of a marked rise in the proportions of persons aged 50 and over would appear to be due to prosperity. The decade was remarkably favourable; and enhanced vitality was accompanied by fewer separations of

husband and wife. In 1901 the general upset of economic conditions would naturally be accompanied by a rise in the proportion both of widows and also of children whose parents had not been able to afford to marry them off. In 1911 a decade of comparative prosperity, the proportion of married rose considerably, and much more rapidly than the proportion of persons in the middle age period. At this Census there is strong correlation in all the six possible cases. Apart from the actual changes in the age proportions, which I have just suggested as being in the long run the most potent determinant in the changing proportions for Civil Conditions, there may be at this Census other extraneous factors. Thus the high level of prices and the occurrence of the Sinhasth festival in the Census year will both have tended to reduce the number of early marriages, while the ravages of Influenza will have had some influence in increasing the proportion of widowed. The rise in the proportion of unmarried females in ages 0—15 to the highest point on record is much more likely to be caused by the major and minor factors indicated above than by any change in the customs of the people. He would be very rash, who deduced change of custom in India from any figures which fall short of absolute and overwhelming proof. Thus in 1911 a special sorting of the slips for certain reforming Hindu Sects in the Punjab revealed the fact that, in spite of their preaching, marriages of females in the Sect took place even earlier than among ordinary Hindus.

359. The figures in the margin are prepared on a different basis from the figures in the Table under discussion. In that Table we have the proportionate distribution of the whole population by three age periods and by the three Civil Condition. In the margin we have the proportion of unmarried girls in every thousand at each individual age period. It will be seen that the proportion of female children below 5 years of age, who are married or widowed, namely 23 (1,000—977), is slightly lower than the corresponding number (29) in 1911. But there are almost exactly the same number of infant marriages as in 1891. And in the next three

Number of unmarried females in every 1,000 females of each of the first four age periods, 1891—1921, British Districts.

	1891	1901	1911	1921
0—5 ..	976	983	971	977
5—10 ..	821	878	836	860
10—15 ..	403	486	440	486
15—20 ..	89	147	111	125

age periods the proportions of married or widowed are lower than in 1911, but equal to or even higher than the proportions in 1891. No change of custom in this matter is indicated by the figures.

360. In this matter the proportions shown by the States and Agencies differ always from those shown by British Districts.

Number of unmarried females in every 1,000 females in each of the first four age groups, British Districts and States and Agencies, compared, 1901—1921.

	BRITISH DISTRICTS.			STATES AND AGENCIES.		
	1901	1911	1921	1901	1911	1921
0—5	983	971	977	978	950	953
5—10	878	836	860	868	837	860
10—15	486	440	486	559	498	571
15—20	147	111	125	171	127	136

The differences are curious. The married and widowed children of ages 0—5 are always slightly higher in the States. The proportions at ages 5—10 are about the same. But at ages 10—15 and 15—20 there are invariably far more unmarried and consequently far fewer married and widowed than in British Territory.

361. The reasons for these differences are unknown. But it is probably largely a question of the caste composition of the population, different castes having different marriage customs. The point is of little importance. I cited these figures largely in order to demonstrate the continuity of our figures from Census to Census.

SECTION 5.—DISTRIBUTION OF EACH RELIGION SEPARATELY
BY CIVIL CONDITION.

362. At the end of the Chapter Subsidiary Table No. 80 gives the distribution of each separate age period by each the three Civil Conditions for each of the main Religions separately. The changes from Census to Census are too small to justify deductions of any far-reaching character.

SECTION 6.—TERRITORIAL DIFFERENCES IN THE MATTER OF CIVIL CONDITION.

363. As the Presidency Proper forms one whole as opposed to Sind, and the more detailed examination by Natural Divisions in the past has not revealed any palpable difference between different portions of the Presidency Proper in the matter of age at marriage and widowhood, the figures are examined this time for two units only, as shown in the following Table.

364. It is clear that marriage among all communities takes place considerably later in Sind.

Subsidiary Table No. 76.—Distribution by Civil Condition of 1,000 of each sex at certain ages in each Religion, Presidency Proper and Sind (British Districts only).

Religion and Natural Division.	MALES.																	
	All ages.			0—5			5—10			10—15			15—40			40 and over.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Presidency proper—																		
All Religions ..	484	470	66	990	10	..	964	34	2	858	135	7	244	703	53	32	763	205
Hindu (including Animist).	459	474	87	989	10	1	903	35	2	840	144	7	225	720	55	29	763	208
Musalman ..	490	450	60	991	8	1	977	22	1	921	75	4	321	632	47	38	776	186
Jain ..	480	434	86	988	10	2	980	18	2	932	63	5	340	601	59	65	666	269
Christian ..	542	419	39	980	13	1	951	46	3	902	90	8	475	499	26	67	805	128
Zoroastrian ..	566	392	42	908	2	..	995	5	..	985	13	2	626	360	14	100	780	120
Sind—																		
All Religions ..	557	366	77	998	2	..	988	11	1	947	51	2	403	524	73	72	695	233
Hindu (including Animist).	545	370	76	998	2	..	990	9	1	935	63	2	371	559	70	75	676	240
Musalman ..	562	361	77	998	2	..	988	11	1	950	47	3	413	513	74	71	700	229
Jain ..	553	388	59	1,000	..	..	969	31	..	932	68	..	391	544	65	152	661	187
Christian ..	622	352	26	1,000	..	..	989	7	4	975	16	9	648	338	14	124	786	90
Zoroastrian ..	579	308	53	1,000	..	..	1,000	..	..	1,000	..	..	534	436	30	58	707	175
Religion and Natural Division.	FEMALES.																	
	All ages.			0—5			5—10			10—15			15—40			40 and over.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Presidency proper—																		
All Religions ..	320	490	190	973	26	1	837	155	8	441	529	30	42	821	137	15	372	613
Hindu (including Animist).	313	494	103	972	27	1	828	164	8	408	561	33	36	824	140	14	370	616
Musalman ..	361	465	174	982	17	1	922	73	5	681	307	12	57	832	111	15	388	597
Jain ..	307	456	237	969	28	3	875	116	9	591	384	25	30	791	179	8	298	694
Christian ..	422	443	135	971	27	2	883	110	7	808	181	11	184	728	86	48	440	506
Zoroastrian ..	468	395	137	996	4	..	990	10	..	979	20	1	428	529	43	60	533	407
Sind																		
All Religions ..	403	451	146	998	2	..	971	28	1	775	210	6	80	819	101	23	453	524
Hindu (including Animist).	393	439	168	998	2	..	964	34	2	709	284	7	48	819	133	23	364	618
Musalman ..	405	457	138	998	2	..	973	25	2	801	194	5	90	820	90	23	480	497
Jain ..	418	411	171	1,000	..	..	933	47	..	790	193	12	103	729	168	50	330	620
Christian ..	515	416	69	1,000	..	..	992	8	..	992	8	..	300	664	36	122	576	302
Zoroastrian ..	579	348	73	1,000	..	..	1,000	..	..	1,000	..	..	546	430	24	56	672	272

SECTION 7.—CROSS DIVISION BY AGES AND CIVIL CONDITIONS.

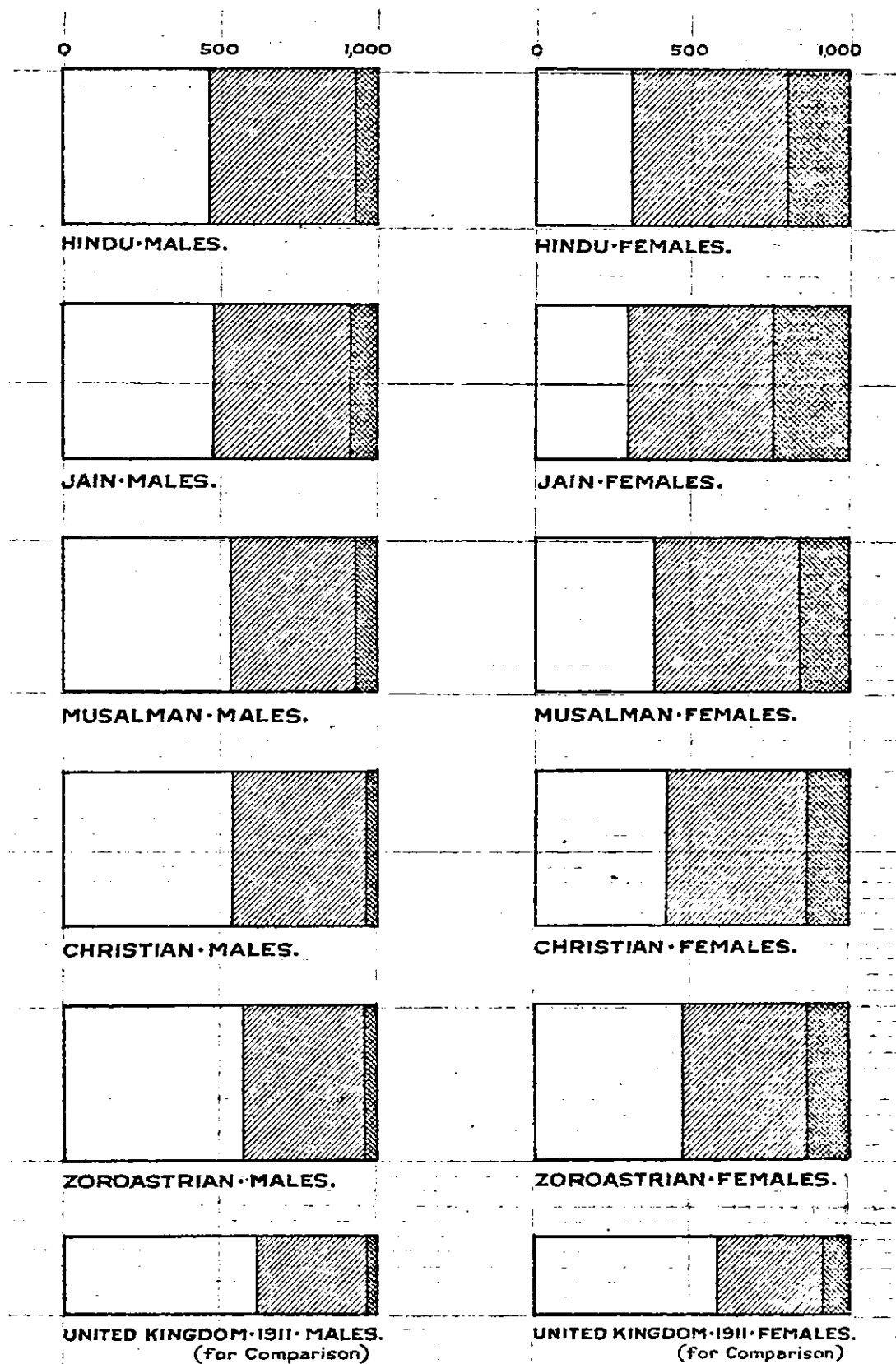
365. In the Table which follows 10,000 of each sex in each religion are distributed in twelve groups, that is by cross-division into four age periods and the three Civil Conditions. The diagrams also illustrate the same facts. In the first diagram is shown simply the distribution of each sex in each religion into the three Civil Conditions independently of questions of age. The diagram produces the effects which would have been expected, and requires little comment. The corresponding distribution of the population of the United Kingdom is also given. *But in comparing this distribution with those of the Indian Religions the difference between the meaning of "married" in Europe and in India is to be borne in mind.*

366. In the second diagram the cross-division by age periods is brought out. The number of juvenile marriages among Christians would surprise foreign readers. But it has always to be remembered that the low caste converts to Christianity in India do not change their customs when they change their religions.

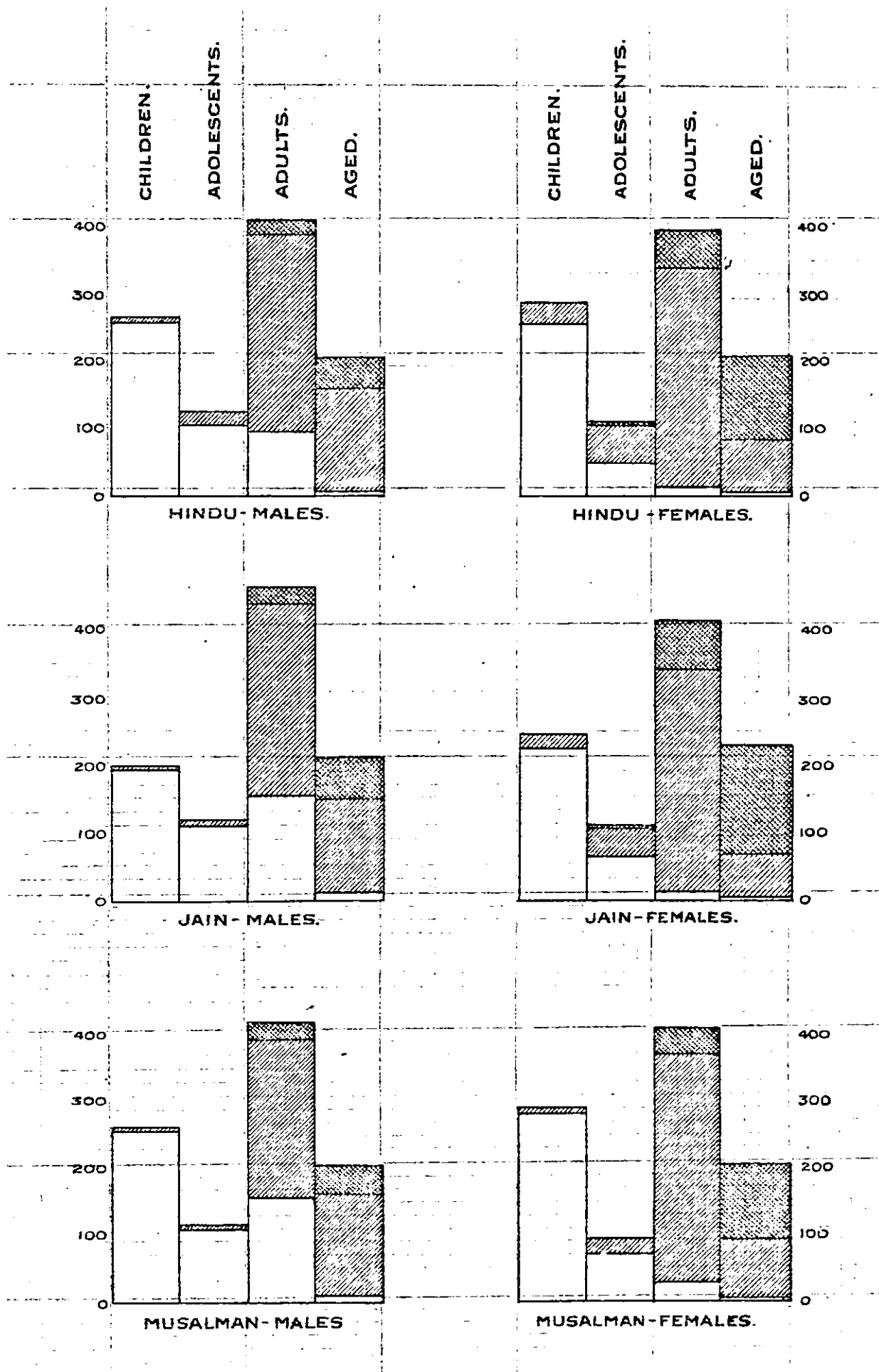
367. In this diagram the scale chosen was too small to allow of the small number of child widow to be shown. The Table gives the number per 10,000. It is very small, smaller I think than the writing of travellers would lead one to expect. The number of child widows among Christians is higher than among Musalmans, and the number under 10 years of age is almost the same as among Hindus.

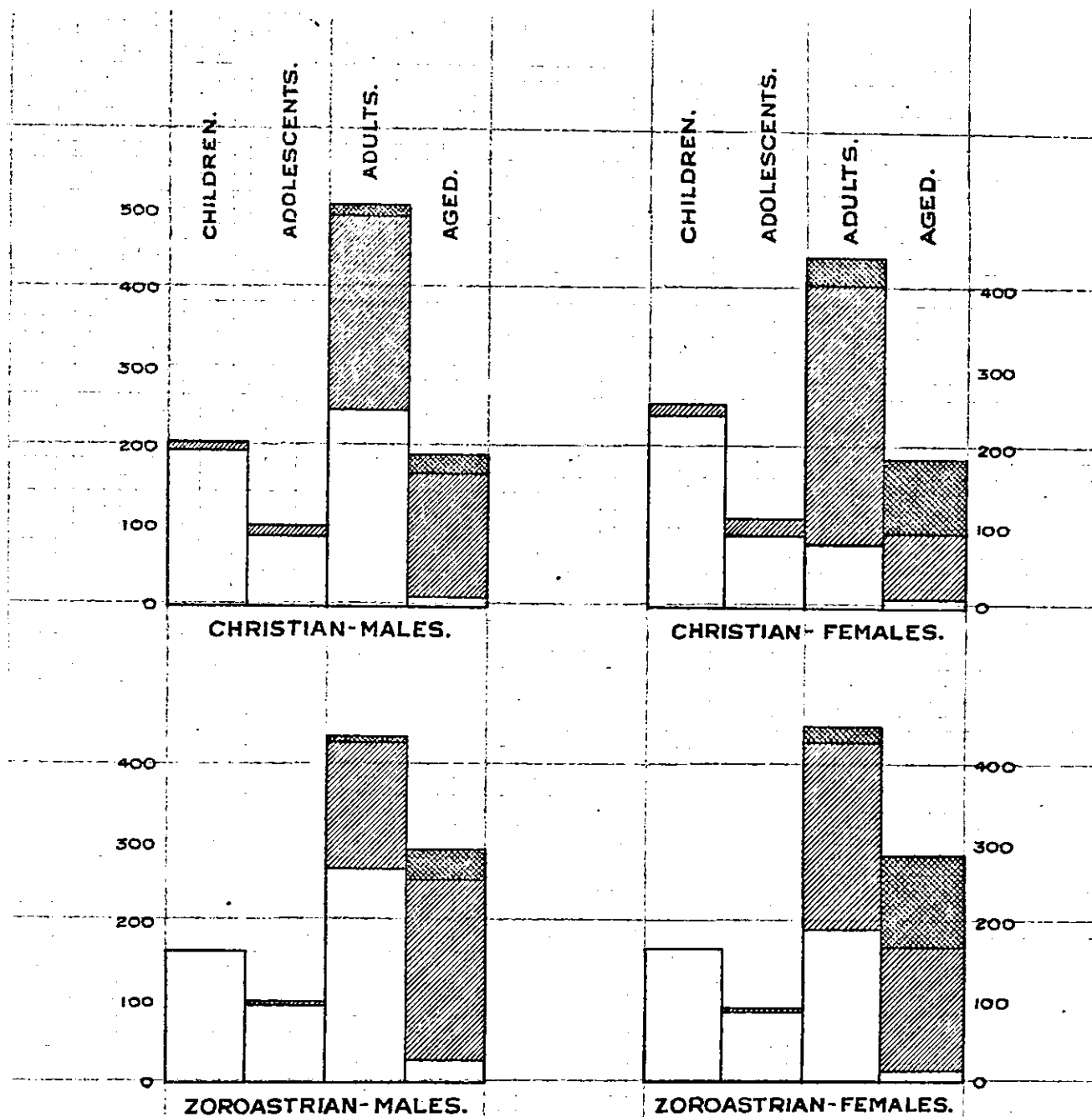
Subsidiary Table No. 77.—Distribution by main age periods and Civil Condition of 10,000 of each Sex and Religion (British Districts).

Religion and Age.				Males.			Females.		
				Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1				2	3	4	5	6	7
All religions—	..	..	..	4,806	4,514	680	3,328	4,839	1,835
0—10	..	..	..	2,549	52	3	2,585	230	12
10—15	..	..	..	1,053	147	8	515	510	29
15—40	..	..	..	1,124	2,760	234	102	3,279	523
40 and over	..	..	..	80	1,555	435	34	811	1,271
Hindu—	..	..	..	4,638	4,687	675	3,175	4,011	1,014
0—10	..	..	..	2,566	60	3	2,546	269	14
10—15	..	..	..	1,053	172	8	455	592	34
15—40	..	..	..	954	2,887	228	143	3,263	554
40 and over	..	..	..	65	1,568	436	31	787	1,312
Musulman—	..	..	..	5,364	2,922	714	3,886	4,599	1,515
0—10	..	..	..	2,587	20	2	2,806	75	5
10—15	..	..	..	1,066	65	2	723	235	8
15—40	..	..	..	1,589	2,330	269	216	3,374	400
40 and over	..	..	..	122	1,501	440	41	915	1,102
Jain—	..	..	..	4,807	4,332	861	3,073	4,558	2,269
0—10	..	..	..	1,960	29	4	2,273	182	15
10—15	..	..	..	1,118	75	6	652	419	27
15—40	..	..	..	1,591	2,803	273	129	3,276	741
40 and over	..	..	..	138	1,420	572	19	681	1,586
Christian—	..	..	..	5,460	4,160	380	4,250	1,421	1,329
0—10	..	..	..	1,957	60	4	2,402	177	12
10—15	..	..	..	902	88	8	920	199	12
15—40	..	..	..	2,468	2,484	127	835	3,210	380
40 and over	..	..	..	133	1,528	241	92	925	925
Zoroastrian—	..	..	..	5,663	3,913	421	4,723	3,938	1,339
0—10	..	..	..	1,657	6	0	1,682	12	0
10—15	..	..	..	984	13	2	920	18	1
15—40	..	..	..	2,730	1,593	64	1,952	2,376	192
40 and over	..	..	..	292	2,301	358	169	1,532	1,146



DISTRIBUTION OF 1,000 OF EACH SEX IN EACH MAIN RELIGION BY CIVIL CONDITION, BRITISH DISTRICTS. 1921.






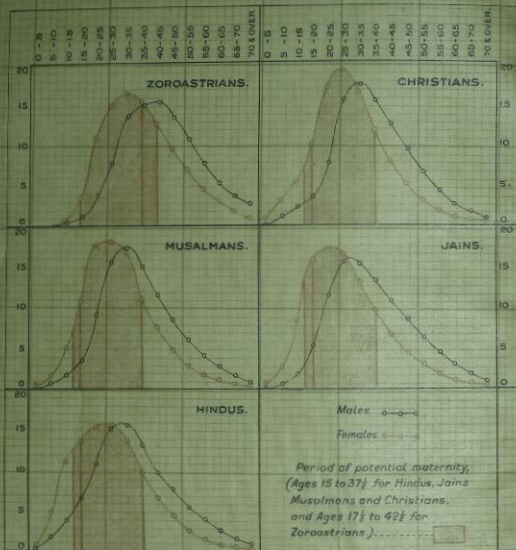


DISTRIBUTION OF 1,000 OF EACH SEX IN EACH MAIN RELIGION BY (i) FOUR AGE PERIODS AND (ii) CIVIL CONDITION, BRITISH DISTRICTS-1921.

The four age periods are 0-10.....CHILDREN.
10-15.....ADOLESCENTS.
15-40.....ADULTS.
40 and over.....AGED.

The three Civil Conditions

	Unmarried.
	Married.
	Widowed.



SMOOTHED CURVES OF THE DISTRIBUTION BY AGE
OF 100 MARRIED OF EACH SEX BY RELIGIOUS:
BOMBAY PRESIDENCY. 1921.

SECTION 8.—PROPORTIONS OF EFFECTIVE MARRIAGES.

368. In the diagram facing this Paragraph are shown the percentage distribution by age periods of 100 Married Males and 100 Married Females in each of the three main Religions. The values shown are not the number of married in the total for each age period, but the number in each age period for the total married. The following is the Table showing the percentages given by the crude figures.

Subsidiary Table No. 78—Percentage distribution by age of every 100 Married Males and Married Females in each main Religion, Bombay Presidency, 1921.

	MALES.					FEMALES.				
	Hindu.	Jain.	Musalman.	Zoroastrian.	Christian.	Hindu.	Jain.	Musalman.	Zoroastrian.	Christian.
0—5	0·4	0·2	0·1	..	0·3	1·0	0·6	0·2	0·1	0·7
5—10	1·4	0·5	0·6	0·1	1·2	4·8	2·7	1·4	0·2	3·4
10—15	4·0	1·7	1·8	0·3	2·2	11·7	8·0	5·2	0·6	4·6
15—20	6·0	5·2	3·7	0·9	3·2	12·3	15·6	10·5	2·4	9·1
20—25	10·2	11·3	8·9	3·7	7·9	15·2	17·2	17·3	10·8	17·0
25—30	15·8	15·7	15·1	7·8	15·5	15·9	16·0	18·6	14·8	19·5
30—35	16·1	15·7	17·7	14·1	17·5	13·8	13·5	17·3	17·2	15·8
35—40	12·5	13·0	13·4	14·2	15·3	8·0	8·7	9·4	14·0	11·0
40—45	10·8	11·4	12·0	15·7	12·4	7·5	7·5	0·2	13·1	8·3
45—50	6·8	7·8	7·1	11·7	8·6	3·6	3·8	3·8	8·7	4·4
50—55	7·1	7·4	8·3	12·2	7·2	3·1	3·5	3·7	7·9	3·3
55—60	3·0	3·7	2·8	6·9	3·2	1·0	1·2	1·0	4·0	1·2
60—65	3·5	3·8	4·6	6·1	3·3	1·0	1·2	1·5	3·0	1·1
65—70	1·0	1·2	1·0	3·0	1·0	0·2	0·3	0·3	1·2	0·3
70 and over	1·4	1·4	2·0	3·2	1·2	0·3	0·3	0·6	1·1	0·3

369. Owing to incorrect age returns these percentages, when plotted, give rather irregular curves. Smoothed curves were therefore passed through the plotted points. The effective period of marriage, or period of potential maternity was then fixed as follows for females—(i) for religions other than Zoroastrian, $17\frac{1}{2}$ to $42\frac{1}{2}$, and (ii) for the other religions 15 to $37\frac{1}{2}$. Christians are given the same periods as Hindus, etc., because the Christian figures, especially of the Married, consist mainly of Indian Christians. The mixture of a fair number of Europeans, however, introduces some small degree of uncertainty; and it is probably largely due to the European element that the peak of the female curve in that religion comes so high. The Zoroastrians were given a later and longer period of potential maternity in view of their much higher life value, and their later marriages. The inner vertical lines within the red area give the inner period of effective marriage, namely $17\frac{1}{2}$ to $37\frac{1}{2}$ for all religions.*

370. The areas of potential maternity, especially when the inner period, $17\frac{1}{2}$ — $37\frac{1}{2}$ alone is considered, show three distinct types. (i) In the case of Christians and Musalmans the individuals in this period are evenly spread over it, the weight being in the centre from $22\frac{1}{2}$ to $32\frac{1}{2}$, and the values of the two outer portions low. (ii) In the case of Hindus and still more of Jains the weight is all towards the early periods, and (iii) in the case of Zoroastrians the weight is all towards the late periods. This means that the majority of children among Musalmans and Christians should be borne to mothers between the ages of $22\frac{1}{2}$ and $32\frac{1}{2}$, among Hindus to mothers between the ages of $17\frac{1}{2}$ and $32\frac{1}{2}$, among Jains to mothers between the ages of $17\frac{1}{2}$ and $27\frac{1}{2}$, and among Zoroastrians to mothers between the ages of $27\frac{1}{2}$ and $37\frac{1}{2}$.

* Some difficulty may be felt in regard to the values of the beginning and end of the red area. The actual points indicated by small circles, through which the smoothed curves pass are the smoothed percentage distribution values of the numbers in each five year periods. But with the smoothing of the curves the area enclosed by any portion of the curve may be regarded as a rectangle with a truncated top. To get the rectangle represented by, say, age period 15—20 we must take the vertical series of blue squares on each side of the line marked 15—20. Of these the left hand series represents the ages 15— $17\frac{1}{2}$ and the right hand the ages $17\frac{1}{2}$ —20. Consequently the area enclosed by the vertical lines marked 15—20 and 35—40 respectively represents the ages $17\frac{1}{2}$ — $37\frac{1}{2}$.

371. Reading off from the smoothed curve the percentage values of the following age periods we get:—

Subsidiary Table No. 79.—Percentage of married females in period of potential maternity to total married females in the main religions.—

Age-period.	Hindus.	Jains.	Musalmans.	Zoroastrians.	Christians.
15—17½	6·6	7·3	4·4	..	4·0
17½—22½	14·6	16·6	15·0	7·0	13·8
22½—27½	15·3	16·9	18·0	13·0	18·4
27½—32½	14·9	14·8	17·6	15·7	18·0
32½—37½	10·6	11·2	13·8	15·8	13·9
Total 17½—37½	55·4	59·5	64·4	51·5	64·1
37½—42½ .. .. .	..	..	..	13·9	..
Grand Total	62·0	66·8	68·8	65·4	68·1

372. But these percentages give us only the proportions of *married* females in the age periods classed as effective.

Community.	Percentage of married females in effective age periods to total married females.	Percentage of married females (all ages) to Total females.
Hindu	62·0	48·8
Jain	66·8	42·6
Musalman	68·8	45·8
Zoroastrian	65·4	39·4
Christian	68·1	44·2

Unequal proportions of married females in the different communities prevent the percentages being a guide to the child-bearing capacity of the community. For instance, as an imaginary example if there were no married females outside the age periods chosen, the percentage would be 100. But the actual child bearing capacity of the community would only be 100 per cent. of potentialities if there were also no unmarried or widow *within* the periods chosen. We

can however arrive at an arbitrary index of child-bearing capacity, by combining the percentages arrived at above with the percentages of married females to total females, which we can get from the Table. The two sets of percentages are given in the margin. The products of these percentages, with the decimal point readjusted, are as follows:—

Percentages of Married Females in the effective age periods to total Females in the main Religions.

Hindu.	Jain.	Musalman.	Zoroastrian.	Christian.
30·3	28·5	31·5	25·8	30·1

373. It was not possible to get this information from the Tables, because the age periods there given do not coincide with those chosen for this study. It was only possible to get them from the smoothed curves, and this method, especially when dealing with curves drawn to so small a scale as those in the diagram, is necessarily only an approximation. If any reader is dissatisfied with the method chosen then we must select as our effective age periods particular age groups as shown in the Tables. Taking 15—35 for all religions except Zoroastrian and 20—40 for the latter we get the following exact percentages from the Tables—

Percentages of Married Females at age periods 15—35 for Hindu, Jain, Musalman and Christian, and 20—40 for Zoroastrian, to Total Females.

Hindu.	Jain.	Musalman.	Zoroastrian.	Christian.
27·9	26·9	29·1	24·3	27·1
<i>The same, adding in age period 35—40 for the others, and 40—45 for Zoroastrians.</i>				
32·1	30·1	33·4	27·5	32·0

374. The percentage values obtained from the smoothed curves necessarily fall between these two values in the case of each community, because the periods there taken are 15—37½ for the other communities and 17½—42½ in the case of Zoroastrians. In the last-mentioned case the number of years covered by the smoothed curve percentages (17½—42½) and those shown in the lower line above (20—45) are as a matter of fact the same, namely 25 years; but from the curves it will be seen that the number of married females in the period 17½—20 is much less than the number in the period 42½—45. In the other communities the number of years included in the three sets of percentages do not correspond, being 20 years and 25 years in the two sets of percentages worked out from the Tables, and 22½ years in the percentages worked out from the smoothed curves. And for that reason the latter percentages are intermediate between the other two.

375. The points to which the whole argument leads up are—

(i) *that there are proportionately more married females of child-bearing age available among Hindus and Christians, fewer among Musalmans, fewer again among Jains, and fewest of all among Zoroastrians, and*

(ii) *that with an equal proportional incidence of childbirth to married females of child-bearing age the average age of the mothers will (as seen from the curves and from the percentage Table No. 78) be lowest among Jains, then a little older among Hindus, considerably older among Musalmans and Christians, and oldest of all among Zoroastrians.*

376. The physiological or eugenic import of these deductions must be left to experts in these branches of science.

SECTION 9.—INFLUENCE OF BRAHMANIC TEACHING ON THE NUMBER OF WIDOWS.

377. The fact that orthodox Hinduism views with disfavour the remarriage of widows is well known. Castes like those mentioned in Appendix C, who petition to be treated as something (Hinduistically) higher than they really are, frequently boast of the rigour with which they forbid such remarriage. On the other hand there are many castes which, theoretically at any rate, permit remarriage. And there are others in which Brahmanic influence is virtually nil. On the face of it therefore as we descend the Hinduistic scale, there should be a decreasing proportion of widowed females. To test this I broke up the castes in Imperial Table XIV into four sections, selecting only those castes in whose case the Ethnographic Survey, or other information, gave me a definite statement of their customs in this respect. The four sections are—

I.—Castes High in the Hinduistic Scale, in which Remarriage of Widows is Absolutely Forbidden.

Brahman-Audicch, Brahman-Deshasth, Brahman-Chitpavan, Brahman-Gaud Sarasvat, Vani-Khadayata, Vani-Modh, Vani-Shrimali, Kanbi-Kadava, Kanbi-Leva.

II.—Castes in the Middle of the Hinduistic Scale, in which Remarriage of Widows is Allowed either under Certain Restrictions, or is Allowed in some sections and Disallowed in others.

Sutar, Kunbi, Darji, Dhobi, Koshti, Sali, Kumbhar, Teli, Ghanchi, Mali.

III.—Castes low in the Hinduistic Scale, in which remarriage of widows is allowed either with or without restrictions.

Dhed, Mahar, Holiya, Mang, Madig, Bhangi.

IV.—Castes or Tribes in which Brahmanic Influence is virtually nil.

Bhil, Chodhra, Dhodia, Dubla, Katkari, Naikada, Vaghri, Varli.

378. The figures, when taken out, exhibited the phenomenon expected. They are as follows :

Section.	Total Females.	Widowed Females.	Number of widowed females per 1,000 total females.
I	276,353	67,236	244
II	358,508	75,159	209
III	461,809	76,612	166
IV	315,245	30,598	97

379. To a certain extent, of course, allowance has to be made for the lower survival value in the IIIrd and IVth Sections, with a consequent smaller number of females in the higher age groups, where widows are chiefly found. But a study of Subsidiary Table No. 61, in Chapter V, where the age distribution of the castes is given, will show that while the porportion of females in the highest age groups in castes in Section IV is lower than the same porportion for castes in Section I, the difference is slight, and is not comparable with the wide difference (97 to 244) in the proportion of widowed females.

380. Beyond the above discussion of the proportions of widowed females it is not proposed to go into detail regarding the distribution by Civil Condition for selected castes. A Table on the subject is relegated to the end of this volume. Reference is also invited to Chapter VII of Mr. MacGregor's Report of 1911, where the different caste customs and their influence on the figures were more or less fully discussed.

Subsidiary Table No. 80.—Distribution by Civil Condition of 1,000 of each sex, religion and main age period at each of the last five Censuses.

NOTE.—The 1921 figures exclude, and the figures for previous Censuses include Aden. But the resulting errors are negligible.

Religion, Sex and age.	Unmarried.					Married.					Widowed.				
	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
All religions—															
Males ..	481	472	483	473	478	451	473	453	480	470	66	55	50	47	52
0—5 ..	901	986	991	991	979	8	13	0	9	20	1	1	..	..	1
5—10 ..	969	963	970	964		30	35	28	34		1	2	2	2	
10—15 ..	873	858	857	839	840	121	137	134	156	152	6	5	9	5	8
15—20 ..	657	630	631	585	570	323	343	348	404	414	15	12	21	11	16
20—40 ..	180	185	176	163	162	746	770	764	800	788	65	45	60	37	50
40—60 ..	40	40	46	37	43	787	815	806	837	819	173	145	148	126	138
60 and over ..	33	32	40	29	36	623	641	641	667	662	344	327	319	301	302
All religions—															
Females ..	333	314	330	319	317	484	509	486	516	504	183	177	184	166	179
0—5 ..	977	971	983	976	916	22	28	10	24	81	1	1	1	..	3
5—10 ..	860	830	878	821		133	150	115	176		7	5	7	3	
10—15 ..	496	440	486	403	426	487	542	483	583	540	27	18	31	14	25
15—20 ..	125	111	147	80	88	831	851	796	884	699	44	38	57	27	43
20—40 ..	31	20	20	10	18	819	840	818	806	834	150	134	153	115	148
40—60 ..	17	14	18	11	10	461	467	467	490	471	522	510	515	499	519
60 and over ..	15	12	15	8	8	151	139	144	137	156	834	840	841	855	836

SEC. 9.—INFLUENCE OF BRAHMANIC TEACHING ON THE NUMBER OF WIDOWS. 131

Religion, Sex and age.	Unmarried.					Married.					Widowed.				
	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hindu—															
Males	464	450	463	451	455	469	495	476	502	492	67	55	61	47	53
0—5	990	984	989	990	975	9		16	10	10	24		1	..	1
5—10	965	955	966	957		33		43	32	41	2		2	2	2
10—15	854	834	846	812	813	139	160	144	182	177	7	6	10	6	10
15—20	611	592	594	533	517	372	395	382	455	461	17	13	24	12	19
20—40	151	146	136	124	127	785	910	802	839	822	64	44	62	37	51
40—60	32	33	36	30	35	795	821	814	845	825	173	146	150	125	140
60 and over	28	27	31	23	29	625	641	644	668	666	347	332	325	300	305
Females	313	293	310	301	294	491	522	496	529	519	191	185	194	170	187
0—5	974	965	980	971	806	25		24	19	28	101		1	1	1
5—10	835	800	838	784		157		195	135	212	8		6	7	4
10—15	421	356	426	324	347	548	622	530	660	623	31	22	35	16	30
15—20	82	67	99	58	53	870	801	839	913	899	48	42	62	20	48
20—40	26	21	21	16	15	814	836	815	864	827	160	143	164	120	158
40—60	15	14	14	10	9	446	449	447	477	453	530	537	539	513	538
60 and over	13	11	12	7	7	137	127	126	123	143	850	862	862	870	850
Musalman—															
Males	537	539	546	546	547	392	403	400	404	401	71	56	54	50	52
0—5	996	995	996	996	901	4		5	4	4	8		..	..	..
5—10	984	986	984	986		15		13	15	13	1		1	1	1
10—15	940	939	893	934	928	57	59	103	64	71	8	2	4	2	3
15—20	798	791	747	773	743	191	201	243	220	248	11	8	10	7	9
20—40	292	290	290	282	274	633	658	656	676	678	75	52	54	42	48
40—60	62	60	83	64	70	780	794	779	805	793	178	146	138	131	137
60 and over	47	45	68	47	55	619	643	632	664	647	334	312	300	289	298
Females	389	383	403	388	377	460	470	451	466	461	151	147	146	146	162
0—5	992	992	992	992	973	8		8	7	8	26		..	..	..
5—10	955	956	955	950		42		43	42	49	3		1	3	1
10—15	748	743	722	720	695	243	250	265	275	296	9	7	13	5	9
15—20	266	254	317	211	194	707	724	648	770	778	27	22	35	19	29
20—40	40	35	50	26	25	849	864	838	882	856	111	101	112	92	119
40—60	20	16	30	12	12	625	537	551	547	522	455	448	419	441	466
60 and over	22	14	23	12	12	207	184	213	191	196	771	802	764	797	792
Jain—															
Males	481	466	454	450	461	433	452	570	480	476	80	82	76	61	63
0—5	983	976	980	991	984	10		12	11	9	15		2	12	..
5—10	990	974	973	971		18		19	25	28	2		7	2	1
10—15	933	905	882	869	846	62	85	110	125	147	5	10	8	6	7
15—20	740	686	637	634	605	245	297	314	356	382	15	17	19	10	13
20—40	238	231	211	235	234	691	705	725	722	716	71	64	64	43	50
40—60	69	74	70	70	77	703	715	746	772	753	226	211	184	158	165
60 and over	46	53	46	52	58	514	539	573	590	591	440	408	381	358	351
Females	307	281	272	269	267	456	474	499	516	506	237	245	229	215	227
0—5	970	965	973	969	905	27		33	26	30	92		3	2	1
5—10	876	860	838	807		115		134	152	180	9		6	10	4
10—15	503	490	456	438	413	392	478	514	547	561	25	23	30	15	26
15—20	81	50	46	23	24	870	895	900	937	927	49	55	54	40	49
20—40	18	13	10	6	6	769	765	801	830	802	213	222	139	164	192
40—60	9	7	5	4	4	364	374	409	433	417	627	610	586	558	579
60 and over	7	6	4	1	2	102	91	106	107	117	891	903	890	892	891

CHAPTER VII.—CIVIL CONDITION.

Religion, Sex and age. 1	Unmarried.					Married.					Widowed.				
	1921 2	1911 3	1901 4	1891 5	1881 6	1921 7	1911 8	1901 9	1891 10	1881 11	1921 12	1911 13	1901 14	1891 15	1881 16
Christian—															
Males	546	556	572	587	559	416	409	387	382	404	38	35	41	31	37
0—5	987	986	990	996	997	12	13	10	4	3	1	1	..	..	..
5—10	952	956	971	993	997	45	41	27	7	3	3	3	2	..	..
10—15	904	894	913	970	975	88	99	80	21	24	8	7	7	..	1
15—20	841	828	808	878	836	151	161	180	120	161	8	11	12	2	3
20—40	413	456	458	514	415	559	522	510	469	538	28	22	32	17	27
40—60	74	70	72	66	82	828	831	818	840	805	98	99	110	94	112
60 and over	51	51	60	36	115	689	681	649	655	603	260	268	291	270	279
Christian—															
Females	425	418	417	430	419	442	445	425	429	430	132	137	158	141	142
0—5	972	961	981	994	995	26	38	17	6	5	2	1	2	..	..
5—10	826	892	893	986	995	107	104	94	14	7	7	4	12	..	..
10—15	813	801	741	871	857	176	191	200	127	140	11	8	59	2	3
15—20	498	485	371	380	303	485	501	538	602	675	17	14	91	9	22
20—40	119	112	93	85	57	780	784	782	809	818	101	104	125	106	125
40—60	53	49	37	29	15	515	480	478	465	492	432	471	485	476	463
60 and over	40	24	26	12	7	200	159	144	138	158	760	817	820	850	885
Zoroastrian—															
Males	566	586	580	550	497	391	372	373	414	462	43	42	47	36	41
0—5	998	996	998	995	995	2	4	2	4	5	..	..	..	1	..
5—10	995	988	994	993	995	5	11	6	6	..	..	1	..	1	..
10—15	985	980	979	978	927	13	18	20	21	72	2	2	1	1	1
15—20	960	959	927	889	677	38	40	72	109	317	2	1	1	2	6
20—40	537	544	498	342	171	445	439	502	637	798	18	17	30	21	21
40—60	117	86	45	28	10	804	822	848	891	884	79	82	107	81	100
60 and over	40	26	23	19	13	701	698	679	732	697	250	276	298	249	260
Zoroastrian—															
Females	472	489	506	426	373	394	370	350	426	477	134	141	144	148	150
0—5	996	996	996	997	985	4	4	4	3	15	..	..	..	..	..
5—10	990	989	990	988	985	10	10	8	12	..	..	1	2	..	..
10—15	980	972	950	916	796	10	25	48	84	202	1	3	2	..	2
15—20	847	854	793	613	273	148	140	198	378	711	5	6	99	9	16
20—40	328	323	281	129	34	620	615	641	805	868	52	62	78	66	98
40—60	73	44	79	5	2	625	611	546	635	600	392	345	375	360	392
60 and over	20	16	51	4	1	285	239	200	229	240	695	746	749	767	719

CHAPTER VIII.—LITERACY.

PART I.—GENERAL LITERACY.

SECTION 1.—THE BASIS OF THE FIGURES.

381. In the case of Literacy, possibly more than any other Census factor, it is essential to explain the basis of the figures before examining them.

382. Comparison with past Censuses is rendered difficult by constant changes in the system. In 1891 there were three categories—“Learning”, “Literate” and “Illiterate”. The definition of these was as follows:—“Learning”, *i.e.*, under instruction, either at home, at school or at college. “Literate”, *i.e.*, able both to read and write any language, but not at the moment under instruction. “Illiterate,” *i.e.*, not under instruction, and not able both to read and write any language. It was found however in tabulating the results that the returns were vitiated “by the omission at the one end of children who had been long at school, and at the other of many of the more advanced students, who returned themselves as literate. There were thus marked discrepancies between the number of persons recorded as learning and the corresponding statistics of the Education Department.”* Consequently at the 1901 Census the “learning” class was entirely abandoned, and the instructions to Enumerators were as follows:—“Enter in this column against all persons of whatever age, whether they can or cannot both read and write any language.” Unfortunately no degree of proficiency in reading and writing was laid down with the result that in the opinion of the next Superintendent the 1901 figures of literates “included a number who could only sign their name, or laboriously spell out a printed book.”† It must however be remembered that this is a personal opinion only, not supported by anything in the 1901 Census Report. It is in practice, if not in intention, almost an *ex-parte* statement, liable to give the impression that the figures of literates in 1901 were too high, and thus afford an argument to prove the advancement of literacy in the decennium at the end of which it was written.‡

383. The 1911 instructions were—“Enter against all persons who can both read and write any language the word ‘literate.’ Against persons who cannot read and write any language make a cross in the column.” This was supplemented in the instructions to Supervisors, which were intended to be dictated to Enumerators,—and at that Census probably were,—by the explanation that the test was ability to write a letter to a friend and read his reply. At this Census the same test was applied. The instructions on the Cover of the Enumeration Book ran—

“Enter against all persons who can *both* read and write a letter in any language the word *literate*. Against persons who cannot read and write such letter this column should be blank.”

There were no supplementary instructions. The last sentence of the instructions is important. The rule that for illiterates the column should be left blank is possibly not sound. It is desirable, if possible, so to frame the schedule and instructions that no column can be left blank. This is because if, as in a case like this, a column is left blank, it may mean one of two things—either that the column has been correctly left blank according to the instructions, or that the question to which the column is devoted was in this instance never put. At the same time I do not suggest that such an omission to put the literacy question occurred in so many cases as to materially affect the figures.

384. Since 1901 the practice of recording the language in which any person is literate has been abandoned, and, I think it will be admitted, wisely. There is a separate column for the English language. And as regards general literacy the particular language is immaterial.

* 1911 Census Report for India, p. 291. See also Mr. Enthoven's discussion on pp. 125-7 of the Bombay Census Report, 1901.

† Bombay Census Report, 1911. para. 184.

‡ On the other hand the opinion was borne out by Mr. Gait who wrote— p. 296 of the India Report—“In the absence of any definite test there can be no doubt that many persons were then entered as literate, who would not have been so entered on the present occasion”. Since however, we have no formula for adjusting the 1901 figures, it is inevitable that we should continue to use the literate returns of that Census side by side with those of 1911 and 1921.

SECTION 2.—ATTITUDE OF THE PUBLIC TOWARDS EDUCATION.

385. There are few heads of the Census statistics which are more eagerly looked out for by serious thinkers than the figures of literacy. The extent to which the enormous mass of illiteracy in India is being reduced is naturally a matter of considerable interest. A man or woman who cannot read is shut out from one of the most valuable heritages of the human race,—a heritage on a par with the discovery of fire, the wheel, and the use of metals. Yet it may be mentioned in passing that the idea entertained in some western countries that India is pining for learning, which its Government refuses to provide, is ridiculously wide of the mark. Apart from all questions of finance before there can be any marked advance towards general literacy there must be the will to learn. That will seems at present to be lacking among large bodies of men, and among the vast majority of Indian females, and those who represent them. It is interesting to note that the Indian attitude towards education, and especially female education, is essentially Brahmanic. Medieval Sanskrit literature, which is usually strongly tinged with Buddhistic influence, gives the impression of women as, on the whole, better educated than now. For instance Vincent Smith recalls how, when Hiuen Tsang gave a lecture at the Court of King Harsha on the Mahāyāna System of Buddhism, the king's widowed sister sat by his side throughout, and expressed much interest in the arguments.* Still more noticeable is the well-known story in the Kathasarit-sāgara of the queen whose lord misunderstood her because she addressed him in pure Sanskrit, whereas he was not acquainted with any language other than his own Prakrit mother-tongue. With the re-establishment of Brahmanism women once more disappeared from society, and by the time of the Abbe Dubois it was considered a disreputable thing for a woman to be educated, such accomplishments being reserved for prostitutes. This attitude persists till the present day, as the following true story will prove. A widowed Brahman lady of Western India decided to train as a Hospital nurse. Her mother fell at her feet and implored her to abandon her idea, saying that "only bad women work for their living".

386. There is no doubt that in its attitude towards women and female education Buddhism has remained true to its early ideals. Burma for instance is always far in advance of India in literacy. The number per mille who were literate in Bombay and Burma in 1911 were as follows. And it is to be remembered that Burma includes the wild hill tribes all along its frontier.

Literate per mille, 1911.

	Males.	Females.
Bombay Presidency	120	14
Burma	376	61

And by religions for the whole of India including Burma—

Literate per mille, 1911, India.

	Males.	Females.
Buddhist	404	58
Hindu	101	8
Musalman	69	4

387. I have given the 1911 figures because the 1921 figures are not yet available. So far as this Presidency is concerned the two Censuses show the following figures:—

Literate per mille in the Bombay Presidency.

	Males.	Females.
1911	120	14
1921	138	23

So we show no signs at present of catching up Burma or the Buddhists.

* The Early History of India. Oxford, 1914, p. 347.

SECTION 3.—EFFECT OF FREE AND COMPULSORY EDUCATION IN BARODA. ✓

388. But what is of the greatest interest and importance to this Presidency is the position of Literacy in Baroda. It is well-known that free and compulsory primary education has been introduced in that State. The process has been gradual. In 1893 it was introduced tentatively in a small area. During the following thirteen years it was nominally extended to the whole State, though at the time of the 1911 Census it was stated that it still remained to be introduced in one-third of the total number of villages. It was also stated that the system had not been in force long enough to produce any marked effect on the Census statistics, and that 148,000 children at school had not been able to be shown as literate, since they could not read or write a letter, but were very nearly up to the standard required.

389. It is absolutely essential *not* to compare the Baroda figures with those of the *whole* of the Bombay Presidency. The Baroda State is interspersed with one portion of the Presidency only, namely Gujarat; and the Baroda figures may fairly be compared with those of Gujarat only. The following are the figures for three Censuses.

Subsidiary Table No. 81.—Progress of Literacy in Baroda and the rest of Gujarat.

	Number per 1,000 who were literate.					
	1901		1911		1921	
	Males.	Females.	Males.	Females.	Males.	Females.
Baroda State ..	163	8	175*	21	210	40
Gujarat—						
1. British Districts ..	206	16	201	26	223	42
2. Kathiawar ..	186	13	178	20	185	36
3. Palanpur Agency ..	80	3	74	5	86	8
4. Mahi Kantha ..	121	3	90	5	100	9
5. Reva Kantha ..	Not available.		73	6	80	13

390. Nor is the superiority of British Territory due to differences in the age distribution. Excluding those below 5 years of age we get—

	Number of literates per 1,000 (aged 5 and upwards), 1921.		
	Persons.	Males.	Females.
Baroda	147	240	47
British Districts of Gujarat ..	155	254	49
Kathiawar	130	213	41

391. The corresponding figures for the Baroda territory in Kathiawar only are Persons 167, Males 264, Females 63. It would not however be correct to draw therefrom any inference unfavourable to the Educational administration of the Kathiawar States, because a good deal depends on the character and composition of the population. The Baroda territory in Kathiawar is small in extent. Excluding Baroda City this territory (*i. e.*, the Dwarka and Okhamandal Divisions) show higher literacy rates than any of the other regions of the State, from which it may be inferred that there is some element in the population of those Divisions which lends itself specially to education. And this factor may be less pronounced in the rest of Kathiawar.

* It may be noted that had all the 148,000 children referred to above been literate, and males, the ratio of literate to total males in Baroda would only have risen to 189, and would still have been below the ratio in British Districts of Gujarat, as it is again at this Census.

392. We can also compare the Baroda figures with those of British Districts of Gujarat by age groups. Clearly the effect of a compulsory education system which has been gradually established itself during several decades, and has now presumably reached its final stage, ought to show itself in a much higher percentage of literates in the lower age groups. The hope held out by the Baroda Superintendent in 1911 was that the education system had not yet had time to leave its traces on the figures. The 1921 Census was to tell a very different tale. The following are the figures :—

Subsidiary Table No. 82.—Comparison of literacy in Baroda with literacy in British Districts of Gujarat by age groups, 1921.

		Number per mille who are literate in certain age groups.							
		0-10.		10-15.		15-20.		20 and over.	
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Baroda	1921	23	10	281	99	355	105	263	34
	1911	24	10	275	72	258	40	216	15
Gujarat British Districts	1921	40	18	264	83	342	94	209	39
	1911	31	9	252	58	271	56	262	26
Kathliawar	1921	45	14	238	76	291	85	237	32
	1911	33	7	260	52	250	42	225	20

393. To some extent these figures show possibly a more progressive state of things in Baroda. The British Districts of Gujarat lead in the first group—the genuineness of the figures of which are always doubtful—and in the highest group. Baroda leads in ages between 10 and 20. The reason for the great disparity in group 0—10 is not known. But there is little doubt that no importance should ever be attached to the literacy figures of this group. One reason is that different enumerators will take a different view of the educational standard reached by the small schoolboy ; and secondly—a point of much greater importance—in this group come those persons, believed to be numerous, who learn up to the fourth standard or thereabouts and then leave school for a purely agricultural life, with the result that their education is wasted, and in after life they are not really able to “ write a letter to a friend and read his reply ”.

394. The 1911 figures show that the proportions of literates in these four age groups in British Districts of Gujarat and in Baroda followed much the same lines then as now. The disparity in the first group was not so marked. And Baroda then led only in group 10—15. At the same time the improvement in the case of Baroda, and her gradual approximation to the Gujarat figures are not phenomena of so marked a character as to demonstrate satisfactorily the success of the compulsory educational system.

395. But there is yet another point of great importance. It is desirable to ascertain how far compulsory education in Baroda results in enhanced literacy among those strata of Hindu society which otherwise usually remain uneducated. In Gujarat generally any boy of certain castes, such as Brahman, Vani, Soni, etc., can secure education if his father is willing to send him to school. There are hardly any persons of those castes who require their small sons to help them in business. On the other hand in the middle strata, such as Leva Kanbi, Kadava Kanbi, etc., some fathers can well afford and some can ill afford to spare their sons from their farms or shops ; while when we come to the lowest strata, such as Dhed, Bhangi, and other untouchable castes, depressed castes such as Vaghri and jungle tribes such as Chodhra, Dubla, etc., it may be said that almost all small boys have to be turned on to earn money as soon as they can scare birds from the crops, or take the cattle out to graze. Free and compulsory education would be of little value if it merely enables the upper strata to get their sons educated for nothing, and leaves the lower strata as ill-educated as before, but with pockets depleted by paying fines for the non-attendance of their children.

396. We can therefore compare the standard of literacy among certain select-castes in British Districts of Gujarat and Baroda State, respectively.

Subsidiary Table No. 83.—Comparison of literacy in Baroda and British Districts of Gujarat, in respect of certain Castes : 1921.

GUJARAT.				BARODA.			
Caste.	From what district examined.	Number per 1,000 who are literate.		Caste.*	Number per 1,000 who are literate.		
		Males.	Females.		Males.	Females.	
Brabhan-Audich ..	All Gujarat Districts ..	700	211	The same ..	580	122	
Vani-Khadayata ..	Ahmedabad, Kaira ..	752	180	The same ..	688	162	
Vani-Modh ..	Ahmedabad, Surat ..	672	324	The same ..	723	255	
Vani-Shrimali ..	All except Surat ..	728	244	The same ..	717	235	
Ghanchi ..	Ahmedabad, Surat ..	600	82	The same ..	481	47	
Kanbi-Leva ..	Ahmedabad, Kaira, Broach.	426	73	The same ..	368	69	
Kanbi-Kadava ..	Do. ..	359	43	The same ..	191	16	
Bharvad ..	Ahmedabad, Kaira ..	10	1	The same ..	32	9	
Babari ..	Do. ..	13	2	The same ..	18	6	
Chodhra ..	Surat ..	27	2	Chodhra (Animist only)† ..	58	..	
Dhoda ..	Do. ..	31	1	Dhoda (Animist only)† ..	72	6	
Dubla ..	Do. ..	21	1	Dubla Hindu ..	29	4	
				Dubla Animist ..	16	6	
Nalkada ..	Do ..	22	1	Nalkada (Animist only)† ..	30	6	
Dhed ..	All Districts ..	65	6	Dhed ..	70	8	
Bhangi ..	Do. ..	28	2	Bhangi ..	43	7	

397. On the whole there is certainly a tendency for the lower social strata to be better educated than in British Territory. But the wide gap separating these strata from the higher (and educated) strata, though possibly diminished, still remains. And the diminution is too small to be regarded as a valid argument for the spread of education among the masses through making it compulsory.

SECTION 4.—PROGRESS AND EXTENT OF LITERACY.

398. In the following Table the progress of Literacy is shown since 1881. Owing to varying standards adopted prior to 1911 the figures for the earlier Censuses are to be accepted with caution. The 1901 figures are believed to be somewhat too high, or at any rate to err, if at all, on the side of excess. This has been fully discussed in paragraph 392. For 1881 and 1891, when there were three categories—“Literate” or “Instructed”, “Learning” or “Under Instruction” and “Illiterate” or “Uninstructed” the figures have been treated as follows: All persons entered as “Learning” or “Under Instruction” have been counted, if of less than 15 years, to “Illiterate”, and, if above 15 years, to “Literate”.

Subsidiary Table No. 84.—Progress of literacy since 1881.

Region.	Number per 1,000 (all ages) who were literate.							
	MALES.				FEMALES.			
	1891.	1901.	1911.	1921.	1891.	1901.	1911.	1921.
Whole Presidency ..	90	115	120	138	5	9	14	24
British Districts ..	102	113	121	140	6	10	16	25
States and Agencies ..	92	121	118	134	4	7	11	21

It was not possible to give the 1881 figures because literacy figures were not fully abstracted in Sind at that Census. It will be noticed that the improvement of Female education has advanced more rapidly than that of males. But there was

* The Hindu figures in these castes are trivial.

† Examined in all cases for the whole State.

more ground to make up. The approximation of the Literacy in States and Agencies to the Literacy in British Districts is largely due to territorial distribution. The States are mainly in Gujarat, where the standard of Literacy is high, Kathiawar especially being well-educated.

399. The differing standards of literacy in the different Religions is shown below :—

Subsidiary Table No. 85.—Literacy in Natural Divisions by Religion, 1921.

Natural Division.	Number per mille (all ages) who are literate.							
	Hindu and Animistic.		Jain.		Musalman.		Indian Christian.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Bombay City	250	89	766	253	245	75	..	..
Gujarat	198	32	855	304	296	33	232	83
Konkan	99	13	578	176	177	24	131	35
Deccan	98	10	508	65	161	15	305	220
Karnatak	133	11	259	21	117	14	..	..
Sind	225	41	640	242	31	6	478	441

NOTE.—In the case of Indian Christian the figures are available only for certain districts for which they were separately taken out for Imperial Table IX, namely—Gujarat Kaira; Konkan, Thana and Kanara; Deccan, Ahmednagar and Poona; and Sind, Karachi.

400. It was not thought worth while taking out the figures for Zoroastrians by Natural Divisions, because the standard of literacy differs little in the case of that Religion from region to region.

401. The confining of the Indian Christian figures to the few districts indicated has resulted in a rather wider divergence of the proportions than would otherwise have been the case. In Thana and Kanara we are concerned with an ancient Christian community of a semi-agricultural character; hence the low standard of literacy. The Sind figures (*i.e.*, the Karachi figures) are the figures of a purely urban community, which naturally shows high rates.

402. It will be seen that the figures for Hindus and Musalmans show quite different proportions in Sind on the one hand and in the Presidency proper on the other. In Sind the cultivating classes are Musalman, and the clerical posts, both public and private, are absorbed by Hindus, mainly Amil Lohanas. In the Presidency the enormous numbers of Hindu and Animistic cultivators and labourers keep down the per mille rate of Hindus, while the Musalmans are largely traders. In the Karnatak the comparatively high proportion of cultivating Musalmans is shown by the lower literacy rate.

403. In the case of Jains the Karnatak Jains are almost all cultivating Chaturths, and those of the north almost entirely traders and clerks (*vide* paragraph 190 of the 1911 Report, and page 131 of the 1901 Report). The Sind Jains are a very small and purely trading community; hence the high rates.

404. The general progress of Literacy in the Presidency as a whole has already been shown. In the Table below are given the figures of the last two Censuses by Natural Divisions of British Districts, and for certain of the main States and Agencies.

Subsidiary Table No. 86.—Literacy in 1911 and 1921 compared.

Natural Division or State.	Year.	Number per mille (all ages) who were returned as Literate.		
		Persons.	Males.	Females.
Bombay City	1911	227	282	123
	1921	241	290	142
Gujarat	1911	117	201	26
	1921	136	220	42
Konkan	1911	55	103	9
	1921	62	109	17
Deccan	1911	49	90	8
	1921	63	111	14
Karnatak	1911	53	109	5
	1921	75	135	13
Sind	1911	47	79	8
	1921	55	84	17
Cutch	1911	82	148	18
	1921	86	152	24
Katiawar	1911	101	179	20
	1921	111	185	35
Mahi Kantha	1911	48	90	5
	1921	55	100	9
Reva Kantha	1911	41	73	6
	1921	48	80	13
Palanpur Agency	1911	41	74	5
	1921	48	86	8
Kolhapur	1911	41	76	5
	1921	86	151	17
Southern Maratha Country States	1911	56	102	6
	1921	69	123	13

405. The figures of British Districts can be analysed by Religion, Locality and Caste. To take religion first the following are the ratios :—

Subsidiary Table No. 87.—Literacy in British Districts by Religion, 1921.

Religion.	Number per mille who are literate, all ages.		
	Persons.	Males.	Females.
Hindu and Animistic	81	138	19
Jain	311	543	123
Musalman	54	88	12
Zoroastrian	732	787	674
Christian	350	424	252
1. Indian Christians	245	306	169
2. Others	902	928	849

406. In order to see whether the progress of the different religions has

Religion.	Number per mille literate.					
	1901.		1911.		1921.	
	M.	F.	M.	F.	M.	F.
Hindu and Animistic.	114	5	120	9	138	19
Jain	514	28	525	65	543	123
Musalman	60	11	74	7	88	12
Zoroastrian	750	541	789	644	787	674
Christian	371	204	400	236	424	252
1. Indian Christians.	Details not abstracted.		278	148	306	169
2. Others			908	804	928	849

been uniform I give in the margin the comparative figures at all ages for the last three Censuses. The 1911 figures include Aden. But the errors thus introduced are negligible.

SECTION 5.—LITERACY IN CITIES AND IN THE ADJACENT RURAL AREAS.

407. A particular feature of Literacy in India is the much higher standard in Cities and towns. The reason seems to be simply that in such areas there are more facilities. But it must also be remembered that in towns there are fewer openings for the remunerative employment of children on wages. In the country children start work very early, and the greatest obstacle to the spread of education is the need of children as herdsman to take the cattle out. The number of children who, on any given day, are herding cattle must be simply enormous. Secondary to herding in importance comes scaring birds from the crops. But whereas herding is a twelve-month job, scaring the birds lasts only for the month or so that the grain is ripening.

Subsidiary Table No. 88.—Comparison between Literacy in Cities and in the surrounding Rural Areas.

Locality.	Number per mille (all ages) who are literate.		
	Persons.	Males.	Females.
Ahmedabad City	242	342	110
Rest of the Ahmedabad District	103	171	28
Surat City	324	469	161
Rest of the Surat District	275	277	36
Poona City	264	392	124
Rest of the Poona District	63	105	20
Sholapur City	125	208	36
Rest of the Sholapur District	40	75	5
Hubli City	196	316	63
Rest of the Dharwar District	91	165	14
Karachi City	198	268	88
Rest of the Karachi District	30	48	8
Hyderabad Town	250	300	185
Rest of the Hyderabad District	43	73	4

SECTION 6.—LITERACY BY CASTES.

408. So far as literacy by Castes is concerned, the figures for which are available in Imperial Table IX, it cannot be too strongly emphasised that Indian children are born into the world with unequal chances of receiving instruction, and thereby passing into a higher plane of civilisation. I have referred to this in the Chapter on Castes as an argument for retaining the Caste column in our schedule. The inequalities exhibited by the figures of literates from Caste to Caste are emphatically not proportionate to the capacity of the particular castes to receive instruction but are due in the main to the peculiar structure of Hindu Society, which keeps all Castes at a definite and unalterable social and economic level. The Education Department usually finds Mahar boys and boys of other depressed castes as quick to learn up to the age of 16 as the boys of higher castes. And when it is remembered that these boys are not admitted to the school-house, but have to sit outside on the verandah, or even in the sun and dust of the street, the fact will be seen to be remarkable. Almost more significant is the result of introducing education among the Chodhras, Dublas, Dhodias, and other "Kaliparaj" tribes in South Gujarat. A boarding school now exists at Ghodsamba in the Surat District exclusively for these boys. It has been found that these also are at any rate up to the age of 16, the intellectual equals of the boys of the highest castes. There are some observers who say that the Kaliparaj boys are the superior. But others deny this view and consider that it is due to the assignment of too much weight to the cases of one or two exceptional boys. At any rate the evidence is against the view that the Brahman boy is, in the beginning, better able to acquire instruction than the Mahar or the Chodhra. Capacity to learn is probably a character transmitted by inheritance; and, though it may be subject to modification either voluntary or involuntary, those modifications are probably not transmissible. It almost certainly has different values in different races. The Kaliparaj are probably of very pure racial stock whether Dravidian or Pre-Dravidian* (Austic)? is not known and not likely to be known until extensive and really serious anthropometric observations are made; but a Pre-Dravidian origin is the

* I use the term "Pre-Dravidian" loosely to cover those early tribes which do not appear racially identical with the Dravidians; and not with any intention of suggesting that the Dravidians originated elsewhere than in India.



VANI-KHADAYATA



KAYASTH PRABHU



BHATIA



BRAHMAN-AUDICCH



BRAHMAN-DESHASTH



BRAHMAN-CHITPAVAN



GHANCHI



BRAHMAN-GAUD SARASVAT



SHIA BOHRA



SUNNI BOHRA



LEVA KANBI (PATIDAR)



SONAR



LOHANA (SIND)



INDIAN CHRISTIAN. (DECCAN)



INDIAN CHRISTIAN. (GUJARAT)



INDIAN CHRISTIAN. (EAST INDIAN)



KOSHTI



SALI



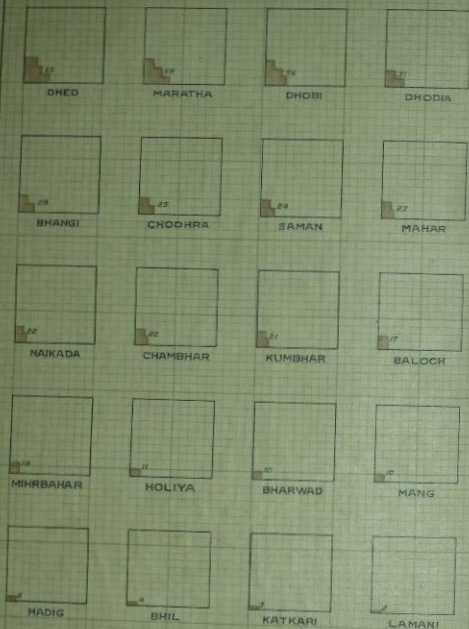
SUTAR



TELI

NUMBER OF LITERATE MALES IN EVERY 1,000 MALES IN
SELECTED CASTES, 1921.....(Continued on next plate)

Each of the large squares represents 4,000 persons, and
each of the small squares 10.



NUMBER OF LITERATE MALES IN EVERY 1,000 MALES IN
SELECTED CASTES, 1921. (Continued from previous plate)

Each of the large squares represents 1,000 persons and
each of the small squares 10.

most probable. The racial origin of the Mahars is very obscure, but their main component element is probably Dravidian. The Brahmans differ sub-caste by sub-caste, some being largely Aryan, others mainly "Scythian." It would be most interesting if some educationalist would collect statistics to prove the degree of "capacity to learn" in the case of each caste. Complete incapacity could be called 0, and the absolute extreme capacity 100. These limits and the intermediate values could be fixed on some such basis as the percentage of boys who, commencing school attendance at any age below 10, and not leaving in the interval, pass some given standard within three years. This ought not to be very difficult to ascertain. We would then be able to make a classified list of castes according to their position in the "Scale of Capacity to Learn." The advantage of this would be twofold. First, similar positions in the scale would be a small but not negligible argument in favour of possible common racial origin; and secondly, by comparing the percentage position in the Scale with the per mille ratio of literates in Table IX we could ascertain the extent to which education is available in the case of each Caste. This last point is perhaps not very important, since Table IX is for Literacy in the Census sense only, and the figures are not given by age periods. No one except an imbecile is unable to learn to read and write a letter; so the Scale of Capacity and the Ratio of Literates are possibly not mathematically commensurable. Nevertheless, even though exact mathematical treatment were impossible, the comparison of the two scales would be of interest, and would go far to combat the view (seldom expressed but often held) that Mahars and Bhils are not educated because they are not worth educating.

409. The above remarks are deliberately confined to boys under 16. An officer of the Educational Department is of opinion that although the Mahar and Kaliparaj boys are as well able to assimilate knowledge up to that age as the boys of high castes, their capacity for learning thereafter deteriorates rapidly. If this is so, then Secondary and still more University Education would be wasted on these Castes. However, accepting his opinion, based on his personal observations, as correct, we have to consider whether this character—early cessation of the power of assimilating ideas—is hereditary, or functional or environmental. If it is an hereditary, transmissible character, then the possibility of remedying it is almost hopeless. But I suggest that it is partly functional, i.e., due to physiological difficulties which could be overcome, and partly environmental. To take the possible physiological causes first: there seems to be some factor which at a definite age inhibits the proper functioning of the brain. This factor may be either related to sexual functions or nourishment. It is often argued that the apparent earlier closing of the minds of Indian than of European youths is due to the earlier commencement among the former of the sexual life,—both sexual development and sexual practice. In the same way therefore, if it could be proved that the Mahars and Kaliparaj develop sexually and commence their sexual life earlier than the Brahmans, there would be ground for attributing to this cause the phenomenon under discussion. But it is almost certain (that family life commences among the Kaliparaj later and not earlier than among the Brahmans. The figures of Civil condition by Castes in Imperial Table XIV unfortunately prove nothing, since marriage for Census purposes does not mean cohabitation, but only the ceremonial contract. But their poor economic condition prevents any very early establishment of a home, especially among the males. In the matter of nourishment on the other hand we are on much surer ground. It would be impossible to deny that the average daily meals of a Brahman boy are more nourishing than those available to a Kaliparaj or Mahar boy. And the brain must necessarily be prejudicially affected by inadequate nourishment of the body. The environmental factor is again quite obvious. In his home the Brahman boy is surrounded with an often highly intellectual, never wholly unintellectual atmosphere. The Kaliparaj boy lives usually in a tiny ill-ventilated hut, surrounded by uneducated people, and constantly brought face to face with the grim struggle for existence. Even removed from these surroundings and placed in a boarding school he is yet at a disadvantage, being surrounded by boys brought up like him from infancy in the surroundings just described. On the whole therefore I am ready to hazard the opinion that, while there may be hereditary racial differences in the character which we may call Normal Duration of the Capacity to Learn, those differences are probably (1) slight, (2) correlated exactly with the differences of the first character, Capacity to Learn, and (3) modified beyond recognition by factors partly functional and partly environmental.

410. Literacy by Castes at this Census is shown in a Table at the end of this Chapter, and also graphically in the diagrams opposite. These bring out very clearly how essentially in India the accident of birth into one or other of the Castes determines the chances of education, and also what a vast mass of illiteracy remains to be broken down in all the castes low down in the Hinduistic scale. It is obvious that the Brahmanic and other higher castes *can look after themselves*. It is the lower strata that require organised effort.

411. In Subsidiary Table VI to Chapter VIII of the India Census Report 1911 Mr. Gait gave the figures for the following Bombay Castes:—

Brahman	Maratha .
Lohana	Agri
Lingayat	Bharvad
Kunbi	Mahar, Holiya, and Dhed
Koli	Bhil

Some notes are required on this occasion to prevent incorrect comparisons. (1) BRAHMAN. The Brahmans chosen in 1911 were Audicch, Deshasth, Chitpavan, Gaud Sarasvat and Brahmans of Sind. On the present occasion the first four are chosen but not the Sind Brahmans. Now these Sind Brahmans are proportionately much worse educated than those of Presidency. The proportion of literate persons per mille shown by Mr. Gait for Brahmans in the Bombay Presidency in 1911 was 344. Without the Sind Brahmans it would have been 355. On the present occasion Gaud Sarasvat does not include Kudaldeshkar. But this probably makes very little difference in the figures. (2) LOHANAS. In 1911 Lohanas were examined from Sind and Bombay City, but on this occasion from Sind only. The Bombay Lohanas are proportionately much better educated than those that stay in Sind. The ratio per mille shown by Mr. Gait was 207. The ratio for Sind alone would have been 195. (4) KUNBI. Here *all comparison is entirely impossible*, and would be very misleading. Kunbi in 1911 included all kinds of Kanbis from Ahmedabad and Kaira, where the Leva and Kadava Kanbis, and especially the former are much better educated than the Maratha Kunbis of Maharashtra. (5) KOLI. No Kolis are chosen on this occasion for Table IX. Reference is invited to the discussion in the Chapter on Caste. (6) MAHAR, HOLIYA and DHED. The figures for these three were combined in 1911 in Table IX, and this time are separated. Comparison is however possible.

412. The ratio of female to male literacy in various castes is very interesting and the variations are very large. The artisan class show up badly in this matter, the extent of female education in castes of the artisan type being evidently very small. The following Table shows the order of some of the more important castes in 1911, and the extent to which female education has advanced.

Subsidiary Table No. 89.—Relation of female to male literacy for certain castes, 1911 and 1921.

Caste.	Factor by which the ratio of literate females per mille of females must be multiplied to make it equal to the ratio of literate males per mille of males.		
	1911	1921	Remarks.
HINDU AND ANIMISTIC—			
Vani—Shrimali	5*	3	* The 1911 figure included Jains.
Brahman—Gaud Sarasvat	5†	4	† The 1911 figure included Kudaldeshkars.
Brahman—Audicch	6	3	
Brahman—Chitpavan	7·5	3	
Bhatia	9	3	
Mali	13	14	
Lohana (Sind)	15	5	
Brahman—Deshasth	17	6	
Kumbhar	19	35	
Sutar	21	22	
Chambhar	21	24	
Bhangi	21	10	
Dhodia	22	21	
Maratha	23	23	
Darji	24	14	
Sonar	33	9	
Sali	34	13	
Lingayat	34	15	
Dhobi	38	24	
Agri	40	14	
Hajam	41	16	
JAIN—			
Vani—Osval	12	10	
Chaturth	41	10	
INDIAN CHRISTIANS			
	3	{ 1·9(a) 2·2(b) 1·4(c)	(a) Gujarat. (b) "East Indians." (c) Deccan.

PART II.—LITERACY IN ENGLISH.

413. The absolute figures for literate in English are of course no guide, because the number of Europeans in this country is constantly increasing. The figures for the indigenous religions will assist. In passing however it may be remarked that the figures of literacy in English even for the indigenous religions are no clue to the real quality of the education in that language. There seems to be little doubt that the standard of English is deteriorating. This is partly due to Educational methods and partly to political reasons. In the old days Indian gentlemen of education would rather make a point of talking among themselves in English. But to-day it is considered patriotic to talk the vernacular on all occasions. Without constant conversation in any language the standard attained will never be high, especially in India where there is no taste for literature and educated people do very little reading. Consequently what the figures really reveal is that quantity is gradually being substituted for quality.

414. The following shows the progress of mere literacy in English for the different religions.

Subsidiary Table No. 90.—Progress of Literacy in English since 1901, by Religions, British Districts only.

Religion.	Number per mille who are literate in English.					
	1901*		1911*		1921†	
	Males.	Females.	Males.	Females.	Males.	Females.
All religions‡	13	2	17	3	23	4
Hindu	9	.....	13	.....	19	1
Musalman	5	.....	5	.....	8	1
Jain	20	.....	33	1	54	3
Zoroastrian	407	100	507	175	539	247
Christian—						
1. Indian	277	138	142	62	154	78
2. Others	.....	.....	886	779	916	829

* Includes figures for Aden.

† Not including Aden.

‡ Note.—The figures under "All Religions" are of less importance because of changes in the number of persons of English Nationality from Census to Census.

415. The figures of literacy in English for Musalmans are kept down by the Sind figures. In Sind the Musalmans are more numerous than in the rest of the Presidency, but constitute the cultivating classes, clerical posts being mostly absorbed by the Amil Lohanas. The marginal figures show the Sind Musalmans per mille rates since 1901.

Literacy in English, Musalmans in Sind, males only, per mille.

1901	..	..	1.2
1911	..	..	1.4
1921	..	..	3.0

416. In the case of Jains the figures are kept down as in the case of general literacy by the Chaturths of the Karnatak. Taking the three districts of Ahmedabad, Kaira and Surat alone the per mille rates for literacy in English among Jains is much above that for Jains in the whole Presidency,

Literacy in English, Jains in Ahmedabad, Kaira and Surat, males only, per mille.

1901	..	..	59
1911	..	..	73
1921	..	..	106

and far above the average for all religions.

417. By locality the figures are as follows.

Subsidiary Table No. 91.—Literacy in English by age and locality, British Districts only.

	Number per 10,000 literate in English.													
	1921.										1911.		1901.	
	0-10.		10-15.		15-20.		20 and over.		All ages.		All ages.		All ages.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
All Districts	12	8	142	53	455	95	330	32	233	43	169	28	131	19
Bombay City	151	125	830	581	1,408	700	1,330	549	1,117	488	1,052	400	931	317
Gujarat	5	2	202	28	559	47	252	19	201	17	144	9	131	5
Konkan	2	1	64	13	235	26	160	10	163	28	122	16	97	11
Deccan	8	5	87	30	437	70	225	20	155	24	100	17	90	13
Karnatak	4	3	77	14	279	23	152	11	112	10	79	9	65	5
Sind	13	12	68	48	277	62	207	34	148	41	103	17	61	9

* Including Movas Estates in West Khandesh.

† Excluding the Movas Estates in West Khandesh, figures for which are not available.

418. In State territory there is less inducement to learn English. The following shows the figures since 1911.

Subsidiary Table No. 92.—Progress of Literacy in English since 1901, States and Agencies, all Religions combined.

State or Agency.	Number per mille who are literate in English.					
	1901		1911		1921	
	Males.	Females.	Males.	Females.	Males.	Females.
Total	6	0·2	8	0·2	12	0·5
Kathiawar	9	0·3	12	0·3	19	0·7
Kolhapur	5	0·2	6	0·2	17	1·0

The Kathiawar figure is kept up by the high level of English Literacy among Jains, as shown below :—

Subsidiary Table No. 93.—English Literacy among Jains in Kathiawar.

	Number per mille who were literate in English.					
	1901		1911		1921	
	Males.	Females.	Males.	Females.	Males.	Females.
Jains in Kathiawar ..	36	....	58	0·4	98	2·5

On the other hand in Kolhapur, where the Jains are mainly Chaturth cultivators, their literacy is below the average for the State.

419. Figures corresponding to Subsidiary Table No. 88, comparing Literacy in Cities with the same in adjacent Rural areas, are as follows.

Subsidiary Table No. 94.—Literacy in English in Cities compared with the same in adjacent Rural Areas.

Locality.	Number per 10,000 (all ages) who are literate in English.		
	Persons.	Males.	Females.
Ahmedabad City	394	629	85
Rest of the Ahmedabad District	45	83	4
Surat City	534	915	106
Rest of the Surat District	79	36	8
Poona City	957	1,659	187
Rest of the Poona District	154	231	73
Sholapur City	206	341	55
Rest of the Sholapur District	25	46	2
Hubli City	418	736	67
Rest of the Dharwar District	60	108	10
Karachi City	775	1,055	330
Rest of the Karachi District	28	48	2
Hyderabad Town	678	932	281
Rest of the Hyderabad District	11	18	1

In this case the large number of Europeans give a fictitious appearance to the Literacy in English in Poona, Karachi and Hyderabad, thus making the divergence even greater than it would be, if calculated on the Indian population only. But the urban character of English education is well brought out.

PART III.—EDUCATION.

420. The Census is only indirectly concerned with education in the way of furnishing figures by which the Educational Authorities can, to some extent at any rate, gauge (1) the extent to which the public are served with schools, and (2) the effect of education in the direction of increasing the proportion of literates.

The following is a Table prepared from information kindly supplied by the Director of Public Instruction.

Subsidiary Table No. 95.—Number of Institutions and Pupils according to the returns of Education Department.

Class of Institution.	1921		1911		1901		1891	
	Number of		Number of		Number of		Number of	
	Institutions.	Scholars.	Institutions.	Scholars.	Institutions.	Scholars.	Institutions.	Scholars.
1	2	3	4	5	6	7	8	9
Total ..	19,552	1,224,888	16,128	865,971	12,085	630,681	11,963	619,740
(A) Arts Colleges ..	15	5,609	11	3,258	9	1,826	9	1,289
(B) Professional Colleges ..	7	2,480	4	1,200	5	1,011	4	566
(C) Secondary Schools ..	666	98,966	529	71,364	474	47,173	397	41,446
(D) Primary Schools ..	16,307	1,019,744	12,342	703,417	9,030	513,198	8,856	508,163
1. Government ..	44	5,553	12	1,860	8	1,028	28	2,165
2. Local Board ..	8,626	486,222	6,369	334,530	3,689	218,671	4,222	227,634
3. Municipal ..	1,272	173,373	948	106,478	716	81,970	716	81,132
4. Grant-in-aid ..	2,907	132,388	2,166	99,576	1,902	85,169	1,834	74,874
5. Unaided ..	127	6,838	162	7,848	93	5,547	66	2,580
6. Native States ..	3,831	215,870	2,665	153,125	2,322	120,813	1,990	117,798
(E) Training and other Special Schools ..	234	14,974	73	5,262	52	3,746	44	2,851
(F) Private Institutions ..	2,323	83,115	3,169	81,470	2,515	63,727	2,653	67,406

421. An important point is the ratio of Educational Institutions to persons of school-going age. The Census figures cannot unfortunately furnish the correct figures of the latter, since we do not tabulate the whole population by individual years of age, and our Age Tables are made up in 5 year groups. We are therefore forced to take the population between 5 and 20, which are absolute outside limits. The result is shown below in a Table.

Subsidiary Table No. 96.—Educational Facilities and Educational Results, 1891 to 1921.

Year.			Number of Educational Institutions.	Number of Scholars.	Number of Census Literates.	Number of persons of School-going Age.	Ratio of (d) to (a), i.e., one institution to every x persons.
			(a)	(b)	(c)	(d)	(e)
1891	..	..	11,963	619,740	1,054,398	5,915,285	494
1901	..	..	12,085	630,681	1,168,128	6,344,372	525
1911	..	..	16,128	865,971	1,365,091	6,119,010	379
1921	..	..	19,552	1,224,888	1,645,533	6,444,327	330

422. The above figures are really very satisfactory. The reason why the numbers in column (d) declined in 1911 and rose again in 1921 is fully explained in Chapter V—AGE. It is caused solely by the passing down through the age groups of those groups which were disturbed by famine. At the next Census the corresponding figure for (d) will probably remain more or less stationary, since,

though the groups disturbed by the 1901 famine will have finally passed out beyond age 20, the present group 0—5, disturbed by the low birth rate of 1918—20, will pass into (d).

Subsidiary Table No. 97.—Territorial distribution of Literacy, 1921.

NOTE.—This Table, which is given for ready reference, differs from Sub. Table No. 98, which follows, inasmuch as the ratios are taken out on ALL AGES, instead of on AGES 5 AND OVER.

District or State.	Number per 1,000 who are Literate.			Number per 10,000 who are Literate in English.	
	Persons.	Males.	Females.	Males.	Females.
Bombay City	241	290	142	1,177	488
Ahmedabad	145	227	52	261	27
Broach	161	280	35	144	11
Kaira	119	196	31	141	5
Panch Mahals	66	114	16	71	4
Surat	170	283	57	294	24
Bombay Suburban	170	222	100	998	468
Kanara	96	167	23	136	10
Kolaba	53	93	13	95	9
Ratnagiri	46	93	8	76	3
Thana	53	88	17	154	21
Ahmednagar	64	112	15	123	14
East Khandesh	69	129	7	77	5
West Khandesh	48	88	7	57	3
Nasik	64	112	11	179	25
Poona	90	144	33	423	88
Satara	46	83	9	76	12
Sholapur	53	94	10	92	10
Belgaum	59	104	12	113	13
Bijapur	65	119	8	62	2
Dharwar	98	175	17	150	13
Hyderabad	58	79	30	157	41
Karachi	97	142	37	477	122
Larkana	37	62	7	34	3
Navabshah	48	78	11	60	5
Sukkur	57	95	10	90	12
Thar and Parkar	38	59	11	80	8
Upper Sind Frontier	26	44	3	21	....
Cambay	140	221	52	159	4
Cutch	86	152	24	68	1
Kathiawar	111	185	35	186	8
Mahi Kantha	55	100	9	27	1
Palanpur Agency	48	86	8	65	2
Reva Kantha	48	80	13	36	3
Surat Agency	48	79	16	76	5
Kolhapur	86	151	17	168	10
S. M. C. States	69	122	13	120	8
Bhor	27	49	6	65	2
Savantvadi	61	118	10	127	6
Khairpur	30	50	5	43	2

SEC. 6.—LITERACY BY CASTES.

147

Subsidiary Table No. 98.—Education by Age, Sex and Locality for British Districts and Natural Divisions.

District and Natural Divisions.	NUMBER PER MILE WHO ARE LITERATE.										
	For all ages, 5 and over.			5-10.		10-15.		15-20.		20 and over.	
	Total.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.
TOTAL FOR THE WHOLE PRESIDENCY	95	157	27	42	15	145	42	217	53	184	24
TOTAL FOR THE BRITISH DISTRICTS	97	158	28	39	16	189	41	218	54	186	26
Bombay City	256	307	155	129	94	284	184	338	202	320	154
Gujarat	156	254	47	88	35	264	83	344	94	285	89
Ahmedabad	105	256	59	101	44	261	94	332	113	282	49
Broach	185	318	40	75	25	292	71	428	86	375	32
Kaira	136	222	36	98	32	246	76	310	76	239	25
Pauch Mahals	73	132	19	41	13	134	33	183	40	159	15
Surat	196	325	65	90	40	350	111	448	117	305	55
Konkan	71	125	19	473	62	105	31	170	37	154	17
Kauara	109	189	26	34	12	152	39	230	45	223	24
Kolaba	61	107	15	21	7	96	28	146	30	131	13
Ratnagiri	53	103	8	16	5	88	17	155	17	139	7
Thana	61	100	19	19	9	88	30	133	39	122	18
Bombay Suburban Dis- trict	188	242	113	89	64	252	174	311	192	255	101
Deccan	72	127	16	27	8	111	34	178	32	151	14
Ahmednagar	73	127	17	30	11	109	31	184	34	161	15
Khandesh East	80	149	8	26	5	143	12	209	15	175	7
Khandesh West	57	104	9	15	3	84	13	166	18	132	8
Nasik	73	128	15	28	9	112	22	186	29	155	14
Pooná	102	162	33	36	18	139	53	232	79	190	35
Satara	52	95	10	21	6	85	17	160	20	112	8
Sholapur	61	106	11	20	7	86	18	158	24	127	10
Karnatak	86	154	15	29	9	127	24	231	31	183	13
Belgaum	68	120	14	22	7	95	21	198	31	143	12
Bijapur	74	136	9	22	6	120	17	208	18	161	7
Dharwar	112	199	20	41	12	160	31	276	40	236	17
Sind	62	95	109	27	13	81	46	111	44	114	18
Hyderabad	65	88	34	26	21	81	49	112	64	105	32
Karachi	111	163	43	54	27	122	62	201	72	184	41
Larkana	42	70	6	57	27	56	9	81	8	87	8
Navabshah	55	88	12	35	8	87	20	116	18	102	11
Sukkur	65	109	12	24	6	89	15	136	19	131	13
Thar and Parker	43	67	13	15	5	58	16	82	63	84	9
Upper Sind Frontier	30	50	4	10	2	42	3	64	6	63	4
All Cities (Including Bombay)	256	328	136	142	84	318	178	367	184	345	123

though the groups disturbed by the 1901 famine will have finally passed out beyond age 20, the present group 0—5, disturbed by the low birth rate of 1918—20, will pass into (d).

Subsidiary Table No. 97.—Territorial distribution of Literacy, 1921.

NOTE.—This Table, which is given for ready reference, differs from Sub. Table No. 98, which follows, inasmuch as the ratios are taken out on ALL AGES, instead of on AGES 5 AND OVER.

District or State.	Number per 1,000 who are Literate.			Number per 10,000 who are Literate in English.	
	Persons.	Males.	Females.	Males.	Females.
Bombay City	241	290	142	1,177	488
Ahmedabad	145	227	52	261	27
Broach	161	280	35	144	11
Kaira	119	196	31	141	5
Panch Mahals	66	114	16	71	4
Surat	170	283	57	294	24
Bombay Suburban	170	222	100	998	468
Kanara	96	167	23	136	10
Kolaba	53	93	13	95	9
Ratnagiri	46	93	8	76	3
Thana	53	88	17	154	21
Ahmednagar	64	112	15	123	14
East Khandesh	69	129	7	77	5
West Khandesh	48	88	7	57	3
Nasik	64	112	11	179	25
Poona	90	144	33	423	88
Satara	46	83	9	76	12
Sholapur	53	94	10	92	10
Belgaum	59	104	12	113	13
Bijapur	65	119	8	62	2
Dharwar	98	175	17	150	13
Hyderabad	58	79	30	157	41
Karachi	97	142	37	477	122
Larkana	37	62	7	34	3
Navabshah	48	78	11	60	5
Sukkur	57	95	10	90	12
Thar and Parkar	38	59	11	80	8
Upper Sind Frontier	26	44	3	21	....
Cambay	140	221	52	159	4
Cutch	86	152	24	68	1
Kathiawar	111	185	35	186	8
Mahi Kantha	55	100	9	27	1
Palanpur Agency	48	86	8	65	2
Reva Kantha	48	80	13	36	3
Surat Agency	48	79	16	76	5
Kolhapur	86	151	17	168	10
S. M. C. States	69	122	13	120	8
Bhor	27	49	6	65	2
Savantvadi	61	118	10	127	6
Khairpur	30	50	5	43	2

Subsidiary Table No. 100.—Education by Caste, 1921.

NOTE.—The figures are examined only for certain Districts, and not for the whole strength of the caste in the Presidency, the Districts chosen in each case are shown in special Table IX.

Caste.	Number per 1,000.						Number per 10,000 literate in English.		
	Literate.			Illiterate.					
	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.
1	2	3	4	5	6	7	8	9	10
HINDU AND ANIMIST.									
Agri	22	41	3	978	959	997	5	9	..
Bedar, Berad	13	24	2	987	976	998	1	2	..
Bhamta, Takari, Uchliya	12	27	..	988	978	1,000	..	..	..
Bhangl	16	28	3	984	972	997	2	3	..
Bharvad	6	10	1	994	990	999	1	2	..
Bhatla	556	719	344	444	281	656	2,039	3,242	480
Bhil	2	4	..	998	996	1,000	..	..	..
Brahman Audicch	473	700	210	527	300	790	734	1,385	48
Brahman Deshasth	403	662	121	597	338	879	833	1,545	58
Brahman Chitpavan or Konkanasth	409	633	186	591	367	814	1,183	2,242	130
Brahman Gaud Sarasvat	350	568	143	650	432	857	633	1,218	75
Chambhar	11	22	1	989	978	999	4	7	..
Chodra	14	25	2	986	975	998	1	1	..
Darji, Shimpi	212	393	29	788	607	971	121	238	2
Dhangar	12	23	1	988	977	999	2	4	..
Dhed	35	65	6	965	935	994	5	10	..
Dhobi, Parit, Agasa, Madival	29	56	2	971	944	998	8	16	..
Dhodla	16	31	1	984	969	999	1	2	..
Dubla	11	21	1	989	979	999	..	1	..
Gavandi, Uppar, Chunar	16	23	8	984	977	992	2	5	..
Ghanchi	351	599	82	640	401	918	152	292	1
Ghanticher	28	44	12	972	956	983	..	..	..
Hajam, Nhavi, Nadig	73	138	9	927	892	991	19	37	1
Halvakki Vakkal	5	8	1	995	992	999	1	2	..
Holiya	6	11	1	994	989	999	3	6	..
Kanbi-Kadava	209	359	43	791	641	957	104	170	30
Kanbi-Leva	272	428	78	728	574	927	156	272	5
Katkari	2	4	..	998	996	1,000	4	8	..
Kayasth Prabhu	573	732	384	427	268	616	2,759	4,535	649
Koshti	110	205	9	890	795	991	16	29	1
Kumbhar	11	21	1	989	979	999	3	6	1
Kunbi	6	11	1	994	989	999	1	1	..
Kurub	15	29	1	985	971	999	1	2	..
Lamani	1	2	1	999	998	1,000	..	1	..
Lingayat	126	231	15	874	789	985	36	69	1
Lohara (Including Amil)	221	343	77	779	657	923	268	443	61
Madig	4	6	1	996	994	999	..	..	..
Mahar	12	23	1	988	977	999	6	13	1
Mali	23	44	3	977	956	997	18	37	..
Mang	5	10	1	995	990	999	1	2	..
Maratha	29	58	3	971	942	997	10	20	1
Naikada	12	22	1	983	978	999	..	..	..
Robari	8	13	2	992	987	998	1	1	..
Sali	108	190	15	892	810	985	77	141	6
Sonar, Soni and Dalvadnya Brahman	220	393	43	780	607	957	79	105	5
Sutar	40	78	4	960	922	996	16	31	2
Teli	38	75	2	962	925	998	6	13	..
Vaddar	5	9	1	995	991	999	..	..	..

CHAPTER VIII.—LITERACY.

Caste.	Number per 1,000.						Number per 10,000 literate in English.		
	Literate.			Illiterate.					
	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.
1	2	3	4	5	6	7	8	9	10
HINDU AND ANIMIST—concluded.									
Vaghri	5	8	1	995	992	999	3	6	..
Vani-Khadayata	481	752	180	519	248	820	872	1,014	46
Vani-Modh	553	771	324	447	220	676	1,131	1,747	487
Vani-Shrimali	500	727	244	500	273	756	728	1,333	44
Varli	1	3	..	999	997	1000	1	3	0
JAIN.									
Chaturth	66	117	10	934	883	990	23	42	2
Vani-Osval	371	635	60	629	365	940	58	101	7
MUSALMAN.									
Baluch	11	17	3	989	983	997	5	8	1
Bohra (Shia)	367	569	147	633	431	853	446	834	27
Bohra (Sunni)	227	436	21	773	564	970	62	122	3
Mihrbahar	8	14	..	992	986	1,000	..	..	..
Saman	14	24	1	986	976	999	4	7	..
Shelkh	64	120	9	936	880	991	24	48	..
CHRISTIANS.									
(a) Gujarat	220	283	149	780	717	851	200	273	118
(b) East Indian	182	248	111	818	752	889	1,407	1,853	936
(c) Deccan	258	299	217	742	701	783	1,240	1,709	732

CHAPTER IX.—LANGUAGE.

SECTION 1.—GENERAL.

423. For the reasons given in the opening paragraph of the Chapter on Caste we were ordered on this occasion not to devote special attention to Languages as such. The Linguistic Survey of India being now concluded, the soundness of this direction will be apparent. It will however be found from what follows that, so long as we record Language at the Census, some discussion of the boundaries of different language names is unavoidable. Some notes entitled "*A Glossary of Rare or Obscure Language Names*" have been detached from this Chapter and relegated to the Appendices.

424. This is perhaps the best place to remark that in my Administrative Report I have strongly urged the abandonment of the language column from the schedules of the next Census. My reasons are (1) that, as many of the language names are ambiguous, our returns are never correct (this is clearly brought out below in the discussions of Lahnda and of Konkani); (2) that the Linguistic Survey has already furnished figures of the speakers of each language, which, though not purporting to be more than rough estimates, are, for the reasons given, incomparably more correct than our Census figures, though these purport to go down to digits; and (3) that there is no economic value in the return. No Administrative problems are, so far as I know, likely to be solved by reference to Imperial Table X, which could not be solved by reference to the Tables of Caste and Religion.

425. The direction on the Cover of the Enumeration Book was as follows :—

"Column 13—*Language*.—Enter the language which each person ordinarily uses in his own home. In the case of infants and deaf-mutes the language of the mother should be entered."

In the Code the following supplementary Instruction was added :

"Column 13—*Language*.—Remember that you are to enter the language which each person talks in his home and not the language in which he talks to you. On the other hand a man does not talk a different language from you merely because his pronunciation is different. Thus Parsees talk Gujarati. There is no such language as Parsi. On the other hand Bhils and some other wild tribes speak languages of their own. Your Supervisor is supplied with an index to the Indian languages occurring in this Presidency, and you should consult him when in doubts."

The Index of Languages referred to above was bound up with the Caste Index, and was a new departure at this Census. Unfortunately in preparing it I did not have the advantage of consulting the Index of Language Names, Calcutta, 1920, compiled by Sir George Grierson as part of the publications of the Linguistic Survey. This was received later.

426. In the Abstraction stage it was directed that if column 13 of the Schedule was blank, the language of the district should be shown unless the clue were furnished by the birth-place and caste columns.

SECTION 2.—GIPSY LANGUAGES.

427. One of the results of the Linguistic Survey has been to limit the application of the term "Gipsy" to languages which (a) are spoken by genuinely wandering or criminal tribes, and (b) are otherwise unclassified. These languages are treated in Vol. XI (the latest) of the Linguistic Survey, still in the Press. They have nothing to do with Romany, the language of the Gipsies of Europe, which is considered by Dr. Grierson to be allied to the Dardic Group of Himalayan languages, of which the most important is Kashmiri. The past Censuses erred in assigning to the head Gipsy any language whose affinities were not at once obvious, and in 1891 many names were thus included. Nevertheless, in spite of removal of some names, in 1901, the figures did not change, while in 1911 they rose. Now, with the Linguistic Survey completed, several of the most important components of this group

have been removed. These with their figures in 1911 are shown in the following Table :—

Dialects Classed as Gipsy in 1911, now removed.

Name.	Number of speakers, 1911.	How classed at this Census.
Chapparbandi	252	Disallowed altogether.
Charani	207	As Bhili.
Ghisádi	226	As Gujarati.
Kaikádi	2,639	As Tamil.
Korvi	943	As Tamil.
Lamanki }	34,916	As Rajasthani.
Vanjári	?	As Telegu.
Vaddári*	411	As Bhili.
Páradi	358	Disallowed altogether.
Tirguli		

* It is impossible to give the figure as it was amalgamated with Odki, which is recognised by the Linguistic Survey as a Gipsy language.

428. The resulting figures show the following changes since 1891 :—

Gipsy Languages, Totals, 1891 to 1921 (in thousands).

1891	..	30
1901	..	30
1911	..	46
1921	..	6

The 1921 figure is made up of any or all of the following which alone were allowed to be classified as Gipsy :—Beldári, Kolhádi, Lád, Odki, Gárodi and Máng Gárodi, Shikalgári, and Mishra Shikalgári, Pendári, Kahirki (Sind), Bahurupi (immigrants from the Punjab) and Advichanchi or Haranshikári. Also, of course unavoidably, the word Gipsy, if returned, as it might be by some Town Enumerator, who would however apply it probably wrongly. The affinities of Advichanchi and Haranshikári are not certain. They are probably not Gipsy, but were left in this Group from uncertainty.

SECTION 3.—SIND LANGUAGES.

429. The languages of Sind present more difficulties than those of the Presidency proper. The boundaries of the various languages of the Desert region are not at all sharply defined, and the question is still further complicated by the use of the same term as the name of quite different languages, or dialects. Thus in Grierson's language Index "Jatki" is given as a name used for nine different things and "Hindki" for seven.

430. The most important thing is to try to get at the figures of *Panjábi* and *Láhnda*. In 1901 Lahnda was not shown. But Multani was returned with 20, and Peshawari with 2 speakers. Punjabi was returned with 34,384. Jatki does not appear; but Siraiiki was shown as a dialect of Sindhi with 651 speakers. In 1911 the problem was handled differently in the various Tables. In Imperial Table X Punjabi, Siraiiki or Jatki, and Lahnda were all amalgamated under Punjabi, which thus had 211,079 speakers. In the Report Volume, in Subsidiary Table I to Chapter IX, Lahnda seems to have been amalgamated with Punjabi, but Siraiiki and Jatki were separately shown. In Subsidiary Table IV to the same Chapter they were all shown separately. Punjabi was placed by itself with 35,881 speakers; Siraiiki and Jatki with 175,198 speakers were placed as a separate language between Lahnda and Sindhi; Lahnda came out with 227 speakers composed of the following—Kacchri 2, Multani 192, Pishori (*i.e.* Peshawari) 33. The truth can never be got at, because Siraiiki and Jatki are both of them terms used sometimes of one, and sometimes of the other language. In other words there should not have to be an entry for them at all.

431. In Grierson's Index Jatki is given nine meanings. Of these, seven are synonyms either of Lahnda generally, or of some special dialect of Lahnda. One is a synonym of a dialect of true Punjabi. The ninth runs as follows :—

“ Under the form Jatki Sindhi it indicates the Lási dialect of Sindhi.”

Siraiki (with the ‘ a ’ long or short) is defined thus :—

“ Literally the language of the Sire, or country up-stream. Hence used to designate the two following languages, both spoken in Upper Sind. (1) Siraiki Hindki or Siraiki Lahnda : a form of the Multani dialect of Lahnda spoken in Upper Sind. (2) Siraiki Sindhi : a dialect of Sindhi spoken in Upper Sind.”

432. There was therefore no option at this Census but to again show the figures of Siraiki or Jatki separately. But over and above the difficulty of the two terms referred to above we have the further trouble that Punjabis themselves do not distinguish between the true (Eastern) Punjabi and the Lahnda (Western) Punjabi. Lahnda is *purely a grammarian's word*. It means “ Western,” and was *invented* as a suitable name for the Western Punjabi, which is regarded by scholars, but not by the masses, as distinct from true Punjabi not only in present form but also in origin. Consequently, until enumerators become grammarians the figures of Lahnda speakers can only be guessed. They will be comprised of the following : (1) all speakers of dialect names, such as Multani, definitely assignable to Lahnda and nothing else, (2) a proportion—probably the larger proportion—of speakers of Siraiki and Jatki, and (3) a considerable number of the figures recorded under Punjabi.

433. A determined effort was made to secure truer figures at this Census by means of the local Index of Languages, referred to above. The correct classification of Lahnda and Punjabi can only be done *in advance, that is at the enumeration stage. Once the schedules are sent in there is no further chance of amendment*. By taking the birth-place figures for the various Districts of the Punjab we could get some assistance. But this would be only a very rough guide, because, not only would those returns include Sindhi speakers born by chance in the Punjab Eastern districts, but it would exclude all Lahnda speakers born in Sind. Unfortunately the clear instructions given in the Index of languages was rendered less useful by (1) the late date of the appearance of that publication, and (2) the inefficiency of the Census staff. For the late appearance of the Indices there were a number of contributory causes,—first the loss of my box of records on the Railways in August 1920, secondly, the slowness of the private press, which printed the English version, and thirdly, the slowness of the Sindhi Translator's Office to which the English version was sent for translation. The net result has raised the figure of Lahnda to 5,920. The figures of the two Censuses may be compared as follows :—

	Punjabi.	Lahnda.	Siraiki and Jatki.
1911—Subsidiary Table IV to Chapter IX ..	35,881	227	175,198
1921—Imperial Table X ..	45,706	5,920	163,607

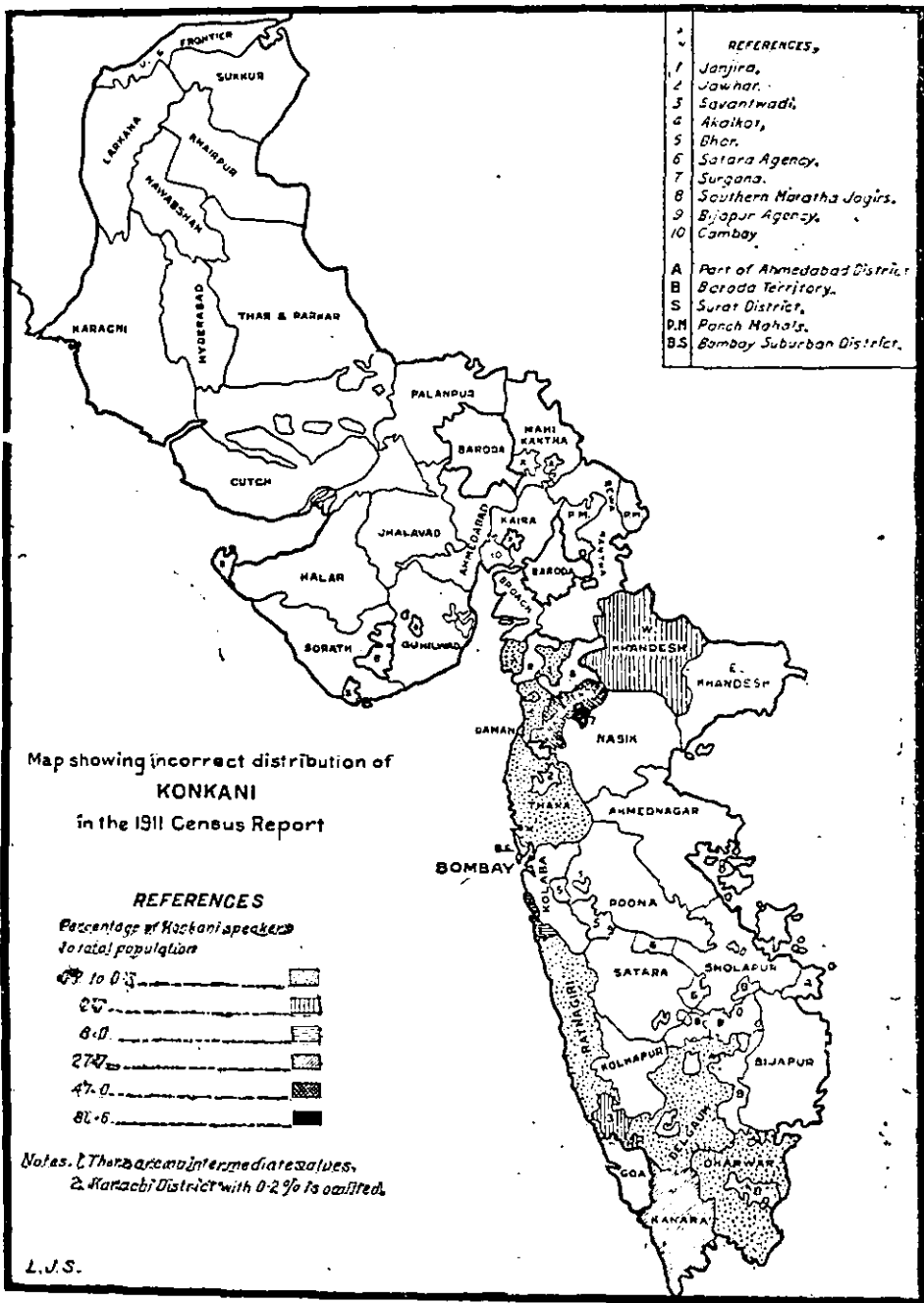
434. As regards Sindhi, to the difficulties caused by the names Jatki and Siraiki mentioned above must be added the difficulties experienced with the names on the Rajputana frontier where the Sind language passes indefinitely into Marwari. In the 1911 report *Thareli* was shown as a division of Sindhi, with two separate subdivisions,—(1) Dhatki and (2) Thari Tharadiri, Thradri, Tharki and Tharin. On the other hand the Linguistic Survey classifies this language “ Thareli or Dhatki ” under Marwari. I have kept it distinct at this Census, as also Kacchi, which is classed by the Linguistic Survey as a dialect of Sindhi.

The figures are—

	Thareli and Dhatki.	Kacchi.
1911—Subsidiary Table IV to Chapter IX ..	116,664	370,559
1921—Imperial Table X ..	134,726	428,051

SECTION 4.—KONKANI.

435. In the Index of Languages emphasis was laid on the correct classification of Konkani. A study of the figures recorded in 1911 under this name show conclusively that there was at that Census confusion between the true Konkani of the Goa side and a Bhil dialect or Marathi dialect of the Surgana-Bansda region which seems to be indiscriminately pronounced Konkani or Kokani. That these two languages were inadvertently mixed together is shown by the sketch map appended, showing the distribution of Konkani speakers in 1911, and by the Table given below.



Subsidiary Table No. 101.—Distribution of Konkani speakers 1911 and 1921, in units returning more than 100 at either Census.

District.	1911				1921	
	Konkani.	Gomantaki	Total.	Percentage to Popula- tion of District.	Konkani.	
	Actual Numbers.				Actual Numbers.	Percentage to Popula- tion of District.
Kanara	119,436	..	119,436	27.7	131,040	32.6
Surat Agency	97,597	3	97,600	47.0	Nil	..
Bombay City	9,287	18,283	27,570	2.8	32,598	2.8
West Khandesh	16,095	5	16,100	2.7	Nil	..
Surgana	12,350	..	12,350	81.6	Nil	..
Janjira	7,133	..	7,133	8.0	6	..
Savantvadi	5,805	..	5,805	2.7	5,217	2.5
Ratnagiri	2,089	722	3,411	0.3	2,053	0.2
Belgaum	3,008	..	3,008	0.3	3,374	0.3
Dharwar	2,774	..	2,774	0.3	2,415	0.2
Karachi	1,034	926	1,960	0.4	2,206	0.4
Poona	491	1,455	1,946	0.2	1,392	0.1
Thana (including Bombay Suburban)	1,397	342	1,739	0.2	3,278	0.3
Surat	1,572	82	1,654	0.3	Nil	..
Nasik	298	361	659	0.1	Nil	..
Bijapur	225	1	226	..	120	..
Kolaba	124	82	206	..	252	..
Kolhapur	24	158	182	..	401	..
Nagar	27	148	175	..	65	..
Sukkur	5	168	171	..	Nil	..
S. M. C. States	130	20	150	..	315	..
East Khandesh	19	43	62	..	115	..
Kathiawar	6	60	66	..	178	..
Satara	25	113	138	..	135	..

436. While the map refers only to the language recorded as "Konkani" pure and simple in 1911, in the Table the figures for both Konkani with synonyms and Gomantaki with synonyms are given. There is thus ready comparison with the present Census, at which classification has been effected by combining Konkani, Goanese, and their synonyms for the figures presented in Imperial Table X.

437. The problem is of course much complicated by the fact that Marathi of the Konkani standard is often described as Konkani. An enumerator in Poona or Satara, coming across a *kunbi* or *kulvadi* from below ghats, and recognising that his dialect differs slightly from his own, is liable to enter the man as a Konkani speaker.

438. The true Konkani of the Goa side is considered by Sir George Grierson and other scholars to be derived not from Marathi, but separately and earlier than Marathi from another Prakrit. This language is the same as Goanese, grouped separately under Gomantaki (which is only a Sanskritised name for the same thing) in the 1911 Report. Like most languages it varies in several directions. Among high class Goanese it is much mixed up with Portuguese words. Among the Musalman sailors of Kanara it is mixed with a sprinkling of Urdu or Arabic, under the name Navayati. Among the Chitpavan Brahmans it takes a more Sanskritic tinge and becomes closer to Marathi. At the present Census Goanese with its synonyms and Konkani with its synonyms have been amalgamated, and the Bhil dialect has been merged in Bhili. That there is no justification for separating Goanese from Konkani is proved by Sir George Grierson's Index of Language Names, in which the two are clearly recorded as synonyms.

439. As to this Bhil dialect one would expect it to be the language of the Koknas or Koknas, a caste with affinities to the Bhils. But the 1911 figures of that caste did not give an exact approximation in territorial distribution with the territorial distribution of the Bhil dialect of Konkani. The marginal figures are given for ready reference. Further it is clear that the Kokna Caste is not represented in the Surgana State, in which 81.6 per cent. of the population was in 1911 recorded as speaking Konkani.

District.	"Konkani" speakers, 1911	Kokna Caste, 1911	Kokna Caste, 1921
Surgana ..	12,350	Nil	Not tabulated.
Surat Agency	97,597	66,181	43,111
W. Khandesh	16,095	17,635	20,675
Surat Dist...	1,572	2,265	2,437
Nasik	298	Nil	Not tabulated.
Javhar ..	Nil.	6,502	2,951

Out of a population of 15,180 no less than 14,866 were recorded by religion as Hindus. Of these the only numerous castes were as given in the margin. From these figures it will be clear not only that the Kokna caste is either unrepresented or called by the name of Bhil, but that the number of Konkani speakers (12,350) is insufficient to cover the Bhils alone or even the Bhils *plus* Varlis.

Bhil	..	4,002
Kunbi	..	7,811
Varli	..	1,151
Koli	..	890
Maratha	..	446
		<hr/> 14,300

440. The fact therefore emerges that the *ordinary* dialect of both the cultivating and labouring classes in that State is sometimes called Konkani. And this is confirmed by Sir George Grierson's Index in which "Konkani (2)" is given as "A dialect of Bhili, spoken in Navasari of Baroda, Surat, Surgana, Nasik, and Khandesh (Bombay)." At the same time it is interesting to remember that in 1901 and 1921 the ordinary language of the State was returned as Marathi and not as Konkani. The following Table shows the languages returned at each of the three Censuses:—

Language in Surgana State, 1901, 1911 and 1921.

Language.	Number of speakers.		
	1901	1911	1921
Bhili—			
1. Bhili proper	Nil.	1	} Nil.
2. Charani	Nil.	35	
3. Konkani	348	12,350	
Gujarati	130	136	71
Hindusthani	291	289	141
Rajasthani	11	12	17
Marathi	10,749	2,357	14,683
Persian	3	Nil.	Nil.

There seems therefore at the moment some doubt whether the dialect of Surgana would be classed by the Linguistic Survey as Marathi or Bhili. The people *sometimes* call it Konkani. But if that term is for any reason barred, as was the case at this Census, they call it Marathi.

441. Generally speaking the distribution of the Konkani returns at this Census would seem to be fairly correct, except that the Karachi figure is probably swelled by persons who really speak Marathi of the Konkani standard.

SECTION 5.—AHIRANI OR KHANDESHI.

442. *Ahirani* or *Khandeshi* is a conspicuous example of a language in which the considered opinion of the Director of the Linguistic Survey is never supported by the Census figures. In 1901 the number of speakers of these two language names combined was 2,021, all in Khandesh. The only other names which might possibly be included are Dhangari (Khandesh 13) and Rangari (Khandesh 32). This gives, 2,066. In 1911 we get the following: Ahirani 113, Khandeshi 133, Rangari 32, Gavli 125 (Nasik 105), Chitodi 60; Possible total 463. Yet the Linguistic Survey estimates the number of speakers at 1,253,066, all of which would be in Khandesh and the regions immediately adjoining. Ahirani is a composite language, with a basic structure of old Gujarati and an admixture of Marathi words. In the classification of the Linguistic Survey Marathi belongs to the Southern Group of the outer Sub-Branch of the Indo-Aryan Branch of the Aryan Sub-Family of the Indo-European Family; while Ahirani, side by side with Bhili, occupies a position between Gujarati and Rajasthani in the Central Group of the Inner Sub-Branch of the same main Branch, Sub-Family and Family. I made a few enquiries of Khandesh residents with a view to ascertaining whether Khandeshi is now really talked. The general opinion is that it is only talked by old fashioned people in villages and towns, and is everywhere giving way to Standard Marathi. Being unwritten, it is bound, under the influence of the official use of Marathi in Courts, Schools and Offices to

disappear. As the result of drawing attention to this language in the Instructions of Enumerators have secured 200,267 at this Census namely :—

West Khandesh	..	..	..	145,676
East Khandesh	..	..	..	53,363
Nasik	..	..	..	1,034
Belgaum	..	..	..	118
Reva Kantha	..	..	..	41
Nagar	..	..	..	22
Elsewhere	..	..	..	13

SECTION 6.—BHILI.

Bhili is another case of the same kind. It is extraordinarily difficult to get the figures. New names keep cropping up, and get wrongly classified. Enumerators who speak Marathi or Gujarati enter any Bhil whose dialect they can understand as a Marathi speaker, or a Gujarati speaker as the case may be. Some of the Bhil dialects are in practice (if not in linguistic origin) intermediate between Marathi and Gujarati. Thus in the Dangs it is always a matter of personal opinion which of the two languages should be the official language. In 1911 the Census of the Dangs was taken in Marathi, and this time in Gujarati. An English Magistrate who has recently arrived from the Deccan, and knows hardly any Gujarati, will find himself almost better able to understand evidence given by Chodras in East Surat than his Gujarati Sheristedar or the local Gujarati Sub-Inspector of Police. But not only does Bhili merge into those two languages, but it merges into Rajasthani also; and our Census figures are a matter of the wildest chance. In this case also the 1911 all-India figures for Bhili were 1,250,000 below the estimates of the Linguistic Survey. The figures of 1911 and 1921 of this Presidency are Bhil Dialects (1911)—416,991; Bhili language (1921)—711,981.

444. The distribution of the returns at the two Censuses reveals the hopeless uncertainty of the figures :—

Subsidiary Table No. 102.—Bhili figures from the principal units, 1911 and 1921.

Unit.	1911.	1921.
West Khandesh	188,925	238,187
Surat Agency	12,937	138,782
Reva Kantha	79,020	109,102
Surat District	21,426	77,957
Mahi Kantha	5,122	39,707
Nasik	17,725	34,202
East Khandesh	30,374	31,135
Panch Mahals	41,682	15,008
Ahmednagar	12,226	12,545
Broach	6,541	10,897

SECTION 7.—HINDI.

445. Under Western Hindi are included all Bombay forms of Hindustani. Dr. Grierson divides Western Hindi into the following main types—Hindustani, Bangaru, Braj, Kanaui and Bundeli. We are only concerned with the first. This he divides into Vernacular Hindustani and Literary Hindustani, with 5½ and 7½ million speakers respectively. A very important point to remember so far as this Presidency is concerned is that out of the 1,261,339 persons who returned names classified as Western Hindi (*i.e.*, Hindustani, Musalmani, etc.), only the few who are strangers from beyond our Northern borders, are unable to speak fluently, and if educated, to write, the local vernacular, whether Sindhi, Marathi, Gujarati or Kanarese, as well. Moreover I am convinced that the majority of those returning these names are *better* acquainted with the local language than with Hindi. For comfort a Mussalman villager in say, Belgaum will talk Kanarese or Marathi. But for religious reasons he will return his language to the enumerator as Musalmani. Considerable time and energy is devoted by Musalmans in this Presidency in the effort to get their sons taught Urdu. These boys learn at their schools an oral smattering of the Koran, and a script and language which they will scarcely ever have need to

use. For their own comfort they mostly learn the local language and script as well. From the Census point of view we accept their return under the head of language. But it would be just as correct to enter the local vernacular.

SECTION 8.—THE FIGURES.

446. The Tables which close the Chapter show the distribution of the various languages in the Presidency. As the notes to the first Table are full and complete there is nothing further to be discussed the main problems being already discussed above. In 1911, following past Censuses a Table was given showing the distribution of Kanarese and Marathi speakers in Sholapur and the three Karnatak Districts. As the figures for past Censuses showed no signs of the displacement of either language by the other, and as the use of particular languages as the Educational and official languages for definite areas stabilises the distribution of languages at the present day, I have not thought it worth while to continue the enquiry on this occasion. Marathi is of course known by most educated men in the Bombay Karnatak. But there is a strong feeling of local patriotism for Kanarese ; and there is little likelihood of its dying out.

Subsidiary Table No. 103.—Distribution of total population by language.

[This Table gives the same thirty-two languages or language-groups as Imperial Table X, but rearranged, in the case of Indian languages, according to their order in the Classified List of the Linguistic Survey. The figures in square brackets after the names of Families and Branches indicates the serial numbers in the classified list which belong to each. The numbers of speakers are given to the nearest thousand, except that where the number is less than 750 the nearest decimal of a thousand is shown, and where less than 50 nothing is shown. The numbers for 1901 and 1911 are arrived at after excluding the figures for Aden, and reclassifying, where necessary, according to the latest classification of the Linguistic Survey, and the various details given in the notes appended to the Table].

Language.	Total number of speakers in thousands.			Number per mille of the population 1921.	Where chiefly spoken.
	1901	1911	1921		
AUSTRIC FAMILY [1 to 30]	Not tabulated.				
TIBETO-CHINESE FAMILY [31 to 284]					
1. Burmese	0·1	..	0·1	..	
DRAVIDIAN FAMILY [285 to 330]					
<i>Dravida Group.</i>					
2. Tamil (a) ..	14	19	29	1	Bombay, Poona, Karnatak.
3. Malayalam (b) ..	1	2	2	..	Bombay, Kanara.
4. Kanarese (c) ..	3,097	3,012	2,943	110	
5. Tulu (d) ..	0·4	0·4	1	..	Bombay, Kanara.
<i>Intermediate Group.</i>					
<i>Andhra Language.</i>					
6. Telegu (e) ..	114	137	153	6	Karnatak.
<i>North-Western Language.</i>					
7. Brahui ..	48	29	45	2	Sind.
INDO-EUROPEAN FAMILY.					
(Aryan Sub-Family) [331 to 840].					
ERANIAN BRANCH [331 to 378].					
<i>Persian Group.</i>					
8. Persian (f) ..	4	4	4	..	Bombay.
<i>Eastern Group.</i>					
9. Pashto ..	11	13	14	1	In small numbers everywhere.
10. Baluchi ..	109	199	202	8	Sind.

Language.		Total number of speakers in thousands.			Number per mille of the population, 1921.	Where chiefly spoken.
		1901.	1911.	1921.		
DARDIC BRANCH	[379/414]	Not tabulated.				
INDO-ARYAN BRANCH	[415/849]					
<i>North-Western Group.</i>						
11. Lahanda	(g) ..	..	1	6	..	Sind.
12. Sirajki and Jatki	(h) ..	0·7	175	164	6	Sind.
13. Sindhi	(k) ..	2,935	3,007	2,618	98	
14. Thareli and Dhatki	(l) ..	..	117	135	5	Sind.
15. Kacchi	(m) ..	476	371	428	16	Cutch, Sind.
<i>Southern Group.</i>						
16. Marathi	(n) ..	10,100	10,453	9,791	367	
17. Konkani	(o) ..	170	165	186	7	Kanara.
<i>Eastern Group.</i>						
18. Bengali	..	0·6	2	4	..	Bombay.
<i>Mediate Group.</i>						
19. Eastern Hindi	(p) ..	3	0·7	0·5	..	West Khandesh.
<i>Central Group.</i>						
20. Western Hindi	(q) ..	1,121	1,226	1,261	47	Everywhere.
21. Panjabi	(r) ..	34	36	46	2	Sind.
22. Gujarati	(s) ..	6,670	7,204	7,404	277	
23. Bhili	(t) ..	187	547	712	27	Rera Kantha, Mahi Kantha, Khandesh, Nasik.
24. Ahirani or Khandeshi	(u) ..	2	0·5	200	8	Khandesh.
25. Rajasthani	(v) ..	275	272	277	10	Sind; but also everywhere.
<i>Pahari Group.</i>						
UNCLASSIFIED INDIAN LANGUAGES		[850/872]				
26. Gipsy	(w) ..	0·7	3	6	..	Deccan, Karnatak, Sind.
INDIAN LANGUAGES NOT SEPARATELY TABULATED.						
27.		0·3	0·3	3	..	Bombay.
OTHER ASIATIC LANGUAGES.						
28.		1	1	3	..	Bombay.
ARABIC.						
29. Arabic		5	5	5	..	Bombay.
EUROPEAN LANGUAGES.						
30. English	..	38	47	55	2	Bombay, Poona, Karachi, Nasik.
31. Others,	..	9	9	6	..	
ALL OTHER LANGUAGES AND LANGUAGE NOT RETURNED	..	3	0·3	0·3	..	

Notes.—(a) After adding Korvi and Kaikadi in both 1901 and 1911.

(b) After adding Malabari in 1901.

(c) After minor adjustments in 1911, which do not affect the thousands.

(d) After deducting for 1911 speakers of Tulu in Khandesh Agency and Koraga in Surat Agency.

(e) After adding Waddari in 1901, and 3,000 of the combined figures of Waddari and Odki in 1911.

- (f) Figures of 1911 are those of Subsidiary Table IV, not Imperial Table X.
- (g) Multani and Peshavari total only 22 in 1901. See discussion in text above as regards this language.
- (h) Jatki not shown in 1901. See also discussion in text.
- (k) After deducting all Sindhi Minor dialects in 1911, as they are none of them Sindhi.
- (l) Not shown at all in 1901.
- (m) After adding Kayasthi and Bhatia, 1901 and Kayasthi, 1911.
- (n) After deducting in 1901 minor dialects not being Marathi, and all Konkani figures except those of Kolaba and Janjira and 2,000 of those shown for Bombay; in 1911 after deducting minor dialects in the same way and all Konkani except for Kolaba, Janjira and Karachi and 5,000 of those shown for Bombay.
- (o) After taking in 1901 Gaoni, Kiristav and Navaiti, the balance (1,685) of the Bombay figure, and the figures for all districts except Janjira, Kolaba, and those shown in the Table in the body of the Chapter as being Bhili. In 1911 after taking Gomantaki, Gaopari, Kiristav and Navaiti, the balance (4,255) of the figures for Bombay and the figures for true Konkani districts in the same way as stated above.
- (p) In 1901 the figure includes "Pardeshi", which would in most cases be Western Hindi. In 1911, after adding Purbi.
- (q) Includes all local forms of Musalmani.
- (r) See discussion in text above. The figures are too high.
- (s) After adding in 1901 Patvegari and Ghisadi and deducting Bhatia, Kacchi, Kayasthi and Rangari. In 1911 after deducting Khandeshi, Kayasthi, Malvi and Rangari and adding Parkari.
- (t) After adding in 1901 Charani, Paradhi and Vasava and the Konkani figures for Surgana, Nasik, Khandesh and Surat Agency. In 1911 adding the same and also speakers removed from Tulu, and figures of Kotvali and Vitilima.
- (u) In 1911 the figures represent Ahirani, Khandeshi, Gavali, Rangari and Chitodi.
- (v) After adding in 1901 figures of Banjhari and Lamaki and in 1911 the same *plus* Mengtwari and Malvi.
- (w) The balance of Gipsy languages as explained in the text above.

*Subsidiary Table No. 104.—Distribution by language of the population of
each district.*

District and Natural Division.	Number per 10,000 of							
	Kanarese.	Brahui.	Pashto.	Balochi.	Lahnda.	Siraiki and Jatli.	Sindhi.	Thareli or Dhatki.
1	2	3	4	5	6	7	8	9
Total for the Province ..	1,102	17	5	76	2	61	980	50
I.—Bombay City ..	45	..	14	1	1	..	15	..
II.—Gujarat ..	..	..	1	1	..	..	3	..
Ahmedabad ..	1	..	3	..	..	..	9	..
Broach ..	..	..	1	..	..	..	4	..
Kaira ..	..	..	1	..	1	..	1	..
Panch Mahals ..	..	..	1	2	..	..	..	..
Surat ..	..	..	..	..	..	..	1	..
III.—Konkan ..	753	..	1	..	..	..	..	..
Kanara ..	5,641	..	..	..	..	..	..	..
Kolaba ..	3	..	1	..	..	..	..	..
Ratnagiri ..	2	..	..	..	..	..	..	..
Thana ..	10	..	1	..	..	..	..	..
Bombay Suburban District ..	20	..	16	2	..	..	2	..
IV.—Deccan ..	111	..	1	1	..	1	2	..
Ahmednagar ..	6	..	..	..	..	..	3	..
Khandesh, East ..	3	..	1	..	..	2	..	..
Khandesh, West ..	3	..	..	3	..	..	..	..
Nasik ..	3	..	..	..	..	6	8	..
Poona ..	17	..	6	4	..	..	1	..
Satara ..	112	..	1	..	..	..	..	..
Sholapur ..	711	..	1	..	..	..	3	..
V.—Karnatak ..	7,545	..	..	..	..	..	..	..
Belgaum ..	6,524	..	..	..	..	..	..	..
Bijapur ..	8,134	..	..	..	..	..	..	..
Dharwar ..	8,031	..	..	..	..	..	..	..
VI.—Sind ..	..	186	31	601	17	460	7,853	411
Hyderabad ..	..	9	14	184	3	577	8,237	79
Karachi ..	..	93	85	510	15	95	6,428	5
Nayabshah ..	..	74	6	397	1	972	7,747	14
Larkana ..	..	288	11	835	7	708	8,068	..
Sukkur ..	..	57	51	364	3	331	8,871	..
Thar and Parkar ..	..	20	8	389	73	221	4,392	3,262
Upper Sind Frontier ..	..	621	37	2,423	49	160	6,522	..

SEC. 8.—THE FIGURES.

163

Population speaking.

Kacchi.	Murathi.	Konkani.	Hindi.	Panjabi.	Gujarati.	Bhil Lan- guages.	Ahirani and Khand-shi.	Rajas- thani.	Gipsy Languages.	Others.
10	11	12	13	14	15	16	17	18	19	20
160	3,667	70	472	17	2,773	267	75	104	2	100
338	5,141	277	1,477	25	2,007	..	..	99	..	562
7	49	1	422	1	9,078	352	..	78	..	7
6	55	2	571	1	9,131	2	..	208	..	11
8	28	..	627	1	8,964	354	..	11	..	2
8	7	..	309	1	9,651	2	..	17	..	2
2	26	1	254	1	9,234	400	..	69	..	10
9	106	..	344	..	8,368	1,156	..	7	..	9
10	8,195	451	241	1	286	..	..	16	1	45
1	595	3,262	422	..	6	..	..	9	2	62
6	9,762	5	100	1	62	1	..	25	2	32
1	9,816	18	155	..	4	..	..	1	..	3
6	8,862	13	253	1	798	..	..	25	..	31
135	6,833	152	883	6	1,434	..	..	71	..	446
4	7,993	3	629	7	119	523	330	124	3	149
1	8,899	1	545	2	38	172	..	222	6	105
8	7,798	1	1,050	..	89	289	496	211	4	48
4	2,752	..	539	1	485	3,711	2,270	193	3	36
4	8,593	..	632	3	89	411	12	141	3	95
4	8,979	14	480	27	113	3	..	79	2	271
1	9,495	1	296	3	27	..	..	7	2	55
1	7,824	1	836	12	97	5	..	48	2	459
2	1,063	21	963	..	56	..	1	114	5	230
1	2,481	35	757	1	19	..	1	14	..	167
..	321	2	1,029	..	40	..	..	228	13	233
4	330	23	1,099	..	103	..	..	120	5	285
148	41	7	116	111	233	5	..	287	5	38
106	4	..	93	65	256	5	..	348	1	19
651	242	41	457	234	809	16	..	119	..	200
101	..	..	20	67	77	..	..	519	3	2
1	1	..	12	33	9	..	..	12	9	1
1	..	..	75	95	17	..	..	124	2	9
72	1	..	33	235	337	12	..	930	13	2
1	..	..	50	36	..	..	..	84	16	1

CHAPTER X.—INFIRMITIES.

PART I.—GENERAL.

SECTION 1.—THE BASIS OF THE FIGURES.

447. The instructions on the Cover of the Enumeration book were—

“ If any person be blind of both eyes, or insane, or suffering from corrosive leprosy, or deaf and dumb, enter the name of the infirmity in this column. Do not enter those who are blind of one eye only, or who are suffering from white leprosy only ”.

There were no supplementary instructions.

447-A. The only important change at this census was that, whereas at past Censuses, in the case of deaf-mutes, only those who had been deaf and dumb from birth were entered, at this Census (in accordance with the recommendations of the Committee appointed to examine the whole question of the education of defectives) all deaf-mutes were to be recorded, irrespective of the age at which the infirmity originated.

448. In Abstraction infirmities were not entered on the ordinary slips ; but a special gang was told off to look through the books, and enter up infirmities on special slips. To cope with incorrect infirmity entries the following was inserted in the portion of the Code dealing with slip-copying :—

“ In spite of instructions to the contrary it will sometimes be found that entries have been made in the infirmities column, which do not correspond with the instructions, such as *káná*, which properly means one-eyed. *Doken phirten*, which means “ funny in the head,” and so on. All such cases will be referred to the Deputy Superintendent for orders. He will decide whether to reject or admit the entries. He should be guided by the exact local meaning of the phrase used, the frequency of its occurrence, and so on. But as a general rule such entries should be rejected. ”

449. A small change was made in the method of classifying cases of persons suffering from two or more of the census infirmities. In 1911 the following Note to Table XII will show the principle followed :—

NOTE.—Persons suffering from two infirmities have been classified under the more important and not shown under the secondary affliction. Leprosy has been treated as more important than insanity, insanity than blindness, and blindness than deaf-mutism. There are no insane lepers and none suffering from three infirmities.

The actual figures were given in a small Table below the note just quoted, and were as follows :—

Leper and blind	..	..	..	11
Leper and deaf-mute	..	..	..	4
Insane and blind	..	..	..	45
Insane and deaf-mute	..	..	..	155
Blind and deaf-mute	..	..	..	28

On the present occasion a person suffering from two or more infirmities has been counted separately to each of them. That is to say, the basis of the statistics is changed from *persons* to *cases*. But, as the figures above quoted will show, the effect is small.

SECTION 2.—THE UTILITY OF THE FIGURES.

450. There are few census heads for which the figures are more unreliable than for infirmities. This has always been recognized. For one thing, even if the definitions of the different infirmities were clear and unmistakeable, omissions would arise from (1) carelessness of the enumerators, and (2) wilful concealment. We know that these causes of omission exist, but have no formula for gauging their extent. In passing it may be remarked that leprosy, at any rate in some regions, is regarded as specially contemptible ; that is to say, that a leper is a person to be despised, and not to be pitied. Consequently it is not likely that we would ever get the true figures. Blindness, deaf-mutism and insanity are usually known, where they exist. So that concealment, even if desired, would not be easy.

451. But, apart from all questions of omissions, all the four infirmities, in varying degrees, require expert diagnosis. This is of course especially the case with insanity. But leprosy is not easy to determine; and even absolute blindness and absolute deaf-mutism are not so easy to determine as they sound. Some indication of the vagueness of ideas which prevail regarding terms of this sort can be given by the following case. The secretary of a certain association for the relief of the deaf and blind wrote in, asking for a special schedule to be filled up. He submitted a sample of the schedule, which contained the following explanatory note.

“ ‘Deaf-mute’ includes ‘Speaking Deaf’ and ‘hard of hearing’. ‘Blind’ includes ‘those that cannot work as well as the sighted’.”

452. The unsatisfactory character of statistics of infirmities obtained by means of the population Census is well recognized in England. The following quotation from the 1911 Report of the Census of England and Wales is illuminating :—

“ While fully realising the great importance of attempting to ascertain the numbers of persons afflicted with certain infirmities, we must submit that statistics of this nature obtained through a general population Census are most unsatisfactory; firstly, on account of the difficulty of framing a suitable form of inquiry defining the degree of disability which it is desired to include in the tabulation, and, secondly, because the definition has to be applied by householders with no technical knowledge, who will interpret it in different ways, and many of whom have a natural reluctance to admit that they or their relatives suffer from any defect—at least to the degree referred to in the inquiry. This was put more strongly by the Census Commissioners of 1881, who stated in their report (C. 3797, page 71):—‘... we felt bound to point out, as clearly as we could, how very incomplete are the returns which relate to these afflictions, and more especially those which relate to idiocy and imbecility. We have done the best we could with these unsatisfactory data. We cannot, however, but express our decided opinion that statements made by persons as to the deficiencies, mental or bodily, of their children or other relatives are not worth the cost and labour of collection and tabulation.’ They also quoted the results of an investigation into the admissions into a large idiot asylum during the year following the date of the Census, which showed that in one-half of the cases of admissions as indisputable idiots between the ages of 5 and 15 no entry had been made on the Census schedule which had been filled in a few weeks or months before.

“ The Report on the Census of 1891 characterised these statistics as ‘in all probability excessively inaccurate,’ while in the Report for 1901 it is stated :— ‘Concerning the above-named infirmities it should be clearly understood that the machinery of an ordinary English Census is but imperfectly adapted to furnish the required particulars with that degree of accuracy which is essential for statistical purposes. It is because experience has impressed us with this conviction that we have abstained from entering into minute details which, had the data been more reliable, would have proved highly instructive and useful.’

“ The Royal Commission on the Care and Control of the Feeble-minded reports as follows on the unsuitability of the Census as an agency for ascertaining facts concerning mental defect : ‘the census, it appears to us, is not an agency suitable for the ascertainment and classification of facts the nature of which in very many instances can only be learned by the personal observation of men and women whose judgment has been trained and well practised in a special branch of medical work. Both for administrative and scientific purposes it would be better, we think, to ascertain the facts by special investigation such as that which has been made by our medical investigators, or by means of the cumulative records which we hope may be compiled as confidential documents, as soon as the importance of the subject is recognised.’ (Cd. 4202, page 198.)

In this connection it may be mentioned that the investigations of the Royal Commission in 1905 proved that the Census figures for the mentally defective had been much understated in 1901.

In foreign countries much the same impression prevails as to the unsatisfactory nature of the infirmity inquiry, and, therefore, in some cases a technical inquiry conducted by experts into the degree, cause, duration, etc., of the affliction follows the obtaining by the general census of the names and addresses of the infirm. In reply to a question on this point, the Census authorities of the United States of America wrote as follows :—

“... one of the reasons for not including inquiries regarding physical and mental defects on the population schedule of the 12th Census (1900) of the United States was the realisation of the impossibility of getting accurate information on these points in a large number of cases, not only on account of the difficulty of defining the degree of impairment which would constitute a defect, but because of the sensitiveness of persons affected and their consequent concealment of such defects in themselves and members of their families. These questions, at the 11th Census, gave rise to much criticism and complaint, and the attempt to secure these data was therefore

abandoned.' It is observed, however, that at the 13th Census (1910) questions relating to blindness and deaf-mutism have been again introduced, with a view, we understand, to the subsequent professional inquiry referred to above."

453. In this Presidency Major W. S. J. Shaw, I.M.S., the Superintendent of the Yeravda Lunatic Asylum, wrote to Government in November 1920 strongly urging that the enumeration of insanes should be abandoned. His letter I quote *in extenso* :—

"As a census of the Presidency is about to be made I have the honour to invite your attention to the following points which I think afford good grounds for omitting in this census certain figures of the incidence of insanity which appear in the previous ones. I would suggest that a report should be simply made of the number of insanes under restraint in asylums, and that no attempt be made to obtain figures of the incidence of insanity in general, as such can only be quite inaccurate. In the last census report the return was for 'mania' alone, and 'mania' is almost the most recoverable type of insanity, but now-a-days it is considered a phase of 'manic-depressive insanity' and not a definite disease in itself. We must assume that the graver varieties of insanity exist in India outside Asylums as they do in all other countries, consequently it is difficult to understand why a return of cases of 'mania' alone is made in India, unless it is meant to include all serious cases of insanity, which from every point of view, it should not.

"2. The census of 1911 shews the population of Bombay Presidency (including Aden, but excluding the Native States) as 19,672,642. The proportion of females to 1,000 males is given as 920 (all ages). The insane population is given as 6,270 (males 4,173 and females 2,097) or nearly 32 insanes (21·2 males and 10·7 females) in 100,000 of the general population. The total accommodation provided in the district asylums then existing was 1,124, or nominally for one out of 5·58 insanes, even if the census figures can be accepted as accurate.

"I think it is, however, certain that the census only enumerates a very small proportion of the insanes in the Presidency for the following reasons.

"3. The Census Superintendent writes (Census of India, 1911, Volume VII, Part 1, page 181): 'There is no hard and fast rule as to what constitutes insanity, and it is possible that some who are merely half witted may have been included within this category, * * * owing to inherent difficulties no attempt has been made to discriminate between the various degrees of mental derangement.' It may be taken as certain that 'half witted' persons are not sane, and therefore are insane. In my experience I have known a medical man, well qualified in an Indian University, speak of a person who had been demented for ten years, dirty in habits and mindless, as, 'not exactly mad, you know, but like this for ten years'. Remarks like this are common. I submit that the figures of the census as to insanes may be considered far too low, from a consideration of this point alone. The Indian and lay mind conceives insanity as 'madness' or 'acute mania' only. The Commissioner was not a medical man, and his judgment, and that of his subordinates, as to what constitutes insanity, cannot be taken as evidence, especially when the curious variations in the earlier decennial periods are borne in mind.

"4. A large proportion of deaf-mutes (enumerated separately above) may be considered definitely insane. This is the only country in the world the statistics of which give a larger proportion of deaf-mutes than insanes. There appear to be about double the number of deaf-mutes than insanes in India*—which is a very noteworthy fact—but I am afraid, we cannot consider it fact.

"5. The proportion given of female to male insanes is in my opinion far too low. In Europe the incidence of insanity among males and females may be considered as about equal. In this country I submit that for the following reasons the incidence should be higher among females than males :—

- (a) Female infants are comparatively neglected ;
- (b) Early child-bearing is encouraged ;
- (c) The ceremonies, regulations, and methods of confinement are brutal compared to those in Europe ;
- (d) Widows are exposed to many hardships as are women of the lowest classes ;
- (e) In private practices I have been called to see slightly more female insanes than male ones.

In view of these facts I can find no *prima facie* reasons why the incidence of insanity should be less among women than among men. The only possible explanation of the census figures is, I think, that it is commoner, but that insane women are not consigned to asylums if possible, and are looked after at home. The *purdah* system of course is an additional reason why insanity among women is not a matter of general knowledge. It may be remarked here that in Abbassia Aylum, Egypt, in 1916, there were 870 males to 532 females. These inmates were mainly Mohamadans.

*Actually it has been at all Censuses considerably more than double in India as a whole.—L. J. S.

"6. The Commissioner remarks (C. of I., Volume VII, Part I, page 182): 'Insanity is most prevalent among Anglo-Indians, next to them among Parsees, and then Europeans, with 467, 160, 130 per 100,000 of the rest, respectively.' These figures are included in the general total of insanes given above (*viz.*, 6,270 for the Presidency), and if removed from this total would leave the number of Hindu and Mohamadan insanes of the Presidency very low indeed—perhaps 25 per 100,000. I think it will be generally conceded that this proportion is far too low, considering those of the smaller communities, which, being smaller and much more highly educated, are easier to enumerate.

"7. Comparison of census returns with the data regarding the incidence of insanity in other countries tends still further to discredit those returns. The proportion of lunatics per 100,000 of the population in Bombay Presidency has been given by the census of 1911 at 32. In England and Wales (1907) it was 354·8, in Scotland 312, and in Ireland 538 per 100,000 of the population. At home the proportion has increased steadily since 1859, *i.e.*, from 186·8 to 354 (in 1907) per 100,000 and in Ireland from 130·9 in 1862 to 538 in 1907.

"A *propos* of this increase Peterson writes (Encyclopedia Britannica, Volume XIV, page 611): 'The publication of these figures has given rise to the question whether lunacy has actually become more prevalent during the last 20 years, whether there is real increase of the disease. There is a pretty general consent of all authorities, that if there has been an increase, it has been very slight and that the apparent increase is due, first to the improved system of registration, and secondly (a far more powerful reason), to the increasing tendency among all classes, and especially among the poor class, to recognise the less pronounced forms of mental disorder as being of the nature of insanity.' He later refers to 'the futility of seeking for accurate figures bearing on the relative number of lunatics in other countries'. Here we are dealing with countries where some method of registration of lunatics is in force. In India there is none, and there is further a deliberate secretiveness, and great ignorance of the meaning of 'Insanity'.

"8. I think it is evident that the previous returns of the incidence of insanity are incorrect and useless, and I think that a return of the certified cases of insanity in the asylums of the Presidency should be substituted. In England such a return is put in annually by the Board of Control."

454. It being then too late to prevent the enumeration of infirmities the Bombay Government wrote to the Government of India recommending that the figures for insanes though collected, should not be tabulated. I quote *in extenso* the Bombay Government's letter and the reply of the Government of India:—

Letter to the Government of India, Department of Education (Census), no. 1098, dated the 31st January 1921:—

"I am directed to forward herewith a copy of a memorandum from the Surgeon General with the Government of Bombay no. C.—2443, dated the 10th December 1920, together with a copy of a letter No. 2950, dated November 1920, from Major W. S. J. Shaw, M.D., I.M.S., Superintendent, Central Asylum, Yeravda and to say that it has been represented that the figures of the incidence of insanity recorded in the census reports are very inaccurate and misleading. Major Shaw suggests that the ensuing census report should simply show the number of insanes under restraints in Asylums and that no attempt be made to obtain figures of insanity in general. The Provincial Superintendent of Census, Bombay Presidency, who was consulted in the matter, concurs in the views of Major Shaw but remarks that it is now too late to alter the schedule and instructions regarding the enumeration of the insanes which are already printed. The Governor in Council agrees with the suggestion made by Major Shaw and considers that although it is too late to prevent the enumeration of the insane population, it is not too late to prevent the printing of inaccurate figures in the final census report. I am therefore to request that the Government of India may be moved to consider the advisability of adopting the suggestion made by Major Shaw."

Letter from the Government of India, Department of Education (Census), no. 31, dated the 14th March 1921:—

"I am directed to refer to your letter no. 1098, dated the 31st January 1921, regarding the compilation of statistics of insanes at the forthcoming census. The Government of Bombay, while recognising that it is too late to issue revised instructions for the enumeration of the insane population, commend for the consideration of the Government of India a suggestion made by Major W. S. J. Shaw, I.M.S., Superintendent, Central Lunatic Asylum, Yeravda, that in the ensuing Census Reports the figures returned in the schedules should not be tabulated but that a return of certified cases of insanity in the Asylums should be substituted.

"2. In reply, I am to say that the Imperial Census Tables, which as determined for the next census have already been published for general information with this Department Notification no. 93, dated the 11th October 1920, must exhibit the statistics collected in the Census Schedules, though in commenting thereon use is sometimes made of departmental figures. It has always been admitted that infirmity statistics collected at the census are inaccurate. But the Census figures, even though inaccurate, are of some interest and value because the errors are fairly constant from Census to Census and the ratio of variation affords some guide to the

growth or decline of a disease.* The statistics also give some clue to the territorial and racial distribution of the infirmities. The Government of India are therefore of opinion that the Census figures of the insane should be compiled and shown in the Census Reports and regret that they cannot adopt Major Shaw's suggestion. There will, of course, be ample opportunity for the Census Commissioner and the Provincial Superintendents of Census Operations to deal with the accuracy and completeness of the figures."

455. The above letters, though dealing primarily with Insanity, raise questions of a wider nature. If our figures of Insanes are worthless, it follows that our figures for all the other Infirmities are the same. If one goes, all should go.

456. So far as the arguments advanced by the Government of India are concerned, I feel that the statement that the figures afford some clue to the territorial distribution of the infirmities is correct. Racial distribution I find to be most probably determined by the territorial location of the different races. The other main defence, namely that the figures afford some guide to the growth or decline of a disease, is more doubtfully sustainable. Yet it seems to be true at any rate to some extent in the case of Leprosy.

457. In the remainder of this Chapter, I hope to be able to show that our figures, whatever they are that we get, are not without some sort of continuity. They may be incorrect; but they are not haphazard, or guided by blind chance. To a considerable extent they represent, Census by Census, the same, or, to be more precise, corresponding facts; and they are therefore capable of statistical treatment.

PART II.—THE FIGURES.

SECTION 3.—MEANING OF "POPULATION AFFLICTED".

458. In the Tables columns are provided for "Population Afflicted", that is to say, for the sum of Insane, Deaf-Mutes, Blind and Lepers. These figures seem to me to be worthless. The figures of Insanes and Deaf-Mutes are better combined; and there *may* be some connection between Leprosy and one or other of the remaining three Infirmities. But scientific justification for adding together, the figures of all four Infirmities seems to me to be lacking. As already explained, the figures in the Bombay Tables under "Persons Afflicted" represent not individuals, but *cases*. But this makes little difference one way or another; and the whole triple column should, in my opinion, be abandoned at future Censuses.

SECTION 4.—GENERAL CHANGES SINCE 1881.

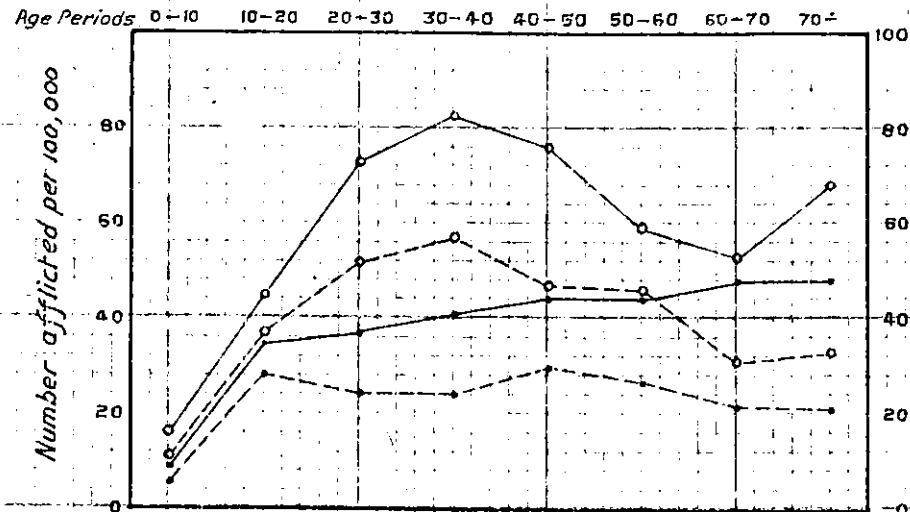
459. In the Table below are given the actual numbers recorded under each infirmity at the 2nd to 6th Censuses. I have also combined the figures of Insanes and Deaf-Mutes, because of the believed difficulty of distinguishing between these two Infirmities, and their acknowledged relationship.

Subsidiary Table No. 105.—Actual numbers recorded under each infirmity, Whole Presidency, 1881—1921.

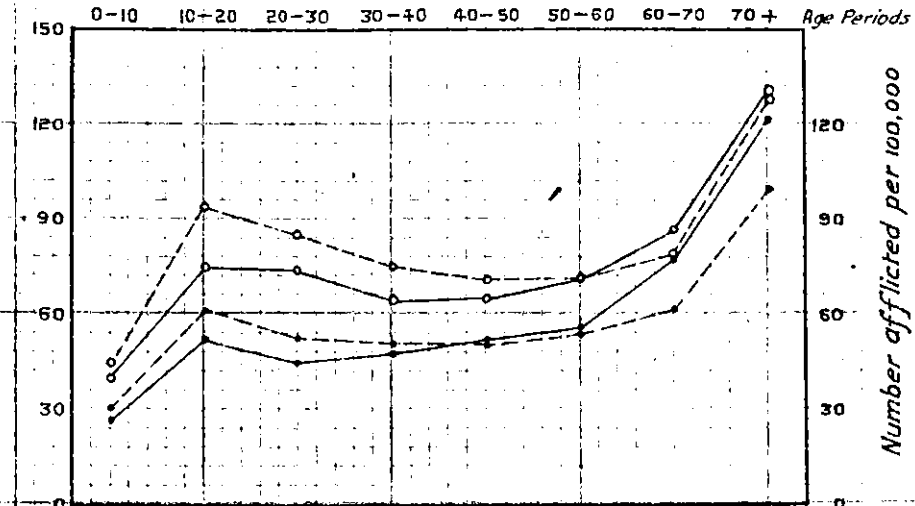
Year.	Insanes.			Deaf-mutes.			Blind.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.
1881.. ..	9,938	6,501	3,437	16,594	9,064	6,630	62,228	28,285	33,943
1891.. ..	8,280	5,347	2,933	16,305	9,941	6,364	41,082	20,721	20,361
1901.. ..	4,679	3,101	1,578	9,113	5,557	3,556	21,634	10,919	10,715
1911.. ..	7,869	5,198	2,671	16,601	10,212	6,389	39,037	19,081	19,956
1921.. ..	11,179	7,277	3,902	14,662	8,806	5,856	49,706	23,200	26,506

Year.	Lepers.			Insane plus Deaf-mute.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
1881.. ..	12,382	9,106	3,276	26,532	16,465	10,067
1891.. ..	12,740	9,594	3,146	24,585	15,288	9,297
1901.. ..	6,901	4,993	1,908	13,792	8,658	5,134
1911.. ..	10,303	7,354	2,949	24,470	15,410	9,060
1921.. ..	9,707	6,746	2,961	25,841	16,083	9,758

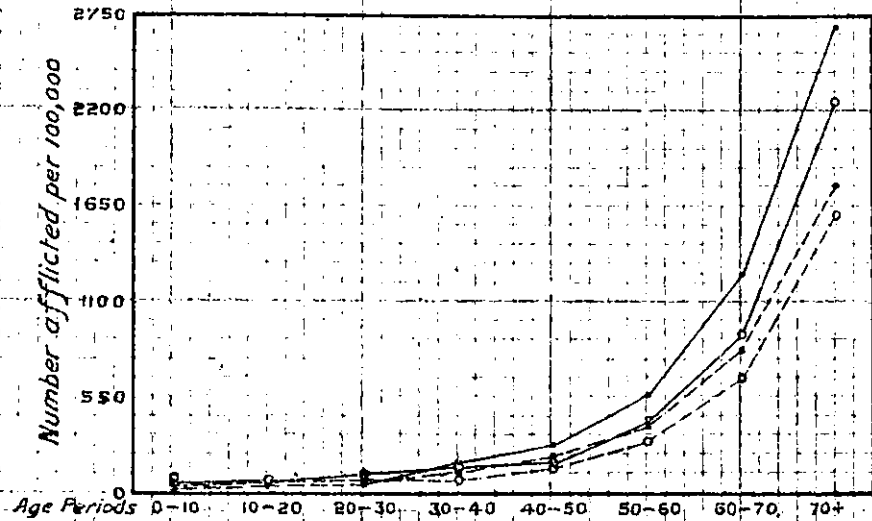
INSANITY.



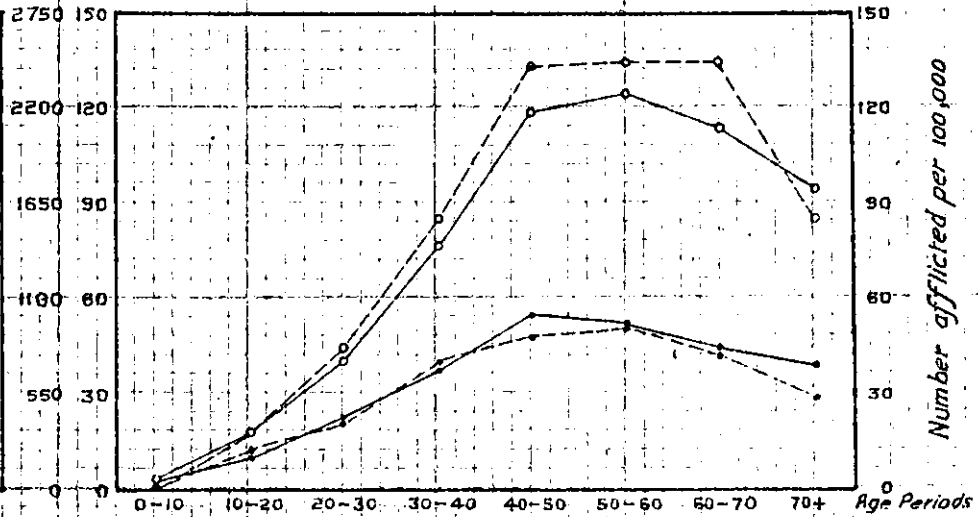
DEAF-MUTISM.



BLINDNESS.



LEPROSY.



Number per 100,000 of the total population at each age period who were afflicted with each of the four census infirmities 1911 and 1921.

1911 { Males ——— Females - - - - }

1921 { Males ——— Females ——— }

460. Briefly, the following are the main facts brought out. (1) The figures for Blind in 1881 were too high, indicating a laxer interpretation of the word than was adopted at later Censuses. (2) The 1901 figures show violent declines under all Infirmities, this decline being confined to that one census. (3) Excluding 1901, the figures under Insane and Deaf-Mute added together show considerable constancy. (4) Excluding 1901 and 1881, the figures under Blind were more or less constant in 1891 and 1911, and rise sharply this time. (5) Excluding 1901, the figures under Leper show a steady decline, the slight rise in 1891 being proportionately lower than the rise in the Total Population.

461. As regards 1901 the violent decreases at that Census correspond with a decrease in India as a whole. In some Provinces the decrease was more pronounced than in Bombay, for instance in the Hyderabad State, where the fluctuation was so violent that Infirmities almost disappeared. On the other hand in the Punjab the proportions under Insane and Blind increased, and the decline under the other two Infirmities was small. Mr. Macgregor in para. 213 of his Report for 1911 entirely disposed of the argument adopted in 1901 to explain the decreases, namely that the infirm persons had died in the famine. There cannot be any doubt therefore that the Census Record of Infirmities in 1901 does not cover the same facts as at the two preceding and two following Censuses. Mr. Macgregor mentions that the method of Tabulation was the same as that used in 1911, and that the same instructions were issued to Enumerators. It is difficult to isolate the cause; but as it was the first occasion on which the Slip System of Abstraction was used, inefficiency in the Abstraction offices is by far the most probable. But, whatever the cause may have been, *the 1901 figures should be entirely neglected in all studies of Infirmities figures.*

SECTION 5.—CONTINUITY OF THE FIGURES.

462. I now wish to demonstrate that the figures show a continuity which their critics might not expect. The figures have already been given. But a further analysis by sex-ratio, age distribution and locality is desirable.

I.—Sex-Ratios.

Number of Females per 100 Males in each infirmity at four Censuses, Whole Presidency.

Year.	Insanes and Deaf-mutes combined.	Blind.	Lepers.
1881.. ..	61	120	36
1891.. ..	61	98	33
1911.. ..	59	104	40
1921.. ..	61	114	44

463. The sex-ratios in the first case are remarkably constant. In the others the fluctuations are somewhat wider than they should be when a large body of figures is dealt with. But compared as one Infirmity against the others the general

<i>Number of Females per 100 Males in the Blind, by Administrative Divisions, 1911 and 1921.</i>			
N. D.	..	121	130
C. D.	..	99	115
S. D.	..	89	104
Sind	..	84	85

continuity is obvious, and the limits of the fluctuations do not even approach one another, much less overlap. Studied by regions we find that the sex-ratios, wherever the figures are large enough, show considerable constancy. Thus, the increased proportion of Blind Females to Blind Males at this Census (114 against 104 in 1911) is borne out by increases in each of the Administrative Divisions—the proportion rising in each case, without disturbing the territorial sequence.

II.—Age-Distribution.

464. In this matter the continuity of the figures is very striking. The diagram opposite shows clearly that, whatever we get as our figures, they represent

the same ideas in the minds of the Enumerators from Census to Census. If the figures were quite haphazard, the distribution by age-groups from Census to Census would be variable. Nor is the parallelism confined to the 5th and 6th Bombay Censuses. Similar curves were shown in Chapter X of the 1911 Report; and it will be there seen that even the 1901 curves conformed almost exactly to the same shapes. Not only so, but in the 1911 India Report will be found similar curves—these in the case of Males going back to 1881. The more important and striking features of the curves, for instance the peak in the Deaf-Mute curve at group 10—20, the peak in the curve of Insanes at group 30—40, the hollow shape of the Blind curve, and the long slow hollow rise in the Leper curve between 0 and 50, followed by a prolonged elevation over three age groups, reappear with perfect regularity at each Census. I feel that the critics of the Infirmitie Tables must admit the force of this argument. No haphazard collections of figures are ever susceptible to parallelism when plotted diagrammatically.

III.—Locality.

465. The constancy of the distribution by locality is clearly brought out by

Number of Lepers per 100,000 persons, Deccan and Sind; 1881 to 1921 (omitting 1901).			
		Deccan.	Sind.
1881	..	108	11
1891	..	96	7
1911	..	57	8
1921	..	77	6

the Tables in this Chapter. The comparison in the margin is striking. If the figures were entirely haphazard we should expect more Lepers in Sind at some Censuses and more in the Deccan at others.

466. The continuity of the figures could also be studied by Caste on the basis of Imperial Table XII-A at this and the last Census. But, since the incidence of Infirmitie by Castes seems to be dependent rather on their territorial distribution than on any racial character, this has not been done.

SECTION 6.—INSANITY AND DEAF-MUTISM.

467. The question how far the two Infirmitie mentioned above overlap—that is to say so far as our records are concerned—is not easy. I lean strongly to the opinion that it is more or less a matter of chance to which head an Insane person, who is of a taciturn type and makes strange noises, will be entered. This idea is, I think, borne out by the haphazard nature of the figures, *when studied separately*. I took out the number per 100,000, both sexes combined, who were returned as (i) Insane and (ii) Deaf-Mute, and then calculated the amount by which, for each regional unit, the rate of Insane exceeded or fell short of the rate of Deaf-mutes. From the resulting differences I could get no sort of homogeneous distribution, whether the Districts were arranged by climate, by geographical position, or by language. In some cases the influence of an Asylum, with its automatic diagnosis, raises the difference in favour of Insanes. Thus Poona, with a difference of +57, is considerably the highest in the Presidency. On the other hand the Thana difference is adverse, namely —32. Contiguous Districts show, divergent differences, *e. g.*, East Khandesh —9, West Khandesh +6; Nasik —22, Ahmednagar +10. Again, Sukkur +29, Navabshah —30, Khairpur +32. There is one solid region, covering the Konkan, the South Deccan, the Southern Mahratta Country and the Karnatak in which there is always a substantial difference in favour of Deaf-Mutes; and this I suspect to be due to language and local custom. The Gujarati-speaking area, the North Deccan and Khandesh, and Sind are all of them heterogeneous in this matter.

468. Consequently I consider that we ought to combine these two Infirmitie in considering the results. In the following Table the per 100,000 distribution value is given for each of the Imperial Tables units, arranged in order of incidence.

Subsidiary Table No. 106.—Number of Insanes and Deaf-Mutes combined, (both sexes combined), in every 100,000 of the Population, 1921.

Poona	..	..	197	(Asylum, accommodation 523)
Hyderabad	..	..	168	(Asylum, accommodation 300)
Thana	..	..	154	(Asylum, accommodation 272)
Navabshah	..	..	146	
Bijapur	..	..	140	
Thar and Parkar	..	..	136	
Surat	..	..	130	
Palanpur Agency	..	..	119	
Ratnagiri	..	..	116	(Asylum, accommodation 183)
Sukkur	..	..	115	
Kanara	..	..	114	
Upper Sind Frontier District	..	..	114	
Dharwar	..	..	112	(Asylum, accommodation 156)
Kolaba	..	..	109	
Sholapur	..	..	108	
Satara	..	..	106	
Larkana	..	..	103	
Kathiawar	..	..	102	
Broach	..	..	102	
Ahmedabad	..	..	100	(Asylum, accommodation 167)
Belgaum	..	..	94	
Surat Agency	..	..	90	
Khairpur	..	..	90	
Southern Mahratta Country States	..	..	84	
Panch Mahals	..	..	80	
Karachi	..	..	80	
Cambay	..	..	79	
Kolhapur	..	..	73	
Kaira	..	..	70	
Cutch	..	..	65	
Nasik	..	..	64	
East Khandesh	..	..	65	
Reva Kantha	..	..	60	
Bhor	..	..	52	
Mahi Kantha	..	..	51	
Ahmednagar	..	..	48	
West Khandesh	..	..	42	
Bombay Suburban District	..	..	18	
Savantvadi	..	..	15	

469. It is difficult to get any order out of this list. The influence of the Asylums makes itself felt to some extent. The position of each asylum is indicated, together with its maximum possible accommodation, which must not be confused with the number (unknown) of actual inmates on the Census date. But so far as territorial incidence is concerned we do not find any satisfactory unity. The range between the highest and lowest in different regions, excluding Asylum Districts, is as follows—

Region.	Highest Incidence.	Lowest Incidence.
Sind	Navabshah .. 146	Karachi .. 80
Gujarat	Surat .. 130	Mahi Kantha .. 51
Deccan	Sholapur .. 108	West Khandesh .. 42
Karnatak	Bijapur .. 140	Kolhapur .. 73

The range in the Konkan is not given since there are only three non-Asylum Districts, and of these one, Bombay Suburban, is so close to the Naupada Asylum as to share it with the Thana District in which it actually stands. The range in the Natural Divisions is very wide. On the whole Sind shows a higher incidence than the Presidency Proper. The incidence in the North Deccan is much lower than in the South. But this is about all that can be said. There may be racial factors at work; but if so they are obscure. Perhaps it may be said that the Bhil country comes out low; and this agrees with the low incidence in that Caste, and in the Forest Tribes generally. Nor do we find any clue by considering the ratio of Urban

to Rural population. East Khandesh and Kaira, containing many moderate-sized towns, come out low, Bijapur and Kolaba, with very few towns, high. Karachi with its large city comes out low; Sholapur high.

SECTION 7.—BLINDNESS.

470. The distribution of Blindness follows the distribution of previous Censuses. Generally speaking there is a rise throughout; but that rise is proportional, except that the Broach figure rises to an unduly high level; and the figure for Savantvadi seems too low having regard to the figures for the Districts surrounding it.

471. The two most important causes of Blindness are usually supposed to be—(1) the glare from the sun, especially reflected glare from sand, burnt grass, salt land, or the sea (or snow, of which of course we have none), and (2) the smoke from fires in small ill-ventilated huts. In this Presidency, owing to the absence of very low temperatures, the second cause will be more or less evenly distributed. But the first cause varies considerably in a Presidency with such marked divergences of climate and vegetation.

472. The following list of units, arranged according to the incidence of Blindness, will be found to follow more or less the arrangement which would have been arrived at, if the reader had been asked to make a list (independently of all figures) of the same units in accordance with the probable average daily values of reflected sun-rays throughout the year.

Subsidiary Table No. 107.—Number of Blind persons (both sexes combined) in every 100,000 persons in each Imperial Tables Unit, 1921.

Cutch	494	Mahi Kantha	179
Broach	351	Bijapur	170
Sukkur	307	Khairpur	166
Ahmednagar	295	Satara	155
Upper Sind Frontier	267	Karachi	145
East Khandesh	264	Panch Mahals	142
Kathiawar	263	Kolaba	129
West Khandesh	258	Thana	119
Palanpur	252	Ratnagiri	117
Nasik	251	Reva Kantha	114
Surat	246	Surat Agency	110
Larkana	238	Bhor	109
Cambay	222	Dharwar	101
Ahmedabad	219	Belgaum	89
Navabshah	216	S. M. C. States	87
Thar and Parkar	209	Kanara	85
Hyderabad	203	Kolhapur	67
Kaira	202	Bombay Suburban	56
Sholapur	194	Savantvadi	12
Poona	188		

473. Some of the units seem to come out of their places, for instance Khairpur, which is too low. There are also extraneous factors to be considered. For instance at Surat there is some charitable work done for the Blind, which may draw such persons from the surrounding Districts. In the case of Karachi the city population is being constantly supplemented by immigrants arriving from other regions, in which the strain on their eyes was less. The comparatively high proportion of Blind in the Konkan Districts is not surprising. A large part of the population lives on the Coast, which, except in Kanara, is bare of trees, and signalised by a high degree of glare from sea, sandy shore, and salt flat.

474. The Deccan Districts fall into their places according to—(1) the proportion of open country, (2) the character of their soil, and (3) the duration of the rainy season. All these three factors are of importance. For instance, in Dharwar and Belgaum there is as much open country as in Satara and Poona. But that open country is almost entirely black soil, without the barren stretches of the lesser spear-grass (*Aristida Adscensionis* Linn.) which causes so much glare in the North Deccan; and the monsoon commences earlier and ends later. The position of the two Khandeshes is rather high, especially West Khandesh. But the monsoon in that region is short, and the glare in the open country severe.

475. As to Savantvadi it can hardly be denied that that unit must be characterised by a lower value for reflected sun-light than any of the others. Nevertheless, in view both of the excessively low figure in this list, and also to the low figure recorded for Savantvadi in the case of *the other Infirmities also*, there is reason to think that either the enumeration or Tabulation of Infirmities in that State was defective. The Abstraction Office was a local one.

476. To have tested the general theory above propounded satisfactorily it would have been desirable to have taken out the proportions of Blind persons by Talukas in Districts like Satara, where there is a marked divergence between the Western Forest Talukas and the open Eastern ones. But unfortunately in the standardised method of abstracting Infirmity figures the District was taken as the unit throughout, and figures by Talukas are consequently not available.

SECTION 8.—LEPROSY.

477. The Leprosy distribution shows remarkable continuity. The variations by locality are exceedingly wide, ranging at this Census from 3 per 100,000 in Cutch to 129 per 100,000 in Satara. Yet not only do the intermediate values arrange themselves on the map in a reasonable territorial scheme; but, when the three Censuses of 1891, 1911 and 1921 are compared, we find the same regional distribution throughout. These figures, therefore, though no doubt in no case absolutely correct to a digit, nevertheless represent actual facts, and not the caprice of individual enumerators. It must be a fact that there is a region of highest incidence in Satara, that the incidence lessens in intensity as we move outwards from the central core, that it increases again locally in East Khandesh, and diminishes almost to zero in Sind and Kanara. The figures are given succinctly in the Table below.

Subsidiary Table No. 108.—Numbers of Lepers (both sexes combined) in every 100,000 persons of each District and chief Agencies and States, 1891, 1911 and 1921.

Locality.	1891	1911	1921
Satara	121	108	129
East Khandesh	116	122	102
West Khandesh		58	57
Kolhapur	195	74	64
Poona*	100	63	45
Ratnagiri†	98	64	55
Bhor	92	60	39
Kolaba* †	91	72	54
Sholapur†	81	90	95
Ahmednagar	78	66	75
Thana	61	47	39
Bombay Suburban District			19
Nasik†	50	40	42
Reva Kantha	43	25	18
Bijapur	42	20	35
Surat	37	49	48
Southern Mahratta Country States	36	32	44
Belgaum†	30	28	22
Surat Agency	28	39	48
Panch Mahals	23	11	7
Broach	23	25	23
Dharwar	20	16	14
Savantvadi	18	21	13
Kathiawar	15	7	8
Kaira	14	10	12
Mahj Kantha	12	9	5
Ahmedabad†	10	9	5
Karachi†	10	10	8
Cambay	9	4	6
Uppor Sind Frontier District	9	5	9
Palanpur Agency	9	5	44
Larkana	8	6	7
Sukkur		7	6
Hyderabad	6	5	3
Navabshah			6
Cutch	5	2	3
Khairpur	5	5	9
Thar and Parkar	4	2	4
Kanara	4	4	5

* Districts having an Asylum with accommodation for more than 100 Lepers.

† Do. do. do. 50 to 100 Lepers.

‡ Do. do. do. less than 50 Lepers.

478. We can further from this Table arrive at deductions in the important matter of diminution or intensification of the Leprosy incidence. Excluding the North and also Kanara, in which two regions the incidence has always been so low as to be of little importance, and confining ourselves to the inner area, in which Leprosy is evidently a real problem, we can distinguish regions in which the values are stationary, and regions in which there is a clearly marked improvement. Thus—

Regions of high and
stationary incidence.

Satara.
S. M. C. States.
Bijapur.
Sholapur.
Ahmednagar.
Nasik.
Khandesh.
Surat District.
Surat Agency.
Broach.

Regions of high but
diminishing incidence.

Thana.
Kolaba.
Ratnagiri.
Kolhapur.
Poona.
Bhor.
Belgaum.
Dharwar.

It will be seen at once, from the map opposite that they are homogeneous. They represent two irregular belts with a direction approximately from N. N. W. to S. S. E. There is also a secondary region of low but diminishing incidence, represented by Ahmedabad, Mahi Kantha, the Panch Mahals and Reva Kantha, which is cut off from the more southerly belt of similar character by Surat and Khandesh.

479. It is not intended to press the argument too far. The series of three Censuses in 40 years is far too short for a continuation of these movements to be forecasted. But as the figures now stand the phenomena to which attention has been drawn are definite statistical phenomena, and cannot be explained away by harping on the difficulty of recognising Leprosy and the ignorance of the Enumerators.

480. The only serious break in the continuity of the figures is the case of the Palanpur Agency. The rise is confined to the Palanpur State, which shows an incidence of 94 whereas the incidence in the rest of the Agency is only 2. There must be some special reason for the Palanpur State figure, either a genuine influx of lepers due to some special attraction, or a mistake in the Abstraction Office. The Political Agent was asked to find out the clue; but unfortunately his reply had not been received when it became necessary to send this Chapter to the Press. Should it arrive in time the result will be incorporated as an Appendix.



SEC. 8.—LEPROSY.

175

Subsidiary Table No. 109.—Distribution of the infirm by age per 10,000 of each sex (five Censuses),
British Districts.

Note.—Aden is included for all past Censuses; but the difference caused by the inclusion of Aden for all past Censuses and its exclusion this time is negligible.

Age.	INSANE.										DEAF-MUTE.									
	Males.					Females.					Males.					Females.				
	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1																				
0—5	185	113	229	240	255	232	172	306	268	348	286	380	408	489	448	447	457	431	572	548
5—10	649	690	558	857	805	608	668	691	840	943	1,463	1,282	1,398	1,557	1,534	1,479	1,360	1,465	1,672	1,561
10—15	810	884	1,002	1,041	1,099	952	1,108	1,053	1,192	1,086	1,467	1,427	1,598	1,460	1,279	1,292	1,214	1,542	1,274	1,137
15—20	848	990	980	1,102	1,054	1,079	1,178	1,233	1,436	1,348	919	1,072	1,185	1,104	972	797	980	1,064	1,037	946
20—25	1,012	1,246	1,051	1,177	2,403	1,194	1,259	1,194	1,371	2,078	971	1,081	1,030	950	1,677	863	1,003	997	894	1,555
25—30	1,352	1,318	1,242	1,155		999	978	950	1,067		1,070	1,034	1,053	999		904	1,027	858	945	
30—35	1,423	1,356	1,063	1,157	1,793	1,227	1,063	896	1,011	1,503	931	950	877	832	1,474	972	920	900	807	1,226
35—40	1,143	997	1,005	860		740	744	707	642		670	629	591	557		622	597	526	458	
40—45	931	860	906	923	1,419	806	958	1,021	757	1,204	556	634	497	613	1,053	677	676	585	679	1,058
45—50	566	458	654	443		530	539	456	346		423	389	319	357		414	337	331	333	
50—55	502	540	512	472	648	612	610	550	388	695	431	420	396	404	757	490	482	493	442	843
55—60	181	194	245	199		245	186	244	180		212	173	169	172		206	186	155	170	
60 and over	398	350	573	356	471	677	539	699	512	706	601	529	479	506	811	837	761	644	717	1,124

Age.	BLIND.										LEPER.									
	Males.					Females.					Males.					Females.				
	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1																				
0—5	251	404	313	412	273	189	289	241	340	165	27	30	29	29	30	62	64	56	36	79
5—10	571	573	601	582	553	336	370	469	431	359	97	16	95	55	128	156	115	169	136	255
10—15	604	584	745	564	608	309	369	516	424	385	289	226	301	264	326	396	451	467	439	568
15—20	392	508	682	518	506	266	387	436	412	347	415	431	503	423	559	470	527	625	727	753
20—25	456	551	620	624	1,106	320	421	474	511	855	560	703	598	670	1,007	676	882	812	870	1,843
25—30	511	576	702	688		399	479	593	662		1,013	933	1,064	986		1,018	962	987	1,091	
30—35	592	629	735	719	1,222	552	583	714	653	1,004	1,259	1,159	1,387	1,361	2,564	1,405	1,365	1,313	1,346	2,374
35—40	510	561	660	571		482	504	641	531		1,272	1,323	1,297	1,275		1,104	1,237	1,062	1,115	
40—45	688	742	796	781	1,220	745	850	874	833	1,249	1,463	1,567	1,460	1,510	2,388	1,540	1,388	1,608	1,298	1,894
45—50	516	569	616	526		574	530	614	493		1,033	1,052	1,011	1,026		915	810	743	767	
50—55	965	897	898	839	1,358	1,102	1,057	997	958	1,624	1,096	1,090	1,052	1,032	1,499	1,002	958	937	967	1,277
55—60	515	461	524	450		548	481	505	466		513	423	486	493		374	419	343	308	
60 and over	3,423	2,942	2,501	2,726	3,154	4,173	3,630	2,020	3,383	3,953	957	992	717	821	893	882	822	809	891	947

Subsidiary Table No. 110.—Number afflicted per 100,000 persons of each age, period, and number of Females afflicted per 1,000 males, British Districts.

Age.	NUMBER AFFLICTED PER 100,000.								NUMBER OF FEMALES AFFLICTED PER 1,000 MALES.			
	Insane.		Deaf-mute.		Blind.		Lepers.		Insane.	Deaf-mute.	Blind.	Lepers.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.				
1	2	3	4	5	6	7	8	9	10	11	12	13
British Districts	57	33	64	46	107	195	55	27	528	651	440	439
0-5	9	6	16	16	36	28	1	1	663	1,022	807	1,000
5-10	26	12	64	45	638	45	4	3	495	639	623	745
10-15	41	20	78	56	84	58	13	10	620	578	545	600
15-20	65	51	79	52	88	74	31	18	672	566	724	496
20-25	73	46	82	46	97	74	39	20	622	528	765	529
25-30	89	36	71	45	88	84	57	29	390	551	834	440
30-35	88	46	65	51	108	111	75	42	455	682	995	489
35-40	93	42	61	48	123	161	99	49	346	696	993	381
40-45	83	48	58	49	186	252	129	65	508	803	1,153	400
45-50	100	62	95	76	302	479	172	81	494	639	1,133	388
50-55	88	61	93	77	55	749	173	74	643	742	1,132	400
55-60	56	49	74	58	458	659	153	61	714	635	1,135	320
60 and over	51	43	86	74	1,267	1,569	115	44	806	902	1,303	404

Subsidiary Table No. 111.—Number afflicted per 100,000 of the population at each of the last five Censuses. For British Districts and Natural Divisions.

District and Natural Division.	INSANZ.										DEAF-MUTE.									
	Males.					Females.					Males.					Females.				
	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
British Districts	57	41	27	42	60	32	22	14	24	33	64	77	45	73	84	46	51	30	49	59
Bombay City ..	7	24	56	57	107	7	22	37	33	53	5	20	27	40	78	3	15	21	33	61
Gujarat ..	113	51	24	46	84	35	26	12	27	34	84	80	36	73	85	35	55	23	52	60
Ahmedabad ..	88	08	34	50	77	36	26	11	29	33	42	71	31	68	87	28	58	18	56	65
Broach ..	06	41	21	44	56	40	19	13	34	32	56	72	37	87	99	40	48	20	42	53
Kaira ..	46	32	10	33	50	23	17	7	17	28	45	68	32	66	62	23	41	26	42	37
Panch Mahals ..	37	37	12	38	37	35	26	13	29	30	44	78	30	70	69	19	55	16	48	45
Surat ..	77	61	32	53	84	44	39	18	31	43	81	107	50	92	125	59	67	34	67	89
Konkan ..	55	41	28	34	47	28	21	12	23	25	91	81	48	80	80	65	58	32	59	54
Kanara ..	48	33	32	31	30	29	21	17	21	16	89	93	68	93	93	61	67	45	68	76
Kolaba ..	29	17	18	32	53	17	15	14	16	24	99	82	39	76	76	72	53	34	58	66
Ratnagiri ..	58	39	29	44	49	27	19	11	22	22	89	76	51	78	73	62	54	30	50	42
Thana ..	82					39					107					78				
Bombay Suburban District ..	11	03	13	25	62	18	30	11	28	35	3	79	40	78	84	6	64	24	08	57
Deccan ..	53	23	17	22	26	34	12	7	11	13	61	54	34	51	89	41	37	24	34	47
Ahmednagar ..	35	21	16	18	20	23	13	9	9	12	26	50	44	50	75	12	39	32	38	71
Khandesh East ..	32	18				24	10				41	50				33	30			
Khandesh West ..	31	*13		*21	*21	17	*11				26	*51		*30	*56			*23	*32	*45
Nasik ..	25	17	8	19	26	17	12	3	9	15	51	59	36	47	70	35	44	25	37	66
Poona ..	147	37	33	36	38	105	15	19	17	19	79	92	30	52	60	62	37	20	32	43
Satara ..	43	26	16	19	23	20	13	7	10	10	85	55	34	47	68	54	38	21	30	39
Sholapur ..	35	25	13	17	20	19	11	5	6	7	83	54	34	56	71	68	46	26	40	50
Karnatak ..	54	33	30	21	19	18	17	14	11	10	82	74	57	66	70	31	68	41	47	57
Belgaum ..	40	29	19	14	24	21	16	9	8	11	69	88	45	82	70	57	58	34	46	57
Bijapur ..	40	24	28	13	12	29	14	12	8	7	113	92	67	48	66	88	46	32	49	64
Dharwar ..	71	45	41	40	19	30	22	19	20	10	71	72	61	95	68	52	54	47	67	64
Sind ..	81	74	42	103	162	49	44	28	64	107	87	129	61	128	133	43	76	40	76	95
Hyderabad ..	106					58					100					60				
Navabshah ..	73	†93	†48	†111	†105	38	†46	†26	†60	†116	107	†143	†51	†136	†120	64	†75	†29	†69	†82
Karachi ..	62	70	37	93	139	42	44	39	61	102	34	113	87	124	176	17	62	51	78	119
Larkana ..	73	76				54	51				45	164				20	85			
Sukkur ..	88	66	39	105	146	52	45	26	72	103	40	140	54	132	111	35	90	40	66	88
Thar and Parkar ..	79	†53	†58	†100	†165	48	†32	†30	†64	†102	78	†81	†69	†98	†133	93	†63	†43	†57	†96
Upper Sind Frontier ..	66	54	24	73	151	56	30	11	52	107	65	112	49	131	177	43	78	52	83	131

District and Natural Division.	BLIND.										LEPER.									
	Males.					Females.					Males.					Females.				
	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881
	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
British Districts	167	126	68	150	240	208	142	88	148	294	55	60	43	79	87	27	27	18	28	34
Bombay City ..	63	51	58	110	199	52	38	89	122	272	66	55	56	45	57	54	45	41	44	52
Gujarat ..	205	156	80	148	240	267	205	108	193	374	40	30	14	28	39	12	11	6	11	17
Ahmedabad ..	178	174	83	193	280	266	241	123	255	465	5	13	10	15	11	4	5	4	6	6
Broach ..	279	206	105	162	234	239	233	148	222	302	26	35	11	25	37	21	15	11	17	13
Kaira ..	162	135	66	144	235	233	167	79	159	340	18	18	9	23	38	5	3	1	4	10
Panch Mahals ..	115	86	42	78	104	169	112	64	97	171	11	20	11	34	44	2	3	4	12	10
Surat ..	211	170	94	146	292	276	210	127	178	411	65	69	26	50	61	29	28	11	25	44
Konkan ..	104	81	52	99	128	120	81	43	89	149	55	70	50	100	113	39	35	28	48	46
Kanara ..	78	54	53	60	70	92	45	34	59	83	7	5	4	6	10	2	2	3	3	9
Kolaba ..	111	96	62	167	161	115	104	75	110	217	62	87	76	117	153	34	58	54	65	73
Ratnagiri ..	118	80	52	81	110	115	66	31	66	130	79	97	77	156	146	34	35	23	48	45
Thana ..	105					133					60					28				
Bombay Suburban District ..	46	87	45	102	136	69	105	44	123	173	26	59	21	78	110	9	84	7	44	58
Deccan ..	207	151	112	180	276	245	152	115	161	302	106	114	80	148	164	47	45	29	42	52
Ahmednagar ..	259	182	161	197	292	332	196	195	187	376	103	91	87	123	153	48	41	35	32	49
Khandesh East ..	237	187				294	180				135	174				67	69			
Khandesh West ..	227	*155		*28	*340	280	*165		*139	*208	79	*85		*84	*176	35	*31		*34	*52
Nasik ..	214	170	92	155	287	289	178	96	144	343	52	50	45	72	109	32	29	18	27	42
Poona ..	175	126	105	171	251	203	129	92	151	274	60	90	82	152	180	30	35	29	48	61
Satara ..	163	117	86	165	240	148	102	60	129	215	162	159	98	193	174	59	53	27	40	47
Sholapur ..	222	123	84	155	208	195	129	105	129	232	135	130	73	127	108	53	48	27	32	20
Karnatak ..	119	72	82	96	126	56	60	87	71	108	31	31	31	50	39	4	11	11	12	14
Belgaum ..	96	69	67	90	114	80	61	56	66	139	33	41	33	56	48	11	15	14	11	19
Bijapur ..	166	70	93	70	129	173	66	85	62	121	37	27	40	46	43	13	12	13	16	16
Dharwar ..	108	78	87	137	107	95	55	64	88	76	24	23	23	46	23	4	6	5	7	9
Sind ..	215	213	97	269	391	233	222	83	221	561	83	6	4	8	13	4	5	5	6	10
Hyderabad ..	193					213					3					3				
Navabshah ..	221	*215	†72	†196	†358	209	†193	†56	†202	†448	8	†5	†12	†18	†12	3	†5	†3	†4	†12
Karachi ..	193	142	65	169	361	136	127	87	142	142	11	14	4	8	20	4	6	5	12	16
Larkana ..	221	250				259	231				9					4				
Sukkur ..	305	311	133	272	443	307	340	109	290	745	6	5	6	9	10	4	8	8	6	6
Thar and Parkar ..	287	†133	†93	†94	†241	235	†142	†85	†117	†380	5	†3	†4	†12	†6	3	†3	†5	†12	†15
Upper Sind Frontier ..	244	191	87	303	469	296	237	108	381	803	13	5	7	11	10	5	5	5	5	7

* Does not include the Mewas Estates. † Does not include Sinjhora Taluka, but includes Digri Taluka. ‡ Includes Sinjhora Taluka, but does not include Digri Taluka.

CHAPTER XI.—CASTE, TRIBE AND RACE.

SECTION 1.—CASTE AT THE CENSUS.

481. For the reasons given in the Introduction no special enquiries were made at this Census into Caste or Caste customs. Nevertheless it is necessary both to explain what the Caste Table represents, and to indicate the difficulties of the record.

482. Mr. R. E. Enthoven, who as Superintendent of the Bombay Ethnographic Survey, has recently completed the collation and revision of the ethnographic and anthropological material in the old District Gazetteers, has several times strongly urged that the recording of Castes at the Indian Censuses should be abandoned, or, as an alternative, should be carried out every twenty instead of every ten years. His contention is that Caste is so hopelessly vague that our figures are useless. That there is a large amount of truth in this contention will be seen from the remarks that follow.

483. Nevertheless I am not personally in accordance with the proposal, because, in contradistinction to language, Caste has an economic value. In this country more than in any other that I know of, children that are born into the world are borne with unequal chances. This is due to the Caste system, and can be best seen from a consideration of educational facilities. To the Deshasth Brahman boy education is his birthright, and if he fails to go to school he is more or less of an oddity. On the other hand, the Mahar boy enters upon life with long odds against his going to school, and if he does go his birthright is to be segregated off from the other boys and sit outside on the verandah, or even in the sun and dust of the road. Consequently as long as the Caste system survives such Departments as the Educational will need to have Caste figures.

SECTION 2.—THE BASIS OF THE FIGURES.

484. Column 8 in the General Schedule was headed "CASTE, TRIBE or RACE". The instructions on the cover of the enumeration book were as follows :—

"Column 8 (*Caste*).—Enter the caste or tribe of Hindus, Musalmans, Jains, Sikhs, Aryas Brahmos, and aboriginal tribes. Indian Christians, Parsees, and Anglo-Indians should be entered as such. For Buddhists, English and other subjects of the Empire, as well as for all foreigners, enter their nationality."

485. In the vernacular versions this was slightly modified in form, a literal translation being as follows :—

"Enter the caste of Hindus, Musalmans, Jains, Sikhs, and aboriginal tribes. Indian Christians, Anglo-Indians and Parsees should be entered as such. For Buddhists, English and Foreigners, enter the name of their domiciled country (nationality)."

486. In Chapter V, Part A, of the Census Code the following additional instructions were issued :—

"Column 8 (*Caste*).—Be sure that you get the true caste name, and not the name of a religious sect, a *gotra*, a title, or a surname. Words indicating country of birth are particularly to be rejected. Thus Madrasi, Marwari, Sindhi, Pardeshi, etc., are not caste names at all.

In the case of the following you should enter the sub-caste names :—(1) BRAHMAN: Ask what sort of Brahman as Deshasth, Nagar, Modh, etc. (2) VANI (BANIA): Ask what sort of Vani. You should not accept the words Shrivak and Meshri, which are religious terms; but should get the caste name as Osval, Shrimali, etc. (3) KANBI AND KUNBI: You should in all cases ask what kind of Kanbi or Kunbi. In Gujarat and Khandesh all Kanbis and Kunbis will know the name of their sub-caste, and you should enter what they say. In the Deccan and Konkan many Kunbis will not answer the question in which case you should put down Maratha Kunbi; and similarly all Marathi-speaking Kunbis except those from Khandesh should be shown by enumerators in Bombay and other cities as Maratha Kunbi. Enumerators in South Belgaum and North Kanara should take care not to enter those whose caste is Kale Kunbi as Kare Vakkal. The two castes are distinct and should be shown under their true names whether the enumerator is using Marathi or Kanarese. Do not in any case enter simply Kunbi. (4) KOLI: In Gujarat and Khandesh it is not necessary to enter the sub-caste names such as Khant, Baria, etc. And in Bombay and

other cities Kolis from Gujarat or Khandesh should be shown as Gujarat Koli or Khandesh Koli. All Kolis of the Konkan, Deccan and Ghats should be asked what kind of Koli, and the name recorded, as Son Koli, Mahadev Koli, Malhar Koli or Dhor Koli. Enumerators in Bombay and other cities should be careful about this.

For Mahomedans, just as for Hindus, you should record the caste as Sheikh, Sayyad, Pathan, Pinjara, Bohra, etc. The word Sindhi should on no account be accepted as a caste name, but all Mahomedans returning the word Sindhi should be asked what kind of Sindhi and the name given by them recorded.

You should be careful of caste names which are also the names of occupations. In such cases make sure that the man is really of that caste. For instance a man may call himself a Sutar, because he is a Sutar by occupation, whereas by caste he is a Panchal; or a Maratha doing Mali work may return himself as a Mali.

You should not accept fanciful names; and if a person is clearly returning himself as of a caste to which he does not belong you should explain to him what is wanted, and if he still refuses to admit his true caste you should report the matter to your Supervisor.”

487. Lastly the Index of Hindu Castes with synonyms issued in 1911 was revised and brought up to date so far as possible.

SECTION 3.—“ RACE ” OF FOREIGNERS.

488. It will be seen that column 8 was intended to record quite different factors for different races. For everyone other than Indians what was required was Nationality. This is by no means a simple thing to record. White subjects of the Empire are often at a loss as to the answer required. Some English people recorded themselves as English, some as British. A subject of the South African Republic would record himself as “ South African ”. But that term might include Zulus, Hottentots, Cape Boys, and even domiciled Asiatics. Actually there is no clear term for “ British subject being a native of Great Britain ” still less for “ British subject being a native of the United Kingdom including the Channel Islands and the Isle of Man ”. Nor is there any term for a member of the South African Republic. And it is not at all clear how a “ Cape Boy ” or a “ Bushman ” should have been recorded had such a person turned up. The same difficulty of nomenclature occurs in the case of subjects of the U. S. A. There is no term for such persons except “ American ” a vague term which might easily be adopted by a Brazilian Cattle-dealer.

489. Actually what was wanted in the case of non-Indians was Political Nationality. And the term “ Race ” used in the heading of the column was unsatisfactory. This word “ Race ” is becoming more and more monopolized by Ethnologists for use in the strictly scientific sense of racial origin and is therefore out of place in a Census.

490. In the case of persons whose nationality has changed since birth, for instance, a Dutch woman married to a Parsee, or a naturalised Greek, what was actually required was a double entry “ Dutch (British subject) ” or “ Greek (British subject) ”. But it is doubtful how many enumerators were sufficiently smart to ensure a correct entry in such cases. Their tabulation is still more difficult. A Dutch woman married to a Parsee is no longer Dutch, and is certainly not Parsee. She is not English, using this term in a limited sense, and even when English is used to include Scotch, Welsh, and Irish it is difficult to see why she should be included under it, being domiciled in India. She belongs in fact to a limited nationality group of “ Dutch (British subject) ”, of which she is probably the only member.

491. There is also the converse case of an English woman married to, say, a Belgian, and residing in India. And even if we decide how to classify these cases of wives, we still have to consider the children. In law, I am told, in some cases the nationality of the children is optional, and has to be decided by them on attainment of majority, for instance, children of an English woman by a Swiss husband, born in India, but registered also in Switzerland.

492. Still more difficult is the case of regions like those of the middle East, where clearly recognized nations are ruled by others, or members of the former are domiciled among the latter. For instance, an Armenian, being a native of Persia, would certainly record himself as “ Armenian ” and not as “ Persian ” or “ Armenian (Persian subject) ”.

493. Consequently the record of the "Caste, Tribe or Race" of non-Indians is inevitably vague. And the nationalities selected for Imperial Table XIII are limited to those which are both numerous and also fairly clearly defined. It is not a comprehensive but a selective Table, and such minor groups as have been indicated above do not have to be shown. If it were ever attempted to make the Table comprehensive, it is clear that considerable difficulties would arise in the classification of foreigners. At present, for gauging the number of foreigners in India the Birthplace Table is a better guide.

SECTION 4.—"CASTE" OF INDIANS.

494. In the case of Indians what was required was "Caste". In this Presidency, there being very few Buddhists, and those mainly foreigners who would therefore have to give their nationality, the problem is confined to Hindus, Animists, Mahomedans, Jains, Christians and Sikhs. Zoroastrians fall either under Parsee or Irani* and present no difficulties.

495. Indian Christians were ordered to be entered as Christian (with sect) in column 4 and as "Indian Christian" or "Anglo-Indian" in column 8. No difficulties ought to have arisen. Yet we always have to cope with the Hindu enumerator, who will record a converted Dhed as still a Dhed by caste; and some such cases actually came to light.

496. For Mahomedans it must be remembered that Caste is a Hindu institution and the application of the term to Mahomedans is scientifically wrong. Yet Islam in India has taken on so much of the garb of Hinduism that divisions which may be called "Castes" do exist within its fold. Endogamy exists as a practical custom, though not demanded by religious tenets, and not so rigidly followed as in Hinduism. The "Castes" which are most sharply defined are those groups whose ancestors were converted in the latest and most localized proselytizing movements, namely the Bohras (of two sects), the Khojas and the Memons. Next, but much less definite, come certain artizan groups, such as Pinjars, Hajams and the like. In the Presidency proper the vast bulk of the Mahomedan community do not readily reply if asked what their caste is. In Magisterial Courts the form of deposition provides for recording both the religion and the caste of each witness. In practice it is probably correct to say that in the majority of Courts the religion entry is not used. For Hindus caste is entered, and for Mahomedans, other than Bohras, Khojas and Memons, the word "Musalman" is entered as *caste*. This saves trouble. The Mahomedan witness will be asked "What is your caste?" and will reply "Musalman". Attempts to find out his caste in the Census sense will take time, and will usually result in his admitting that he is a Sheikh, less frequently a Sayyad or a Pathan or one of the artizan groups. It may be remarked in passing that most of these artizans are really Sheikhs just as much as their agricultural co-religionists.

497. In Sind the divisions of the Mahomedans are rather more definite and are more suitably described as tribes, the tribal parriotism becoming clearer on the frontiers. A note on the treatment of these tribes at this Census will be found in Appendix D.

498. Among the Sikhs it appears that some individuals regard all Sikhs as of one caste, Khalsa (the name of the religion), while others adhere to their original (Hindu) Castes. Consequently the question of caste for Census purposes is very obscure. The Sikhs in this Presidency are however few, and further discussion would therefore be out of place†.

499. Jains are mainly either Chaturths, which is the general name for the cultivating Digambars of the Karnatak or Vanis. Among the Jain Vanis the Hindu sub-caste names reappear, which may indicate either that these subcaste divisions date back to a time previous to the establishment of the Jain faith, or else that persons from the Hindu Vani subcastes have from time to time passed over to the Jain faith.

500. Hindu Castes and Animistic tribes must inevitably be considered together. In Hinduism caste is a very definite and perhaps the most important institution.

* Iranis are discussed in the Chapter on Religion (Chapter IV).

† For further discussion of Sikhs, see Chapter IV—Religion.

Indeed it may be that the opposition which is always aroused by any attempt to abolish caste is dictated by a sub-conscious realization that with its caste structure the loosely knit tenets and inconsistent theology of the religion would also go. Yet although Caste is an institution so important and essential, the individual castes are far from definite or clear cut. It is quite a mistake to suppose that every Hindu will readily and easily give a correct answer if asked what his caste is. Nor is it true that individual castes are equally homogeneous either in origin or in existing boundaries.

SECTION 5.—TYPES OF HINDU CASTES.

501. Risley distinguished seven types of caste, namely :—

(i) *Tribal castes*, i. e., pre-Hindu tribes, absorbed into Hinduism intact and transformed into castes, e. g., the Kolis of Gujarat.

(ii) *Functional castes*, e. g., Dhobi, Kalal.

(iii) *Sectarian Castes*, e. g., Lingayat.

(iv) *Castes formed by crossing*, e. g., ~~Philala~~ *Philala*. B/

(v) *Castes of the national type*, e. g., Maratha.

(vi) *Castes formed by migration*.—If the Ods are originally the same as the Waddars, the former would be a good example, as representing Waddars who have moved to Gujarat and further North. Other examples are furnished by many Khandesh castes, e. g., the Reva Kunbis who were Leva Kanbis from Gujarat.

(vii) *Castes formed by change of custom or occupation*.—A good example is the Wanjari Kunbis of Khandesh, who are Wanjari who have settled and become Agriculturists and probably the Brahmabhattis, who were Brahmans but took to the occupation of writing and reciting genealogies. Here also Risley included many castes formed by excommunication.

502. The above scheme of origins is cited and exemplified not in order to continue a discussion of origins, but to facilitate an appreciation of some of the difficulties in the way of the recording of Castes at a Census. Almost every one of the types presents its own peculiar difficulties.

503. (i) *Tribal castes*.—These tribes are sometimes small and homogeneous but often quite the opposite. Examples of homogeneous tribal castes are the Katkaris, the Varlis, and the various castes known in Surat as “Kaliparaj”, viz., Dhodia, Dubla, Dhodhra and others. Examples of the opposite character are the Bhils and the Kolis. The various sub-tribes among the Bhils, such as the Mavchis, Pavras and others, are so palpably different in physical character, and therefore in racial origin, that Mr. Macmillan, the Collector of West Khandesh, urged their separate enumeration and tabulation. It was impossible however to do so owing to the ban on ethnographic enquiry, and the time occupied in statistical and economic work. This was the more regrettable since Mr. Enthoven's work has thrown no further light on the Bhils, whose ethnography badly needs elucidation. The caste figures in Table XIII for Bhils are therefore figures for a heterogeneous group of tribes, a group whose external boundaries are by no means definite, and whose internal divisions are inadequately examined. Bhils.

504. The Kolis present an even more difficult problem. In 1911 an attempt was made to enumerate and tabulate “sub-castes” of Kolis. This attempt broke down owing to the uncertainty of the different names in Gujarat. The matter need not be discussed here, as it is fully explained on pages 195—6 of the 1911 Report. But it was decided on this occasion that, while abandoning any attempt to differentiate the Gujarat Kolis from one another, the more distinct and localized castes bearing the name Koli in the Central Ghats and on the Konkan Coast should be separately tabulated. That melting pot of castes and languages—Khandesh—introduced a difficulty since Kolis occur there also. It was therefore decided to keep the Kolis of Khandesh again separate, so far as should be possible. In this way there would be the Kolis of Gujarat, the Kolis of Khandesh, the Son Kolis, the Mahadeo Kolis the Malhar Kolis and the Dhor Kolis.* Certainly the Southern Kolis, and

* No Dhor Kolis were recorded. This is an example of the difficulty of getting at Caste figures for those castes which are low in the social scale. A “Raj” Koli is no doubt proud of this high-sounding appellation. But a “Dhor” Koli prefers to be called simply “Koli.”

most particularly the Son Kolis, are apparently distinct from those of the North, and have been united with them in the past through the accident of having the same name. However the Khandesh Kolis form a possible connecting link. The whole problem emphatically calls for further elucidation, and is one towards the solution of which a long and careful series of anthropometric measurements should prove invaluable. The figures obtained by separating the different groups can be seen from Subsidiary, Table 112 below.

505. (ii) *Functional castes*.—There is a double difficulty here. In the first place any particular occupation is now-a-days by no means confined to the caste which traditionally performed it. And it is even doubtful whether in some cases there was ever at any period a clearly defined and exclusive caste. Good instances are Mali and Gavli. The Mali caste, as such, is a loosely knit group of endogamous divisions, united by little except traditional occupation. But beyond the fringe of this group are a large number of gardeners who, belonging technically to other castes, will return their caste as Mali to the enumerator. The same remarks apply to the Gavlis. Secondly there are some groups in which instead of one term, as Mali or Gavli, there are several synonymous terms. The simplest case is where the terms are linguistic. For instance Sutar, Suthar and Badig; Teli, Ghanchi and Ganiger; and many others. Here it becomes little more than a matter of personal idiosyncrasy whether to tabulate as one caste or as several. But a still more complicated problem is raised by the weaving communities. Here there are a large number of synonyms,—Koshti, Hatgar, Jed, Vinkar, Devang, Pategar, Khatri, Sali, Padamsali and others. These have been grouped as far as possible, mainly on the authority of the Ethnographic Survey and previous censuses. But no two educated weavers would agree as to synonymy. This matter is discussed in further detail in Appendix C. Thirdly there exist in many of the functional castes intercaste groups bearing the name of one of the early tribes, representing descendants of members of those tribes who passed into the functional caste through community of occupation. And in some cases the tradition of the tribe name is so strong that it will be returned at the Census. Thus many functional castes contain Ahir and Gujar sections, and it may and does happen that an Ahir Chambhar, for instance, will return himself as an Ahir. But the balance of the Ahir tribe, that is all those who had not been absorbed into other castes, became itself a caste with the traditional occupation of cowherds. Consequently the Chambhar is not only lost to his own caste, but is included wrongly in the Ahir caste. For this reason the strength of castes like Ahir is liable to show violent fluctuations from Census to Census. When the Ahir strength rises the strength of many of the functional groups will fall and *vice versa*. This is seen from the following Table :—

Caste.	Percentage increase or decrease.		
	1891—1900.	1901—1911.	1911—1921.
Ahir	— 20	+ 75	— 5
Sonar	+ 20	— 9	+ 6
Sutar	+ 5	— 5	+ 7
Chambhar	+ 3	— 2	— 8

Lastly there are some functional groups like the Panchkalshis and Panchals, whose traditional occupation is not a single trade, but embraces several. Here again there is a tendency for the name of the particular occupation of the individual to be returned instead of the caste name. Thus a Panchal carpenter will return Sutar (his occupation) and will then be tabulated in the Sutar caste. From the above remarks it will be seen that the figures for all the functional castes are exceedingly doubtful value. As a record of castes they are vitiated by the innumerable mistakes which creep in, while a record of occupations they are not and were never intended to be.

506. (iii) *Sectarian castes*.—In this Presidency the only important problem raised by this type of caste is the problem of the Lingayats. The question whether Lingayat is a sect name or a caste name has been mentioned in the chapter on

Religion. Mr. Enthoven who had studied the Lingayats for many years, was strongly of opinion that, if caste was to be recorded at all, the internal caste-system of the Lingayats should be separately recorded and tabulated. How difficult the problem is will be understood when it is remembered that while the founder of the Lingayat sect abolished caste distinctions, there are within the Lingayat fold today not only separate endogamous groups, but actually untouchable sections. A "Caste" which contains within itself touchables and untouchables is almost a contradiction in terms. On the other hand it is to be remembered that if we relegate the entry "Lingayat" to col. 4 of the schedule as a sect of Hinduism and record the castes in col. 8, we shall get names like Devang, which occur among ordinary Hindus also, and these Lingayat Devangs will be included with their Hindu fellows. If on the other hand we keep Lingayat as a main religion in col. 4, i.e., in Abstraction, using a slip of Hindu colour, then we can tabulate Hindu Devangs and Lingayat Devangs separately, just as we now tabulate Mahomedan Bhangis separately from Hindu. At this Census Government's order was to treat Lingayat as one substantive caste of Hindu. But the question should be considered again at the next Census as soon as, or better still before, the operations commence.

507. (v) *Caste of the National type*.—These differ in origin from the Tribal Castes in their lower degree of Racial purity. A tribe like the Katkaris or the Chodhras has probably preserved its racial character, free from admixture of other blood, from a point of antiquity at whose remoteness we can only guess. The Mahrathas on the other hand represent a comparatively recent mixture of different racial elements, whose unity, at the time when they became a Hindu caste, was political and not racial. The whole problem of the tabulation of Marathas and Kunbis was raised in the early stages of the Census operations, and a large number of opinions collected. The problem was whether Marathas, "Maratha Kunbis", other Kunbi, and Kunbis should be tabulated together or separately, and was accentuated by the fact that in 1901 persons returning as "Maratha Kunbis" were tabulated with Marathas, but in 1911 with Kunbis. In 1911 an attempt was made to record and tabulate the "Sub-castes" of Kunbis and Kanbis, taking these two together. Altogether 44 sub-caste names were returned (see p. 215 of the 1911 Report). Some of these contained only a handful of individuals, in two instances only one individual. The largest sub-caste was the Leva Kanbis of Gujarat with 505 thousand. But there was a 45th entry for "Unspecified," which contained 638 thousand. There is reason to think that the Kanbis of Gujarat are racially distinct from the Kunbis of the South, and have been included with them at previous Censuses from the accident of having the same name,—the names Kunbis and Kanbi, as also Kurmi and Kulvadi, indicating, almost certainly, "husbandman", even though their exact etymology is a matter of doubt. Khandesh, as in the case of the Kolis, presented a difficulty, since it supplies various Kunbi groups, some of whom are almost certainly of Gujarat origin, but others allied to the Deccan Kunbis. Further, in the case of the Kunbis and Marathas of the Deccan and Konkan it seems certain that the boundaries of the Maratha caste are hazy, and that well-to-do Kunbis assume and retain without opposition the Maratha name. To the suggestion that Marathas and Kunbis should be amalgamated there was a divergence of opinion. The prouder Maratha families of the South Konkan much resented the suggestion. On the other hand Lt.-Col. H. C. Steen, the Poona District Recruiting Officer, wrote very strongly urging that the "term or title 'Maratha' should be authoritatively and finally applied to the present Kunbis or Kulvadis of the generally understood Mahratha portion of the Deccan and Konkan, as their birth right." About the time of this enquiry, and later, Government published in Government Notifications 1117-R of 11-6-20 and 1881-R of 10-8-20 lists of Castes which should be taken as included under the term "Mahratta" for election purposes. But those lists included castes which no Census officer or ethnographer could possibly unite with Marathas and throw no further light on the subject. Later at the time of the Census, the Gabits or Gapits of the Konkan coast began to submit memorials urging that they should be shown as Marathas and the name Gabit abandoned. These people exhibited extraordinary energy, collecting signatures from the bulk of the caste. If there had been no good grounds for believing them to be racially allied to the Marathas their energy would have been wasted. But, since the Gazetteers, confirmed by the Ethnographic Survey, admit their Maratha origin, it was decided to include them as a

separate unit in the Maratha-Kunbi group. The classification ultimately arrived at for Table XIII was as follows :—

KANBI (including PATIDAR).

- | | |
|------------|-----------|
| 1. Anjana. | 3. Leva. |
| 2. Kadava. | 4. Matia. |

MARATHA and KUNBI.

- | | |
|-------------|-----------------------|
| 1. Maratha. | 4. Kunbi and Kulvadi. |
| 2. Arer. | 5. Kunbi of Khandesh. |
| 3. Gabit. | |

508. Types (vi) and (vii) do not raise any very *important* problems, although numerous questions arise, which the limitations imposed on this Census, as mentioned in the Introduction, preclude from discussion. It may be mentioned in passing however that, following previous Censuses and the opinion of the Ethnographic Survey, Vaddars and Ods have been kept together, though it is doubtful whether they are not distinct castes, the former of southern, the latter of Northern origin, and Lamanis have been kept distinct from Wanjaris, although the dress, language and physical appearance of these two castes seem to suggest that they are one and the same.

SECTION 6.—THE FIGURES.

509. The Table which follows shows the strength in the Presidency of the Castes selected for Imperial Table XIII. It was customary at former Censuses to break the Castes up for this Table into groups according to their traditional occupation. I have not done this on the present occasion, partly because there is such uncertainty as to the traditional occupation of many castes, and partly because the tendency to confine one occupation to one caste is now largely dying out. For instance in 1911 the traditional occupation of Rajputs was put down as "Soldiers and Cultivators". In this Presidency, as I have remarked in the Chapter on Civil Condition, the Rajputs are an extraordinarily heterogeneous lot, and it is doubtful whether more than a mere handful have either gone in for soldiering for a century or more, or are really descended from a warrior class. The Lingayats, one of our largest castes, have no traditional occupation in any true sense. Many castes of large dimensions, such as the Kanbis of Gujarat, the Kunbis of the south, the Kolis of Gujarat, and others, follow any occupation other than trades requiring special artisan knowledge. Moreover in some cases the traditional occupation is very unimportant. The Bhandaris were shown as having the traditional occupation of "Palm juice drawing and distilling". Yet in Table XVI (1911) out of 43,000 actual workers only 1,600 persons returned this occupation, whether as principal or subsidiary. The Halepaiks were shown as "Toddy Drawers". Yet in Table XVI out of 24,500 actual workers only 200 returned that occupation. In the case of both these castes,—certainly in the case of the Bhandaris—it would have been quite as correct to show "soldiering" as their traditional occupation. The Bhandaris were an important fighting element in the early Bombay armies. The Bhois were shown as "Fishermen". Yet the numbers returning this occupation were trivial. And "palanquin-bearing" would have been quite as correct an entry.

510. For these reasons I have abandoned this classification and have shown some of the principal Castes and Caste-groups grouped according to general considerations and convenience.

Subsidiary Table No. 112.—Strength of the more important Castes and Caste-groups in the Presidency.

Caste.	Strength in the whole Presidency. Actual figures.		Ratio per mille.		Remarks.
	1921	1911	Of the 1921 figures to the total figure of the particular religion in the Bombay Presidency.	Of the 1921 figures to the total figure of the general population (all religions) in the Bombay Presidency.	
1	2	3	4	5	6
HINDU AND ANIMISTIC.					
<i>I.—Miscellaneous Castes of general dispersion.</i>					
✓ Bhangi or Halalkhor	99,720	93,691	5	....	D.C. 99,720 2,82,324 13,37,463 2,75,427 19,94,934 But unfortunately includes figures of States in Bom. Presy. e.g. Baroda, which had with the Govt. of Ind. See Sec. 2, page 1
Bharwad, Dhangar and Kurub ..	792,064	836,927	37	30	
Bhol	64,131	63,722	3	....
✓ Chambhar, Mochi, Mochigar and Sochi ..	282,324	306,478	13	11	
Darji, Shimpi, Sai and Mirai ..	141,112	141,423	7	....
Dhobi, Parit, Agasa and Madival ..	79,752	79,707	4	....
Hajam, Nhavi, Nadig and Kelasi ..	188,029	189,180	9	....
Kumbhar	258,181	247,501	12	10	
Lohar, Luhar and Kammar ..	120,321	117,663	6	....
✓ Mahar, Holliya and Dhed	1,337,463	1,470,992	63	50	
✓ Mang and Madig	275,427	274,037	13	10	
Mali and Phulmali	295,640	302,205	14	11	
Soni, Sonar, Aksali and Dalvadnya Brahman ..	168,094	176,150	9	....
Sutar and Badig	213,527	199,968	10	....
Teli, Ghanchi and Ghaniger ..	127,046	123,040	6	....
Vaddar and Od	98,940	102,566	5	....
<i>II.—Weaving Communities.</i>					
Total	222,530	*245,450	11	....	*Believed to have included one or more minor if non-weaving castes.
Koshti, Hatgar, Jed, Vinkar and Devang ..	90,008	....	4	....
Patvekar, Pategar Khatri (Kshatri) and Somavanshi Sahasrarjun Kshatriya ..	63,530	....	3	....
Sali and Padamsali	68,398	....	3	....
<i>III.—Maratha, Kunbi and Kanbi-Group.</i>					
Total	58,32,342	5,768,726	275	218	
Maratha and Kunbi	4,889,484	....	230	183	
Kanbi	945,858	....	45	35	
<i>Alternatively arranged.</i>					
Maratha	3,105,928	3,279,496	146	116	
Kunbi and Kanbi	12,726,414	2,489,230	129	102	†Arrived at by taking the balance of the Maratha-Kunbi group after deducting Maratha and then adding total of Kanbi group.
<i>IV.—Brahmans.</i>					
Total (all admissible Castes) ..	1,029,163	1,067,681	49	39	
Brahman Andicoh	149,605	160,740	7	....
Brahman Chitpavan or Konkanasthi ..	109,107	110,712	5	....
Brahman Desasthi	291,247	296,927	14	....
Brahman Sarasvat, Gaud Sarasvat, etc. ..	88,203	90,167	4	....	‡Including Gaud Sarasvat of General Table, and Sarasvat under Presidency Proper and Sind.
<i>V.—Vani.</i>					
Total	333,773	337,232	16	12	
<i>VI.—Localized Castes.</i>					
Agri	231,589	233,558	10	....
Ahir	174,248	183,919	8	....
Baya	91,066	39,981	4	....	Excluding any of these castes who may have been enumerated in Sind.

Caste.	Strength in the whole Presidency—Actual figures.		Ratio per mille		Remarks.
	1921.	1911.	Of the 1921 figure to the total figure of the particular religion in the Bombay Presidency.	Of the 1921 figure to the total figure of the general population (all religions) in the Bombay Presidency.	
1	2	3	4	5	6
VI.—Localised Castes—continued.					
Berad or Bedar	186,434	184,871	9	....
Bhandari	179,103	183,131	8	....
Gavli	38,067	*38,542	2	....	*Excluding any of these castes who may have been enumerated in Sind.
Gavandi, Uppar and Chunar	36,770	*39,409	2	....
Gurav and Hugar	48,967	*65,538	2	....
Halepalk or Namdhari	46,370	*48,493	2	....
Halvaki Vakkal	24,761	*30,399	1	....
Kabbaligar	55,410	*35,580	3	....
Kathi	28,203	*28,580	1	....
Kayasth Prabhu	26,586	*27,120	1	....
Kharva and Kharvi	37,792	*37,844	2	....
Khavas	27,780	*31,173	1	....
Korava, Korchar, etc.	23,537	*†23,254	1	....	†As "Korava."
Lamani	37,625	*29,442	2	....
Lingayat	1,155,610	1,339,248	53	43	
Lohana (including Amli)	570,431	593,584	27	21	
Macchi	40,679	*39,300	2	....
Me	31,842	*26,228	1	....
Panchkalshi or Somavanshi Kshatriya.	27,856	*14,357	1	....
Panchal or Vishva Brahman	70,739	81,083	3	....
Rabari	135,875	180,009	6	....
Raddi	47,586	*50,115	2	....
§ Rajput	472,623	453,605	22	18	§ Rajput in Bombay Presidency is a very uncertain term.
Ramoshi	50,748	59,914	2	....	§ Unfortunately this figure for the Rajput is in pencil written on the preceding page for D.C. is for the whole province including Baroda, & then the total will be 58,451 - C. B. Baroda.
Ravalya or Raval	51,707	*46,717	2	....
Sathvara	42,699	*40,637	2	....
Vanjari	109,025	114,144	5	....
VII.—Koli group.					
Total	1,617,044	2,006,121	76	61	
Koli of Gujarat	1,265,988	....	60	47	
Koli of Khandesh	49,689	....	2	....
Son Koli	64,063	....	3	....
Mahadev or Raj Koli	188,787	....	8	....
Malhar or Panbhare Koli	23,352	....	1	....
Unspecified	45,163	....	....	....
VIII.—Forest Tribes, §					
Total	1,734,346	....	82	66	§ Except in the case of Bhil the 1911 figures for these tribes are for those returned as Hindu only; those returned as Animist were not included in Table XIII of that Census.
Bhil	786,726	793,252	37	20	
Chodhra	43,277	38,138	2	....	¶ Excluding any of these tribes who may have been enumerated in Sind.
Dhodia	108,966	109,615	5	....
Dubla and Talavia ¶	132,539	127,870	6	....	¶ These are probably distinct.
Gamta and Gamit*	12,599	*0,892	....	....	* These are really Bhils.
Katkari	80,830	91,319	4	....
Kokua	71,077	*72,078	3	....

Caste.	Strength in the whole Presidency—Actual figures.		Ratio per mille		Remarks.
	1921	1911	Of the 1921 figure to the total figure of the parti- cular reli- gion in the Bombay Presidency.	Of the 1921 figure to the total figure of the general population (all reli- gions) in the Bom- bay Pre- sidency.	
1	2	3	4	5	6
VIII.—Forest Tribes—continued.					
Kolgha	1,364	*5,849	*Excluding any of these tribes who may have been enumerat- ed in Sind.
Nalkada	64,969	*48,258	4	....
Thakur	148,494	*132,168	7	....
Vaghri	86,114	82,016	4	....
Varli	177,391	190,237	8	....
JAIN					
Chaturth	92,166	89,208	192	
Vani	326,697	350,348	660	12	
MUSALMAN.					
Arab	65,908	156,395	14	*Including Makrani.
Baloch	*607,714	*613,691	132	23	
Brahui	54,737	60,389	12	....
Pathan and Afghan	146,308	161,095	32	†Including Sheikh Nao Muslim after excluding Kutch Bhuj Memon, Khoja Pujabhai and Serai.
Sheikh	918,969	†990,712	199	34	
Sayyad	154,593	150,492	33	‡Including Khoja shown under Presidency proper and Khoja Pujabhai shown under Sind.
Bohra	131,917	126,011	28	....
Khoja	58,498	‡35,912	13	....
Memon	137,639	§119,626	30	§Including Memon in Imperial Table XIII. General Table and Kutch Bhuj Memon under Sind.
Mirbahar or Mubana	103,379	133,199	22	¶Including Jat Sindhi and Sheikh Nao Muslim, Serai.
Saman	524,523	1,309,439	114	49	
Sumra	92,457	62,163	20	....
Khaskheli	99,745	....	22	....
Serai and Jat	45,790	¶114,830	10	....
Pinjari	28,220	....	6	....

SECTION 7.—REASONS FOR THE CHANGES.

511. Not all of the castes in this Table exhibit changes which can really be felt to be reasonable. Many of the fluctuations are of course impossible as facts, and are due solely to differences in enumeration or classification. This is particularly true of some of the Sindhi Musalmans. Baloch, Brahui and Pathan show reasonable changes, and we may therefore assume that the figures are correct enough for administrative purposes. But Arab, Saman, Sumra, Muhana, and Serai or Jat yield *no information of any value at all*. Khaskheli was not tabulated in 1911, and the stability or instability of the figures cannot therefore be estimated. If anyone wishes to know the number of any one of these castes he will have to work on estimates. (Reference is invited to Appendix D.)

512. The figures of Bohra, Khoja and Memon all show increases at this Census, which could not possibly be due to natural causes. It must be assumed therefore that the 1911 figures were too low, since it does not seem likely that in the case of these particular castes there is any danger of persons getting wrongly included.

513. The Presidency castes usually show rational changes. Castes in which violent fluctuations occur are—Bava (which is an occupation term), Gurav and

Hugar (here the reduction is probably the fault of the members of the caste, who will return themselves—wholly erroneously—as Brahmans), Kabbaligar and Panchkalshi (they probably got into Khatri through returning themselves as Kshatriya in 1911).

514. A diagram is given showing the approximate distribution of the whole population by castes. Roughly speaking, one-fifth or more is covered by Marathas, Kunbis and Kanbis. The only other very important castes are Koli, Mahar and Dhed, Brahman, and Lingayat.

515. Generally speaking, the impossibility of getting true caste figures is due to (1) ignorance, and (2) prejudice. People are very ignorant of what is under their own noses, not only in India, but elsewhere. In England there are probably more people who could define the functions of the Heperides than of the Lord Lieutenant of a Country, and more who could describe a Phoenix than a Kestrel. In the same way in India there are more people who can summarise the Manu tradition of caste origins than define the differences between the existing tribes of Kolis and more who can explain the difference between an Apsaras and a Kinnara than give a reasonable answer to the question—"Is a Gamta a Bhil?". Yet the former in each case is the wildest poetical mythology, while the latter is a living problem of the present age.

516. As to prejudice we are defeated by the persistent desire to rise in the Hinduistic Scale. The desire to become a Brahman is as old as the Aryan invasion. Not one in ten Brahmans is descended from original members of the caste, which in old times received constant accretions from families or groups which were learned enough, rich enough or astute enough to obtain Brahmanic recognition. Today the press, platform and law-courts suffice to defeat the *numerous* aspirants to Brahmanic status. But in the lower strata, where the change would be less noticeable, odds and ends are constantly passing into the ranks of the Kunbi and the Rajput. At home, in his own village, the Indian cannot easily change his caste, unless (as sometimes) the whole village community is doing so (an example of this is given in Appendix C). But when he goes off with his family to a new country no one can tell whether he is of the caste which he states. Many English people in Western India believe that their Mahar servants are Marathas. And recently, when I asked a Mahar servant what his caste was, he replied Somavanshi; and when I hinted that this was a synonym for Mahar, he was prepared to argue that the two castes are quite different.

517. The caste limits are therefore not nearly so irrevocably fixed as would in theory be expected. There is a fringe to each caste, in which are found those persons who, for one reason or another, have just entered or are just leaving it.

518. In these circumstances it may be objected that the arguments used at the beginning of this Chapter for the retention of the Caste column in the Schedule cannot be sustained, since the figures which we get are so rough that those of the past will serve as well as those of the present. There is some truth in this argument. But on the other hand the 1901 figures, were they being used, would give serious underestimates of many of the Bhil and other Forest tribes, who suffered severely from the famine. Judiciously used, with a clear realisation of the probability in each case of over or understatement, of numbers, the Caste figures are not only useful but necessary for the Educational and Public Health Departments. The great thing is to take a broad view of the Castes,—for example to amalgamate the Forest Tribes, whether for any one area or for the whole Presidency, and similarly to amalgamate the weaving communities, and the Maratha-Kunbi group.

519. Some of the more important changes in the numbers since 1881 are shown in the Table which closes the Chapter.

SECTION 8.—EUROPEANS AND ANGLO-INDIANS.

520. The strength of the Indian Christians, and their changes since 1881 have been so fully given in Appendix G that there is no use in repeating the information here. But it might be interesting to trace the increase in Europeans and Anglo-Indians since 1881.

Subsidiary Table No. 113.—Changes in the number of Europeans and Anglo-Indians since 1881, Actual figures, whole Presidency (except 1881).

	1881 (British Dis- tricts only).	1891	1901	1911	1921
Europeans (British Subjects) ..	23,601	31,456	25,203	27,281	29,474
Europeans (Other Nationalities) ..			3,168	3,235	2,415
Anglo-Indians ..	2,893	8,809	6,820	9,144	10,465

For an analysis of the different Nationalities of Europeans of other Nationalities, and all other foreigners the Birthplace Table is the best guide. And the discussion of the changes in their numbers will be found in Chapter III.

Subsidiary Table No. 114.—Variation in caste, tribe, etc., since 1881.

Caste, tribe or race.	Persons (000's omitted).					Percentage of Variation Increase (+) decrease (—).				Net Variation, 1881- 1921.
	1921	1911	1901	1891	1881	1911- 1921	1901- 1911	1891- 1901	1881- 1891	
1	2	3	4	5	6	7	8	9	10	11
HINDU AND ANIMISTIC—										
Agri ..	232	234	211	224	171	—1	+11	—6	+31	+36
Berad or Bedar ..	186	185	177	150	142	+1	+5	+18	+6	+32
Bhandari ..	179	183	169	167	158	—2	+8	+1	+6	+13
Bhangl or Halalkhor ..	100	94	81	117	..	+6	+16	—31	..	..
Bharvad, Dhangar or Kurub ..	702	837	779	827	591	—5	+7	—6	+40	+34
Bhil ..	787	480	482	832	543	+64	..	—42	+53	+45
Bhol ..	64	64	58	60	..	+1	+10	—10	..	..
Brahman Total ..	1,029	1,068	1,053	1,108	1,011	—4	+1	—5	+10	+2
„ Andich ..	150	161	178	161	..	—7	—10	+11	..	..
„ Chitpavan or Konk- nasth ..	109	111	114	117	..	—1	—3	—3	..	..
„ Deshasth ..	291	297	298	280	..	—2	..	+3	..	..
Chambhar, Mochl, Machlgar or Sochl ..	282	308	311	302	203	—8	—2	+3	+49	+39
Darji, Shimpi, Sal or Miral ..	141	141	151	158	155	..	—7	—4	+2	—9
Dhobi, Parfi, Agasa or Madival ..	80	80	85	96	84	..	—6	—11	+14	—5
Dhodia ..	109	110	92	97	..	—1	+20	—5	..	..
Dubla or Talavia ..	133	128	98	102	109	+4	+31	—4	—6	+22
Gurav or Hugar ..	49	66	65	75	..	—25	+2	—13	..	..
Hajam, Navi, or Nadig ..	188	139	188	291	204	—1	+1	—28	+28	—2
Katkari ..	81	91	60	74	..	—11	+52	—19	..	..
Koli ..	1,617	2,008	1,714	2,107	1,669	—10	+17	—19	+26	—3
Kumbhar ..	258	248	239	330	268	+4	+4	—28	+23	+1
Lingayat ..	1,156	1,339	1,422	302	369	—14	—6	+371	—18	+213
Lohana ..	570	594	562	369	340	—4	+6	+52	+6	+64
Lohar, Luhar or Kammar ..	120	118	116	137	122	+2	+2	—15	+12	—1
Mahar, Holiya, Dhod ..	1,337	1,471	1,320	1,449	1,198	—9	+11	—9	+21	+12
Mang or Madig ..	259	274	251	257	195	—6	+9	—2	+32	+33
Maratha ..	3,106	3,279	3,651	2,126	4,486	—5	—10	+72	—53	—31
Rabari ..	136	130	109	157	..	+5	+19	—31	..	..
Rajput ..	473	456	387	533	450	+4	+18	—23	+18	+5
Ramoshi ..	51	60	61	64	..	—15	—2	—5	..	..
Sonar, Soni or Aksali ..	188	178	195	163	170	+6	—0	+20	—4	+11
Sutar or Badig ..	214	200	211	201	195	+7	—5	+5	+3	+10
Teli, Ganiger or Ghanchi ..	123	123	129	266	189	+4	—5	—52	+41	—33

Caste, tribe or race.	Persons (000's omitted).					Percentage of Variation Increase (+) decrease (—)				Net Variation, 1881- 1921.
	1921	1911	1901	1891	1881	1911- 1921	1901- 1911	1891- 1901	1881- 1891	
1	2	3	4	5	6	7	8	9	10	11
HINDU AND ANIMISTIC—contd.										
Thakur	148	132	122	138	8	+12	+8	—12	+1,625	+838
Vaddar or Od	100	103	84	93	..	—3	+23	—10	..	..
Vaghri	86	82	60	76	..	+5	+37	—21	..	..
Vani	334	337	352	464	339	—1	—4	—24	+37	..
Vanjari	109	114	113	134	108	—4	+1	—16	+24	+1
Varli	177	190	152	167	63	—7	+25	—9	+165	+180
JAIN—										
Chaturth	92	89	112	58	..	+3	—21	+98	..	..
Vani Total	327	350	339	361	180	—7	+3	—6	+101	..
MUSALMAN—										
Balochi	607	603	543	523	425	+1	+11	+4	+23	+43
Bohora	132	126	118	121	..	+5	+7	—2	..	..
Brahui	55	60	48	30	..	—9	+25	+60	..	..
Pathan	146	161	171	176	128	—9	—6	—3	+38	+14
Sayad	155	150	130	163	145	+3	+15	—15	+6	+6
CHRISTIAN—										
European (British Subjects) ..	28	29	32	31	..	—3	+3	+3	..	..
Other Europeans and Allied Races..	2	4	..	..	..	—52	..	..	..	..
Anglo-Indians	10	9	7	9	..	+1	+29	—22	..	..
Indian Christians	234	204	181	111	..	+21	—4	+123	..	..
ZOROASTRIAN	85	84	79	77	..	—3	+6	+3	..	..

CHAPTER III.—BIRTHPLACE.

1.—THE BASIS OF THE FIGURES.

521. The instructions on the cover of the Enumeration Book were as follows :—

“ Enter the district or State in which each person was born ; and if the person was not born in your province add the name of the province to the district of birth. If the person was born out of India, enter the country, as *Goa, Afghanistan, Ceylon*. —The names of villages, Talukas, etc., are not to be given.”

In the supplementary instructions in Chapter V-A of the Code I added, at the request of the Superintendent of Census, Baroda, a direction that in the case of that State the “ district (Subha) of birth ” should be entered. The areas for which the figures were actually required in the case of Baroda are more properly termed Prants, but the direction—so far as it was not entirely neglected—was generally understood.

522. In the Chapter dealing with Slip-copying the following was inserted (in accordance with precedent and the Imperial Census Code)—

“ If column 12 is blank, the district of enumeration will be entered ”.

This provision, though possibly suitable in the more remote parts of the Presidency, is so liable to be fallacious in the case of the larger cities that I had to repeal it in their cases. The tradition of the Indian Census that all blanks should be filled up by guess-work, and no Table should have a class “ not returned ” was hardly suitable to the present occasion, when the enumeration books were often incompletely filled.

523. In addition to actual blanks in column 12 of the schedule the number of cases in which the village instead of the District or State was entered was enormous, in spite of the very clear instructions on the cover. The Abstraction Offices had a difficult task to identify village names, more especially since the same name very frequently belongs to several villages in different districts.

524. This Chapter was headed “ Migration ” in the last Census Report for the Provinces, but “ Birthplace ” in the Report for India. The latter is its prescribed heading on this occasion, and is much more correct than the other, since the statistics are based entirely on the returns of birthplace in the schedules. Nevertheless it is necessary to speak of Immigrants and Emigrants throughout the Chapter, because of the absence of any satisfactory term for “ a person born in one place but enumerated in another ”. The birthplace basis for analysing migration figures is in accordance with the practice of the Census in most other countries, and is due to the impossibility of obtaining any other basis with clear boundaries. The true emigrant is, of course, an individual, who, being a permanent resident of one region leaves it and becomes a permanent resident of another ; and that is the sense in which the words emigrant and immigrant are used in common parlance. But there is no possible criterion for defining “ permanent ” ; and there are many persons who are not permanently residents of *any* region. Consequently the casual visitor, the criminal sent to a distant jail, the soldier in barracks, the passenger on a passing train, the Chinese carpenter of a ship in harbour, and the genuine permanent resident whose mother happened to be elsewhere at the time of his birth, are alike classed as Immigrants.

525. Not only so, but they are classed as Immigrants from the particular region in which they were born. Thus one of the soldiers in barracks might have been born in Malta, though a genuine native of Ireland. He is classed therefore as an Immigrant from Malta to India. Another might have been born in Bombay City, returned to England with his parents a few months after birth and never come back to this country till late in life. Being enumerated in barracks at Poona he counts as an immigrant from Bombay City to the Poona District.

526. Mr. Macgregor in the 1911 Report (p. 39) wrote—

“ It is assumed for the purposes of this report, though it is not necessarily true for everybody, that the district of nativity is the same as the district in which the person's home is situated. With the extension of railways and the spread of railway travelling this must become less and less true every year, but the people are still conservative enough to make the statistics accurate when dealing with large figures.”

This statement requires some modifications. We must distinguish between Indians and Foreigners (including for the moment in this latter term Englishmen and persons from other parts of the Empire).

527. In the case of Indians the very extensive practice of a married woman returning to her father's house for the birth of her first, and often of her subsequent children necessarily results in a large proportion of extra-district birthplace returns, and in extra-provincial returns in the case of districts on the marches of the Province. In the case of Foreigners in this country birthplace is an unreliable guide to genuine residence, partly because of the large number of white children born in India to parents who are liable to transfer from station to station, and partly because many of the non-English foreigners probably come of a wandering stock, whose parents also wandered about the world.

528. In the English Census, in order to analyse persons returning foreign birthplaces, distinction is made between "Persons of British parentage born abroad," "Naturalised British subjects born abroad" and "Foreigners born abroad". The foreigners are then again separated by occupations, and by Civil Condition. These figures are not only valuable in themselves, but afford an index of the proportion of those foreigners who (as for instance seamen), are only temporarily present, and of those who (as for instance Music masters in schools), are permanent residents. It is certainly desirable at future Censuses in India to make some similar analysis of persons returning foreign birthplaces. Upto 1911 Birthplace was not examined in conjunction with any other factor, except in the case of Bombay City, and at this Census the only change has been to extend the compound analysis to the two further cities of Ahmedabad and Karachi.

529. The statistics of Immigration are obtained entirely from Imperial Table XI for this Presidency. Figures of emigrants within British India, *i.e.*, persons enumerated in other parts of British India, but returning Bombay as their birthplace are obtained in MS. from other Superintendents. Emigration outside British India is not ascertainable, except in the case of a few of the colonies. The real difficulty of obtaining correctly either figures of immigrants or emigrants is the multitude of Indian territorial names, and the natural ignorance of the enumerator, the individual enumerated, and the Abstraction Offices. For instance, the direction to record the State and Province becomes a difficult problem with regions like the Central India Agency, where the States are numerous and often very small and the term Central India Agency not well known. And the same applies to districts also. Many a stranger from other Provinces may reasonably plead ignorance of the district of birth, especially in cases where he has not been back to his birthplace for many years. For instance an Army Officer enumerated by myself gave Landaur as his birthplace, and it required an Atlas and the expenditure of a good deal of time to ascertain the District and Province. It is for that reason that many lazy enumerators accepted the name of the village, since most persons know the name of their actual birthplace.

530. In order to save elaboration both in Enumeration and Abstraction I refused requests from the Census Superintendents of the Central India Agency, Hyderabad, and Mysore to order the record of Talukas within States in the first case, and of Districts in the others. To take the case of the Hyderabad State—usually called the Mogalai in this Presidency—it would have added to the work of my Abstraction Offices if they had had to handle the names of Hyderabad Districts, while the position of the Enumerator was much the same. Provided that he was not so lazy as to accept the village name it was no trouble to him to ascertain that the man was born in the Mogalai, whereas the name of the District would be unknown to him, and quite possibly would have been incorrectly entered.

531. In short, we must, so far as possible, consider the interests of the careful enumerator and the Abstraction offices. With the lazy enumerator it is impossible to cope.

532. In passing I would remark that in showing the number of immigrants from *districts* of the Hyderabad and Mysore States in Subsidiary Table I (a) on p. 49 of the 1911 Report my predecessor fell into a trap. At that Census, as at this, there was no order to record the district in the case of States, but only the State; and the figures there given are therefore those cases in which the enumerators *against instructions* entered the district. The immigrants from Hyderabad numbered 140,990. And obviously the numbers from the four continuous districts must have been nearer to one lac than the figure (1,666) actually shown.

SECTION 2.—TYPES OF MIGRATION.

533. The following classification and definitions of different types of migration is taken straight from the India Census Report of 1911, to the extent indicated by the inverted commas.

“ 1. *Casual*.—Or the minor movements between neighbouring villages. These minor movements are called casual, not because they are temporary or accidental—for they are often . . . of a permanent character—but because a change of residence from one place to another within a very short distance does not amount to migration in the ordinary acceptance of the term. Such movements are going on all over the country, but they find expression in our statistics only where they take place between villages which happen to lie on opposite sides of the district boundary.”

534. It is obvious that this type of migration is of a kind which is of no economic importance, and could with advantage be excluded from our figures, if there were any possible means of doing so. As pointed out in the same Report the principle cause of such migration is the practice of taking wives from villages other than that of the bridegroom. By that means not only does the wife appear in the figures as an “immigrant” from the district of her father’s house, but since according to custom she returns to her father’s house for the birth of her first child, the child also so appears.

535. Mr. Gait amalgamated with these domestic types of migration the cases of purely random guests and visitors who happen to be present on the Census night. Strictly speaking the cases of wives from neighbouring villages and children born there stand on a different footing from the cases of guests and travellers. We might therefore divide Mr. Gait’s class “Casual” into two, and call them (1) “*Casual*” and (2) “*Domestic*” or “*Social*”.

536. With “*Casual*” in its thus restricted sense it is unnecessary to deal in much detail. There is no possibility of any quantitative estimates of this type. It may be assumed on grounds of probability that the proportion of casual Immigrants in the total population of towns and cities is higher than in country places. But beyond this nothing can be said.

537. To return to the Sub-Class (2) “*Domestic*” or “*Social*”—this type of migration is indicated in the figures by the ratio of females, and is naturally most obvious in the case of immigration from contiguous regions, whether of the same or another province. Thus in 1911 (when the figures were not upset by famine migration as at both the 1901 and 1921 Censuses) the figures in the case of certain particular districts were very striking. These are given in the annexed Table. Partly owing to the abnormal condition prevailing at this Census and partly for other reasons the 1921 figures are not here quoted.

Subsidiary Table No. 114.—Actual figures in thousands of population of British Districts, and of immigrants from contiguous regions, 1911.

District.	1911			District.	1911		
	Population	Immigrants from contiguous Districts.			Population	Immigrants from contiguous Districts.	
		M.	F.			M.	F.
Ahmedabad ..	828	65	85	Poona ..	1,072	31	34
Broach ..	307	14	17	Satara ..	1,081	9	16
Kaira ..	602	16	55	Sholapur ..	768	29	46
Panch Mahals ..	323	14	19	Belgaum ..	944	29	43
Surat ..	654	15	16	Bijapur ..	863	23	31
Kanara ..	431	9	8	Dharwar ..	1,026	34	40
Kolaba ..	504	10	8	Hyderabad ..	1,037	24	15
Ratnagiri ..	1,204	6	11	Nawabshah ..			
Thana ..				Karachi ..	522	9	4
Bombay Suburban ..	882	27	20	Larkana ..	601	19	14
Ahmednagar ..	945	20	35	Sukkur ..	574	15	9
East Khandesh ..	1,035	22	29	Thar and Parkar ..	457	36	24
West Khandesh ..	581	15	18	Upper Sind Frontier ..	263	24	19
Nasik ..	905	11	17				

It will be seen that the ratio of females is exceptional in Kaira, and high in all inland districts. In Poona the ratio is kept down by the number of males in military and other employment in Poona City. In the coast districts the females are usually in deficit, probably owing to the high proportion of males on boats in ports. The Sind figures again emphasise the utter dissociation between conditions in that Province and conditions in the rest of the Presidency.

538. The next of Mr. Gait's categories was "(2) *Temporary*, due to the migration of coolies to meet the demand for labour on new canals and lines of railways, and to journeys on business, or in connection with pilgrimages, marriage ceremonies and the like."

539. So far as pilgrimages are concerned the date of the Census is always fixed so as to avoid, so far as possible, all important pilgrimages. But while avoiding the main gatherings it is not possible to take cognizance of the smaller local festivals. The following are the only festivals known to have been in progress at or near the date of the Census in this Presidency. But the list is not necessarily complete, since all districts did not report.

District.	Locality.	Festival.	Estimated number of pilgrims.
Broach	.. Ankleshwar ..	Halinsba Pir ..	1,000
Bijapur	.. Marimatti (Tal. Bagewadi, ..	.....	2,000
Dharwar	.. Hulgur (Tal. Bankapur) ..	Local Pir ..	3,000
Kanara	.. Itgi (Tal. Siddhapur) ..	Car Procession ..	2,500
Do.	.. Gokarn ..	Shivratri ..	Considerable
Do.	.. Idgundi (Tal. Yellapur) ..	Do. ..	500
Do.	.. Shivalli (Tal. Sirsi) ..	Do. ..	1,000
Nasik	.. Nasik ..	Sinhashth ..	The festival was more or less over, but a good many persons whose presence had been due to the festival still remained.

540. Mr. Gait's next category was "(3) *Periodic*, due to seasonal demand for labour." In this Presidency it is well known that many cultivators and agricultural labourers go to Bombay for Mill and other labour in the off season. In some cases they only visit their villages in order to sow, possibly to weed if the crop comes up all right, and to reap the harvest. Mr. Macgregor put the number of temporary migrants into Bombay City at 125,000 out of 590,000 not born in the city. This he mentioned as being arrived at by taking as temporary immigrants 75 per cent. of the coolies, 66 per cent. of the cartmen, and 30 per cent. of the mill-hands, who gave birthplace returns within the Presidency. It is not known on whose authority this formula was chosen. I consulted Dr. Sandilands, the Health Officer, who replied that he knew of no sound statistical basis for a formula; that some general idea might be obtained from persons with an estimate knowledge of the habits of the people; but that any such exact estimates as that put forward in 1911 would need to be accepted with a good many reservations.

541. Mr. Macgregor also referred to the periodic migration for the sugarcane harvest on the canals in the Poona District. This phenomenon still continues. Wherever there is irrigation in the Deccan there must be an influx of labour in the harvest season; but as Mr. Macgregor pointed out the immigrants are mostly from short distances. In the present year the canals were very feeble, and the population of the canal villages mostly lower than in 1911. This, which has been separately discussed in Appendix L, is merely mentioned here as a justification for not attempting any exact estimates of immigrants. It is no use analysing a normal movement in an abnormal year.

542. Other lines of normal periodic migration at this season are the movement of labourers into the cotton districts of Khandesh and eastwards out of our territory into Berar. But this again is not worth studying on the present Census figures.

543. Mr. Gait's next category was "(4) *Semi-permanent*, where the inhabitants of one place earn their living in another, but maintain their connection with their old homes, where they leave their families, and to which they ultimately return." Mr. Gait's instanced the Englishman in India as an example of this type. It is a type which so far as Indians are concerned is characteristic of industrial cities.

There is no reason to think that much migration of this type goes on as between agricultural tracts. The majority of the Bombay City immigrants are undoubtedly of this type, rather than periodic.

544. Mr. Gait's type (5) "*Permanent*" explains itself. Mr. Macgregor estimated that the sons of semi-permanent Bombay City immigrants, being inured to city life, may tend to become permanent settlers. Settlement on the Sind canals is also of this type. And there is also a distinct movement, though probably over distances too short to be observable in our figures, from the forest tracts of the Karnatak Mallad to the inland villages.

SECTION 3.—GENERAL CHARACTER OF THE POPULATION.

545. The following is a summary showing the general distribution of the whole population by Birthplace since 1881. Considerable care is required on the part of any one seeking to compare Birthplace figures for the different Censuses. Not only are the Tables at the various Censuses quite differently framed, but the treatment of (i) Aden and (ii) Baroda have been very different. In the figures now given Aden has been excluded from the Presidency throughout, and treated as a country in Asia. The Baroda State has been separated off from the "Rest of India"—i.e., the unit called in the Tables "Provinces and States in India beyond Bombay". The Baroda figures have been first shown separately, and then combined with the figures of those born in the Presidency. In comparing the figure 22,478,056 of 1881 with the figure 22,713,572 in the same year, and in making all similar comparisons for subsequent years, it must be borne in mind that the two sets of figures, though truly comparable, are nevertheless of different types, the first representing persons born and enumerated in the same region, and the second persons born in Baroda but enumerated with us. The figures of "Birthplace not specified" in the first four Censuses cannot be redistributed among the other items as there is no information to guide us. They represent three main types of entry—(1) actual blanks in the Birthplace column of the schedules, (2) names of villages within the Presidency, not assignable with certainty to any district, and (3) names of foreign Birthplaces unidentified, usually through ignorant misspelling. The almost complete elimination of this item in 1911, and its entire disappearance at this Census, does not mean that the schedules have ceased to contain these blanks, village names and misspellings, but only that since 1911 the rules for filling up the doubtful entries have become stereotyped. The Bombay City schedules in particular contained many entries of village names and some blanks. But the Deputy Superintendent in charge of that Abstraction Office managed to get everything corrected to his satisfaction. In the case of villages he obtained lists of villages from the Mamledars of all Talukas in the Konkan and adjacent Deccan Districts. The tracing of villages is laborious and to some extent uncertain, and the slips in such cases were filled up with a district name partly by guess-work. But in a matter like this it is pretty certain that the mistakes would balance out correctly.

Subsidiary Table No. 115.—Distribution of the total enumerated population of the Bombay Presidency by Birthplace, 1881—1921.

	1881	1891	1901	1911	1921
Total Population	22,395,663	26,916,342	25,424,235	27,048,352	26,701,148
BORN IN—					
Bombay Presidency	22,478,056	25,919,985	24,602,206	26,041,820	25,618,935
Baroda State	235,526	246,879	195,645	229,239	215,281
Total Bombay Presidency and Baroda	22,713,572	26,166,864	24,797,851	26,271,059	25,834,216
Rest of India	607,913	699,954	570,988	723,313	824,341
Rest of Asia (including Aden)	18,193	18,490	20,148	19,873	17,825
Europe	14,845	20,367	15,648	21,915	21,870
Africa	2,237	1,989	1,268	1,503	2,260
America	298	303	317	277	455
Australasia	94	63	104	149	177
At Sea	25	35	26	17	4
Birthplace not specified	38,476	8,277	17,885	36	

546. In considering the above figures it is important to remember that the bulk of the returns of Birthplaces outside India occur in Bombay, Poona and Karachi cities. The returns of persons born in the United Kingdom are naturally rather more dispersed. But those of other European countries, and of all the other extra-Indian items, are almost confined to the three cities.

547. The figures from Europe downwards do not appear to call for comment. The figures for Rest of Asia are noticeable, partly because of the high figure in 1901, and partly because of the drop at this Census. The latter is due in the main to the disturbed state of Asia, and to our strained relations with Afghanistan. The cause of the 1901 figure is unknown; but the great famine may have attracted Kabuli money-lenders, and traders hopeful of picking up goods cheap.

548. The most important point is the extent to which this Presidency draws strangers from other parts of India. Of course a large part of the figures under that head represent persons born in their paternal grandfather's house just across the frontier, and will be set off by corresponding figures of emigrants. But this factor must be more or less constant; and the great rise in the "Rest of India" figure this time must be genuine immigration. The diagram opposite shows the movements of the two sets of figures, namely (i) those born in the Presidency *plus* Baroda, and (ii) those born in the "Rest of India". The drop in 1901 is natural, when the conditions then prevailing are borne in mind. The rise at this Census is very noticeable.

549. But when we analyse the figures of those born in the "Rest of India," we find that the increase is entirely confined to Bombay, Karachi and Sholapur cities. The following are the figures:—

Distribution of persons born in the Rest of India.

	1881	1891	1901	1911	1921
Whole Presidency	607,913	699,954	570,988	723,313	824,341
Bombay City, and Karachi and Sholapur Districts.	81,731	188,224	137,293	219,976	317,140
Rest of the Presidency	526,182	511,730	433,695	503,337	507,201

This point is brought out in the diagram by means of the red curves. The fact that it is only the three cities that attract is very clearly brought out. The mofussil does not attract strangers any more now than 40 years ago.

Distribution by Birthplace of every 1,000 persons in England and Wales at the 1911 Census.

Born in—
England and Wales .. 965
Rest of the British Isles. 20
Outside the British Isles. 15

550. In the English Census of 1911 the distribution of the enumerated population of England and Wales was as shown in the margin. The corresponding figures for this Presidency are given below.

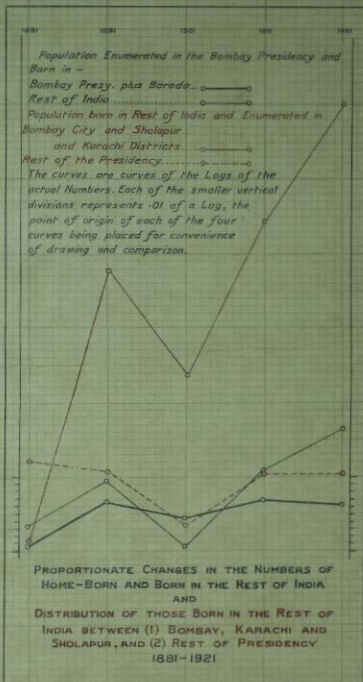
Distribution by Birthplace of every 1,000 persons enumerated in the Bombay Presidency, 1881—1921.

	1881	1891	1901	1911	1921
Bombay Presidency and Baroda ..	971	972	975	971	967
Rest of India ..	26	26	23	27	31
Outside India or Not Specified ..	3	2	2	2	2

The number of persons of unspecified birthplace send up the figures in the last line in 1881, and to a lesser extent in 1891 and 1901.

SECTION 4.—INDEX OF MIGRATION.

551. Subsidiary Table No. 22 (on page 30) showed the unaccounted-for differences between Vital Statistics and Population changes during the intercensal



INDEX OF MIGRATION

as shown by the

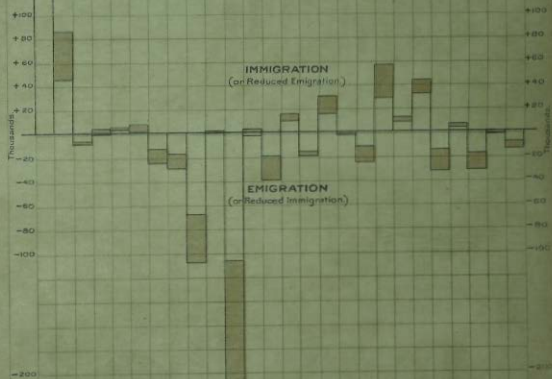
UNACCOUNTED FOR DIFFERENCES + or - BETWEEN
VITAL STATISTICS (Balance of Births and Deaths) AND
CENSUS CHANGES (Increase or Decrease), 1911-1921, for
BRITISH DISTRICTS.

The Sexes are treated separately throughout

Males

Females

The West Khandesh District is omitted, owing to the absence
of Registration of Vital Statistics in the Mewas Estates.



period, both sexes combined. In the following Table this is shown for the two sexes separately, thereby enabling more accurate results to be obtained. It is to be noted, however, that, while the period taken for the former Table was April 1911 to March 1921, the period for the present Table is simply the ten calendar years, 1911—1920. This is not quite so exact an approximation to the intercensal period; but it is the period usually taken; and the results will be sufficiently near for all practical purposes.

552. The advantage of taking the sexes separately is that in the case of those districts, where the unaccounted-for difference is small, the migration factor will be elicited by comparing the sex figures. For example, in Kaira, while the figure (+3,757) in Subsidiary Table No. 22 would at first sight seem to imply a slight migration, the figures (Males — 552, Females + 3,104) in the Table below reveal a slight increase by natural causes set off by a certain amount of emigration.

553. The figures in this Table are also exhibited diagrammatically in the plate opposite. This shows the general situation very clearly; but subtle differences, such as those indicated for Kaira above, can be discerned best by a careful study of the Table itself.

Subsidiary Table No. 116.—Migration Index, obtained by comparing separately for each sex the difference between Births and Deaths (recorded) and the difference between the populations enumerated in 1911 and 1921, British Registration Districts.

District.	Difference between Births and Deaths, 1911—1920. Excess of Births (+) Excess of Deaths (—)		Difference between Census figures, 1911 and 1921. Increase (+) Decrease (—)		Unaccounted-for differences on comparing columns 2 and 4, and 3 and 5.	
	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7
Bombay City	— 114,374	— 73,674	+ 131,044	+ 65,425	+ 245,418	+ 139,099
Ahmedabad	— 11,117	— 19,639	+ 33,880	+ 19,222	+ 44,997	+ 38,861
Broach	+ 6,541	+ 3,490	+ 342	+ 686	— 6,199	— 2,704
Kaira	+ 10,068	+ 6,618	+ 9,516	+ 9,722	— 522	+ 3,104
Panch Mahals	+ 25,423	+ 23,243	+ 27,471	+ 24,694	+ 2,048	+ 1,451
Surat	+ 9,717	+ 4,741	+ 10,479	+ 9,763	+ 762	+ 5,022
Kanara	— 2,572	— 2,835	— 15,974	— 12,847	— 13,402	— 10,012
Kolaba	+ 1,982	— 2,823	— 15,548	— 15,676	— 17,530	— 12,853
Ratnagiri	+ 39,142	+ 20,037	— 28,041	— 21,353	— 67,183	— 41,390
Thana with Bombay Suburban.	— 11,028	— 10,567	— 10,320	— 10,743	+ 708	— 176
Ahmednagar	— 262	— 6,534	— 106,677	— 107,076	— 106,415	— 100,542
East Khandesh	+ 26,457	+ 14,187	+ 23,870	+ 17,081	— 2,587	+ 2,894
Nasik	— 11,296	— 20,443	— 31,587	— 40,867	— 20,291	— 20,424
Poona	— 36,099	— 41,756	— 26,137	— 36,342	+ 9,962	+ 5,414
Satara	— 9,811	— 24,940	— 27,590	— 27,429	— 17,779	— 2,489
Sholapur	— 23,990	— 31,234	— 8,902	— 17,418	+ 15,088	+ 13,816
Belgaum	+ 9,075	+ 2,840	+ 7,277	+ 2,197	— 1,798	— 643
Bijapur	— 15,716	— 24,796	— 28,259	— 37,838	— 12,543	— 13,042
Dharwar	— 18,564	— 27,371	+ 8,214	+ 2,407	+ 26,778	+ 29,778
Hyderabad	— 24,237	— 25,873	— 15,849	— 22,740	+ 8,388	+ 3,133
Nawabshah	— 16,629	— 18,709	— 13,899	— 15,929	+ 2,740	+ 2,780
Karachi	— 13,675	— 8,030	+ 17,757	+ 2,587	+ 31,452	+ 10,617
Larkana	— 12,003	— 18,031	— 28,015	— 34,904	— 16,012	— 16,873
Sukkur	— 12,235	— 19,518	— 30,625	— 32,996	— 18,390	— 13,478
Thar and Parkar	— 18,709	— 16,686	— 20,204	— 16,863	— 1,504	— 177
Upper Sind Frontier District	— 2,095	— 5,703	— 11,234	— 11,154	— 9,139	— 5,451

SECTION 5.—EXTRA-INDIAN BIRTHPLACES.

554. The numbers returning *European* Birthplaces at the last two Censuses are shown in the following Table. I have omitted from the 1911 list the cases of 4 males in Kaira and 1 in Thana, who claimed to have been born in Iceland, or at least who were abstracted as such. The fact is not impossible; but a confusion between Iceland and Ireland in the Abstraction Office is to be suspected. The head "Europe Unspecified" would usually mean the United Kingdom, since it is a peculiarity of Anglo-Indian idiom to use the term "Europe" as meaning England. The 77 Russians in 1911 were largely Bombay Prostitutes, the numbers at that Census being Males 23, Females 54. At this Census the 142 persons include 86 détenus in the Belgaum Fort. These people had come down through Afghanistan,

and were still at Belgaum at the time of the Census. The Russian prostitute seems to have disappeared from India.

555. The numbers born in *Portugal* in 1911 were clearly wrong. There was evidently confusion between Portugal and Portuguese India. Of the 637 persons 280 were recorded from Ahmedabad and 275 from Kathiawar, which indicates that this error was mainly committed by the Gujarat Abstraction Offices. This time directions were given to guard against the confusion, with the result that the figure declines to a more probable value.

556. Apart from the above remarks the figures call for no other comment.

Subsidiary Table No. 117.—Numbers recorded from European Birthplaces, 1911 and 1921.

Country.	1911	1921
United Kingdom	22,418	21,870
Austria (Austria-Hungary in 1911)	220	75
Belgium	55	70
Denmark	13	16
France	164	182
Germany	353	49
Gibraltar	30	13
Greece	81	80
Holland	15	37
Italy	213	208
Malta	32	35
Norway	47	6
Portugal	637	119
Roumania	12	4
Russia	77	142
Spain	21	30
Switzerland	107	59
Turkey in Europe	5	18
Europe Unspecified	84	319

557. The decline of the *Africa* figure from 8,006 to 2,260 is due entirely to the exclusion of Aden from the Tables. Of the 2,260 recorded in the Presidency the following Districts contributed the most—Bombay City 462, Surat 486, Kathiawar 780. Other Gujarat Districts also returned moderate numbers. This is of course the region from which the bulk of the Indian emigrants to East and South Africa are drawn.

558. Bombay and Karachi contain the large majority of those born in *Other Asiatic Countries*. The fall in the numbers of born in Arabia from 18,376 to 2,709 is again due entirely to the exclusion of Aden. The fall in the numbers born in Afghanistan from 8,247 to 4,238 is due presumably to political conditions. The increase of those born in Nepal from 514 to 1,574 is due entirely to troop movements. Of the total of 1,574 Nasik recorded 881, which figure evidently indicates a Gurkha regiment. The increase of the number of those born in Turkey in Asia is due probably to war refugees and also to the expansion of trade between Bombay and Mesopotamia. The number born in Japan, as well as in most other foreign countries, depends mainly on what shipping happens to be in Bombay and Karachi Harbours at the Census date.

SECTION 6.—IMMIGRANTS FROM THE REST OF INDIA.

559. The figures of those born in *Rajputana* and *Ajmer-Merwara* reveal the important fact that, while considerable reliance could probably be placed on the combined figures of immigrants from those two regions, no reliance can be placed on either set of figures when taken separately. The immigrants at the last two Censuses were—

	1911	1921
Rajputana	141,251	156,357
Ajmer-Merwara	36,368	7,991
	177,619	164,348

Now the population of Rajputana is $10\frac{1}{2}$ millions and of Ajmer-Merwara $\frac{1}{2}$ million. It is therefore improbable, and indeed almost beyond the verge of possibility, that the 1911 figure could be correct. What seems to be the case is that the terms Merwar, Marwar and Mewar are liable to be taken either in Abstraction or Enumeration, capriciously to either Rajputana or Ajmer-Merwara. The following Table shows the comparative numbers for the two Censuses in the case of all units which in 1911 returned over 1,000. It is obvious that such wild fluctuations could not be true. At this Census West Khandesh introduces a palpable and disturbing error, while the figures for all other Districts are probably considerably nearer to the truth.

Subsidiary Table No. 118.—Immigrants from Rajputana and Ajmer-Merwara, 1911 and 1921.

District.	1911		1921	
	Rajputana	Ajmer-Merwara	Rajputana	Ajmer-Merwara.
Bombay City	12,453	6,937	19,722	1,683
Ahmedabad	11,670	4,231	23,842	119
Kaira	875	1,541	1,043	15
Panch Mahals	1,490	856	3,328	123
Surat	714	1,178	2,150	23
East Khandesh	3,614	2,759	5,468	..
West Khandesh	4,177	637	1,268	2,145
Nasik	1,770	1,844	2,584	..
Palanpur Agency	8,169	6,446	14,646	76
Mahi Kantha	5,660	2,927	8,168	20
Reva Kantha	3,744	1,087	2,961	25

560. There is a remarkable increase in the number of persons born in the *Hyderabad State*. There does not seem to be any confusion between Hyderabad State and Hyderabad Sind. Nor is there likely to be, because, for one thing, persons hailing from or having occasion to refer to the latter usually call it "Sind Hyderabad" and for another the State is usually referred to either as the "Mogalai" or as the "Nizam's Dominions", the term "Deccan Hyderabad" being reserved for the city itself. The figures at the two Censuses are given in the margin. Of course the bulk of these persons are found in the frontier Districts, and represent simply children of trans-frontier brides. But there could not be any sudden increase in this element at this or any other Census; and the rise must therefore be attributed to genuine migration due to famine conditions in the Hyderabad dominions. The figures at the two Censuses are given in the subjoined Table.

Persons born in Hyderabad State and enumerated in the Bombay Presidency, 1911 and 1921

1911	140,990
1921	219,252

Subsidiary Table No. 119.—Numbers of persons born in the Hyderabad State, 1911 and 1921.

District.	1911	1921	Difference+ or (—)
Bombay City	9,302	19,602	+10,300
Ahmednagar	24,630	23,820	— 810
Poona	4,917	9,366	+ 4,449
Sholapur	34,516	60,306	+25,790
Bijapur	23,368	29,221	+ 5,853
Dharwar	13,108	29,329	+15,921
East Khandesh	12,631	14,913	+ 2,282
Nasik	6,544	9,731	+ 3,187
Thana (incl. Bombay Suburban)	600	5,252	+ 4,652

561. The numbers of immigrants from the *United Provinces* show a considerable rise in Bombay City and in the city Districts of Ahmedabad and still more Karachi. But in other Districts the numbers either do not change much, or else (as in Nasik) show a violent fall. The reason for the very high figure in Nasik in 1911 is not

known. The figures at the two Censuses for all districts in which there were more than 1,000 were—

Subsidiary Table No. 120.—Numbers of Immigrants from the United Provinces, 1911 and 1921.

District.	1911	1921
Bombay City	50,682	70,911
Ahmedabad	3,307	5,862
Surat	2,219	2,232
Thana (incl. Bombay Suburban)	5,484	6,440
East Khandesh	2,090	2,709
West Khandesh	1,813	1,404
Nasik	7,957	3,833
Poona	2,493	1,478
Hyderabad, 1911		
Hyderabad and Navabshah, 1921	2,127	2,787
Karachi	4,016	10,080
Sukkur	1,494	1,308
Kathiawar	2,606	1,147

The Poona figures are possibly affected by troop movements. The lure of the cities of Bombay and Karachi is striking.

562. But, although the United Provinces immigrants are mainly city workers they share the feature, found in the case of no other Province of India except Rajputana, of being widely dispersed throughout the Presidency. A glance at Table XI will show that the immigrants from all the other Indian Provinces are mainly, if not almost entirely, confined to those parts of this Presidency which are nearest to them. Thus Baroda sends us nearly twice as many immigrants as the United Provinces, and is a good deal nearer to the Karnatak; yet the immigrants from Baroda to the Karnatak Districts are not half those of the United Provinces. And the same feature will be found all through. The Rajputana people are the most dispersed, and next to them the strangers from the United Provinces. It seems that, while in the case of other provinces the immigration is mainly of the Domestic and Casual Types (see below), the immigration from the two Provinces under discussion is of the Semi-Permanent type.

SECTION 7.—EMIGRATION.

563. It cannot be too strongly emphasised that this Presidency is an immigration region, and that emigration is, by comparison, trivial. Excluding Baroda, the figures of which almost balance out (Immigrants 215,281; Emigrants 215,831), we find—

<i>Born in Bombay Presidency and enumerated in the Rest of India</i>	..	..	360,884
<i>Enumerated in the Bombay Presidency and born in the Rest of India</i>	..	..	824,341

which leaves a balance of 463,457 in our favour.

564. So far as the world outside India is concerned our information is incomplete. We know up to date of 16,954 persons born in this Presidency, the details of which are as follows :—

	Persons.	Males.	Females.
Hongkong	133	116	17
Kenya	10,179	7,379	2,300
Sudan	131	94	37
Nyasaland	291	272	19
Gold Coast Colony	10	10	....
Rhodesia	28	28	....
Tanganyika Territory	3,855	2,661	1,194
Ceylon	1,423	1,238	185
Malaya	798	701	97
Gibraltar	76	76	....
Malta	30	30	....

Clearly this is a very incomplete list. But it is of course impossible to wait for such information; and the figures, when available, could be published as a bulletin by the Local Government, if desired.

565. So far as the rest of India is concerned there are certain Provinces which lose population to us, and others which gain from us. Omitting the less important Provinces the following are the main details :—

			Immigrants.	Emigrants.
<i>PROVINCES WHICH LOSE TO US—</i>				
United Provinces	..	..	115,029	7,165
Baluchistan	..	..	54,352	5,367
Punjab and Delhi	..	..	62,380	18,324
North-West Frontier	..	..	12,051	2,489
Rajputana and Ajmer-Merwara	..	..	164,348	20,215
Hyderabad State	..	..	219,252	60,700
Madras and Coorg	..	..	45,628	19,457
<i>PROVINCES WHICH GAIN FROM US—</i>				
Central Provinces and Berar	..	..	31,922	107,268
Central India Agency	..	..	19,313	45,560
Gwalior	..	..	1,600	4,891
Behar and Orissa	..	..	3,931	7,860
Bengal and Sikkim	..	..	7,957	11,043
Burma	..	..	855	18,460
Mysore	..	..	14,624	28,578

566. There are thus two chief streams of Immigrants, which reach us,—one from North-West India represented by the huge area of Baluchistan, the North-West Frontier Province, the Punjab, the United Provinces and Rajputana, and the other coming from the South-East from Hyderabad and Madras. So far as there is any outward stream it is in a direction moving towards the North-East into Central India, and beyond into Bengal and even to Burma, with a second slighter southern movement into Mysore. But it is believed that while the two streams of emigration are in the nature of casual seasonal labour into cotton lands and the like (though of this there is little actual evidence), the two streams of immigration represent persons in search of work in the cities. The stream from the North goes to swell the proletariat of Bombay and Karachi; and the Hyderabad stream goes to the mills at Sholapur. For proof of these facts reference is invited to the Report on the Cities of the Bombay Presidency (Vol. IX of this series).

567. Only in the cases of Hyderabad and Baroda do the figures both of Immigrants and Emigrants show an excess of females, indicating that the migration is to a considerable extent of the Domestic type. This feature would have been expected in the cases of Mysore and Madras also. But males are there in excess in both directions.

568. For the most part Emigrants to the other Provinces of India are drawn from the Districts and States nearest to them. But in the case of the more distant parts of India the individual regional figures of the origin of the Emigrants are of interest. The migratory habits of the Gujaratis and Sindhis are usually clearly brought out. Thus—

Districts of origin of the Emigrants to Bengal and Sikkim.

		Males.	Females.
Total Emigrants from the Bombay Presidency		7,639	3,404
Ahmedabad	..	696	164
Surat	..	711	161
Cutch	..	522	246
Kathiawar	..	1,921	770
Mahi Kantha	..	104	1
Rova Kantha	..	228	121
Surat Agency	..	57	53
Sukkur	..	507	266
Hyderabad	..	299	73
Karachi	..	182	87
Poona	..	287	224
Ahmednagar	..	69	33
Bombay City	..	1,183	706
The figures from all other units are trivial.			

Districts of Origin of Emigrants to Burma.

	Males.	Females.
Whole Bombay Presidency	14,051	3,809
Surat	2,395	801
Cutch	540	258
Kathiawar	2,877	862
Palanpur Agency	887	33
Hyderabad	2,720	687
Ratnagiri	532	10

Districts of Origin of Emigrants to Behar and Orissa.

	Males.	Females.
Whole Bombay Presidency	5,156	2,704
Surat	812	329
Cutch	1,345	912
Kathiawar	613	284
Bombay City	426	264

569. Generally speaking, the numbers of Emigrants returning Poona as birth-place are always in excess of the proportional size of that District. This is natural having regard to the cosmopolitan character of the Poona Cantonment population.

570. The chief emigration Districts are Surat, Ahmedabad, Hyderabad, Karachi, Sukkur, Ratnagiri, Ahmednagar, Poona, and the Gujarat Agencies. Why Sukkur should give so many emigrants is not obvious. For instance, Sukkur gives by far more to Baluchistan than any other Sind District, although it is not so adjacent as some others. The figures are—

Districts of Origin of Sind Emigrants to Baluchistan.

	Males.	Females.		Males.	Females.
Hyderabad ..	278	97	Sukkur ..	1,095	390
Karachi ..	204	106	Thar and Parkar ..	.....	.....
Larkana ..	195	63	U. S. Frontier ..	288	101
Navabsbah ..	487	105			

SECTION 8.—INTERNAL MIGRATION BETWEEN NATURAL DIVISIONS.

571. The small Table which here follows shows the main extent of internal migration as between the different Natural Divisions of the British Districts of the Presidency. The extent to which it is of value depends on the question of the value of the Natural Divisions—a point which has been discussed in the 1st Chapter. The vertical columns are figures of persons enumerated, and the horizontal lines the figures of persons born in one and the same Division. The Table is interesting in one way, namely that it shows at a rapid glance the varying extent to which the different Natural Divisions supply recruits for the Bombay Proletariat; but of course the figures here given are absolute figures and not proportions adjusted to the size of the Natural Division of origin. Thus 299 thousand persons from the Konkan represents a far larger drain on the existing population than 242 thousand persons from the Deccan.

Subsidiary Table No. 121.—Migration between Natural Divisions (Actual Figures), compared with 1911.

Natural Division in which born.	NUMBER ENUMERATED (000's OMITTED) IN NATURAL DIVISIONS.						
	Year.	Bombay City.	Gujarat.	Konkan.	Deccan	Karnatak	Sind.
1	2	3	4	5	6	7	8
Bombay City	1921	188	3	6	9	1	5
	1911	192	3	12	9	1	2
Gujarat	1921	64	2,621	9	6	1	3
	1911	56	2,471	13	10	..	3
Konkan	1921	209	5	2,703	20	8	6
	1911	271	4	2,958	21	8	5
Deccan	1921	242	6	40	5,728	13	4
	1911	162	3	37	6,089	13	4
Karnatak	1921	6	..	10	15	2,594	..
	1911	5	..	15	11	2,649	..
Sind	1921	7	1	..	2	..	2,983
	1911	2	1	1	1	..	3,199

* Subsidiary Table No. 122.—Part I.—Migration between the Province and other parts of India.

Province or State.	Immigrants to Bombay Presidency.			Emigrants from Bombay Presidency			Excess (+) or Deficiency (-) of Immigrants over Emigrants.	
	1921	1911	Variation.	1921	1911	Variation.	1921	1911
1	2	3	4	5	6	7	8	9
Grand Total	970,584	857,136	+ 113,448	576,715	591,849	- 15,134	+ 393,869	+ 265,287
Provinces	494,212	452,071	+ 42,141	217,351	181,389	- 35,962	+ 276,861	+ 270,682
Ajmer-Merwara	7,901	36,368	- 28,377*	5,403	1,917	+ 3,546	+ 2,528	+ 34,451
Andaman and Nicobar	21	38	- 17	1,356	1,030	+ 326	- 1,335	- 992
Baluchistan	54,352	43,169	+ 11,183	5,367	4,466	+ 901	+ 48,085	+ 38,703
Bengal	7,955	6,795	+ 1,160	10,771	7,629	+ 3,142	- 2,816	- 834
Assam	601	1,280	- 589	1,176	3,334	- 2,158	- 485	- 2,054
Burma	855	632	+ 223	18,460	12,821	+ 5,639	- 17,605	- 12,169
Central Provinces and Berar	31,022	34,720	- 2,798	107,268	100,357	+ 6,911	- 75,346	- 65,637
Bihar and Orissa	5,831	....	....	7,860	....	....	- 3,920	....
Madras	15,592	35,462	+ 10,110	18,805	26,470	+ 335	+ 20,787	+ 17,012
North-West Frontier Provinces	12,051	7,141	+ 4,910	2,489	677	+ 1,812	+ 9,562	+ 6,464
Punjab	57,465	52,090	+ 5,375	16,419	6,848	+ 9,571	+ 41,046	+ 45,242
United Provinces of Agra and Oudh	115,028	94,285	+ 20,744	7,165	9,282	- 2,117	+ 107,864	+ 85,003
Rajputana	615,357	141,251	+ 15,106*	14,752	14,558	+ 194	+ 141,605	+ 126,693
States and Agencies	476,372	405,065	+ 71,307	359,364	410,460	- 51,096	+ 117,008	- 5,395
Baroda State	215,281	229,307	- 14,026	215,831	207,748	+ 8,083	- 550	+ 21,559
Coorg State	36	11	+ 25	652	549	+ 103	- 515	- 539
Delhi	4,915	....	....	1,905	....	....	+ 3,010	....
Central India Agency	19,313	19,244	+ 69	45,560	52,056	- 6,496	- 26,247	- 32,812
Hyderabad State	218,252	140,900	+ 78,262	60,700	118,830	- 58,130	+ 158,562	+ 22,160
Kashmere State	714	751	- 37	150	104	- 44	+ 564	+ 557
Gwalior State	1,608	....	....	4,691	....	....	- 3,083	....
Cochin State	470	391	+ 88	654	900	- 255	- 175	- 518
Travancore State	145	135	+ 13	371	171	+ 200	- 223	- 36
Mysore State	14,024	14,222	+ 402	28,578	29,771	- 1,193	+ 13,954	- 15,549
Sikkim State	2	14	- 12	272	232	+ 40	- 270	- 218

* See however discussion in text.

Subsidiary Table No. 122.—Part II.—Migration between the British Districts and other parts of India.

Province or State.	Immigrants to Bombay British Districts.			Emigrants from Bombay British Districts.			Excess (+) or Deficiency (−) of Immigrants over Emigrants.	
	1921	1911	Variation.	1921	1911	Variation.	1921	1911
1	2	3	4	5	6	7	8	9
Grand Total ..	838,870	710,678	+128,192	439,550	360,800	+ 78,750	+399,320	+349,878
Provinces ..	454,875	404,825	+ 49,561	179,258	87,241	+ 92,017	+275,128	+317,584
Ajmer-Merwara ..	7,644	24,962	− 17,318	4,735	1,254	+ 3,481	+ 2,909	+ 23,708
Andaman and Nicobar ..	18	31	− 13	1,296	826	+ 470	− 1,278	− 795
Baluchistan ..	54,110	42,588	+ 11,522	4,795	4,046	+ 749	+ 49,315	+ 38,542
Bengal ..	7,440	6,008	+ 1,432	6,856	4,441	+ 2,415	+ 584	+ 1,567
Assam ..	678	1,131	− 453	1,105	1,050	+ 55	− 427	+ 81
Burma ..	668	499	+ 169	12,805	3,030	+ 9,775	− 12,137	− 2,531
Central Provinces and Berar ..	30,756	33,035	− 2,279	91,353	44,167	+ 47,186	− 60,597	− 11,132
Behar and Orissa ..	3,005	....	....	4,623	....	....	− 1,558	....
Madras ..	44,039	33,590	+ 10,449	17,566	8,408	+ 9,158	+ 26,473	+ 25,182
North-West Frontier Provinces ..	11,693	6,870	+ 4,823	2,489	477	+ 2,012	+ 9,204	+ 6,393
Punjab ..	55,603	49,170	+ 6,433	15,904	5,835	+ 10,069	+ 39,699	+ 43,335
United Provinces of Agra and Oudh ..	112,496	88,951	+ 23,545	6,383	7,506	− 1,213	+106,113	+ 81,355
Rajputana ..	126,176	117,990	+ 8,186	9,348	6,111	+ 3,237	+110,828	+111,879
States and Agencies ..	384,484	305,853	+ 78,631	60,292	273,559	− 13,267	+134,192	+ 32,394
Baroda State ..	138,838	143,593	− 4,755	125,758	126,094	− 336	+ 13,080	+ 17,409
Coorg ..	36	8	+ 28	620	354	+ 266	− 584	− 346
Delhi ..	4,623	....	....	1,612	....	....	+ 3,016	....
Central India Agency ..	17,347	15,086	+ 2,261	39,422	13,245	+ 26,177	− 22,075	+ 1,841
Hyderabad ..	206,842	132,189	+ 74,653	60,202	110,102	− 49,840	+146,580	+ 22,087
Kashmir ..	685	712	− 27	146	176	− 30	− 539	− 536
Gwalior ..	1,217	....	....	4,489	....	....	− 3,272	....
Cochin ..	469	881	+ 88	177	....	....	+ 292	....
Travancore ..	147	83	+ 64	205	36	+ 159	− 148	+ 47
Mysore ..	14,273	13,787	+ 486	27,429	23,324	+ 4,105	− 13,166	− 9,537
Sikkim ..	2	14	− 12	82	223	− 146	− 80	− 214

Subsidiary Table No. 122.—Part III.—Migration between the Native States and Agencies and other parts of India.

Province or State.	Immigrant to Bombay States and Agencies.			Emigrants from Bombay States and Agencies.			Excess (+) or Deficiency (-) of Immigrants over Emigrants.	
	1921	1911	Variation.	1921	1911	Variation.	1921	1911
	2	3	4	5	6	7	8	9
Grand Total	131,714	146,074	- 14,360	137,165	113,300	+ 23,865	- 5,451	+ 23,774
Provinces	89,828	47,031	- 7,305	23,093	21,527	+ 6,566	+ 1,733	+ 15,504
Ajmer-Merwara	247	11,392	- 11,045	723	347	+ 381	- 381	+ 11,045
Andaman and Nicobar	3	7	- 4	60	43	+ 17	- 57	- 23
Baluchistan	242	511	- 269	573	308	+ 264	- 330	+ 203
Bengal	515	715	- 200	3,915	2,177	+ 738	- 3,400	- 2,462
Assam	13	148	- 135	71	1,839	- 1,768	- 58	- 1,691
Burma	187	111	+ 76	5,655	29	+ 5,618	- 5,463	+ 72
Central Provinces and Berar	1,166	1,645	- 479	15,915	14,715	+ 1,200	- 14,749	- 13,070
Behar and Orissa	866	..	....	3,337	..	....	- 2,371	....
Madras	1,553	1,853	- 300	1,339	1,518	- 279	+ 314	+ 225
North-West Frontier Provinces	259	260	+ 98	....	108	....	....	+ 152
Punjab	1,662	2,563	- 701	515	566	- 51	+ 1,347	+ 1,997
United Provinces of Agra and Oudh	2,532	4,764	- 2,232	732	983	- 151	+ 1,751	+ 2,331
Rajputana	30,181	23,062	+ 7,119	5,404	7,934	- 2,530	+ 24,777	+ 15,123
States and Agencies	91,888	99,043	- 7,155	99,072	81,773	+ 17,299	- 7,184	+ 17,270
Baroda State	76,442	85,646	- 9,203	90,073	72,686	+ 16,387	- 13,630	+ 11,960
Coorg	..	3	....	22	21	+ 1	....	- 23
Delhi	337	..	....	393	..	....	- 6	....
Central India Agency	1,966	4,111	- 2,145	6,133	6,148	- 710	- 4,173	- 2,737
Hyderabad	12,410	8,762	+ 3,648	433	177	+ 251	+ 11,072	+ 8,585
Kashmir	29	29	....	4	13	- 14	+ 25	+ 11
Gwalior	391	..	....	302	..	....	+ 189	....
Cochin	10	10	....	477	..	....	- 467	....
Travancore	1	51	- 50	76	..	....	- 75	....
Mysore	251	431	- 80	1,149	1,009	+ 140	- 793	- 573
Sikkim	..	..	....	190	4	+ 186	....	....

CHAPTER XII.—OCCUPATIONS.

PART I.—GENERAL.

SECTION 1.—THE BASIS OF THE FIGURES.

572. There were three columns in the General Schedule devoted to Occupations. These were headed :—

Occupation or Means of Subsistence of Actual Workers.		For Dependants, the Occupation of the worker by whom supported.
Principal	Subsidiary	
9	10	11

In the 1911 Census Column 11 had been headed "Means of Subsistence of Dependants on Actual Workers". The change of heading on this occasion was designed to render the purpose of the column clearer; and on the face of it that object should have been attained. Yet it is surprising to what an extent the column was misunderstood. The English is very clear and plain; yet in many schedules filled up by English householders of the highest education the column contained entries such as "Wife" or "Daughter of No. 1". Sometimes simply the word "Dependant" was entered, and sometimes the word "Nil". Of course it was never intended that any householder should receive a General Schedule without a set of instructions. But sometimes plain Schedules were so issued, and sometimes the instructions were received but not read. Nevertheless, even in these cases, it is surprising that the column heading could be misinterpreted.

573. The value of the Column for Subsidiary Occupations of Actual Workers is fully discussed later on; and there can be little doubt, in view of the figures there given, that its retention is wholly undesirable.

574. In the same way the advantage of Column 11 is open to doubt. While it is certainly desirable to know how many actual workers there are, and how many non-workers, out of the total population, the advantage of knowing which occupations support more and which less of the non-workers is dubious. It is obvious that in all men's professions the workers will be supporting a normal number of non-workers, while in professions ordinarily open to boys, and professions (e.g., Hospital Nurses) ordinarily open only to women, the workers will be supporting few except themselves. But exact figures on this point are not of much value. There are therefore good grounds for suggesting that at the next Census the classification on the schedules should be altered. It is suggested that first there should be a column for the primary classification into worker or dependant, and then a column or columns for the occupations of workers only.

575. Before considering the Tables it will be as well to cite the instructions for record of occupations. These are rather long. On the cover of the Enumeration Book the following was printed :—

*Column 9 (Principal occupation of actual workers).—*Enter the principal means of live lihood of all persons who actually do work or carry on business, whether personally or by means of servants, or who live on house rent, pension, etc. Enter the exact occupation and avoid vague terms such as "service" or "writing" or "labour." For example, for Factory Labourers you should not only mention that it is in a Factory but also say what kind of a Factory. In the case of field labour distinguish ordinary labour and indentured labour (this term for the purposes of the census being used as including all those labourers who are either permanent life servants or are serving in lieu of repayment of a debt, whether on written bond or not), and in the case of agriculturists distinguish receivers of profits of Inam villages, rent-receiving landlords, cultivating owners, cultivating tenants, cultivators in Inam villages, and the other classes shown in the separate instructions issued to you. If a person makes the articles he sells he should be entered as 'maker and seller' of them. Women and children who work at any occupation which helps to augment the family income must be entered in column 9 under that occupation and not in column 11. Column 9 will be blank for dependants.

*Column 10 (Subsidiary occupation of actual workers).—*Enter here any occupation which actual workers pursue at any time of the year in addition to their principal occupation. Thus if a person lives principally on his earnings as a boatman, but partly also by fishing, the word

'boatmen' will be entered in Column 9 and 'fisherman' in Column 10. If an actual worker has no additional occupation, the column will be left blank. This column will also be blank for dependants.

Column 11 (Means of subsistence of dependants).—For children and women and old or infirm persons who do not work, either personally or by means of servants, enter the principal occupation of the person who supports them. This column will be blank for actual workers.

576. And the following were the Subsidiary Instructions in Chapter V, Part A of the Code:—

Column 9—OCCUPATION.—Only those women and children are to be entered as actual workers who help to augment the family income. A woman who simply looks after the house and cooks the food is not a worker for Census purposes but a dependant. But a man or woman who is a paid cook in some one else's house is a worker. A woman who collects firewood or cowdung and sells it regularly is thereby adding to the family income, and should be shown as a worker. So also a woman who regularly assists her husband in his work (e.g., the wife of a potter, who fetches the clay from which he makes his pots), but not one who merely renders a little occasional help. A boy who sometimes looks after his father's cattle is a dependant, but one who is a regular cowherd must be recorded as such in Column 9. It may be assumed as a rough and ready rule, that boys and girls over the age of ten who actually do field labour or tend cattle are adding to the income of their family, and should therefore be entered in column 9. Boys at school or college should be entered as dependants. Dependants on a joint family, the members of which follow different avocations, should be entered in column 11 under the occupation of the member who contributed most largely to the family income. Domestic servants must be entered as cook, Bhisti, etc., in column 9, and not in column 11 as dependants on their master's occupations. Persons temporarily out of employ should be shown as following their previous occupation.

In describing the occupation you must give exact details. You must not use vague terms like "labour," "service" or "shop-keeping," but must enter the exact kind of labour or service, or the nature of the good sold. In the case of service it is necessary not merely to distinguish Government service, railway service, municipal service, village service, service in a shop or office, and domestic service, etc., but also to show the exact occupation followed, e.g., in the case of Government service, whether Collector, or Army Officer, or Civil Court Clerk, or Police Inspector, etc. In the case of clerks the occupation of their employer must be shown, e.g., Clerk Revenue Department, Clerk Military Accounts, Pleaders clerk, etc. In the case of labour you must make clear the kind of labour. Thus where large gangs of coolies are employed on earth-works, you should show whether it is a road-work, a tank, a railway, etc.

In the case of agriculture the directions are given on the cover.

Persons who live by rent of house property should be clearly distinguished from those who live on rent of agricultural lands.

In the case of cattle-breeding and herding, you should distinguish between those who own and breed cattle, and those who are paid herdsman looking after the cattle of others.

In the case of cotton ginning, cotton and silk spinning, weaving of wool, cotton and silk, calico printing, dyeing, iron and other metal working, and oil pressing distinguish between home workers and factory workers.

In the case of drivers of motor vehicles distinguish between those who drive hired vehicles and those who drive private vehicles. The latter should be shown as "Domestic Service, motor driver."

Enter correctly the occupation of professional prostitutes. The figure of past Censuses show that in some districts very few prostitutes have been correctly entered.

Column 10—SUBSIDIARY OCCUPATION.—It will often happen that a man has two occupations. For instance a cultivating landowner will also be a cultivating tenant, a pleader will also be a rent receiver, and so on. In that case you should judge which is his principal and which is his subsidiary occupation and enter accordingly. The principal occupation will be the one from which he gets the greater part of his income. A subsidiary occupation should be entered even though followed for only one season of the year, for instance an agricultural labourer who works in a ginning factory for one or two months. Where a man has more than one subsidiary occupation, only one (the most important) should be entered.

577. In the above Instructions those relating to Agricultural occupations, Home and Factory workers in industrial occupations, Cattle breeding and Motor driving were refinements introduced by me over and above the general instructions issued from Simla. For the rest, the instructions themselves sufficiently indicate the difficulties with which we have to cope.

578. For the filling up of blank in Slip-copying the following was the rule :—

“ If columns 9 and 11 are both blank, the person will be treated as a worker or as a dependant, as may seem most probable, having regard to his age, sex and caste, and the occupation of the head of the family. The occupation to be entered (in column 9 or column 11 as the case may be) will be that of the head of the family or the usual occupation of the caste.”

579. This rule I had to modify in the case of the big cities, where caste is little if any clue to occupation. But in view of the absence of figures of “ Occupation not returned ” it is evident that the Deputy Superintendents in charge of the Abstraction Offices did not fill up blank as best they could on the evidence of caste, occupations of other adjacent persons and so on.

SECTION 2.—THE TABLES.

580. Imperial Table XVII gives the primary statistics of occupations. ✓ Imperial Table XXI Part A gives figures showing to what extent certain castes follow their traditional occupations. Imperial Table XX—(Distribution by Religion of workers in various occupations), Imperial Table XIX—for certain so-called Dual Occupations, Imperial Table XXI Part B—(Distribution of Workers in certain groups of occupations by Castes) are not published for this Presidency. And Imperial Table XVIII—Subsidiary Occupation of Agriculturists, though prepared was also, for reasons set forth in Section 7 below, abandoned.

581. In India, in the ordinary Tables, we classify occupations by sexes only, and not, as in Western countries, by ages also. But it may be noted that in the Industrial Tables on this occasion there has been a rough age classification of industrial workers. Having regard to the economic importance of age in occupations it is to be considered whether at the next Census an age classification should not be made.

582. The connection between occupations and birth-place, being important in the case of the big cities, is presented to some extent in City Table VI, Part II, for the Cities of Bombay, Karachi and Ahmedabad in the Cities Volume—Volume IX. of this series.

SECTION 3.—THE SCHEME OF CLASSIFICATION.

583. The elaborate classification adopted in 1901, with divided occupations up into 521 Groups was much modified in 1911 by the adoption of the Bertillon scheme, and the reduction of the Groups to 169. This time the main classification system used in 1911 is maintained, but the Groups rise to 191. In some cases new Groups are necessitated by changing world conditions, for instance, the Order and Groups for Transport by Air, and the Air Force. In other cases expansion has been found desirable so as to avoid lumping occupations, the individual figures of which are required for administrative or social purposes. The descriptions of many Groups have also been recast, and other have been transferred about from Order to Order, or variously altered and adjusted. This is inevitable, and the 1921 classification still demands improvement in the light of experience. I have in some cases broken up prescribed Groups into smaller ones, adopting in all such cases subordinate letters as 25 (a), 25 (b) 25 (c) and the like.

584. The classification scheme is divided into 4 Classes, and these 4 Classes into 11 Sub-Classes. The Sub-classes are then divided into Orders, and the Orders into Groups. For a wide view the Sub-classes are the best guide ; and for details the Groups.

585. Occupation is by far the most difficult of Census Heads ; and this is well recognised, not only in India, but in Western Countries also. In the first place the Occupational Groups, as anyone can see who looks at them in Imperial Table XVII, are themselves composite, and often include several occupations which in ordinary parlance would be considered quite separate and distinct. Secondly, most occupations can be described in various quite different terms. For example “ herdsman ” can be described as “ cattle-tender ” or “ looking after cattle,” or “ buffalo-tender ” or in several other different ways ; and this example is chosen from a comparatively simple case. Thirdly, many occupations are highly technical. For instance, how many users of this Report know what a “ doffer ” is, or a “ sizer ”. Consequently the

Enumerator is often hard put to it to make the entry in his Schedule. And even after we have got the Schedules and prepared the Slips (in which the original entry is simply copied), and from thence prepared the Sorters' ticket, in which the total number of every individual description is entered, we are faced with the far more difficult task of classifying. An Index was sent to each office, showing a vast number of possible descriptions, and their correct classification in the system. But many descriptions not in the Index turn up. One of the special difficulties is the extent to which one and the same occupation is classifiable under quite different Groups. This sounds a contradiction. But the following example will make it clear. A "fitter" in a Cotton mill must go into Industries, Textile, etc., etc., while a "fitter" in a Railway workshop must go into Transport—Transport by Rail, etc., etc.

586. The following list of curious Occupational entries found in the Books of One Municipality only (Karachi) may be of interest. They are typical of the sort of entries that occur in all Cities and Towns :—

Cartman driving with hands.	Exchanger.
Paid servant.	Sitting quiet.
Clerk Louis.	Disciple.
Interest.	Rent.
Government servant.	Assistant Manager.
Jamadar company.	Paid servant.
Poor man in mosque.	Hand train.
Jamadar.	Brahman.
Business.	Service.
Vendor.	Clerk Company.

SECTION 4.—THE INDUSTRIAL CENSUS.

587. In 1921, as in 1911, we conducted, in addition to the ordinary General Census, a special Census of Industrial Establishments. This special Census differs in method and intention from the other. The schedules, instead of being filled up by Government Enumerators, are simply handed over to the Managers of Establishments, with instructions to fill them up, and are then afterwards collected. Secondly—the information obtained is not for the conditions existing on one particular day or night, but for "any normal working day" during a certain scheduled period,—in the present case the month of March, 1921.

588. As to what constitutes an Industrial Establishment the subjoined definition, extracted from Schedule A itself, will make the matter clear.

Definition of Industrial Establishment.

Industrial Establishment for the purpose of these schedules means any premises wherein, or within the precincts of which, 10 or more persons are employed on separate remuneration in any process for making, repairing, ornamenting, finishing or otherwise adapting for use, for transport or for sale any article or part of an article. It does not include such industries as are carried on by members of a household in their joint interest with less than 10 hired labourers.

It is particularly to be noted that the definition has been extended since 1911, when it covered only cases of 20 persons on separate wages. In Subsidiary Table No. 136 at the end of this Chapter some comparison with 1911 is effected by giving figures for establishments employing not less than 20 persons. But in the using the actual Tables themselves in the Tables Volume the different scope of the 1911 and 1921 figures must be borne in mind.

589. There were two Industrial Schedules, one for details of the Establishment, and the other for details of the Employees. It is not necessary to reprint the Schedules themselves. But the following Instructions will help in understanding the figures :—

Instructions for filling up Schedule A.

Column 1.—State clearly what the nature of the establishment is, e.g., Jute Press, Jute Mill, Woollen Carpet Weaving Factory, Glass Works, etc.

Column 2.—A general description only is required of the principal commodity manufactured, e.g., coal, cotton goods, glass goods, vegetable oil, etc.

Column 3.—Where any important bye-product is manufactured which has a distinct commercial value this should be entered in this column, *e.g.*, coke or coal gas. If the same establishment turns out several distinct classes of goods or one class of goods at one season and another at another season, the most profitable should be entered in Column 2 and the other or others in Column 3.

Column 4.—*Ownership.*—State whether the establishment is owned by (a) Government, (b) a local authority (*i.e.*, Municipality, Port Trust, etc), (c) a Registered Company or (d) is private owned. If a Registered Company state the name under which it is registered.

Column 5.—*Number, Sex and Race or Nationality of Directors or Owners.*—

(a) This Column will be blank in the case of Establishments owned by Government or a local authority.

(b) Give the total number of Directors or Owners. Enter the number of British or Anglo-Indians. In the case of others give the *nationality* of Europeans and foreigners, *e.g.*, American, Swiss, Chinese, etc. For Indians state whether Hindu, Muhammadan, Parsi, or "others." In the case of foreigners who are British subjects enter the letter B in brackets after the nationality. Give separate figures for females, if any.

Specimen Entry.—Directors total 10. One British—one Anglo-Indian—one Swiss (B)—one Armenian—two Muhammadans—one Parsi—three Hindus.

Column 6.—*Race or Nationality of Manager.*—Enter as in the preceding Column. If a female state this.

Column 7.—*For Supervising and technical staff the number by sex and race.*—This heading will include Assistant Managers, Heads of Departments and Sections, Inspectors, Engineers, Special Technical Experts and Advisers, etc. It should *not* include Foremen, Mates or Mukadams who are of the same general class as the operatives.

Column 8.—*Clerical Staff.*—Enter the particulars for all persons employed on clerical work in the Establishment, such as clerks, accountants, writers, copyists, etc.

Column 9.—*Number and nature of power engines with horse-power.*—

(1) In the case of power engines other than electric generators or motors enter how many engines of each class (steam, oil, &c), there are in use and the horse power of each engine, *e.g.*, three steam—one 25 Horse Power and two 20 Horse Power; four oil—three 15 Horse Power and one 10 Horse Power, etc.

(2) Electric power is either (a) generated on the premises by steam, water or oil prime movers, or (b) supplied from outside by agreement. In the case of (a) enter (i) how many (steam, oil, etc.) prime movers there are in use and the horse power of each and (ii) how many electric dynamos there are in use and the power (in Kilowatts) of each *e.g.*, Power is steam and electricity;

(i) Two steam prime movers—one 45 Horse Power, one 40 Horse Power.

(ii) Two dynamos—each 10 Kilowatts.

In the case of (b) enter how many electric motors are installed and their *total* horse power.

Column 10.—*State of Industry.*—Enter whether the Establishment works :—

(a) throughout the year, or

(b) during a part of the year only.

In the case of (b) state the months during which or during part of which the Establishment works or is likely to work in the Census year.

Extracts from the Instructions for filling up Schedule B.

* * * * *

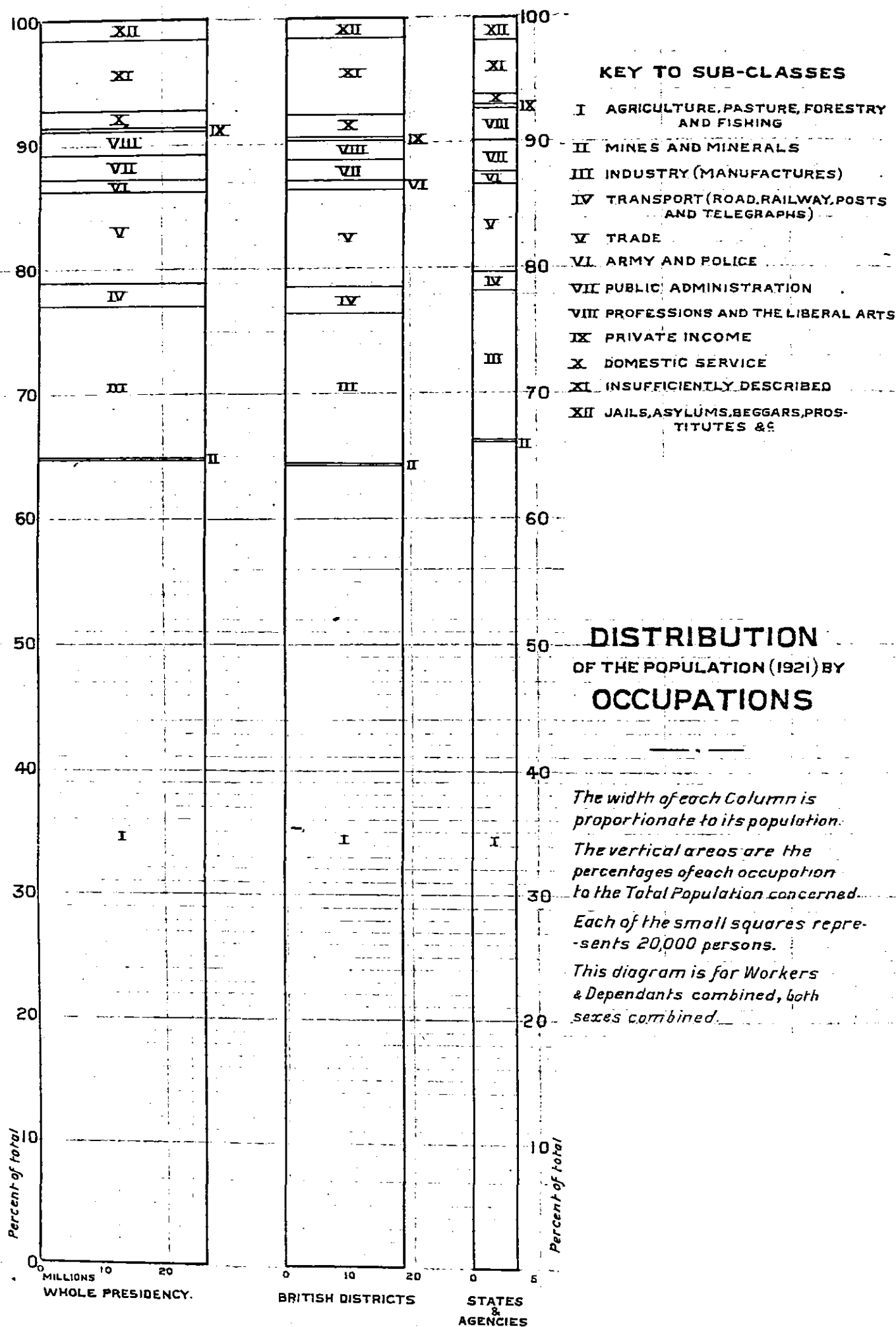
Column 3.—For this schedule adult means 14 years and over. Child means under 14. In the case of children state the actual age in years after the word child.

* * * * *

Column 6.—Skilled means those employed on work requiring special technical skill and training, and paid above the rates for ordinary labour. For such operatives enter the word "skilled." For the rest make a cross or dash.

Column 7.—In the case of *skilled operatives* only enter their actual personal occupation in your establishment at the time, *e.g.*, fitter, weaver, engine driver, carpenter, etc. For the unskilled this column will be blank.

590. In the rest of this Chapter I have only referred to the Industrial Statistics to the extent to which they are of use in checking the figures of Occupations obtained from the Ordinary General Census. I have not made any attempt to discuss the number or character of Factories, still less the class of power employed. The utilisation of this branch of the Statistics I felt to be more properly the function of the Industries Department.



PART II.—THE FIGURES.

SECTION 5.—GENERAL PROPORTIONAL DISTRIBUTION OF THE WHOLE
POPULATION ACCORDING TO MAIN TYPES OF OCCUPATION.

591. This is shown on the basis of the numbers in the different Sub-classes in the Diagram opposite. The percentage distribution, on which the diagram is prepared, is as follows :—

Sub-Class.	Percentage of persons supported to total population.		
	Whole Presidency.	British Districts.	States and Agencies.
I	64.8	64.3	66.1
II	0.1	0.1	0.2
III	12.2	12.2	12.0
IV	2.0	2.2	1.5
V	7.3	7.5	7.0
VI	0.9	0.8	1.0
VII	1.8	1.6	2.4
VIII	1.9	1.6	2.5
IX	0.3	0.3	0.3
X	1.4	1.6	0.9
XI	5.7	6.3	4.3
XII	1.6	1.5	1.8

These percentages are obtained from the following Actual Figures, which are given here for ready reference.

Subsidiary Table No. 123.—Summary of the persons supported in different occupational Sub-classes.

Sub-Class	British Districts	States and Agencies.	Whole Presidency.
I—Exploitation of Animals and Vegetation	12,408,489	4,896,917	17,305,406
II—Exploitation of Minerals	12,370	8,001	20,371
III—Industries	2,350,179	892,458	3,242,637
IV—Transport	428,355	117,482	545,837
V—Trade	1,418,633	522,779	1,941,412
VI—Public Force	150,197	71,150	227,347
VII—Public Administration	311,674	176,551	488,225
VIII—Profession and Liberal Arts	334,851	182,452	517,303
IX—Persons living on their Income	66,053	20,230	86,283
X—Domestic Service	301,591	66,862	368,453
XI—Insufficiently described	1,211,584	318,831	1,530,415
XII—Unproductive	291,686	135,716	427,402
Occupations not returned	57	....	57

SECTION 6.—WORKERS AND DEPENDANTS.

592. Perhaps the most remarkable feature of the Occupation statistics is the general increase in the proportion of Dependants :—

Distribution of 1,000 persons between Workers and Dependants, Whole Presidency, 1901—1921.

	Actual Workers.		Dependants (both sexes combined).
	Males.	Females.	
1901	345	182	473
1911	322	147	531
1921	311	128	561

This movement might be brought about either (1) by changes in the methods of enumeration or tabulation, (2) by changes in the age distribution, or (3) by increasing prosperity.

593. It is difficult to say that there has been no *change in methods*, for instance in the degree of care exercised to make sure that women who only render a little occasional help to their husbands are not put down as workers. But substantially the principles followed have been the same, especially at the last two Censuses. *Age distribution* could affect the figures under consideration, by the extent to which the proportions of those in (i) wage-earning and (ii) dependent age periods have varied from Census to Census. There have been changes, but they were slight, and not parallel with the changes in the proportions of Workers and Dependants. The two factors can be compared as follows :—

Distribution of every 1,000 persons into (i) Workers or Dependants and (ii) Main Age groups, Whole Presidency, 1901—1921.

—						Age- period 15—50.	Workers (both sexes combined).	Age periods 0—15 and 50 and over.	Depend- ants (both sexes combined).
1901	..	..	..	..	..	516	527	484	473
1911	..	..	..	..	..	525	469	475	531
1921	..	..	..	..	..	513	439	487	561

594. The above comparative proportions definitely disprove the idea that age distribution has anything to do with the phenomenon. The choice therefore lies between the other two causes suggested, unless, of course, some quite different and correct cause has eluded us. Apart from that possibility I do not feel that changes in method in Enumeration or Abstraction would have caused such a definite and gradual movement of the figures, especially when we are dealing with very large numbers. I therefore lean to the view that with the *increased prosperity of India* wage-earning has tended to commence later in life and cease earlier. I should be far from asking the reader to consider this fact *proved* from so short a series as three items, and with the existing uncertainty regarding the first possible cause of the changes. But the inference which I have drawn offers the most probable explanation.

SECTION 7.—SUBSIDIARY OCCUPATIONS.

595. I found all figures based on column 10 of the General Schedule for Subsidiary Occupations to be very unreliable. The filling up of this column has deteriorated rapidly since 1901, when it was instituted; nor was it, even in that year, adequately attended to. The reason why it is badly filled is that it is impossible to check it. Every individual listed in the Schedule must have an entry for principal occupation either as a worker or as a dependant. But no Supervisor examining the Schedules can definitely prove that a blank in the column for Subsidiary Occupation is incorrect, unless he goes over the ground again, and himself questions each and every individual. This, which amounts to the redoing of the Enumerator's work, no Supervisor will ever attempt. Consequently the Enumerator can be as lazy as he likes in filling up the column referred to.

596. Even under ordinary circumstances the figures supplied by this column are only partially tabulated, with the result that a vast amount of entries would be wasted, even if they were made. The extent to which we normally use the column is confined to—(1) the columns for "Partially Agriculturists" in the General Occupation Table (Imperial Table XVII); (2) certain so-called "Mixed Occupations" in Imperial Table XIX; (3) the Subsidiary Occupations of Agriculturists in Imperial Table XVIII; and (4) occupations of certain selected castes in Imperial Table XXI.

597. It is fairly easy to prove from the figures that column 10 of the Schedule is neglected.

*Subsidiary Table No. 124.—Actual workers in occupations other than Rent Receivers and Cultivators, and numbers of the same who were returned as "Partly Agriculturists,"
Whole Presidency, 1901—1921.*

1	Actual Workers.		Partly Agriculturists (included in the figures in Columns 2 and 3).	
	Males.	Females.	Males.	Females.
	2	3	4	5
1901*	5,152,280	2,433,373	232,394	45,008
1911	4,992,112	2,901,160	196,788	38,609
1921	4,530,194	2,153,126	114,380	23,879

* The figures for 1901 include Aden, and in the other years exclude it.

598. In considering the above figures it has to be remembered that "Partly Agriculturists" includes Agricultural Rent Receiver, Ordinary Cultivator (whether proprietor or tenant), and Agricultural Labourer. This being so, when we remember the extent to which persons in Trade and Industry, Professions and Public Services are also small landlords, and the extent to which Labourers in various Industries are also partly agricultural labourers, we are inevitably forced to the conclusion that the figures in columns 4 and 5 are a mere fraction of what they should be. Nor, even making allowances for the industrialisation of the country and the specialisation of occupations, which have gone on during the last two decades, is it possible to regard as a genuine fact the great rapidity with which the figures in columns 4 and 5 diminish? On the contrary the only thing that we can deduce is that column 10 of the Schedule is burdensome in itself, sets too high a premium on the honesty and diligence of the Enumerators, and is increasingly neglected.

599. Nor is the diminution in the numbers of "Partly Agriculturists" confine to one or two important non-Agricultural Occupations. A comparison of the Tables for the three Censuses shows that the diminution is spread evenly throughout the whole 56 Occupational Orders. Again if the figures were correct, they would utterly upset certain basic economic theories of this Presidency. It is always and everywhere stated as a fact that many of the Mill-hands are cultivators, who return home to their lands in the rains. We have never proved this from statistics, so far as I am aware; and it is extraordinary how commonly preconceived opinions are shown to be wrong when subjected to numerical tests. But in this case it is impossible to disbelieve the main theory. Yet what do we find?

Subsidiary Table No. 125.—Numbers of Actual Workers, and the same who are partly Agriculturists, in certain Textile Occupation, 1921.

1	Actual Workers.		Partly Agriculturists included in the figures in Columns 2 and 3.	
	Males.	Females.	Males.	Females.
	2	3	4	5
Cotton ginning, cleaning and pressing	22,669	18,825	198	68
Cotton spinning—				
(a) Home Workers	4,379	16,269	162	347
(b) Factory Workers	32,658	9,189	60	4
(c) Unspecified	1,257	1,287	15	8
Cotton sizing and weaving—				
(a) Home Workers	89,497	40,581	2,386	586
(b) Factory Workers	115,915	34,687	563	8
(c) Unspecified	20,661	3,357	210	6

600. The figures are deplorable. Only the hand-loom weavers come out with a possible figure for Partly Agriculturists. The factory workers in particular yield

figures which we cannot even consider, much less accept. For instance in the case of Cotton Ginning almost every Revenue Officer could name off-hand many an individual village in which more than 100 operatives are employed at small oil-engine gins. And such operatives are almost in all instances partly agriculturists.

601. Imperial Table XIX was prepared but proved so very unreliable that it was decided to abandon it. It dealt with those mixed or dual occupations, which are really a feature of Indian Mofussil life. These occupations can be stated as follows :—

- | | | |
|-------------------------------|----|-----------------------|
| 1. (a) Sheep-breeding | .. | (b) Blanket Weaving. |
| 2. (a) Shop-keeper. | .. | (b) Money Lender. |
| 3. (a) Fisherman. | .. | (b) Boatmen. |
| 4. (a) Rent Receiver or Payer | .. | (b) Village Watchman. |
| 5. (a) Cattle Breeder | .. | (b) Milkman. |
| 6. (a) Field Labourer | .. | (b) Mill-hand. |

No. 6 has already been discussed from another point of approach. In this Table the number of Mill-hands was shown as 159 thousand, and the number out of those who are also Field Labourers was shown as only 183. Out of the 550 thousand Shop-keepers only 4,947 were shown as also Money Lenders. And out of 36 thousand Money Lenders only 1,895 were shown as also Shop-keepers. Yet everyone who has heard Income Tax appeals knows that the person who is a Money Lender pure and simple is very rare, and that the large majority of tradesmen go in for both occupations. This Table showed only 40 to 41 thousand money lenders altogether. And even allowing for persons who were returned as any occupation other than shop-keeper, with money lending as a subsidiary occupation (which figures were not tabulated) the figure 41 thousand is far too low. It comes to approximately 1 per village and Town. But on consideration of the commonly-known facts of Indian economic life this proportion is obviously too low. There will be here and there a good many small villages with no Money-lender or Money-lending shop-keeper; but the number of such villages would be quite overshadowed by the large number of persons of these occupations in the larger Towns and Cities.

602. As to Imperial Table XVIII—Subsidiary Occupations of Agriculturists—this would have been a most valuable Table had the figures been reliable. But in view of the incompleteness of the entries in column 10 of the Schedule, this Table also was abandoned.

603. Ultimately it was also decided to abandon the columns for “Partly Agriculturists” in Table XVII. So that, so far as the Imperial Tables are concerned, no use has been made of the Subsidiary Occupation column of the General Schedule except for one column in Table XXI A—Part I. The Cities Tables in Volume IX of this series, and the discussion of the same having however been printed off before the above decisions were arrived at, columns for “Partly Agriculturists” will be found in City Table VII (corresponding to Imperial Table XVII) in the case of all cities; and the discussion of those figures in Volume IX, Cities of the Bombay Presidency, Part I, Report, had to be allowed to stand.

SECTION 8.—COMPARATIVE IMPORTANCE OF AGRICULTURAL AND MERCANTILE OCCUPATIONS.

Subsidiary Table No. 126.—Summary of the numbers supported by Agriculture, compared with the numbers supported by Industry and Trade, British Districts, 1901—1921.

	1901	1911	1921
Income from rent of Agricultural Land	7,052,016	542,615	608,750
Ordinary Cultivators	763,447	8,839,757	7,716,046
Total Landlords and Cultivators	7,815,463	9,382,372	8,324,796
Market Gardeners	58,409	39,992	25,281
Agricultural Labourers	3,141,017	3,322,255	2,287,220
Total	11,014,889	12,744,619	10,637,297
For comparison—			
Industries	2,283,419	2,458,086	2,350,179
Trade	1,399,115	1,242,172	1,418,633
Labourers and workmen otherwise unspecified	1,102,382	250,853	833,964

604. There is nothing in the figures to lead to the idea, commonly held, that the people are forsaking the land for Industries. The figures given above are for workers and dependants combined. The violent fluctuations between Income from rent of Agricultural Land and Ordinary Cultivators from 1901 to 1911 was caused by a change of system in 1911. In 1901 Cultivators who pay assessment were classified as Rent Receivers. The terms used at that Census were "Rent-Receivers" and "Rent-Payers". The definitions of these terms will be found in a foot-note on page 236 of Mr. Enthoven's report. Rent-Receivers included "Holders of land who pay revenue to Government and cultivate the fields themselves." The arrangement was obviously misleading. In 1911 the principle was changed, and the ordinary ryot was classified as a Rent-Payer, the term "rent" being held to include Agricultural Assessment, and these "Rent-payers" were afterwards described in the Tables as "Ordinary Cultivators." The same principle held good this time, with certain further sub-division mentioned below.

605. The Groups for "Fruit, flower, spices, etc., growers," (termed "market gardeners" in the Table above) is unsatisfactory in this Presidency, where there is no separate and distinct type of grower of special products. The *shetkari* grows grain-crops, or sugarcane, or spices, or anything else, according to convenience. The distinction may hold good in some countries, but it does not hold good with us. And the figures in this group at any Bombay Census are a mere chance.

606. The figures appearing at any Census under Agricultural Labourers are largely influenced by the numbers appearing under "Labourers and Workmen otherwise unspecified." This Group shows wide fluctuation according to the efficiency or inefficiency of the Enumerators, and the extent to which the Officers in charge of the Abstraction offices have been prepared to improve the figures by classifying on probabilities. It is not likely that, when dealing with such large numbers, the variations from Census to Census in the Schedules themselves will be so great. And the great reduction in the figures under this group in 1911 may with probability be assigned to the second of the above causes. However, even after adding, say, 500,000 from that group to the group Agricultural Labourers it is clear that the *numbers supported by that occupation have much diminished in the decade*. This is in accordance with known economic tendencies. Agricultural labourers are known to be scarce, and to be able to command higher wages than formerly, though those wages still leave much to be desired. The proportion of the sexes among the actual workers and the proportion of dependants has varied much :—

Distribution of every 1,000 persons supported by Agricultural Labour, British Districts, 1901—1921.

	1901	1911	1921
Workers, Males	352	303	294
Workers, Females	217	386	330
Dependants (both sexes)	431	311	376

I do not think there is any reason for these violent fluctuations, and the cause must lie in the methods of Enumeration or Abstraction. At the same time the figures of the last two Censuses, which are more reliable than those of 1901, show that this is an occupation in which women predominate as workers. And this is in accordance with the known facts of mofussil life. The matter is further discussed in a later Section of this Chapter.

607. Before proceeding to a detailed discussion of some of the more important of the figures in Imperial Table XVII, I give herewith for ready reference a summary of some figures for various Orders and Groups, selecting only those which it seemed that persons using the Report might occasionally require for quotation.

Subsidiary Table No. 127.—Summary of the persons supported in a few of the more important Groups and Orders (for ready reference).

	British Districts.	States and Agencies.	Whole Presidency. Total Workers and Dependents.
Group 1—Income from rent of Agricultural Land	608,750	256,046	864,796
„ 2—Ordinary Cultivators	8,951,420	3,511,960	12,463,389
„ 4 & 5—Farm servants and Field labourers	2,287,220	804,344	3,091,564
„ 7—Market Gardeners, etc.	25,281	13,169	38,450
Order 1 (d)—Raising of Farm Stock	363,422	247,337	610,759
Group 17—Fishermen	121,773	11,422	133,195
Order 6—Textiles *	799,426*	214,842*	1,014,268*
„ 21—Road Transport	99,101	51,941	151,042
„ 22—Rail Transport	190,171	26,447	216,618
„ 23—Posts and Telegraphs	30,561	6,223	36,784
„ 46—Religion	126,766	117,915	244,681
„ 47—Law	25,254	8,049	33,303
„ 48—Medicine	35,958	11,247	47,205
„ 49—Instruction	84,366	23,427	107,793
Group 187—Labourers and Workmen otherwise unspecified ..	333,964	235,707	1,069,671

SECTION 9.—THE SUB-DIVISION OF THE AGRICULTURAL OCCUPATIONS.

608. On page 236 of Mr. Enthoven's report for 1901 will be found an account of an attempt which he made to "arrive at a more detailed classification of the population living on the land"—which attempt, being made in the Abstraction stage, was unsuccessful. At this Census I attempted to secure the information from the very beginning, by directing the distinction of Cultivating Owners and Cultivating Tenants. The reason for making such an attempt is obvious when we remember that our Group 2 "Ordinary Cultivators" includes both the sturdy yeoman who owns his own fields and pays assessment, and the mere one year tenant of the lands of the village shop-keeper or priest. Nevertheless extraordinary difficulty was experienced owing to the following among other causes,—(1) Many cultivators have about 50 per cent. of their own land and 50 per cent. of rented land; and (2) the ordinary types of ryot and tenant are not the only types of cultivator in the Presidency. We are faced with all sorts of Inam tenures, sub-tenancies, part-shares, and a host of other classes, with innumerable technical vernacular titles. In particular there is the old quarrel between Inamdar and cultivator, one saying that he owns the land and leases it out as private property, and the other saying that he is the owner, and that the Inamdar's rights are limited to receiving part of the assessment in place of Government. In view of the undesirability of the Census being used as evidence in these disputes I had to direct that cultivators in Inam villages should be separately shown, and these, where so shown, have been added to "Unclassified." This is one of the reasons why the "Unclassified" figure is so high.

609. This class "Cultivators Unclassified" comes out especially strong in the States, where the tenures are complicated, and the Chiefs sometimes unwilling that the Census should even attempt to get at the figures. In the case of British

* See however discussion in text.

Territory it is desirable to distinguish the different divisions, and especially Sind, the peculiar difficulties of which will be separately discussed.

Subsidiary Table No. 128.—Landlords and Cultivators. (Actual Workers only) 1921.

	Landlords.		Cultivating Owners.		Cultivating tenants.		Cultivators unclassified.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
States and Agencies ..	68,603	32,154	318,730	84,975	394,433	81,658	284,217	86,790
Bombay Sub-division ..	231	203	2,659	1,222	963	225	2,925	1,419
Northern Division ..	24,013	11,957	256,163	70,789	160,819	58,374	44,075	21,526
Central Division ..	38,153	24,140	543,897	224,341	71,280	19,313	177,456	96,674
Southern Division (Three Karnatak Districts) ..	27,139	15,573	304,792	79,206	72,534	15,832	16,389	4,821
Southern Division, (Three Konkan Districts) ..	20,930	9,098	92,017	76,742	222,483	186,740	30,535	32,324
Sind ..	41,739	3,227	74,953	4,209	487,765	30,291	6,506	966

610. The above figures may, or may not, have elucidated to some extent the economic conditions in the various regions. Whether they have done so is for those who use the figures to say, and not for the agency which prepares them. But on the face of them they are interesting. The high number of "Cultivators Unclassified" in the Deccan is due probably to the large number of Inam villages. But, excluding Sind from consideration, the picture presented is not of a prosperous Gujarat and Karnatak and a down-trodden Deccan, but quite the reverse. Not only is the proportion of Landlords lower in the Deccan, but among the cultivators themselves the proportion of cultivating owners is higher. On the other hand is this possibly due to a cause exactly the opposite of prosperity? Is the truth of the matter simply that land in much of the Deccan is so poor in outturn that it cannot be sold or mortgaged, and the ryot is therefore driven even against his own will to cultivate his land instead of realising money on it, and squandering that money on *tamashās* and on silk saris for his women folk?

611. On the other hand when the figures for the Konkan only are examined, and compared with those of the other Divisions in the Presidency Proper, it will be found that in that region alone the Cultivator is in far the greater number of cases a tenant. As a picture of economic conditions this corresponds with what has been found by the Family Budgets enquiry (in Appendix W to this Report), where the Konkan was found to be much poorer than the above-Ghat tracts of Gujarat. The reason why it probably does not come in for so much outcry as the Deccan is that the Konkanis, owing to the character of the climate in their region, are never brought face to face with public charity through famines. In Ahmednagar—the worst of the Deccan Districts in point of poor outturn—the proportion of Cultivating tenants to Cultivating Owners is very low. The large majority of the Actual Cultivators are owners of their lands. On the other hand in all the three Konkan Districts of the Southern Division the Cultivating tenant is the rule.

SECTION 10.—AGRICULTURAL OCCUPATIONS IN SIND.

612. The problem in Sind is complicated, not only by the divergence between the agricultural system in that Province and the systems in the Presidency Proper, but also by the peculiarities of that system itself. The ordinary position is a Zamindar who owns the land and gets it cultivated by "*Haris*," who are tenants, often of a more or less hereditary and permanent nature*. The normal arrangement is described by Mr. A. S. V. Acott, I.C.S., as follows:—

"A Zamindar (unless circumstances compel him to let his land on lease) normally finds his own cultivators (*haris*) and makes his own arrangements with them. The normal principle underlying these arrangements is that the Zamindars and the *haris* each get one-half of the

* That is—hereditary and permanent as tenants, but not as tenants of a particular field or fields. So far from that, with an eye to the danger of the acquisition of prescriptive rights in any field, the Zamindar often makes a point of shifting the holdings of his *Haris* from time to time.

produce if the land is irrigated by "flow", whereas the Zamindar gets one-third and the hari two-thirds if it is irrigated by "lift", the reason being that in "lift" the hari has to undergo the expense of erecting a wheel and keeping bullocks to work it. Other details subsidiary to this main principle depend on who provides the seed, clears the "*Karias*" (watercourses), etc., and their settlement is made at "*batai*" (distribution of produce) by an apportionment of part of the crop before the main division takes place. The Zamindar pays Government the land-revenue and receives nothing in consideration of this."

613. This normal arrangement is however complicated by the presence of a sort of middleman-lessee (*maktedar*), who holds from the Zamindar and employs the Zamindar's tenants. This arrangement is described in the following letter from Mr. H. Montgomery, I.C.S. :—

"Lessees in Sind form an important class, consisting mainly of bunyas, who in all matters step into the place of the Zamindar, from whom they may hold a Lease, or consecutive leases, running over a long term of years. They are wholly responsible for all cultivation operations, and pay the assessment to Government direct. Ordinarily the management of land is their main source of livelihood, and in many cases it is their sole avocation.

"These men live by agriculture, and any classification of the agricultural population must necessarily find a place for them. In Upper Sind there are lessees who have long term leases on rent which runs to Rs. 40,000 or 50,000 per annum."

614. Sometimes these middlemen, or men of the same class, acquire the entire rights of an estate, thus ousting the original Zamindar; or amass an estate in other ways. In such cases they become virtually Zamindars themselves, and are usually termed "*Banya Zemindars*".

615. There is also a class of Landholder known as *Jaghirdar*, who correspond almost exactly to the *Inamdars* of the Presidency Proper. These men might, if their estates are small, be Cultivating Owners, but are usually large landlords—in all respects similar to ordinary *Zemindar*, except for the *Inam* character of their property.

616. Another class is known as "*Petty Khatedar*", a term used mostly for persons who take up newly irrigated land, not previously forming part of any estate. These men, if their tenure is permanent, or for a long term, would correspond closely to the ordinary ryot of the Presidency Proper. But if the tenure on which they take the land is a short term lease from Government it becomes a question whether they are Cultivating Owners or Cultivating Tenants. The same problem would arise not infrequently in the Presidency Proper. It is not known how such cases were enumerated and tabulated. But it is more correct to restrict the term Tenant to those who hold from a private landlord. The "*Petty Khatedar*" in Sind may however be only a *Petty Khatedar* for some portion of the lands which he cultivates, and a *Hari* for the rest, in which case his main occupation would be *Hari*.

617. Lastly we have a type known as the "*Maurosi Hari*", who holds through or from a Zamindar, but is not liable to eviction at pleasure. This type, which is described in the following letter from Mr. R. E. Gibson, I.C.S., appears to correspond fairly closely in fact, if not in theory, with the cultivator in an *Inam* village in the Presidency Proper, who holds private, heritable and transferable land, in which the *Inamdar* has little right except a possible reversionary interest in case of intestate estates, and (though this is not paralleled by the Zamindar) the right to recover from Government the alienated portion of the assessment.

"*Maurosi hari*" literally 'hereditary cultivator,' is a tenant possessing a right of occupancy which is inheritable. It is also transferable at the will of the tenant, and irrespective of that of the superior holder, or zamindar, whose right in the land is strictly limited to a quit rent, which generally he cannot enhance. In fact the zamindar is in these cases simply a person possessing a certain lien on the land, and, although he is the superior holder, he is not allowed to pay the Government demand, which right exclusively belongs to the '*Maurosi hari*.' This tenure is prevalent in the Rohri Division and in the Sukkur Taluka, but less so in the rest of the Sukkur and Shikarpur Divisions, whilst south of Larkana and the territory of Khairpur it is almost unknown."

618. It will be seen therefore that we have—The Zamindar, who cannot come into any category except "*Income from Rent of Agricultural Land*"; the *Maktedar* or intermediate lessee, who, though he holds from a Rent-receiver, necessarily comes into the same category himself; the *Jaghirdar*, who would usually be also a rent-receiver; the *Petty Khatedar* and the *Maurosi Hari*, who would both usually be classifiable as Cultivating Owners; and the ordinary *Hari*.

619. The problem therefore narrows down into the question how to treat the Hari. These persons are variously regarded as (i) tenants or (ii) labourers. In fact they occupy a position more or less intermediate between the two. Viewed as tenants they are tenants at will, with no written deeds and no fixed money rent. They cultivate usually an amount, if not a portion, of land traditional to their family, and pay to the Zemindar or his lessee a portion of the produce approximating to the rent in kind usually exacted by landlords in the Presidency Proper. Viewed as labourers they are not engaged on wages, but remunerate themselves by the results of their efforts. The figures which follow show how the gradual crystallisation of the rule that Haris should be treated as tenants (*i.e.*, as Ordinary Cultivators) has thrown the weight of the figures more and more into the Cultivator class, and reduced the figures left in Agricultural Labourers to a point which is hardly credible. The rule that Haris should be classed as tenants was instituted by my predecessor in 1911, and was maintained by me, largely with a view to securing continuity of the figures, and in face of the opinion of at least one of the Sind Collectors, who wished these persons to be regarded as Labourers.

Subsidiary Table No. 129.—Numbers classified as (i) Rent receivers and Cultivators, and (ii) Agricultural Labourers in Sind, 1901—1921.

	Rent Receivers and Cultivators combined.		Agricultural Labourers.	
	Males.	Females.	Males.	Females.
1901	212,994	61,550	485,709	139,242
1911	590,953	15,809	87,297	43,224
1921	610,963	38,701	12,907	5,871

SECTION 11.—PROPORTION OF FEMALES TO MALES IN AGRICULTURAL OCCUPATIONS.

620. It has been suggested to me that it is possibly owing to the Hari system that the proportion of Actual workers who are females comes out so very much lower in Sind than in the Presidency Proper. Where the Hari system prevails the wife of a Hari is certainly not a tenant as well as her husband, and she cannot be regarded as her husband's labourer. Consequently she is regarded by the Enumerator as coming under the definition of "a woman who only renders occasional help". Yet even allowing for this it would seem that the woman working in the fields must in Sind be rarer than the man, whereas in the Presidency they are almost equally common. We find, however, that this phenomenon is not confined to Agriculture. Even among General Labourers the proportion of females to males is exceedingly low in Sind, and much lower than in the Presidency Proper. It may be inferred therefore that social customs are the chief determinant.

SECTION 12.—PROPORTION OF FEMALES TO MALES IN AGRICULTURAL LABOURERS IN THE PRESIDENCY PROPER.

621. So far as the Presidency Proper is concerned the proportion of females to males among Landlords and Cultivators can be seen from the Table previously given. Of persons returned as Agricultural Labourers, Actual Workers, women exceed men in all Imperial Tables units except Thana, East Khandesh, Nasik, Sholapur, Kolhapur, the Southern Mahratta Country States, and the unit "other States in the Presidency Proper", which are mainly small States of the Deccan and Konkan. The region in which the excess of females is greatest—sometimes amounting to 200 per cent. of males—is Kaira, Panch Mahals, Surat, Cambay, Palanpur Agency, Reva Kantha and Mahi Kantha; with a second smaller area consisting of Kolaba and Ratnagiri, Bhore and Savantwadi. In the latter area the excess of females in this occupation is possibly mainly due to the absence of males on Industrial work in Bombay. But that reason cannot apply to the Northern area, which is extensive and well-defined.

SECTION 13.—AGRICULTURAL SERFS.

622. At this Census I decided to make an attempt to get at the figures of those Agricultural Labourers—for the most part called "*Haris*"—who are not employed

at their own convenience on wages, but are maintained, usually hereditarily, as permanent estate servants by the larger landlords,—furnished by these with homes and food, and not regarded as in a position to resign service and seek any other occupation. There is virtually no difference between the position of these “Halis” and the Slaves of the American plantations prior to the Civil War, except that the courts would not *recognise* the rights of the master as absolute over person and services. But in this country where—more, probably, than in others—the rich have a better chance in the courts than the poor, this difference diminishes in importance. We might describe the situation by saying that these Halis are Freemen, *de jure*, but Serfs or Slaves *de facto*. I am not in a position to describe their condition, beyond what is said in the letters quoted below. I have tried to get the figures. And if the position of these Serfs calls for public enquiry and amelioration, it is for the public to demand an enquiry, and for the Government to institute it. There are many who believe that the negro slaves were happier than the negro freemen who followed them. At any rate transition stages are always difficult; and it is possible that if public action is taken to liberate the “Halis” in fact as well as in law, they may suffer inconvenience for a time. It is also possible that the problem will yield to the proverb—“*Solvitur ambulando*”,—in other words, that under a policy of masterful inactivity the serfdom may disappear of its own accord. It is certain that some landlords are complaining that their Halis are absconding and taking service in Bombay. But the fact that *they have to abscond* (their resignations would certainly not be accepted), and that the masters regard this absconding as a reasonable cause of grievance shows how easily advanced sentiment for the liberty of the individual will vanish before the combined influence of callous tradition and all powerful self-interest.

623. I subjoin four opinions by competent observers. Mr. Shivdasani's remark that the employer is becoming dissatisfied with the Hali system may be true. But it is not borne out by opinions received by me orally from other regions. It seems that there is always an agreement, often, if not usually, written, binding the Hali to service for a term of years. Mr. Shivdasani states that most of the Hali families are serving “for several generations”; and that is the impression which I have gained from others. The first agreement may be for a term of years. But this term usually leads up to another, and that to a third, till in the end all hope of redeeming the loans is gone. This is also confirmed by Mr. Covernton's letter. A state of perpetual service on bond differs little from *de facto* servitude.

624. The second type of Hali system, *viz.*, the *Khandhadia* system, mentioned by Mr. Parekhji, is really of a totally different type. I have left the note as it stands. But these persons serve a master of their own or of a closely allied tribe as a bride-price, and the service definitely terminates with the displeasure of the woman or the birth of children. This picturesque feature of the life of the forest tribes seems to possess no inherent injustice and to call for no remedies. The other system is contrary to human sentiment.

I.—From Mr. S. H. Covernton, I.C.S., (then) Collector of Broach :—

“The system of indentured labour prevails to a limited extent in this district,—especially in Ankleshwar Taluka. The indentured labourers are called Halis, and are usually Bhils, Talavias, or members of some other low caste. They receive money in advance from their employers and bind themselves by a written or oral agreement for a number of years for the repayment of the debt. They are fed and clothed by their employers and are paid 2 or 4 annas per day. As a rule they spend the advances they receive in drink, marriages, or other extravagances and thereafter remain practically as bond-slaves for years—probably for life, since before they have worked off one term of service they have probably taken a further advance. If they wish to transfer their services to another master, the new master would have to repay to the old the amount of their debt. The relations with their masters are said to be fairly satisfactory so long as both parties abide by the agreement and the customary conditions of service. If an employer is over-harsh, it is always possible for the Hali to run away without repaying the debt, provided he is willing to leave his village and go to one of the cities. The Labour Corps and the Mills have no doubt enabled many of these semi-serfs to escape from bondage at any rate for a time. In fact the growing popularity of the former among the Bhils from Ankleshwar has begun to provoke bitter complaints from their Bohra Masters in at least one village. In such a case the employer is more or less helpless, since the runaway serf has no property from which the debt can be

recovered, even if he could be traced. No doubt however a day of reckoning comes when the Hali returns from the mills or from Mesopotamia with some money to his village. It is reported that the Bhils are gradually beginning to see the evils of the indenture system and to prefer work on daily wages: and no doubt this tendency will increase in future. So long, however, as the nature of the Bhils and "Kali-paraj" remains what it is, it is not easy to see how they can refrain from accepting advances larger than they can work off in a few months. And so long as this advance system continues, the Hali system will remain. I have not heard of any hereditary serfs, *adscripti glebæ* (or *domino*), in this district."

H.—From Mr. N. M. Parekhji, District Deputy Collector, N. P., Surat:—

"A labourer becomes a "Hali" of his *Dhaniama* (master-cultivator) after he accepts the amount required for his marriage which is consummated soon after. Very few of the cultivators are in the habit of taking any documents or receipts from the "Halis" for amounts paid to them in advance, as they have learnt by experience that such documents or receipts do not stand them in good stead in civil courts if the Hali elopes away. The amount of advance by a *Dhaniama* (employer) to a Hali varies from Rs. 100 to 400 in cash. The Halis are drafted from low castes such as Dublas, Chodhras, Gamtas, Naykadas and Kolis. After a contract is accepted by both the parties and payment made, a Hali gets two meals in the morning and evening, besides $2\frac{1}{2}$ seers of Juwar and 5 seers of rice and a small quantity of tobacco for smoking as his daily wages for the days he serves his master. For the days on which his master has no work for him he is free to do any labour for any other man for the usual wages, to which his master can have no claim or objection. A Hali also gets a pair of shoes and two pairs of clothes with some rough woollen sheet or two coarse sheets for the mon. on and winter. His service begins as a cow-boy tending the household cattle, taking them to the fields and back, and so on. Domestic duties in the house gradually devolve upon him. A Hali's wife also has to fetch water for the master's family every morning, grind the required corn and clean the cow-shed and cooking utensils, for which she gets a thick loaf weighing about $\frac{1}{2}$ seer, papad and a little pickle. During the day she is free to do labour in her master's field if there is work, for which she gets some 4 seers of grain extra. Besides marriages, a Hali takes necessary advances to meet the expenses of guests, confinement during delivery, death of a family member, and so on. If the master is a good cultivator, having wet crops such as sugarcane, ginger, potatoes, graft mangoes, etc., Halis are not inclined to run away, as they get many opportunities to satisfy their thieving propensities. But in other cases, after a service of some five years they begin to pick up quarrels, annoy their masters, and run away. But in doing so they generally approach other cultivators of the same or any other village and prevail upon them to pay up money for repayment of money advanced by the old master. If a new master is not available, they make good their escape and the money advanced is gone for good, and never to be repaid. The money advanced to a Hali does not bear any interest. If again a Hali proves to be a bad character, a thief or an abominable drunkard, etc., the master tries to get rid of him. But if no other man comes forward to accept his services on payment of advance to the previous master, in that case also the Hali secretly runs away. In these cases the masters have no remedy against their Halis. The contract terminates with the death or disappearance of a Hali when the advance becomes unredeemable.

A "Dhaniama" is originally a well-to-do cultivator who employs one or more Halis according to his requirements for agricultural purposes. But gradually men of other castes also adopted the same course as it was convenient for domestic purposes as well.

"There is another type of *Dhaniama*, viz., a Chodhra or a Gamta of a well-to-do condition. His Hali is known as "Khandhadia", who ultimately becomes his son-in-law, residing at his master's or father-in-law's house. If the master's daughter selects him as her lover and husband, and if he continues in her good graces, he remains in her father's house as husband and wife till children are born to her. No money advance is made to such a Hali. A wife in other words is a substitute for money advance. He is bound to perform all the services required of a regular Hali. After children are born, the couple leaves the parental house. It is curious to note that when the girl ceases to love her husband and shows apathy the man should take a hint and run away. Service in such a case terminates at the displeasure of the girl or birth of children.

"With the spread of education, the Halis have gradually realized their position of servitude. Prospects of labour in big industrial concerns such as Railways, workshops, mines, mills and the like, have of late years diverted them from their original pursuits. Several have gone as recruits for the army during the war. The result is that agricultural labour is starving; agriculturists bitterly feel their want for their field labour which has automatically become very dear. Experienced agriculturists apprehend a fall in the value of land in consequence of the fall in demand for the same. What to do with land for which no labourers are available? Land will remain uncultivated and uncared for. The argument is not without its force. The Hali system is imperceptibly falling into disrepute and will eventually disappear with enlightenment of the masses."

III.—From Mr. H. B. Shivdasani, Esq., M.A. (then) Assistant Collector, Southern Prant Surat :—

“ The Hali system prevails in all Talukas of my Prant except in the villages inhabited entirely by Kaliparaj people, as these people cultivate land themselves, and they and their families work in their fields.

“ Most of the Hali families are serving from several generations. What usually takes place is that the employer of a Hali lends him money under a *khata* for his own marriage and the Hali orally binds himself to serve till he pays off the debt. The Hali serves the master and in return he gets an allowance of a certain quantity of juwari or rice per day, and also he is fed in the morning and noon by the master on the day he works at his master's house. When there is no work at his master's house he does work for other persons as a labourer, and gets money or corn from those persons in return for his labour.

“ In case the Hali runs away, being unwilling to serve under his master, and takes up an employment under a new master, the latter generally pays the outstanding debt of the Hali to his former master. The former master goes into the court only when he fails to recover his debt from the Hali's new master, on the strength of the *khata* made by the Hali. No criminal courts take cognizance of the breach of service.

“ With the advance of civilization, the wants, luxuries and domestic expenses of these Halis have increased and seeing that they can get employment at other places and earn more money, they run away and get employment at other places of industrial activities. Also the master does not find that it pays to keep Halis. The Hali labour is notoriously inefficient, and with the present high prices it costs ever so much more to maintain a Hali. In short, the master also finds the system uneconomic. The Hali system is now day by day disappearing. There is an appreciable decrease in the number of Halis for the last few years. There is now a general tendency among these people not to serve as Hali. I think within a few years the system will disappear.”

IV.—From Mr. E. J. Taleyarkhan, B.A., Dewan, Sachin State :—

“ The custom of keeping ‘Halis’ is still in vogue, although their number is gradually diminishing. They chiefly belong to the Dubla class and are generally employed by the better classes of cultivators such as the Anawils, Bohras, Kunbis, Rajputs, and Parsis, who advance them money in return for service. They are given some grain for their daily sustenance and some times a few rupees monthly. As labour is scarce and the ‘Halis’ have come to understand things and their own interest better than in the old days, they try to shake off the yoke as best they can. During the war many of them are said to have gone out, either themselves or by their near relatives, and paid off their debts. The condition of the ‘Halis’ is by no means good, but their relations with their masters are none the less cordial. Their masters know that if they ill-treated them they would run away, and the Courts would not give them protection. The Halis are also aware of this. I do not think the younger generation of the ‘Halis’ will brook this bondage. They can earn enough and to spare in these days, Education is free in this State and the Dubla who could read and write would scoff at the idea of becoming a ‘Hali’. I think that in the course of a few years the ‘Hali’ system is bound to perish. The courts of this State do not encourage ‘Halism.’ Sometime ago I had a suit before me in which a Parsi sued a Bharwad ‘Hali’ who had run away on war service, and had just returned to his village on leave. I passed a money decree as the ‘Hali’ admitted the claim but refused to give the Plaintiff any other help.”

625. The figures which may be taken as almost certainly likely to err, if at all, on the side of deficiency show the geographical distribution set forth in the margin. Two figures call for special comment, viz.:—(1) the Navabshah figure, which seems to be due to some confusion between Hali and Hari; and (2) the Thana figure which is almost certainly too low. As regards the term Hari it is no doubt etymologically the same as Hali. But it does not follow from that that the position of the two types of worker is the same. The Halis of Sind have already been discussed. They seem to be rather traditional and possibly sometimes compulsory tenants: whereas the Halis of the South are traditional and compulsory servants. This is as far as I can judge. As regards Thana there are certainly many of these serfs in the coastal regions, especially to the North; but it would seem that the Landlords were sufficiently powerful and enterprising to secure that they should not be returned by designations which in the Census Office could be classified to this sub-Group.

Number of persons supported by "Indentured Labour",* i.e., by permanent and unresignable agricultural and domestic service.

Ahmedabad ..	41
Broach ..	7,356
Kaira ..	28
Panch Mahals ..	416
Surat ..	57,010
Thana ..	3
Ahmednagar ..	4,011
East Khandesh ..	717
West Khandesh ..	3,174
Poona ..	237
Kolaba ..	576
Ratnagiri ..	1,453
Navabshah ..	145
Idar State ..	954
Rest of Mahi Kantha ..	45
Rajpipla ..	4,351
Rest of Reva Kantha ..	508
Surat Agency ..	2,920
Bhor ..	357

* The term "Indentured" is used for lack of any other and better term. It is not equivalent to the indentured labour of the plantations in various parts of the world.

SECTION 14.—MINOR AGRICULTURAL OCCUPATIONS.

626. Group 9, Woodcutters, firewood, catechu, rubber, etc., collectors, and charcoal burners comes out much smaller than in 1911. But it must be combined with Group 147, Dealers in firewood, charcoal, coal, cowdung cakes, etc. The figures then are—

		Workers and Dependants combined.	
		1911	1921
Group 9 ..		129,807	53,488*
Group 147 ..		47,577	78,801
		177,384	132,289
Group 10 ..	Not separated		2,091
		177,384	134,380

Group 10 is Lac Collectors, and these were included in 1911 in the figures of the

Distribution of Lac Collectors, 1921. Workers and Dependants combined.

Ahmedabad ..	13
Kaira ..	1
Panch Mahals ..	16
Ahmednagar ..	2
West Khandesh ..	11
Nasik ..	91
Hyderabad ..	908
Larkana ..	448
Navabshah ..	84
Thar and Parkar ..	39
Cutch ..	2
Palanpur Agency ..	183
Reva Kantha (excluding Rajpipla) ..	293

Group corresponding to present group 147. Group 9 comes out strongest in Thana, Kanara, Kathiawar, and Hyderabad Sind; but there are fair numbers in most units. Group 10, Lac Collectors shows the geographical distribution given in the margin. There is no doubt lac collecting in many other forests of the Presidency, but in those cases it is combined with other occupations. The figures in the margin are those cases only in which this is the principal occupation.

* See however section 15 below.

627. *Group 11, Cattle and Buffalo breeders and keepers* will have to be amalgamated with *Group 133, Sellers of Milk, butter, ghee, poultry, eggs, etc.* The figures then are—

		Workers and Dependants combined.	
		1911	1921
Group 11	..	83,663	176,830
Group 133	..	47,416	68,212
		<hr/>	<hr/>
		131,079	245,042

This large increase is apparent only. *Group 12, Sheep, Goat and pig breeders* shows :—

65,877 62,372

But *Group 14, Herdsmen, shepherds, goat heads, etc.,* shows :—

518,989 363,951

The fact is therefore that persons who went in as *herdsmen* last time have this time gone in as *cattle-breeders*. The grand total of this *Sub-order 1 (d), Raising of Farm Stock* shows—

672,556 610,759

628. *Group 17, Fishing* shows :—

162,348 133,195

Territorially the principal contributories are the Coast Districts and the Indus Districts of Sind. But the Deccan Districts also contain a fair number supported by fishing.

629. *Group 15, Raising of birds, bees, etc.,* is very unimportant. Out of 737 persons supported Navabshah contributed 374 (presumably the egret farmers) and Larkana, Karachi, Palanpur and Khandesh the remainder. The Khandesh contribution may represent honey collectors, who should have gone into Group 9. It is not certain whether bees are really domesticated in Khandesh.

630. *Group 16, Silk worm breeders,* shows 480 persons, almost entirely from Nasik.

SECTION 15.—MINES AND MINERALS.

631. *Group 19, Coal Mines* shows 2,237 persons supported. Of these the bulk are from Thana and Jawhar State. As it seemed doubtful whether there was not some error, I referred to the Personal Assistant to the Collector of Thana who replied that there are no coal mines in the region, and that the figures must be those of charcoal-burners. It is unfortunate that this error was detected too late for correction of the Tables.

632. *Group 21, Mines and metallic minerals (gold, iron, manganese, etc.,)* shows 3,079 persons supported. The distribution is as follows :—

Panch Mahals	..	1,781	Cutch	..	13
Ahmednagar	..	3	Reva Kantha (excluding		
Nasik	..	6	Rajpipla)	..	1,024
Poona	..	82			

633. *Group 22, Quarries of Hard Rocks (jade, diamonds, limestone, etc.)* shows only 6,560. Omitting very small figures the distribution is as follows :—

Bombay Suburban District	..	566	Cutch	..	350
Ahmedabad	..	109	Bhavnagar	..	742
Kaira	..	186	Gondal	..	525
Poona	..	676	"Rest of Kathiawar"	..	2,378
Ratnagiri	..	505	Mahi Kantha	..	190
Hyderabad	..	123	Kolhapur	..	102
Sukkur	..	95			

I am inclined to doubt the correctness of the figures. I think there must be more quarries. There are certainly some in Bijapur. It seems that the quarrymen have gone into *Group 86, Excavators, etc.*, or *87, Stone-cutters*.

634. *Group 23, Rock, Sea and Marsh Salt* shows 7,792 persons supported. The main distribution is—

Bombay City ..	441	Ratnagiri ..	299
Bombay Suburban District ..	1,192	Karachi ..	213
Ahmedabad ..	2,666	Cutch ..	60
Surat ..	214	Bhavnagar ..	403
Thana ..	260	Junagadh ..	269
Kanara ..	386	" Rest of Kathiawar " ..	734
Kolaba ..	576		

635. *Group 24, Extraction of Saltpetre, alum etc.*, shows 596 persons supported.

Bombay City ..	141	Thar and Parkar ..	82
Panch Mahals ..	117	Kathiawar ..	154
Larkana ..	94		

SECTION 16.—INDUSTRIES, TEXTILES, COTTON.

636. In the case of the Textile Occupations an effort was made to get at the number of Home Workers as distinct from Factory Workers. Unfortunately any sub-division like this necessitates the opening of a third sub-group for the Unspecified; but on the whole the Unspecified do not come out inordinately high. The figures actually obtained from the General Occupation Table in the case of Cotton operations are given below :—

	Workers.		Dependant.
	Males.	Females.	
<i>Definitely specified as Factory Workers—</i>			
25. Cotton ginning, cleaning and pressing	10,166	10,161	14,421
26. Cotton spinning	32,658	9,189	16,796
27. Cotton sizing and weaving	115,915	34,687	97,876
Total Cotton (Factory Workers) ..	158,739	54,037	129,093
<i>Definitely specified as Home Workers—</i>			
25. Cotton ginning, cleaning and pressing	10,670	7,761	14,599
26. Cotton spinning	4,379	16,269	13,554
27. Cotton sizing and weaving	89,497	40,581	160,397
Total Cotton (Home Workers) ..	104,546	64,611	188,550
<i>Unspecified—</i>			
25. Cotton ginning, cleaning and pressing	1,833	903	895
26. Cotton spinning	1,257	1,287	2,067
27. Cotton sizing and weaving	20,661	3,357	23,794
	23,751	5,547	26,756
Grand Total Cotton Industries ..	287,036	174,195	351,399
Total (1911) (for comparison) ..	315,603	145,228	367,576

637. With these figures we can compare the figures arrived at from the Special Industrial Schedules, which were filled up by the Managers of Establishments :—

	Workers.	
	Males.	Females.
<i>Cotton Ginning Factories.—</i>		
Mechanical power used	10,519	5,816
Mechanical power not used	25	21
<i>Ginning and Pressing Factories</i>	2,756	1,367
<i>Cotton Presses*</i>	2,460	562
Total Cotton Establishments ..	15,760	7,766

* It is pointed out in the discussion of the Hubli Population in the Cities Report (Vol. IX, Part I of this series) that the Hubli Cotton Presses either did not send in full returns or were closed down during March 1921.

The figures in the General Occupation Table are apparently too low in the case of Males and too high in the case of Females.

638. For the other divisions of the industry it is necessary to combine Cotton Spinning with Cotton Sizing and Weaving, because in the Industrial Tables there are many establishments of the type known as "Spinning and Weaving Mills". The figures are as follows :—

<i>Spinning Mills or Factories.</i>					
Mechanical Power used	..	..	..	10,745	5,226
Mechanical Power not used	..	..	..	123	197
<i>Spinning and Weaving Mills.</i>					
Mechanical Power used	..	..	..	180,077	49,888
Mechanical Power not used	..	..	..	20	13
<i>Weaving Mills.</i>					
Mechanical Power used	..	..	..	3,312	586
Mechanical Power not used	..	..	..	2,828	478
				197,005	56,388
Grand Total Cotton Establishments				212,765	64,154

639. The figures in the General Occupation Table, therefore, for Factory workers in Cotton Industries are too low. The principal cause of this is that many of the operatives, especially in Bombay City, got wrongly into *Group 197, Labourers and Workmen otherwise unspecified*. But we also have *Group 38 (b)* which shows very high figures, and is discussed below.

640. In the matter of Home Workers the regions in which Home Workers in *Group 25, Cotton Ginning, Cleaning and Pressing* are most numerous are the principal cotton producing regions where there are numerous hand gins. Cotton spinners, Home Workers, are widely spread, but are specially common in the South Deccan and Karnatak. In the case of Cotton Weavers, Home Workers, we are probably defeated by *Group 38 (b), Occupations such as "weaver," insufficiently described, indicating the order, but not assignable to any particular group*. This group 38 (b) forms in the prescribed scheme one group with 38 (a) *Makers of lace, crepe, embroideries, fringes, etc.* We must therefore consider the groups for Cotton Spinning and Weaving, and Group 38 together in order to get a comparison with 1911.

	Workers.		Dependants.
	Males.	Females.	
1911			
Group (22) Cotton spinning, sizing and weaving	301,290	136,283	348,835
Group (31) Others (Lace, embroideries, fringes, etc.) and insufficiently described textiles	4,601	2,975	6,959
	305,891	139,258	355,794
1921			
Group 26. Cotton spinning	38,294	26,745	32,417
Group 27. Cotton sizing and weaving	228,073	78,625	282,067
Group 38 (a). Makers of lace, crepe, embroideries, fringes, etc. ..	6,109	3,771	13,441
Group 38 (b). Occupation, such as "Weaver", insufficiently described, etc., etc.	20,236	6,298	31,171
	290,712	114,439	359,096

The figures are still too low. And the reason already given applies. In passing attention is drawn to the much higher proportion of dependants at this Census.

641. It must, however, be remarked with regard to the above that in *Group 38* there appear many silk-workers, as is shown in the discussion of the silk occupations below. So the 1921 figures are even more defective than the above

comparison would indicate. Group 187. *Labourers insufficiently described* remains the most important repository for missing workers in Cotton.

642. The territorial distribution of the Home Weavers would have been very interesting. But unfortunately the Sind handloom weavers have gone apparently almost solid into Group 38 (b) as "weavers" without further specification. Anyone who wants the figures must therefore take into consideration Groups 27 (a), 27 (c) and 38 (b). From Group 38 (b) he must first disentangle the Silk Weavers (for which see the discussion below), and then the bulk of the balance can be taken to cotton weavers, and probably most of it to Home Workers.

643. The territorial distribution of Factory Workers, in all Industries, but especially in the Textile Industries, must be looked for in the Industrial Tables (XXII), and not in the General Occupation Table.

SECTION 17.—INDUSTRIES—OTHER TEXTILES.

644. Group 29, *Rope, Twine and String making* shows 52,935 persons supported. The principal Districts contributing are Poona, Satara and Sholapur, with Kolhapur and the Southern Maratha Country States. But other Districts contribute lesser figures.

645. Group 30, *Workers in other fibres (coir, aloe, flax, hemp, straw, etc.)*, shows 13,397 persons supported, against only 9,250 in 1911. I have serious doubts about the correctness of the figures, because the territorial distribution in 1911 and 1921 are entirely different. The principal contributing Districts at the two Censuses were :—

1911			1921		
Kanara	..	1,519	Nagar	..	2,613
Ratnagiri	..	1,113	Larkana	..	2,542
Nasik	..	1,070	Sukkur	..	1,945
Dharwar	..	907	Upper Sind Frontier	..	1,163
Surat	..	853	Cutch	..	1,301
Ahmedabad	..	737	Hyderabad	..	750
Nagar	..	607	Khairpur	..	410
Belgaum	..	491			
Cutch	..	481			

It is virtually impossible that any one occupation could move about territorially in this way in 10 years. Therefore the figures of either one or the other Census or both are wrong. The error no doubt lies in classification, since the terms used by the Enumerators will be the same from Census to Census.

646. *The woollen industries occupations*, which were included in one group in 1911, have this time been separated into three (Groups 31, 32 and 33). Wool-working alone is not an important occupation. The persons supported are 40,212 against 42,565 in 1911. In this Presidency most wool-workers are primarily sheep-herds, and go into that group. Those that get in here are almost entirely home workers and are principally found in the Deccan and Karnatak.

647. In the same way the *Silk-working Occupations*, which formed one Group in 1911, have been divided into Silk-Spinners and Silk-Weavers. The number of persons supported in 1911 was 44,137, and in 1921 only 26,699. It is impossible to believe that the industry has declined in this way. I think the explanation lies in Group 38 (b) already discussed, the missing silk-workers having gone into the vague group as "weavers" pure and simple. The bulk of those who did get into Groups 34 and 35 are specified as Home workers. The Industrial Tables also show that this Industry is not one to which mechanical power and industrial organisation has yet been much applied. The territorial distribution of the silk-spinners and the silk-weavers is not the same. The large majority of the spinners are found in Dharwar, Bijapur and the Southern Maratha Country States, with a few in Navanagar and Surat. On the other hand the large majority of the weavers are found in Surat, Ahmedabad and Ahmednagar, with a few in Poona and Navanagar. The missing silk-workers can then, by comparing the 1911 figures with the 1921 figures in Groups 34, 35 and 38 (b), be determined as belonging to the weaving branch, and as located in Surat, Ahmedabad and Nasik, in which districts there is a large fall between the total silk-worker figures of 1911 and those of 1921. In the case of

Nasik they seem to have gone into 38 (a) Makers of Lace, etc., and in Surat and Ahmedabad partly into 38 (a) Makers of Lace, etc., and partly into 38 (b). It is evident that there is some difficulty in classifying makers of silk embroideries. Doubtless some silk fabrics are both woven and also embroidered, and the assignment of their producers to the Group for Silk-weavers, or to the Group for makers of Embroidery is therefore a matter of chance.

648. *Group 37, Dyeing, bleaching, printing, preparation and sponging of textiles.*—This Group, at the request of the Department of Industries, I tried to divide up into (a) Dyers, (b) Calico Printers, and (c) Others. The figures, as obtained and abstracted, I have left in the Table. But it would seem that they are not satisfactory. It is believed that calico-printers are numerous in Ahmedabad; but this occupation did not there occur to any satisfactory extent. The reason is probably that the vernacular terms for dyeing and calico printing are not distinct and certain.

649. Group 38, which has already been incidentally discussed, is highly unsatisfactory as it stands. It includes, as will be seen from the above discussion, (1) a good many genuine makers of lace, etc., (2) miscellaneous silk-weavers, and (3) a good many hand-loom cotton weavers especially in Sind. The important thing next time will be to impress upon the Enumerators, especially those in Sind, that the return "weaver" cannot be accepted; that the first thing is to ascertain whether the weaving is in cotton or silk or wool, and then to ascertain whether the weaving is done at home or in a factory.

SECTION 18.—INDUSTRIES OTHER THAN TEXTILES.

650. There is little here that calls for comment. The figures are in the main those of village workers, such as potters, carpenters, tailors and many other occupations. For the most part industries covered by Orders 7 to 18 do not figure much in the Industrial Tables because such establishments as exist are small ones. A difficulty is felt as regards *Salt Refineries*. These are shown in the Industrial Tables as employing 7,336 Males and 2,135 Females. But in the General Occupation Table the total workers in Groups 23 and 24, (Order 5), Salt-workers, were 3,292 Males and 1,289 Females. It is not known where the extra workers shown in the Industrial Tables have got placed in the General Occupation Table. There is no other Group which they seem to fit. The only thing that I can suggest is that the workers in these Establishments are not whole-time workers. This may be a subsidiary occupation, and they may have returned Agriculture or something of that sort as their principal occupation.

651. The same applies to *Manufacture of Aerated Waters*. This is in point of numbers an unimportant industry. But it is noteworthy that the number of workers returned in the General Occupation Table is only one-fourth of the number returned in the Industrial Tables. Here also it is possible that a person employed in making Aerated Waters is not a whole-time employee, but it is primarily a Butler or Cook. In such cases the Manager of the establishment would enter in the Industrial Schedules all persons who are engaged on the work, even though they some of them work for only an hour or so per day at this particular operation. On the other hand these persons, when asked by the enumerator for their occupation, would rightly return their regular employment, which would be taken in the General Occupation Table, Sub-Class X, Domestic Service, or to *Group 130, Owners of Hotels, etc., etc., and their employees*. Nor would it probably even occur to them to return Manufacture of Aerated Waters as a Subsidiary Occupation, since to them the work on the soda-water machine would seem to be simply part of their ordinary daily duties as employees of the Hotel.

652. In the case of *Sugar Refineries*, Mechanical Power not used, some difficulty was experienced in the Deccan Sugar-cane growing areas as to how to dispose of the numerous small crushing mills, which from time to time employ more than 10 persons on the crushing operations. Some of these have got into the Industrial Tables, but not so many as at one time seemed probable. On the whole I think that at the next Census there should be a differentiation between (1) Cane crushing mills *in the fields where the cane is grown*, and (2) the same in the Village Site or in the adjacent Towns. The first type should, I think, be excluded from the Industrial Tables altogether, as it is not an Industrial Establishment in the sense intended by the framers of the scheme, whatever the number of employees.

653. To return to the General Occupation Table I do not feel that our Occupation figures are so reliable as to make it worth the reader's while to be drawn into a long and detailed comparison between the figures for each Group at this Census and the last.

We might however perhaps take note of the *Group 65, Rice Pounders and Huskers and Flour Grinders*. When we take the corresponding groups for 1911 and 1901 and combine the figures so as to make a correct comparison, we get—

<i>Population Supported.</i>			
1901	..	..	133,879
1911	..	..	103,076
1921	..	..	49,328

The reduction at this Census is very marked. It is uncertain whether this large reduction is genuine. But there seems reason to believe that the very laborious occupation of husking rice in pits with enormous pestles, and the almost equally laborious occupation of grinding flour by hand (otherwise than for purely domestic needs), have given place to mechanical methods, which render necessary a very much smaller number of persons. So far as we can get information from the Industrial Tables it is given below, and it will be seen that there has been a doubling of the number of employees :—

				<i>Employees.</i>	
				Males.	Females.
<i>1911</i>					
Flour Mills	..	..	..	1,100	43
Rice Mills	..	..	..	835	179
Rice and Flour Mills	..	..	..	25	..
Flour Mill and Sugar Factory	..	..	..	26	..
Flour and Oil Mill	..	..	..	60	..
Flour and Rice Mills	..	..	..	137	14
				<u>2,133</u>	<u>236</u>
<i>1921</i>					
Flour Mills	..	..	..	1,358	92
Rice Mills	..	..	..	2,891	675
				<u>4,249</u>	<u>767</u>

654. Nevertheless I am not satisfied that this increase in Mechanical methods could have effected the reduction which is shown between the 1911 and the 1921 figures in the General Occupation Table. I think a possible line of explanation is to suppose that many persons who got into the General Occupation Table last time as Rice Huskers, etc., have this time got into *Group 136, Grain and Pulse Dealers*, the figures of which rise from 157,784 to 213,498. In any case in which either (i) the same persons who pounds or husks also sells, or (ii) the said person is an employee of a definite grain dealer, it would not be incorrect to classify him or her into this Group 136.

655. In all cases in which we find a very violent increase or decrease as against the 1911 figures it is necessary to look about for an explanation by supposing that the persons who at one Census got into that Group got into another Group at another Census. A good example of this is furnished by *Group 40, Makers of leather articles such as trunks, water-bags, saddlery or harness, etc., etc., excluding articles of dress*, where the persons supported rise from 10,206 to no less than 35,356. Such a violent increase is virtually impossible. But we can combine certain Orders and Groups as shown below, and thereby produce reasonable comparative figures.

			<i>Persons Supported.</i>	
			1911	1921
Order 7. Hides, skins and hard materials from the Animal Kingdom (e.g., bone, etc.)	..	..	100,889	127,5
Group 78. Shoe, boot and sandal makes	..	..	201,850	156,477
Order 27. Trade in skins, leather, furs, etc.	..	..	18,029	22,410
Group (81) of 1911. Saddlers, harness makers, whip and lash makers	..	..	798	(included in Order 7)
			<u>321,566</u>	<u>306,448</u>

656. In *Group 46, Forging and Rolling of Iron and other metal* the figures and persons supported leap up again from 1,792 to 21,420, a quite impossible phenomenon. Here again it is a question of classification pure and simple.

	1911.	1921.
Group 46	1,792	21,420
Group 48, Other workers in iron, and makers of implements and tools principally or exclusively of iron ..	122,774	110,533
	<u>124,566</u>	<u>131,953</u>

657. A good example of the difficulty of differentiating between Manufacture and Trade in a country where the same persons usually both make and sell is afforded by the following, in which two parallel groups out of Sub-class III and Sub-Class V respectively show opposite movements :—

	1911.	1921.
Group 72, Sweetmeat makers, preparers of jam, condiments, etc.	37,086	20,064
Group 134, Sellers of sweetmeats, sugar, gur, molasses ..	11,918	22,404
	<u>49,004</u>	<u>42,468</u>

and again

	1911.	1921.
Group 75, Manufacture of Tobacco, opium, and ganja ..	25,388	14,232
Group 137, Tobacco, opium, ganja, etc., sellers ..	24,494	33,641
	<u>49,882</u>	<u>47,873</u>

658. The user of the General Occupation Table must, in fact, be constantly on the look-out for pitfalls like these. He must always be prepared to combine the corresponding Groups in the Industry and the Trade Sub-Classes, and he must, in addition, be prepared to follow up more subtle byways of classification. In short no comparative study can be attempted until the whole series of 191 Groups is mastered.

SECTION 19.—TRANSPORT.

659. The figures in this Sub-Class show a very large drop from those of 1911. It would be best to consider them by the different orders.

Order 19, Transport by Air is of course new, and the figures are trivial. They amount to 159 Workers (all Males) and 118 Dependants, almost all of whom were enumerated in Ahmednagar.

Order 20, Transport by Water shows a reduction from 173,564 persons supported to 141,116, which extends to almost all Groups, and is probably due to the increase in Group 187, Labourers and workmen, otherwise unspecified.

Order 21, Transport by Road. Here the reduction is from 329,164 to 151,042, an impossible state of things. There is no reduction in the numbers of persons employed on maintenance of roads and bridges, but on the contrary a slight rise. There is also a doubling of the small Group *Palki, etc., bearers and owners*. Abbreviating the lengthy Group titles we get—

	1911.		1921.
Vehicles	108,499	Mechanically driven Vehicles ..	5,789
Pack Animals	50,337	Other Vehicles ..	41,453
Messengers	143,752	Pack Animals ..	34,157
		Messengers ..	40,597
	<u>302,488</u>		<u>121,976</u>

660. To a certain extent we may assume that increased Railway facilities and the enlarged use of motor vehicles has diminished the demand on bullock carts and pack animals. This is certainly true of Bombay City and applies in a lesser way everywhere. But the reduction is too great. The explanation is not apparent. However it is pointed out below that some of the missing persons have got into *Order 37, Trade in the means of Transport*. When we come to *Group 117, Porters and Messengers* (called Messengers in the above figures) we find that many of the 143,752 Porters and Messengers of 1911 were probably Railway Porters. Now in

1911 the word "porters" did not occur in *Order 22, Transport by Rail*, but this time does occur. And this order rises from 183,569 to 216,618. Even this however does not fully explain all the vagaries of the figures, as the following comparative distribution of the same between British Districts and States will show :—

661. *Group 117, Porters and Messengers—*

	1911.	1921.
In British Districts	134,042	9,710
In States and Agencies	16,734	23,843

I am inclined to think that the correct definition of this Group will have to be fixed and explained to Abstraction Offices in 1931. At present there seems to be extensive misunderstanding.

662. *Order 23, Post Office, Telegraph and Telephone Services.* The number rises from 30,827 to 36,784.

SECTION 20.—TRADE IN GENERAL.

663. The difficulty of distinguishing Industry from Trade has already been explained. If the figures of one of these Sub-Classes fall the figures of the other are likely to rise. This has occurred this time.

	Persons supported.	
	1911.	1921.
Sub-Class III—Industry	3,393,836	3,242,637
Sub-Class V—Trade	1,754,054	1,941,412
	<u>5,147,890</u>	<u>5,184,049</u>

SECTION 21.—EATING AND DRINKING HOUSES.

664. The figures for *Hotels, Cafés, and Restaurants* are always of interest. They rise from 49,021 to 63,836 ; and in the case of *British Districts* alone we get the figures in the margin. There is little doubt that the rise in this case is genuine. Territorially speaking this Trade is wide-spread, and calls for little comment. Bombay City accounts for no less than one quarter of the figures of the whole Presidency. Ratnagiri comes next. And the high figures for the Konkan Districts and Surat show either that the teashop is more common on the coast than above ghats, or that the small toddy-shop in toddy-producing districts is able to send up the Group figures.

1901 ..	26,671
1911 ..	39,599
1921 ..	52,784

SECTION 22.—TRADE IN VEHICLES, ETC.

665. *Order 37, Trade in the means of Transport* rises sharply from 26,789 to 65,110. The extra persons have evidently come across from Sub-Class IV, Transport, as already pointed out above. It is impossible therefore to make any comparison with 1911. As a matter of interest, however, it may be pointed out that the number of persons shown in *Group 144, Dealers and Hirers in mechanical transport, motor cycles, etc.* come out at only 861 Male Workers, 150 Female Workers and 1,274 Dependants. These figures sound very low ; but it has to be remembered that many cycle shops in places like Poona are only partially cycle-shops and are mainly occupied with other trade.

SECTION 23.—OTHER TRADE.

666. Attention is drawn to *Group 152, General Store-keepers and shop-keepers unspecified.* It is in India highly desirable to have a group for the general store-keeper, who is such a noticeable feature of mofussil life. But it is a pity that this was merged with the undefined entry "shop-keeper". The result is that we do not know the number supported by General Stores. In 1911 the Group (135), Shop-keepers otherwise unspecified, showed 100,539 persons supported, and this Group 152 shows 259,079 persons. But it is impossible to make any positive statement to the effect that the difference between these two is the true figure for persons supported by general stores. The excess persons this time have been

drawn from various other Groups, but particularly from *Group 132, Grocers, etc.* etc., which falls from 346,593 to 145,988.

SECTION 24.—PUBLIC FORCE AND ADMINISTRATION, AND THE PROFESSIONS.

667. I pass over these Sub-Classes, because I do not think that any comparisons are sound. I say this because, while these Sub-Classes are small, *Group 185* for clerks, etc., unspecified rises from 164 thousand to the high figure of 352 thousand. Any reductions in Groups in Sub-Classes VII and VIII can therefore be assigned to this Group, and all comparisons are at an end.

SECTION 25.—PRIVATE INCOME.

668. This is classified as an occupation on the broad understanding that occupation includes passive means of livelihood, and this is made clear in the heading of the Table. The figure is singularly constant. But it amounts to a very much smaller proportion of the population than must be the case in European Countries, where income from dividends and investments generally is such an important source of existence.

SECTION 26.—DOMESTIC SERVICE.

669. This Sub-Class shows a slight reduction, though *Group 182, Private Grooms, coachmen, dogboys, etc.*, is 300 per cent. of the 1911 figures—an increase which cannot be genuine. A new Group was opened for Chauffeurs and cleaners of private cars, showing 7,731 Male Workers, 703 Female Workers and 9,685 Dependants.

SECTION 27.—INSUFFICIENTLY DESCRIBED OCCUPATIONS.

670. We now come to that bugbear of the Census Officer the unclassifiable entries. This time the numbers leap up from half a million to a million and a half. But I should like to emphasise that this is due not so much to the greater accuracy in enumeration in 1911 as to the habit, to which I have referred several times in this Report, by which the Abstraction Offices were expected to improve the schedules by interpreting doubtful entries in any way that seemed fit. The reason for advancing this belief is that in 1901 the numbers falling under insufficiently described were about the same as in 1921. My predecessor arrived at some formula for getting a comparison between the Groups of his own and of the previous Census, and showed the figures (for British Districts only) in Subsidiary Table VII of his Chapter XII. Accordingly I give below those figures and the figures from British Districts only at this Census :—

	Population supported, British Districts.		
	1901	1911	1921
Sub-Class XI			
Including mainly—			
Unclassified business-men	1,232,229	383,301	1,211,584
Unclassified Clerks, etc.	8,458	10,185	77,885
Unclassified Labourers	114,484	108,640	289,660
	1,102,382	250,853	833,964

671. We are therefore better than in 1901 in the matter of Labourers, but worse in other departments. On the whole, in spite of the above reservations, it must be admitted that the result is somewhat worse than even in 1901, because (1) a very large number of unclassified business-men and clerks is less justifiable than an excess of unclassified labourers, the former being educated and able to answer questions if asked them by the enumerators, and (2) in 1901 the famine conditions had probably really thrown a good many extra persons into the ranks of General Labourers.

672. In the Cities Report an attempt has been made to redistribute these unclassified figures among the different Sub-Classes for the Cities of Bombay and

Ahmedabad. But in the case of the whole Presidency I do not feel that I am on such sure ground; nor is the result worth the difficulty and uncertainty involved.

SECTION 28.—UNPRODUCTIVE OCCUPATIONS.

673. The total number of Beggars in the Presidency is—

	Workers.		Dependants.
	Males.	Females.	
Religious Mendicants	40,822	10,837	74,279
Beggars	111,577	54,405	145,218
Total number supported by Religious Mendicancy	..	..	125,938
„ „ „ „ Beggary	..	..	311,200
Grand Total supported	..	..	437,138

674. The number of *Prostitutes and Procurers* would have been interesting if we could have got at it. But a glance at the territorial distribution, which follows very closely that of 1901 (the last year when this occupation was separately tabulated), will reveal that we have only got the true figures for certain regions where the occupation is not concealed. It is evident that in Gujarat Prostitutes do not record themselves as such. Where they get to is uncertain. A glance at the number of Female Workers in Group 178 will show that they have got into the Tables as “singers, actors and dancers”. It may therefore be assumed that they record themselves as dependants of some real or imaginary male connection. Certainly none could accept the statement shown by the figures that in the whole of the five British Districts of Gujarat there are only 75 working Prostitutes, in Kathiawar only 85, in Palanpur Agency only 92, and in Mahi Kantha none at all. The only regions where correct figures seem to be returned are the Karnatak and Kanara with the adjacent States.

675. It may cause some surprise to learn that 352 Male Workers, 98 Female Workers and 178 Dependants returned themselves, or at any rate found their way into our Tables, under the designation of “*Witches, Wizards and Cattle poisoners*”. Who these are is uncertain; but they are almost all from Surat and West Khandesh, with a few from Sholapur, Broach and Belgaum. The territorial Distribution seems at first sight to imply that they are by caste members of Jungle Tribes in the forest country; but their entire absence from the Surat Agency and Reva Kantha upsets this. The corresponding group in 1901 was returned almost entirely from Mahi Kantha and Kathiawar, which makes the obscurity even greater.

676. Group 188 (b), *Inmates of refugee camps, settlements, etc.*, is a small subordinate group which I found desirable to segregate for the purpose of accommodating these Refugees, who are not beggars, yet have no livelihood at the moment. Territorially the figures came out as under:—

West Khandesh	..	559	Poona	..	..	72
Belgaum	..	128	Kolaba	..	..	55

The Belgaum and Kolaba figures were War refugees. Who the West Khandesh and Poona persons are is uncertain.

SECTION 29.—EMPLOYEES IN CERTAIN DEPARTMENTS.

677. Altogether independently of the General Census special returns were called for from certain Government and semi-Government Departments of the employees in their services on the 18th March. These returns were compiled for the Presidency, and the results are shown below.

Subsidiary Table No. 130.—(1) Number of persons employed on the 18th March 1921 on Railways and in the Irrigation Department.

Class of persons employed	Europeans and Anglo-Indians.	Indians	Remarks.
RAILWAYS.			
Total persons employed ..	2,619	129,958	
<i>Persons directly employed.</i>			
Officers ..	*222	52	* includes one Armenian.
Subordinates drawing more than Rs. 75 per mensem ..	1,944	5,273	
" " from Rs. 20 to 75 ..	423	†56,435	† includes 186 menials.
" " under Rs. 20 ..	26	‡50,270	‡ includes 135 daily paid workmen.
<i>Persons indirectly employed.</i>			
Contractors ..	1	364	
Contractors' regular employés ..	3	2,207	
Coolies ..	..	15,357	
IRRIGATION DEPARTMENT.			
Total persons employed ..	31	44,629	
<i>Persons directly employed.</i>			
Officers ..	26	44	
Upper subordinates ..	1	§150	§ includes one Japanese.
Lower " ..	1	247	
Clerks ..	..	..
Peons and other servants ..	1	6,489	
Coolies ..	..	9,207	
<i>Persons indirectly employed.</i>			
Contractors ..	1	756	
Contractors' regular employés ..	1	833	
Coolies ..	..	26,903	

(2) Number of persons employed in the Post Office and Telegraph Department on the 18th March 1921.

Class of persons employed.	POST OFFICE.		TELEGRAPH DEPARTMENT.		REMARKS.
	Europeans and Anglo-Indians.	Indians	Europeans and Anglo-Indians.	Indians.	
Total persons employed ..	16	16,222	309	2,555	
<i>(1) Post and Telegraphs.</i>					
Supervising officers (including Probationary Superintendents and Inspectors of post offices and Assistant and Deputy Superintendents of Telegraphs and all officers of higher rank than these.) ..	9	81	56	22	
Postmasters, including Deputy, Assistant, Sub and Branch Postmasters ..	2	888	..	..
Signalling establishment including warrant officers, non-commissioned officers, military telegraphists and other employes..	..	..	239	681	
Miscellaneous agents, School masters, Station masters, etc. ..	..	1,935	..	..
Clerks of all kinds ..	2*	2,860	11	470	* includes one lady clerk.
Postmen ..	..	5,377	..	..
Skilled labour establishment including foremen, instrument-makers, carpenters, blacksmiths, mechanics, sub-inspectors, linemen and line-riders and other employes ..	..	17	3	592	
Unskilled labour establishment including line coolies, cable guards, battery-men, telegraph messengers, peons and other employes ..	..	1,808	..	790	
Road establishment consisting of overseers, runners, clerks and booking agents, boatmen, sycas, coachmen, bearers and others ..	..	1,872	..	..
<i>(2) Railway Mail Service.</i>					
Supervising Officers (including Superintendents and Inspectors of Sorting) ..	3	27	..	..
Clerks of all kinds ..	..	94	..	..
Sorters ..	..	609	..	..
Mail guards, mail agents, van peons, porters, etc. ..	..	317	..	..
<i>(3) Combined Offices.</i>					
Signallors ..	..	195	..	..
Messengers and other servants ..	..	342	..	..

Subsidiary Table No. 131.—General Distribution by Occupation—For British Districts only.

Class, Sub-Class and Order.	Number per 10,000 of Total Population.		Percentage in each Class, Sub-Class and Order of		Percentages of Actual Workers and Dependents to Total Persons supported.			
	Persons supported.	Actual workers.	Actual workers.	Dependents.	Actual workers.		Dependents.	
					In cities.	In rural areas.	In cities.	In rural areas.
1	2	3	4	5	6	7	8	9
CLASS A.—PRODUCTION OF RAW MATERIALS	6,438	2,838	44	56	52	44	48	56
Sub-Class I.—Exploitation of animals and vegetation ..	6,432	2,834	44	56	50	44	50	56
Order 1.—Pasture and Agriculture ..	6,366	2,804	44	56	50	44	50	56
Order 2.—Fishing and hunting ..	66	30	46	54	50	45	50	55
Sub-Class II.—Exploitation of minerals	7	4	61	39	52	62	48	38
Order 3.—Mines ..	2	1	65	35	41	68	59	32
Order 4.—Quarries of hard rocks ..	1	1	58	42	55	60	45	40
Order 5.—Salt, etc. ..	4	2	59	41	54	60	46	40
CLASS B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES	2,175	994	46	54	53	43	47	57
Sub-Class III.—Industry ..	1,218	579	48	52	56	44	44	56
Order 6.—Textiles ..	414	229	55	45	61	50	39	50
Order 7.—Hides, skins and hard materials from the animal kingdom ..	372	15	40	60	54	40	46	60
Order 8.—Wood ..	146	61	42	58	48	41	52	59
Order 9.—Metals ..	63	25	40	60	46	37	54	63
Order 10.—Ceramics ..	65	32	49	51	55	48	45	52
Order 11.—Chemical products properly so called and analogous ..	23	9	41	59	43	40	57	60
Order 12.—Food Industries ..	61	30	53	47	53	49	47	51
Order 13.—Industries of dress and the toilet ..	202	87	43	57	52	41	48	59
Order 14.—Furniture Industries ..	2	1	49	51	47	48	53	52
Order 15.—Building industries ..	102	46	45	55	51	44	49	56
Order 16.—Construction of means of transport ..	1	1	48	52	51	46	49	54
Order 17.—Production and transmission of physical forces (heat, light, electricity, motive power, etc.) ..	3	2	58	42	48	66	52	34
Order 18.—Other miscellaneous and undefined industries ..	99	41	41	59	49	38	51	62
Sub-Class IV.—Transport ..	222	105	47	53	56	42	44	58
Order 19.—Transport by air ..	..	..	58	42	85	56	15	44
Order 20.—Transport by water ..	56	29	48	52	76	27	24	73
Order 21.—Transport by road ..	51	25	49	51	48	49	52	51
Order 22.—Transport by rail ..	99	45	37	63	48	31	52	69
Order 23.—Post Office, Telegraph and Telephone services ..	16	6	41	59	46	39	54	61
Sub-Class V.—Trade ..	785	310	43	57	46	41	54	59
Order 24.—Banks, establishments of credit, exchange and insurance ..	38	14	28	72	41	22	59	78
Order 25.—Brokerage, commission and export ..	31	13	40	60	46	35	54	65
Order 26.—Trade in textiles ..	60	22	36	64	38	35	62	65
Order 27.—Trade in skins, leather and furs ..	8	3	39	61	39	39	61	61
Order 28.—Trade in wood ..	7	3	46	54	38	48	62	52
Order 29.—Trade in metals ..	5	2	41	59	42	41	58	59
Order 30.—Trade in pottery, bricks and tiles ..	1	1	48	52	47	49	53	51

Class, Sub-Class and Order.	Number per 10,000 of Total Population.		Percentage in each Class, Sub-Class and Order of		Percentages of Actual Workers and Dependents to Total Persons supported.			
	Persons supported.	Actual workers.	Actual workers.	Dependents.	Actual workers.		Dependents.	
					In cities.	In rural areas.	In cities.	In rural areas.
1	2	3	4	5	6	7	8	9
CLASS B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES—contd.								
Sub-Class V.—Trade—contd.								
Order 31.—Trade in chemical products ..	1	1	41	59	37	45	63	55
Order 32.—Hotels, cafes, restaurants, etc. ..	27	13	47	53	54	41	46	59
Order 33.—Other trade in food-stuffs ..	290	127	44	56	48	43	52	57
Order 34.—Trade in clothing and toilet articles ..	16	6	40	60	46	37	54	63
Order 35.—Trade in furniture ..	5	2	37	63	37	38	63	62
Order 36.—Trade in building materials ..	3	1	50	50	54	48	46	52
Order 37.—Trade in means of transport ..	30	13	38	62	45	37	55	63
Order 38.—Trade in fuel ..	32	18	57	43	48	60	52	40
Order 39.—Trade in articles of luxury and those pertaining to letters and the arts and sciences ..	25	10	44	56	41	23	59	77
Order 40.—Trade of other sorts ..	156	61	39	61	48	35	52	65
CLASS C.—PUBLIC ADMINISTRATION AND LIBERAL ARTS ..	447	179	43	57	50	41	50	59
Sub-Class VI.—Public Force ..								
Order 41.—Army ..	23	18	81	19	82	76	18	24
Order 42.—Navy ..	..	..	44	56	45	44	55	56
Order 43.—Air Force ..	..	..	65	35	..	68	..	32
Order 44.—Police ..	58	24	41	59	44	40	56	60
Sub-Class VII.—Public Administration ..								
Order 45.—Public Administration ..	162	66	41	59	45	40	55	60
Sub-Class VIII.—Professions and liberal arts ..								
Order 46.—Religion ..	66	27	41	59	46	40	54	60
Order 47.—Law ..	13	4	28	72	30	28	70	72
Order 48.—Medicine ..	19	7	37	63	41	39	59	61
Order 49.—Instruction ..	44	19	43	57	42	42	58	58
Order 50.—Letters and arts and sciences ..	32	14	43	57	42	43	58	57
CLASS D.—MISCELLANEOUS ..	969	516	53	47	57	51	43	49
Sub-Class IX.—Persons living principally on their income ..								
Order 51.—Persons living principally on their income ..	34	13	36	64	37	36	63	64
Sub-Class X.—Domestic service ..								
Order 52.—Domestic service ..	156	89	57	43	61	55	39	45
Sub-Class XI.—Insufficiently described occupations ..								
Order 53.—General terms which do not indicate a definite occupation. ..	628	329	52	48	56	50	44	50
Sub-Class XII.—Unproductive ..								
Order 54.—Inmates of jails, asylums and almshouses ..	9	7	78	22	71	81	29	19
Order 55.—Beggars, vagrants, prostitutes, etc. ..	123	70	57	43	68	56	32	44
Order 56.—Other unclassified non-productive industries ..	19	8	44	56	63	43	37	57

*Subsidiary Table No. 132.—Distribution by Occupation in Natural Divisions—
For British Districts only, 1921.*

Sub-Class.	Number per mille of total population supported in					
	Bombay City.	Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.
1	2	3	4	5	6	7
SUB-CLASS I.—Exploitation of animals and vegetation ..	11	628	747	693	721	629
SUB-CLASS II.—Exploitation of minerals ..	1	2	2	✓	..	..
SUB-CLASS III.—Industry ..	303	157	65	105	126	105
SUB-CLASS IV.—Transport ..	91	15	25	17	16	16
SUB-CLASS V.—Trade ..	181	67	55	57	62	99
SUB-CLASS VI.—Public Force ..	12	5	4	9	12	8
SUB-CLASS VII.—Public Administration ..	16	14	11	21	16	15
SUB-CLASS VIII.—Professions and Liberal Arts ..	29	26	13	14	16	17
SUB-CLASS IX.—Persons living principally on their income ..	9	5	3	3	1	2
SUB-CLASS X.—Domestic service ..	52	16	8	9	5	31
SUB-CLASS XI.—Insufficiently described occupations ..	284	56	62	53	8	55
SUB-CLASS XII.—Unproductive ..	11	9	5	19	17	23

Subsidiary Table No. 133.—Distribution of the agricultural, industrial, commercial,

District and Natural Division.	Agricultural (Order 1 (a) I (b))				Industry (including mines) Sub-Class II and III.			
	Population supported by Agriculture.	Proportion of agricultural population per 1,000 of District Population.	Percentage on agricultural population of—		Population supported by Industry.	Proportion of industrial population per 1,000 of District population.	Percentage on industrial popu- lation of—	
			Actual workers.	Dependants.			Actual Workers.	Dependants.
1	2	3	4	5	6	7	8	9
Bombay City	9,470	8	65	35	357,120	304	65	35
Gujarat	1,777,949	601	44	56	470,661	159	45	55
Ahmedabad	370,045	415	41	59	222,476	250	47	53
Broach	202,573	658	43	57	43,391	141	47	53
Kaira	511,268	719	40	60	68,776	97	41	59
Panch Mahals	294,875	787	49	51	24,194	65	44	56
Surat	399,188	592	46	54	111,824	166	44	56
Konkan	2,148,502	709	52	48	201,229	66	48	54
Bombay Suburban	25,603	168	52	48	31,101	203	56	44
Thana	570,210	750	47	43	38,621	51	50	50
Kanara	265,838	662	52	48	40,232	160	49	51
Kolaba	414,768	737	52	48	28,061	50	47	53
Ratnagiri	872,083	756	49	51	63,214	55	38	62
Deccan	4,113,824	679	42	58	639,718	106	43	57
Ahmednagar	492,029	673	40	51	78,169	107	48	52
Khandesh East	765,085	711	38	62	94,883	88	39	61
Khandesh West	469,664	732	42	58	42,433	66	44	56
Nasik	546,028	656	39	61	83,837	101	40	60
Poona	565,330	560	43	57	117,049	116	42	58
Satara	818,218	597	40	60	93,486	90	42	58
Sholapur	457,472	617	44	56	129,861	107	46	54
Karnatak	1,934,466	694	44	56	351,665	126	49	51
Belgaum	682,789	716	41	59	106,121	111	47	53
Bijapur	563,714	707	47	53	101,466	127	52	48
Dharwar	687,963	663	45	55	144,078	139	48	52
Sind	1,895,652	578	35	65	342,156	104	49	51
Hyderabad	325,352	585	39	61	71,711	121	44	56
Karachi	198,218	366	32	68	65,650	121	45	55
Larkana	406,633	680	36	64	41,557	69	43	57
Navabshah	287,112	686	38	62	35,898	86	40	60
Sukkur	261,241	572	34	66	64,933	127	40	60
Thar and Parkar	240,075	606	35	65	47,348	119	45	55
Upper Sind Frontier	177,021	736	37	63	15,059	62	44	56
All Cities	55,521	25	50	50	718,518	328	56	44

and professional population in Natural Divisions and Districts, 1921.

Commerce. Sub-Class IV and V.				Professions. Sub-Class VIII.				Others.			
Population supported by Commerce.	Proportion of commercial population per 1,000 of District Population.	Percentage on commercial population of		Population supported by professions.	Proportion of professional population per 1,000 of District Population.	Percentage on professional population of		Population supported by others.	Proportion of others population per 1,000 of District Population.	Percentage on other population of	
		Actual Workers.	Dependents.			Actual workers.	Dependents.			Actual workers.	Dependents.
10	11	12	13	14	15	16	17	18	19	20	21
320,657	273	56	44	33,713	29	49	51	454,954	387	62	38
242,647	82	35	65	77,410	26	40	60	380,132	128	48	52
99,282	113	37	63	25,836	29	43	57	173,272	194	46	54
23,355	76	39	61	8,720	21	46	60	29,706	97	46	54
31,421	44	33	67	18,585	26	39	61	80,932	114	50	50
21,671	58	33	67	5,719	15	40	60	28,401	76	49	51
66,918	99	34	66	18,550	23	37	63	64,871	101	61	39
243,719	80	45	55	39,838	13	38	62	398,326	131	55	45
32,131	211	49	51	3,160	21	38	62	60,845	398	58	42
51,713	69	49	51	5,911	8	41	59	93,461	123	56	44
42,880	107	48	52	8,700	22	42	58	44,077	109	54	46
40,596	72	55	45	7,154	13	36	64	72,308	128	62	38
76,399	66	34	66	14,913	13	35	65	127,635	111	50	50
444,499	73	41	59	84,509	14	39	61	776,560	106	43	57
55,874	76	46	54	10,321	14	46	54	95,159	131	54	46
79,045	73	43	57	12,285	11	40	60	124,539	116	50	60
48,736	76	45	55	8,954	14	39	61	72,060	112	52	48
81,485	98	40	60	9,835	12	37	63	111,391	134	48	52
91,201	90	39	61	21,382	21	37	63	214,069	212	51	49
36,233	287	33	62	10,409	10	42	58	67,913	66	48	52
51,925	70	39	61	11,323	15	39	61	91,429	123	49	51
216,770	78	45	55	44,163	16	41	59	239,732	86	61	39
64,678	68	46	54	14,836	16	42	58	84,572	89	61	39
56,819	71	48	52	12,593	16	41	59	62,284	78	63	37
95,273	92	43	57	16,734	16	40	60	92,876	90	60	40
378,696	115	38	62	55,218	17	41	59	607,655	185	17	83
56,130	98	37	63	8,594	15	41	59	111,663	195	53	47
98,554	172	43	57	12,846	24	39	61	106,797	308	50	50
60,594	101	38	62	8,774	15	40	60	80,402	134	48	52
38,848	81	35	65	5,036	12	38	62	51,766	124	49	51
73,669	144	34	66	13,916	27	41	59	96,533	189	44	56
31,498	79	98	2	3,628	9	52	48	73,782	186	52	48
19,403	81	38	62	2,424	10	40	60	26,712	111	50	50
537,917	246	49	51	80,272	37	42	58	796,549	364	57	43

*Subsidiary Table No. 134.—Occupations of Females by sub-classes and selected orders and groups.
For British Districts only.*

Group No.	Occupation.	Number of actual workers.		Number of females per 1,000 males.
		Males.	Females.	
1	2	3	4	5
1/18	SUB-CLASS I.—EXPLOITATION OF ANIMALS AND VEGETATION.	3,672,858	1,793,846	488
1/16	Order 1.—Pasture and Agriculture	3,623,270	1,780,634	481
1/4 & 5	(a) Ordinary cultivation	3,397,599	1,742,738	513
1	Income from rent of agricultural land	152,382	62,230	508
2	Ordinary cultivators	2,570,551	925,989	360
4 & 5	Farm servants and field labourers	671,560	754,150	1,123
6/7	(b) Growers of special products and market gardening	9,617	2,236	233
8/10	(c) Forestry	14,836	4,347	293
11/14	(d) Raising of farm stock	205,754	31,302	152
17	Order 2.—Fishing and Hunting	42,020	12,717	303
19/24	SUB-CLASS II.—EXPLOITATION OF MINERALS	5,024	2,475	493
25/103	SUB-CLASS III.—INDUSTRY	834,709	283,367	339
25/38	Order 6.—Textiles	299,929	141,069	470
25	Cotton ginning, cleaning and pressing	14,456	14,642	1,013
26	Cotton spinning	96,868	20,223	552
27	Cotton sizing and weaving	186,921	64,902	347
29	Rope, twine and string making	11,464	8,689	758
30	Workers in other fibres (coir, aloë, flax, hemp, straw, etc.)	3,387	2,277	672
31	Wool carding and spinning	1,182	4,589	3,884
32	Weaving of woollen blankets	6,038	3,156	523
33	Weaving of woollen carpets	576	613	1,064
34	Silk spinners	1,184	8,844	7,470
35	Silk weavers	4,041	1,663	412
39	Tanners, curriers, leather dressers, and leather dyers, etc.	12,268	3,223	263
43/45	Order 8.—Wood	100,546	18,935	188
43	Sawyers	5,909	553	94
44	Carpenters, turners and joiners, etc.	81,504	4,791	59
45	Basket makers and other industries of woody material, including leaves, thatchers and builders working with bamboo, reeds and similar materials	13,133	13,591	1,035
46	Forging and rolling of iron and other metals	4,683	337	72
52/57	Order 10.—Ceramics	40,187	20,629	514
55	Potters and earthen pipe and bowl makers	29,760	15,983	537
65/75	Order 12.—Food Industries	30,988	27,829	898
65	Rice pounders and huskers and flour grinders	4,696	17,517	3,730
75	Manufacturers of tobacco, opium and ganja	2,702	4,605	1,704
76/82	Order 13.—Industries of dress and the toilet	138,686	29,881	215
77	Tailors, milliners, dress makers, darners and embroiderers on linen	38,432	10,466	272
78	Shoe, boot and sandal makers	36,860	6,935	188
80	Washing, cleaning and dyeing clothes (see Group 37)	21,371	10,642	497
81	Barbers, hairdressers, and wig makers	40,948	1,552	38
85/89	Order 15.—Building Industries	71,238	17,926	252
87	Stone cutters and dressers	14,924	4,661	312
88	Brick layers and masons	33,029	5,298	160
94/103	Order 18.			
98	Workers in precious stones and metals, enamellers, imitation jewellery makers, gilders, etc.	41,077	2,120	52
103	Sweepers, scavengers, etc.	14,005	8,134	581
104/120	SUB-CLASS IV.—TRANSPORT	181,843	20,649	114
105/110	Order 20.—Transport by Water	53,544	1,985	37
111/117	Order 21.—Transport by Road	38,756	9,407	243
113	Owners, managers and employees (excluding personal servants) connected with mechanically driven vehicles (including trams).	2,300	71	31

Group No.	Occupation.	Number of actual workers.		Number of females per 1,000 males.
		Males.	Females.	
1	2	3	4	5
	SUB-CLASS IV.—TRANSPORT—<i>contd.</i>			
	Order 21.—Transport by road—<i>contd.</i>			
114	Owners, managers and employees (excluding personal servants) connected with other vehicles	12,230	611	50
117	Porters and messengers	5,080	2,470	486
118	Railway employees of all kinds other than labourers and coolies	53,326	3,995	75
121/154	SUB-CLASS V.—TRADE			
121	Order 24.—Banks, establishments of credit, exchange and Insurance.	473,637	124,273	262
121	Bank Managers, money-lenders, exchange and insurance agents, money changers and brokers and their employees	23,456	2,847	121
123	Order 26.—Trade in textiles			
123	Trade in piece goods, and textiles of wool, cotton, hair, silk and other fabrics	38,895	2,909	75
131/139	Order 33.—Other trade in food-stuffs	173,242	70,791	409
131	Fish dealers	8,653	18,704	2,162
132	Grocers and sellers of vegetable oil, salt and other condiments	45,730	12,803	280
133	Sellers of milk, butter, ghee, poultry, eggs, etc.	19,068	6,387	335
135	Cardamom, betel-leaf, vegetables, fruit and areca nut sellers	33,897	16,505	489
139	Dealers in hay, grass and fodder	5,734	5,982	1,043
147	Order 38.—Trade in fuel			
147	Dealers in firewood, charcoal, coal, cowdung cakes, etc.	16,066	19,161	1,193
155/160	SUB-CLASS VI.—PUBLIC FORCE	77,502	4,029	52
161/164	SUB-CLASS VII.—PUBLIC ADMINISTRATION			
	Order 45.—Public Administration	114,469	12,817	112
164	Village officials and servants other than watchmen	38,494	7,641	198
165/179	SUB-CLASS VIII.—PROFESSIONS AND LIBERAL ARTS	117,372	19,004	162
165/168	Order 46.—Religion	43,682	8,739	200
166	Religious mendicants, inmates of monasteries, etc.	20,125	4,452	221
	Order 48.—Medicine	11,001	3,339	304
172	Midwives, vaccinators, compounders, nurses, masseurs, etc.	2,325	2,538	1,094
180	SUB-CLASS IX.—PERSONS LIVING PRINCIPALLY ON THEIR INCOME	18,782	5,146	274
181/183	SUB-CLASS X.—DOMESTIC SERVICE	122,615	49,707	487
184/187	SUB-CLASS XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS.			
	Order 53.—General terms which do not indicate a definite occupation	467,018	167,407	358
185	Cashiers, accountants, book-keepers, clerks and other employees in unspecified offices, warehouses and shops	116,390	7,293	63
187	Labourers and workmen otherwise unspecified	322,310	157,318	473
188/191	SUB-CLASS XII.—UNPRODUCTIVE	101,140	63,245	625
	Order 55.—Beggars, vagrants, prostitutes, etc.	80,226	54,845	684
189	Beggars and vagrants	79,488	38,982	490
		79,143	38,884	491

Subsidiary Table No. 135.—Distribution of Industries and Persons employed.

GENERAL DISTRIBUTION OF INDUSTRIES AND PERSONS EMPLOYED.																
Industrial Establishment.	Total number of establishments.	Districts where chiefly located.	NUMBER OF PERSONS EMPLOYED.												Number of adult females employed per 1,000 adult males.	Number of children of both sexes employed per 1,000 adults.
			Total.	Direction, supervision and clerical.				Skilled workmen.	Unskilled labourers.							
				Europeans and Anglo-Indians.		Indians.			Adults.		Children.					
				Males.	Females.	Males.	Females.		Males.	Females.	Males.	Females.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I.—Growing of special products.	3	Poona, Belgaum and Sukkur.	74	2	..	..	13	..	4	..	56	2	1	..	27.4	13.3
II.—Mines ..	5	Surat, Cutch, Kathiawar	326	163	..	..	26	..	135	6	129	126	36	31	455.2	158.8
III.—Quarries of hard rocks.	24	Kaira, Surat, Thana, Poona, Kathiawar, Mahikantha.	1,316	275	1	..	146	..	246	2	849	240	74	33	199.7	94.2
IV.—Textiles and connected Industries.	818	All British Districts except Ratnagiri, Larkana and Upper Sind Frontier and all Bombay States and Agencies except Bhore, Savantvadi.	216,994	65,042	281	..	10,994	8	105,332	22,725	91,774	36,824	8,413	3,485	295.3	52.4
Spinning Mills or factories.	17	Bombay, Ahmedabad, Kaira, Belgaum.	10,177	4,989	14	..	383	..	4,542	1,823	4,284	2,696	954	570	481.7	118.9
Spinning and Weaving Mills or factories.	125	Bombay, Ahmedabad, Broach, Kaira, Surat, Thana, Khandesh East, Poona, Sholapur, Dharwar, Cambay, Kathiawar.	179,475	49,813	208	..	7,656	2	92,362	20,236	72,616	27,167	6,633	2,408	272.7	48.9
Weaving Mills or factories.	2	Bombay, Ahmedabad ..	2,342	474	..	..	87	..	1,340	39	916	455	..	..	203.7	9.7
Woollen Mills..	1	Bombay ..	712	94	1	..	20	..	48	..	643	94	..	..	132.6	3.7
Bleaching, Washing and Dyeing Works.	2	Bombay ..	924	127	5	..	51	..	92	..	776	127	..	..	138.3	5.7
V.—Leather, etc., Industries.	44	Bombay, Panch Mahals, Thana, Ahmednagar, Poona, Belgaum, Hyderabad, Karachi, Kathiawar, Revakantha Southern Mahratta Country States.	1,804	155	15	..	152	..	423	14	1,104	135	110	6	87.8	75.8
VI.—Wood, etc., Industries.	36	Bombay, Kaira, Panch Mahals, Thana, Bijapur, Kanara, Cambay, Kathiawar, Revakantha, Surat Agency.	1,663	105	6	..	186	..	522	2	921	101	28	2	63.5	24.3
VII.—Metal Industries.	196	Bombay, Ahmedabad, Kaira, Surat, Thana, Nasik, Poona, Sholapur, Belgaum, Dharwar, Kanara, Ratnagiri, Karachi, Sukkur, Cutch, Kathiawar, Revakantha, Bhore, Southern Mahratta Country States, other States in the Presidency Proper, Khairpur.	26,450	471	249	..	1,324	8	12,392	17	12,049	437	436	9	17.8	18.8
His Majesty's Mint.	1	Bombay ..	591	..	23	..	39	..	335	..	194	..	..	..	..	12
Engineering Workshops.	2	Bombay ..	1,227	..	14	..	41	..	721	..	461	..	..	..	..	..
Arsenals ..	1	Poona ..	1,798	42	10	..	8	..	536	..	1,040	42	104	..	24.8	59.9
Metal Workshops.	3	Bombay ..	10,516	8	88	..	297	3	5,091	..	6,040	5	..	..	8	5
Iron Works or factories.	1	Nasik ..	875	23	3	..	7	..	312	..	496	23	57	..	28.1	67.8
Tin factories	2	Bombay ..	1,170	85	6	..	51	..	279	6	834	79	..	..	72.7	8
VIII.—Glass and Earthenware Industries.	170	Bombay, Kaira, Surat, Thana, Khandesh East, Khandesh West, Poona, Sholapur, Dharwar, Belgaum, Kanara, Kolaba, Hyderabad, Larkana, Karachi, Sukkur, Kathiawar, Revakantha, other States in the Presidency Proper.	7,819	3,206	10	..	710	..	1,521	185	4,813	2,577	765	444	393.9	131.7
Brick and Tile factories.	1	Thana ..	531	92	..	..	32	..	140	2	355	80	4	10	155.6	23

GENERAL DISTRIBUTION OF INDUSTRIES AND PERSONS EMPLOYED.																
Industrial Establishment.	Total number of establishments.	Districts where chiefly located.	NUMBER OF PERSONS EMPLOYED.												Number of adult females employed per 1,000 adult males.	Number of children of both sexes employed per 1,000 adults.
			Total.		Direction, supervision and clerical.				Skilled workmen.		Unskilled labourers.					
					Europeans and Anglo-Indians.		Indians.				Adults.		Children.			
			Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.		
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
IX.—Industries connected with Chemical Products.	268	Bombay, Northern Division except Broach and Kaira, Central Division except Ahmednagar and Satara, Southern Division, Karachi, Kathiawar, Mahikantha, Revakantha, Kolhapur and Sangli.	16,406	3,460	126	..	1,962	..	5,097	886	8,611	2,468	610	106	212.4	55.1
Oil Mills ..	1	Bombay ..	522	..	10	..	52	..	42	..	417	..	1	..	..	1.9
Salt Refineries	8	Ahmedabad, Surat, Thana.	1,920	1,147	1	..	120	..	1,172	660	611	486	16	1	607.5	38.6
Aerated water factories.	1	Bombay ..	933	50	14	..	98	..	270	2	571	48	..	..	52.5	..
Ammunition factories.	1	Poona ..	2,001	..	1	..	630	..	561	..	1,475	..	324	..	..	121.5
Paper Mills ..	1	Poona ..	181	240	..	..	41	..	18	..	117	218	10	22	1,274.9	82.3
X.—Food Industries.	444	Bombay, Northern Division, Central Division except Khandesh East and Satara, Southern Division except Kanara, Sind except Navabshah, Thar and Parkar, Kathiawar, Revakantha, Mahikantha, Surat Agency, Sawantwadi, Sangli.	10,354	2,254	53	..	1,538	4	1,880	515	6,728	1,671	155	64	214	20.5
XI.—Industries of Dress.	41	Bombay, Ahmedabad, Poona, Sholapur.	1,608	45	165	10	179	16	548	..	360	19	56	..	31	104.9
XII.—Furniture Industries.	43	Bombay, Surat, Thana, Poona, Sholapur, Belgaum, Kolaba, Ratnagiri, Karachi, Sawantwadi, Southern Mahratta Country States.	2,020	12	8	..	198	2	1,036	..	740	0	38	1	5.7	44.7
XIII.—Industries connected with buildings.	24	Kaira, Panch Mahals, Surat, Thana, Poona, Kolaba, Sukkur, Kathiawar.	2,860	1,002	3	..	157	..	198	2	2,225	841	283	159	328	133.3
Lime Works and Kilns.	1	Thana ..	337	118	..	..	5	..	..	..	308	106	24	12	338.7	85.9
Cement factories.	1	Kathiawar ..	357	69	2	..	36	..	65	..	254	69	..	..	193.3	..
XIV.—Construction of Means of Transport and Communication.	128	Bombay, Ahmedabad, Broach, Thana, Khandesh West, Nasik, Poona, Sholapur, Belgaum, Dharwar, Karachi, Sukkur, Thar and Parkar, Cutch, Kathiawar, Southern Mahratta Country States.	19,842	161	245	5	995	1	10,603	..	7,824	155	175	..	8.2	12.3
Railway Workshops.	5	Bombay, Poona, Dharwar, Karachi.	6,123	12	25	..	98	..	3,470	..	2,461	12	69	..	2	11.5
Ship Yards	1	Bombay ..	708	4	5	..	17	..	563	..	123	4	..	..	5.7	..
Tramway Workshop.	1	Bombay ..	1,152	..	3	..	7	..	621	..	521	..	..	..	..	..
XV.—Production, application and transmission of Physical Forces.	31	Bombay, Ahmedabad, Thana, Poona, Kolaba, Hyderabad, Karachi, Sukkur, Kathiawar, Mahikantha, Revakantha	3,228	79	71	3	285	..	1,532	..	1,307	72	33	4	23.5	11.3
Electric Store and repair Workshops	3	Bombay, Poona, Kolaba.	1,286	66	12	..	66	..	848	..	335	62	28	4	49.3	24.2
XVI.—Industries of Luxury.	145	Bombay, Ahmedabad, Broach, Thana, Poona, Belgaum, Dharwar, Kanara, Kolaba, Hyderabad, Karachi, Sukkur, Kathiawar, Revakantha, Sawantwadi, Kolhapur, Khairpur.	9,325	91	68	3	1,077	23	5,310	19	2,670	46	200	..	9.9	34.4
Printing Presses.	3	Bombay, Poona, Karachi.	2,036	4	16	..	156	3	1,065	1	793	..	6	..	2	5.4

Subsidiary Table No. 136.—Particulars of Establishments employing 20 or more persons in 1911 and 1921.

Establishments employing 20 or more persons.	INDUSTRIES.																
	All Industries.	I.—Growing of special products.	II.—Mines.	III.—Quarries of hard rocks.	IV.—Textiles and connected industries.	V.—Leather, etc., Industries.	VI.—Wood, etc., Industries.	VII.—Metal Industries.	VIII.—Glass and earthenware Industries.	IX.—Industries connected with chemical products.	X.—Food Industries.	XI.—Industries of dress.	XII.—Furniture Industries.	XIII.—Industries connected with Buildings.	XIV.—Construction of means of transport and communication.	XV.—Production, application and transmission of physical forces.	XVI.—Industries of Luxury.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A.—Total Establishments—																	
1921 ..	1,596	3	5	21	568	32	29	122	111	193	205	35	30	16	107	26	95
1911 ..	798	..	4	..	497	26	6	43	27	14	60	6	9	..	31	8	61
(i) Directed by Government or Local authorities—																	
1921 ..	96	..	1	1	3	..	2	11	1	13	18	..	..	..	32	4	10
1911 ..	9	..	..	..	2	..	1	1	..	..	..	..	..	..	1	..	4
(ii) Directed by Registered companies—																	
1921 ..	305	..	1	1	193	1	..	19	1	24	9	3	1	2	28	12	10
1911 ..	347	..	4	..	256	2	2	13	1	6	19	1	1	..	21	5	16
(iii) Owned by private persons—																	
(a) Europeans or Anglo-Indians—																	
1921 ..	110	..	..	..	27	3	2	5	2	16	8	10	1	1	21	4	10
1911 ..	20	..	..	..	1	..	..	7	..	1	..	1	1	..	3	1	5
(b) Indians—																	
1921 ..	1,048	3	3	19	335	27	25	85	100	134	167	21	25	13	23	6	62
1911 ..	422	..	..	..	238	24	3	22	26	7	47	4	7	..	6	2	36
(c) Others—																	
1921 ..	37	..	..	..	8	1	..	2	7	6	3	1	3	..	3	..	3
1911 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B. Number of persons employed—																	
(a) Direction, supervision and clerical—																	
1921 ..	18,989	10	21	120	10,157	102	146	1,301	1,762	1,712	747	318	155	84	1,116	313	925
1911 ..	12,385	..	50	155	7,568	62	71	819	88	366	533	195	91	117	933	105	1,232
(b) Skilled workmen—																	
1921 ..	1,70,940	4	141	236	1,26,407	381	507	11,796	6,784	5,613	1,524	780	920	56	10,405	1,506	4,830
1911 ..	1,55,496	..	69	896	1,23,619	752	333	5,928	184	1,421	758	1,046	366	35	14,222	834	5,038
(c) Unskilled labourers—																	
1921 ..	1,98,563	59	322	1,174	1,41,233	1,248	983	12,603	11,244	7,156	6,415	412	726	2,748	8,086	1,377	2,777
1911 ..	1,02,433	..	926	2,765	66,982	1,204	433	5,057	2,879	3,270	3,702	571	138	4,018	6,776	988	2,724
(d) Adult women per 1,000 adult men—																	
1921 ..	334	36	977	279	423	133	116	36	280	561	171	52	9	370	200	57	18
1911 ..	337	..	342	447	459	436	97	55	420	81	277	313	..	312	23	16	85
(e) Children (of both sexes) per 1,000 adult—																	
1921 ..	81	17	263	100	92	83	30	33	61	106	25	135	37	106	21	28	67
1911 ..	143	..	53	11	172	56	234	67	168	313	63	126	87	101	13	..	115

Subsidiary Table No. 137.—Organisation of Establishments.

Type of Organisation.	INDUSTRIAL ESTABLISHMENTS.																
	Total Establishments.	I.—Growing of special products.	II.—Mines.	III.—Quarries of hard rocks.	IV.—Textiles and connected industries.	V.—Leather, etc., Industries.	VI.—Wood, etc., Industries.	VII.—Metal Industries.	VIII.—Glass and earthenware Industries.	IX.—Industries connected with chemical products.	X.—Food Industries.	XI.—Industries of dress.	XII.—Furniture Industries.	XIII.—Industries connected with Building.	XIV.—Construction of means of transport and communication.	XV.—Production, application and transmission of physical forces.	XVI.—Industries of Luxury.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Under the Local Government or Local authority.	96	..	1	1	3	..	2	11	1	13	18	..	..	..	32	4	10
Registered Companies.	305	..	1	1	193	1	..	19	1	24	9	3	1	2	38	12	10
(a) With European or Anglo-Indian Directors	77	..	..	1	17	..	..	14	1	10	1	..	1	..	26	4	2
(b) With Indian Directors	185	..	..	..	153	1	..	5	..	13	1	1	..	1	1	3	6
(c) With Directors of different races..	43	..	1	..	23	..	..	..	..	1	7	2	..	1	1	5	2
2. Privately owned	2,038	3	3	22	622	43	34	166	187	231	417	38	43	22	68	15	125
(a) By Europeans or Anglo-Indians..	112	..	..	..	27	3	2	5	2	16	8	10	1	1	21	6	10
(b) By Indians	1,556	3	3	22	486	37	24	105	148	152	367	21	37	12	32	7	88
(c) By joint owners of different races.	350	..	..	..	107	3	8	56	37	63	42	7	4	9	15	2	27

Subsidiary Table No. 138.—Place of origin of skilled workmen employed in Industrial Establishments using mechanical power.

Birth-place.	Total number of workmen.	INDUSTRIAL ESTABLISHMENTS.															
		I.—Growing of special products.	II.—Mines.	III.—Quarries of hard rocks.	IV.—Textiles and connected industries.	V.—Leather, etc., Industries.	VI.—Wood Industries.	VII.—Metal Industries.	VIII.—Glass and earthenware Industries.	IX.—Industries connected with chemical products.	X.—Food Industries.	XI.—Industries of dress.	XII.—Furniture Industries.	XIII.—Industries connected with Building.	XIV.—Construction of means of transport and communication.	XV.—Production, application and transmission of physical forces.	XVI.—Industries of Luxury.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
GRAND TOTAL	154,871	3	..	54	125,313	151	393	11,853	409	1,494	916	64	241	34	3,044	1,522	4,321
I.—In the Province or State	128,123	1	..	48	105,702	98	358	9,511	320	1,227	780	24	196	79	5,153	1,153	3,528
(i) District of Employment	37,451	1	..	22	28,744	21	141	2,971	99	610	421	4	74	69	2,550	292	1,423
(ii) Other Districts	90,677	..	..	26	76,958	77	217	6,540	221	617	309	20	122	10	2,594	861	2,105
II.—Outside the Province	26,200	1	..	6	19,584	53	32	2,084	89	227	186	37	38	5	2,735	371	772
(i) Baroda	5,210	..	..	..	5,042	..	2	87	1	9	13	1	1	..	29	3	22
(ii) Mysore	204	..	..	..	99	..	2	15	..	1	..	1	1	..	60	3	2
(iii) Hyderabad	3,467	..	..	..	3,172	..	1	139	2	8	1	2	..	..	87	24	31
(iv) Central Provinces and Berar	2,012	..	..	2	1,815	..	..	62	31	5	1	..	1	2	67	9	17
(v) Rest of India	15,807	1	..	4	9,436	53	27	1,781	56	204	171	33	35	3	2,472	332	700
III.—Outside India	543	..	..	..	47	..	3	258	..	40	..	3	7	..	156	8	21

CHAPTER XII.—OCCUPATIONS.

Subsidiary Table No. 139.—Place of origin of unskilled labourers employed in Industrial Establishments (using mechanical power).

Birth-place.	Total number of workmen.	I.—Growing of special products.	II.—Mining.	III.—Quarries of hard rock.	IV.—Textiles and connected Industries.	V.—Leather, etc., Industries.	VI.—Wood Industries.	VII.—Metal Industries.	VIII.—Glass and earthenware Industries.	IX.—Industries connected with chemical products.	X.—Food Industries.	XI.—Industries of dress.	XII.—Furniture Industries.	XIII.—Industries connected with building.	XIV.—Construction of means of transport and communication.	XV.—Production, application and transmission of physical forces.	XVI.—Industries of luxury.
		Persons.	Persons.	Persons.	Persons.	Persons.	Persons.	Persons.	Persons.	Persons.	Persons.	Persons.	Persons.	Persons.	Persons.	Persons.	Persons.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
GRAND TOTAL ..	1,77,615	80	..	159	140,883	241	898	12,451	2,013	8,351	4,537	113	245	348	5,506	1,416	2,426
I.—In the Province or State ..	1,48,171	5	..	121	119,301	64	829	9,940	1,777	5,325	3,316	95	234	338	3,867	1,020	1,941
(i) District of employment ..	46,969	2	..	22	35,678	20	263	2,311	516	2,549	2,180	26	51	320	2,043	300	693
(ii) Other Districts ..	101,202	3	..	99	83,623	44	566	7,629	1,261	2,776	1,136	69	183	16	1,824	720	1,253
II.—Outside the province ..	29,356	15	..	38	21,539	176	53	2,511	234	1,023	1,220	17	11	11	1,637	396	475
(i) Baroda ..	5,578	..	..	..	5,324	..	1	22	116	35	34	2	..	4	20	3	8
(ii) Mysore ..	82	..	..	1	43	4	2	10	..	3	1	..	..	..	15	..	3
(iii) Hyderabad ..	2,797	..	..	1	2,524	..	14	116	..	84	31	..	4	..	35	0	29
(iv) Central Provinces and Berar ..	2,155	..	..	35	1,004	6	..	239	..	85	116	..	..	1	48	7	14
(vi) Rest of India ..	18,744	15	..	1	12,044	166	36	2,124	113	866	1,038	15	7	0	1,510	377	421
III.—Outside India ..	88	..	..	..	43	1	14	10	2	3	1	1	..	1	2	..	10

Subsidiary Table No. 140.—Distribution of certain races in certain Industrial Establishments.

Race or Caste.	INDUSTRIAL ESTABLISHMENTS.																	
	Total.		I.—Growing of special Products.		II.—Miners.		III.—Quarries of hard rocks.		IV.—Textiles and connected Industries.		V.—Leather, etc., Industries.		VI.—Wood Industries.		VII.—Metal Industries.		VIII.—Glass and Earthenware Industries.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Total Europeans and Anglo-Indians	1,872	22	..	..	..	..	1	..	800	..	15	..	6	..	830	..	10	..
Number employed as—																		
(a) Managers	274	..	..	..	..	..	1	..	77	..	4	..	2	..	40	..	3	..
(b) Supervising staff	950	10	..	..	..	..	..	..	196	..	6	..	4	..	177	..	4	..
(c) Clerical staff	177	11	..	..	..	..	..	..	8	..	5	..	..	..	22	..	3	..
(d) Skilled workmen	371	1	..	..	..	..	..	..	10	..	..	..	..	..	81	..	..	..

Race or Caste.	INDUSTRIAL ESTABLISHMENT.															
	IX.—Industries connected with Chemical Products.		X.—Food Industries.		XI.—Industries of Dress.		XII.—Furniture Industries.		XIII.—Industries connected with Buildings.		XIV.—Construction of means of Transport and Communication.		XV.—Production, application and transmission of Physical Forces.		XVI.—Industries of Luxury.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Total Europeans and Anglo-Indians	172	..	65	..	172	10	8	..	3	..	400	5	88	3	102	4
Number employed as—																
(a) Managers	21	..	23	..	11	..	1	..	2	..	52	..	18	..	19	..
(b) Supervising staff	99	..	27	..	63	10	3	..	1	..	180	..	46	..	44	..
(c) Clerical staff	6	..	8	..	91	..	4	..	..	..	13	5	7	3	5	3
(d) Skilled workmen	46	..	13	..	7	..	..	..	..	..	155	..	17	..	34	1

Subsidiary Table No. 141.—Proportional distribution of adult women and of children of each sex in different industries.

Women and Children.	PRINCIPAL INDUSTRIES OF EMPLOYMENT.																	
	Total number employed.	I.—Growing of special Products.	II.—Minus.	III.—Quarries of hard rocks.	IV.—Textiles and connected Industries.	V.—Leather, etc., Industries.	VI.—Wood, etc., Industries.	VII.—Metal Industries.	VIII.—Glass and Earthenware Industries.	IX.—Industries connected with Chemical Products.	X.—Food Industries.	XI.—Industries of Dress.	XII.—Furniture Industries.	XIII.—Industries connected with Buildings.	XIV.—Construction of means of Transport and Communication.	XV.—Production, application and transmission of Physical Forces.	XVI.—Industries of Luxury.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Adult women ..	72,179	2	18	34	8,528	20	14	64	383	465	803	6	2	117	22	10	13	
Children ..	15,957	06	4	6	758	7	2	28	76	45	14	4	2	28	11	2	13	
Male ..	11,612	..	4	6	644	6	2	24	64	38	12	3	2	24	9	2	10	
Female ..	4,344	..	..	..	114	1	..	4	12	7	2	1	..	4	2	..	3

CHAPTER XII.—OCCUPATIONS.

Subsidiary Table No. 142.—Distribution of Power.

Type of power used.	Total number of Establishments.	Total number of Establishments.															
		I.—Growing of special Products.	II.—Minas.	III.—Quarries of hard rocks.	IV.—Textiles and connected Industries.	V.—Leather, etc., Industries.	VI.—Wood Industries.	VII.—Metal Industries.	VIII.—Glass and Earthenware Industries.	IX.—Industries connected with Chemical Products.	X.—Food Industries.	XI.—Industries of Dress.	XII.—Furniture Industries.	XIII.—Industries connected with Buildings.	XIV.—Construction of means of Transport and Communication.	XV.—Production, application and transmission of Physical Forces.	XVI.—Industries of Luxury.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
GRAND TOTAL ..	1,294	1	..	3	598	7	29	140	15	88	232	2	7	2	64	31	85
Steam ..	747	1	..	1	461	3	16	52	6	33	123	1	3	1	28	8	10
Oil ..	293	..	..	2	73	3	7	42	9	29	77	..	2	..	13	5	31
Water ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gas ..	20	..	..	..	6	1	..	1	..	7	1	..	..	..	..	2	2
Electricity :—																	
(a) Generated in the premises ..	70	..	..	..	27	..	..	8	..	3	11	..	..	..	5	8	8
(b) Supplied from ..	164	..	..	..	31	..	6	37	..	16	10	1	2	1	18	8	34

APPENDICES.

The Appendices which follow, having, for the sake of speed, been sent to Press as each became ready, are not arranged in order of subjects corresponding to the order of the Chapters of the main Report. A list of Appendices will be found at the beginning of the Volume.

The Subsidiary Tables in the Appendices are distinguished by a series of small Roman numerals.

APPENDIX A.

VITAL STATISTICS OF CRIMINAL TRIBES IN SETTLEMENTS.

It having been observed in some cases that the concentration and settlement of nomad people had resulted in a marked increase in their mortality, owing to various factors connected with the change in their mode of living, the Census Commissioner asked Provincial Superintendents to obtain any information which they could concerning the health conditions and vital statistics of such concentrations as Criminal Tribes Settlements, which are under observation. Mr. O. H. B. Starte, O.B.E., the Criminal Tribes Settlement Officer, wrote to the Sanitary Commissioner on the subject, and Lt.-Col. W. O'S. Murphy, I. M. S., Sanitary Commissioner, kindly furnished the Table annexed, with the following remarks:—

Your total figures being small, the possibility of error is proportionately high. Combined figures have therefore been worked out and the rates for the local general population are shewn side by side for purposes of comparison. This brings out the fact that birth-rates of the Settlements with two exceptions are lower than those of the corresponding local general population. As regards death-rates, the Settlements individually and as a whole compare very favourably with the general population.

Other points of interest also shew up, e.g., the markedly high birth and low death-rates of Bijapur Settlement when contrasted with both the local population and the population of the other Settlements.

It is to be remembered that as regards births, there is a fair percentage of default in registration of the local areas. Presumably Birth registration is more thorough in the Settlements.

*Subsidiary Table No. (i)—Statement of actual population and actual Births and Deaths
figures in Criminal Tribes Settlements.*

Name of Settlement.	1919.			1920.			1919-1920 combined.		Comparison with the general population in those areas. 1919-1920.			
	Total popula- tion.	Total births.	Total deaths.	Total popula- tion.	Total births.	Total deaths.	Total births.	Total deaths.	Birth-rates.		Death-rates.	
									Settle- ment.	Local popula- tion.	Settle- ment.	Local popula- tion.
1. Bijapur ..	1,431	38	10	1,195	70	23	108	42	42.70	27.85	16.26	23.48
2. Hubli ..	741	31	11	1,351	35	33	66	44	33.87	29.76	19.63	37.49
3. Gokak-Falla ..	415	14	8	591	22	16	36	24	35.47	45.52	23.17	37.83
4. Sholapur ..	3,491	111	79	3,611	138	59	249	138	35.00	50.64	19.50	64.99
5. Bagalkot ..	431	6	4	390	15	6	21	10	22.26	36.31	10.76	34.63
6. Khanapur ..	492	9	9	476	7	20	16	29	16.51	33.39	30.24	28.03
7. Gadag ..	857	14	33	1,035	21	14	35	47	18.31	40.70	26.01	39.58
Total ..	7,858	223	163	8,749	308	171	531	334	31.79	..	20.14	..
Rates per Mille ..	..	28.38	20.74	..	35.20	19.54	..	..	..	..	..	..

It will be seen therefore that so far as this Presidency is concerned the effect of concentration of nomadic tribes in Settlements, so far from having a deleterious effect on their health has had quite the opposite effect. In this connection, however, it is important to remember that the tribes which are settled in this Presidency are not by any means thoroughly nomadic. Some, such as the Chapparbands, are not really nomadic in any sense. While others, such as the Ghantichors and Haranshikaris, though they may in ordinary life move about, are not necessarily men of the open road by choice, but by necessity. The Haranshikaris are probably allied to the Bhils, who are essentially not nomads. The real nomads of this Presidency are the people referred to in the Police Gazettes as the "so-called Sindhi Baluchi Gipsies", and a few very small castes such as the Kakars (referred to in the Language Chapter of this Report). And these people do not find their way into the Settlements.

APPENDIX B.

GLOSSARY OF OBSCURE LANGUAGE NAMES.

The official vernaculars of this Presidency are five. And, as the local Index issued to Supervisors contained 133 names, and should have contained about 140, had it not been for the omission through oversight of Kanarese and its synonyms, it might be imagined that it was a fairly complete list of the names that have ever been returned. This is far from being the case. There are 872 Indian Languages recognised by the Linguistic Survey. Dr. Grierson's Index of Language Names, Linguistic Survey of India, Calcutta, 1920, contains approximately 4,500 recorded names of Indian Languages and Dialects. Of course many of these are Burmese or Himalayan, and never have been, nor are ever likely to be, returned on this side of India. But the names actually returned in this Presidency since 1891 are probably nearer 250 than 133. It is a pity that Dr. Grierson, in compiling his Index, though using the Bombay Census Report of 1891, did not consult the Reports of the next two censuses. The Glossary which follows is merely a collection of random notes, intended to be supplementary to the Index referred to. It does not include all the obscure names mentioned in the Index as recorded in 1891. In particular it omits—(1) names, apparently misspellings, for which the Index itself suggests the equation, e.g. *Lahani* (1891, Khandesh & Panch Mahals), a misspelling for Labhani; (2) names on which it has not been found possible to throw any further light, e.g. *Meki* (1891, as a form of Hindi), *Khaked* (1891, from Kanara, as Dakhini Hindustani); and (3) names, not being misspellings which are fully explained in the Index, e.g. "*Kaliparaj*—a general name for the Bhil languages spoken in Gujarat." It includes—(1) names mentioned in the Index, on which it has been possible to throw some further light; (2) all names recorded in 1901 and 1911, and not entered in the Index; and (3) a few names of new Bhil dialects given to me by the Rev. Enoch Hedberg, D.Litt., of Dhanora, West Khandesh, to whom, as well as to various District Officers consulted from time to time, I am much indebted for assistance.

In order to save trouble in printing diacritical marks have not been used in the transliteration. The long *á* has been accented wherever there seemed to be danger of misunderstanding. But for the rest it has been assumed that only those will consult the Glossary who are likely to be able to judge what the diacritical transliteration of any name would be.

GLOSSARY.

Abbreviations.—ILN = Dr. Sir George Grierson's Index of Language Names, Linguistic Survey of India, Calcutta, 1920. BCR = Bombay Census Report. Lang. = language. Repd. = reported. Sp. = spoken. M. = Males. F. = Females. Ref. = Reference. Ethn. Survey Bom. = Ethnographic Survey of the Bombay Presidency.

ADVICHANCHL.—1911, Dharwar. M. 10; F. 10. Classified as Kanarese. Not in ILN. The Advichanchars or Haranshikaris are in the Karnatak the equivalent of the Páradhis or Phánse Páradhis of the North Deccan. The interrelation of these castes is obscure. Dr. Grierson classes Páradhi as a Bhil lang., but from the C. P. The Advichanchars' homespeech seems to be corrupt Kanarese. On this occasion I have let the language, if returned, be classed as Gipsy, as it is an unexamined language of a wandering tribe.

BAHURI.—1911, Bijapur. M. 28; F. 26. Classified as Gipsy. Not in ILN. *Báori* is given as a Bhil dialect spoken by a wandering criminal tribe of the Punjab, Rajputana and the U.P. What the Bijapur Bahuri would represent is quite uncertain.

BHANGSA'LL.—ILN gives—"Repd. 1891 BCR as a form of Kacchi. Not since identified." This will be the language of the Bhansális, a well known trading caste, almost confined to Cutch. It is therefore probably ordinary Kacchi.

BHA'TIA.—1901, Classified as Gujarati. ILN correctly classifies as Kacchi.

BHIMDL.—1911, Reva Kantha. M. 2; F. 2. Classified as Gipsy. Not in ILN. Not identified.

BHOJ.—1911, Surat Agency. M. 27; F. 0. Classified as Gujarati. Not in ILN. Reference to the Agency failed to identify any local language called by this name. *Bhojpuri* is an important dialect of Bihári, and spoken in the east of the U.P. Table XI of 1911 shows that 91 males and 18 females enumerated in the Surat Agency returned U.P. birth-places. So *Bhoj* is probably *Bhojpuri*.

CHAPPARBAND.—1911, Bijapur. M. 112; F. 140. Classified as Gipsy. Not in ILN. There is no Chapparband language. Like most thieves and other criminals they have an argot of their own. But the caste is of Northern origin. They talk either Hindustani or Kanarese.

CHITODI.—1891, Khandesh. 1911, East Khandesh. M. 29; F. 31. In both cases classed as Gipsy. ILN cites the 1891 reference and adds—"Not since identified." Reference to East Khandesh elicited the fact that *Chitodi* is spoken by "Chitode" Banyas, and is "Gujarati with a Marathi admixture." (Mr. B. W. Kissan, I.C.S. The description and locality seem to indicate Ahirani. It is clearly not Gipsy.

DHA'NKL.—ILN gives—"A Bhil lang. repd. in 1891 BCR as sp. in Khandesh and Ahmednagar. Not since identified." Acc. to information given me by Mr. A. M. Macmillan, I.C.S., the Dhánkars are a sub-caste of Bhils in the Raisinghpur estate of the Khandesh Mevas, and they have a dialect of their own. This will be the *Dhánki* of 1891.

DHORI.—1911, Reva Kantha, M. 33, F. O. Classified as Marathi. Not in ILN.
The 1911 classification was almost certainly wrong. The word *Dhori* was returned from the same region as a caste name in 1921, and is probably a tribal name of Bhils. If so, the correct classification would be as Bhili.

DOMBARI.—1891, Satara, (as "*Dhombary*"), classified as Gipsy. 1901, Khandesh (as "*Dombari*"), classified as Marathi. ILN gives *Dhombary*, citing the 1891 reference, and adding—"Not since identified," and also *Dombari* or *Dombhāri*—"Another name for Kolhāti."

Evidently the equation *Dhombary*=*Dombari* escaped the notice of the compiler of the ILN. According to Ethn. Survey Bom. the lang. of the Kolhatis or Dombars varies in different tracts. In Satara it is a mixture of Gujarati, Marathi and Hindustani; in Nagar, Poona and Nasik a mixture of Marathi, Gujarati, Kanarese and Hindustani; in other parts pure Marathi or pure Kanarese. On the other hand Kolhati is recognised in the Ling. Survey as a Gipsy language (Vol. XI in the Press).

DOMRA.—1911, East Khandesh, M. 18, F. O. Classified as Gipsy. ILN gives *Domra* as a Gipsy lang., but only in Bihar and the east of the U.P. Reference to East Khandesh failed to elicit any information. It is possible that this is the same as *Dombari* (q.v.). But on the other hand the position of East Khandesh renders it possible that strangers of the Dom tribe from Bihar were present at the 1911 Census.

GANDE.—ILN gives—"Repd. in 1891 BCR as a dialect of Marathi. Not since identified." The district was Nasik. As *gāndo* (cerebral d) is the Gujarati for "mad," *gāndi* would be the feminine, (sc. *Bhāshā*), and *gānde* the adverb. This may therefore possibly be a name given to the jibberish talked by some insane.

GARODI.—1911, *Gārodi* and *Māng Gārodi* amalgamated, North Deccan and Khandesh, M. 21, F. 29. Classified as Marathi. ILN recognises *Gārodi* as a Gipsy lang. (Vol. XI in the Press). Whether *Māng Gārodi* is the same is uncertain. The two castes never admit identity.

GAVALI.—1911, Nasik (105), Sholapur (1). Classified as Marathi. Not in ILN.
This may be Marathi, or possibly Ahirani.

GAVIDI.—ILN gives—"A Bhil language repd. in 1891 BCR as sp. in Khandesh. Not since identified." Dr. Enoch Hedberg sent me the following note on this. "*Gavid* or *Garti* is identical with *Gamti* or *Gamati*. The former name comes from the Marathi form and the latter from the Gujarati form of the word for a village, usually transliterated '*gaon*' or '*gaum*'. Or rather the second name comes from the Gujarati '*gamathi*,' i.e., 'native country.' The real name of this Bhil dialect is neither *Garti* nor *Gamti* but *Mavchi*, and this name is used both by the speakers themselves and by others both in Khandesh and in the Naosari Prant of Baroda. *Gavid* is the clan name of the largest *Murchi*-speaking '*kut*' or clan among the Bhils. And this is evidently the reason why the language has also sometimes been called *Garti* or *Gamti*. These names are however incorrect and should be discontinued. In the Linguistic Survey Report, Vol. IX, Part III, pp. 95-104 and 119-123, *Mavchi* and *Gamti* are treated as separate dialects. But even a superficial examination of the specimens given will show that they represent the same dialect. The name *Mavchi* is, I believe, derived from the Marathi word '*mavān*'—used of the 'setting' of a heavenly body, and especially the sun. If this interpretation is correct *Mavchi* means the language of the sunset people, that is of the people of the West."

GOLLA.—1911, Bijapur (115), Dharwar (60), ~~Kanara (3)~~. Classified as Telegu. Not in ILN.
Evidently the language of the Golla caste; and correctly identified, as the caste has an Andhra origin.

GUGLI.—ILN gives—"Repd. in 1891 Baroda CR as a form of Kacchi. Not since identified."
Evidently the language of the Gugli Brahmans, who are mostly localised at Dwarka, and cross into Cutch. They probably speak either ordinary Gujarati or ordinary Cutchi or both.

GUJARA.—1911, East Khandesh (295), West Khandesh (4). Classified as Gujarati. ILN gives Gujarati only as a name used for Gujarati in Cutch to distinguish it from Kacchi. The Gujar Kunbis and Gujar Vanis of Khandesh are probably descended from an early migration, and the language returned as *Gujara* is probably Ahirani. References to East Khandesh confirmed this view.

GURBI.—1911, Reva Kantha, M. 5, F. O. Classified as Gipsy. Not in ILN.
Not identified.

HARANSHIKARI.—1911, Bijapur (116), Dharwar (39). Classified as Kanarese. Not in ILN. Apparently the same as Advichanhi (q.v.).

HONGADI.—ILN gives—"A Gipsy lang. repd. from Satara in 1891 BCR. Not since identified." This is almost certainly *Kongadi*, which is a general name given in the South Deccan and Karnatak to any Dravidian language not locally understood (generally Tamil). *Kongadi* occurred in 1901 and 1911. See ILN (s.v. *Konga*).

JAND.—1901, Dharwar, M. 3, F. O. Classified as a dialect of Western Hindi. ILN only gives *Jand* (cerebrals), as a dialect of Punjabi.
The Dharwar return was probably some copyist's error.

KAHARI.—1901, Nagar, M. 32, F. 59. 1911, Nagar, M. 42, F. 47. On both occasions classified as Western Hindi. Not in ILN.

This is evidently the language of the Kahars, a small caste which exists mainly in the North Deccan. Mr. K. V. Joshi, Huzur Deputy Collector, Nagar, in whose own village Kahars reside, kindly supplied me with notes, from which it appears that these persons have tradition of a Bundelkhand origin. They are evidently the same as the Kahars of the Central India Agency, who were shown in the 1911 Tables of that region as numbering 56,835. Their language is therefore evidently a form of Bundeli, and the 1901 and 1911 classification was therefore correct.

KAHIRKI.—1911, Hyderabad, M. O, F. 2. Classified as Sindhi. Not in ILN.
Reference to Sind elicited the statement (Mr. Bheramal Mahirchand of Hyderabad) that the Kahars or Kahirs are a Gipsy tribe, and their language, which is "more allied to Balochi than to Sindhi" might be a Gipsy language. It is doubtful whether these are not the same as the Kahars mentioned s.v. Kahari, in which case their language would presumably be Western Hindi with a Sindhi admixture.

KAKARI.—ILN gives—"A dialect of Gujarati sp. by Kākars, scattered over the Bombay Deccan."
Kākars were returned as 122 in the 1891 Census, but not returned at all in 1901. Both the Ethn. Survey Bom. and the Ling. Survey say that they were originally Afghans of the Kākarsāhi Tribe, and came to India in the 18th Century, settling or wandering in Malva and Gujarat. This language name does not seem to have ever been returned either in 1891 or afterwards in the Bombay Census.

KARANDI.—1891, from Kanara, classified as Kanarese. 1901, from Satara, classified as in 1891. ILN cites the 1891 reference without further elucidation. May be the same as *Karantith* (q. v.), and *Karin*, also noted in ILN as repd. in 1891 B. C. R. as a form of Kanarese. Reference to the Kanara District failed to elucidate the point. Mr. P. B. Haigh, the Collector, suggests that both those names, as well as the next, may be mistakes for *Kannadi*. This is possible. *Kanadi* or *Kannadi* is derived from *Kare-nadu*, "the black province". The original language name would therefore be *Karnadi*. And *Karandi* is simply by metathesis.

KARANTITH.—ILN gives—"Repd. in 1891 BCR as a Gipsy language of Kanara."
Not since returned, and nothing is known. (v. sub *Karandi*).

KATARI.—1901, Kolaba, M. 121 F. 108. Classified as a Gipsy language. ILN gives—"Katari. A Gipsy language. The form of Marathi spoken by the *Kataris* of the Haveli Taluka of Poona." This is a contradiction in terms. The *Kataris* are turners and wood-carvers. As they were strong in Kolaba in 1901, the *Katari* of that year was probably returned by them. There is no reason to regard this as a Gipsy language, and the ILN gives no ref. to Vol. XI. From the Ethn. Survey Bom. it would seem that *Katari* is a caste with occupation as above in Kathiawar, but that the name is a trade name and not a caste name in the Deccan and Konkan. The *Kataris* probably therefore speak pure Marathi. But if they have any Gujarat origin they may use a home speech of impure Gujarati.

KATIYAI.—1911, Nasik, M. 3. F. 8. Classified as Rajastani. ILN gives *Katia* or *Katiyai* as a form of the C.P. dialect of Marathi sp. in Chindwara and Narsinghpur. Owing to the North-Eastern position of Nasik these *Katiyai* speakers might be speakers of the Marathi dialect mentioned. On the other hand there is the *Kattai* caste, a small caste of Mochis of upper India origin, found only in Nagar and Nasik, and their home speech might be Hindi. The *Katiyai* from Nasik might be the speech of these *Kattais*.

KAY'LI OR KA'YNI.—Cited by Dr. Hedberg as a Bhil dialect spoken in Shahada Taluka of West Khandesh. Probably identical with *KA'YALI* cited in Ling. Survey IX, Part III, p. 157, as known to be sp. in the Satpuras (estimated number of speakers 25,000) but no specimens available.

KAYASTHI.—1901 and 1911, from Cutch only. Classified on both occasions as Gujarati. ILN gives two languages named *Kayasthi*, (1) a name for the North-Konkan standard of Marathi, and (2) a form of Kacchi spoken in Cutch. The 1901 and 1911 returns from Cutch ought clearly to have been classified as Kacchi.

KHA'DI.—1911, Surat Dist. (30), Reva Kantha (5). Classified as Gipsy. Not in ILN.
Reference to Surat failed to elicit any information.

This may be the same as
KHODI. ILN—"Repd. in 1891 BCR as a form of 'Hindi' sp. in the Panch Mahals and Khandesh."
Nothing is known about either name.

KIRAD. ILN gives—"Repd. in 1891 BCR as a form of Urdu sp. in Poona."
As Kirad is the name of a very small trading caste, numbering in 1901 only 152, almost all in Poona, the language name was probably returned in 1891 by that caste. They are said to be immigrants from the U.P., and their home speech will therefore probably be one of the Hindis.

KOLAVANA. ILN gives—"Repd. in 1891 BCR as a form of Marathi sp. in Poona. Not since identified."
Probably nothing but Marathi spoken by Kolis from the Ghats.

KOLAVI. ILN gives—"A Gipsy language repd. in 1891 BCR as sp. in Sholapur."
Possibly this is *Korvi*. A few Koravas are usually found in the Central Deccan. *Koravi* or *Korvi*, the dialect of the Korchar Koravas, is classed by Dr. Grierson as a dialect of Tamil. See remarks in the para. on Gipsy languages in the body of the Report.

KORAGA.—Surat Agency, 1911, M. 40, F. O. Classified as Tulu. This is very obscure. ILN gives Koraga as a secret Dravidian language of South India, and Kodagu (cerebral d) or Coorgi as the language of Coorg. Reference to the Agency failed to assist. The chance of 40 speakers of either of the two languages mentioned being found in the Surat Agency in 1911 is very remote. On the other hand it is to be noted that the return was of males only. When a fairly considerable number of males are returned under any language name and no females it may usually be assumed that, whatever the language is, it is a language of immigrants (cf. Bhoj sup.)

KOTVA'LI or VITILIMA or VITOLIA.—1911, Surat Dist. (190 as Kotvali); Surat Agency (252 as Vitilima or Vitolia), in both cases classified as "Other Indian Languages". Not in ILN.

This is clearly the dialect of the tribe known as Vitolia, Kotvalia or Vansphoda. It is a jungle tribe of the eastern portions of the Surat District and Agency, and by a curious clerical error was included in Table XIII of 1911 as a sub-caste of Vani. Probably the language of the tribe never came under the eye of the Ling. Survey. Reference to the Surat District elicited the fact that the dialect is a form of Bhili (specimens furnished by the Divan of Bansda State). The interesting fact is also mentioned (authority Mr. Chotubhai N., Mamledar of Manvdi) that the Kotvalias have still some traditional connection with Khandesh, and Kotvali may therefore be the same as *Kotali*, a Bhil dialect recognised from Khandesh in the Ling. Survey.

KUMBHAKARNI.—1901, Ahmedabad, M. 4, F. 4. Classified as Marathi. Not in ILN.
The authority for classing this return as Marathi is uncertain. It might be a joke, *Kumbhakarna* being a mythical *Rakshasa*.

LA'D.—1911, Sholapur, M 21. F 22. Classified as Gipsy. In ILN *Lad* or *Ladi* is cited as a Gipsy language repd. from Berar. *Lada* (but dental d) is cited as a Madras name for *Lamanki*.
References to the Sholapur District failed to elicit any information. The district is so situated as to receive wanderers from Hyderabad but scarcely from Berar.

ILN also gives—"LADAR. A Gipsy lang. repd. in 1891 BCR as spoken in Bijapur and Kanara." This might be the same (though the d is shown as dental), since -ar or -aru is the plural ending in Kanarese. It is probable that all these names are names for *Lamanki*. The name *Lad* is an important intra-caste divisional name among the Lamanis and Vanjaris, and the use of the name as the name of their language is an example of the extraordinary way in which names like *Lad*, *Gurjar* and others belonging to groups of the later barbarian invasions persist, and turn up in unexpected places.

LODHI.—1901. Kathiawar, 7 Males only. Classified as Western Hindi. ILN gives such a name for a form of the Bundeli dialect of Western Hindi.
But there is also a caste named Lodha or Lodhin, cultivators and labourers, located in N. Gujarat and Kathiawar. This return might therefore be a name for the language of that caste, which would probably be Gujarati.

LONA'RI.—ILN gives "Repd. in 1891 BCR as a form of Marathi sp. in Satara."
Presumably ordinary Marathi sp. by persons of Lonari caste.

MALVI.—ILN gives—"Malvi. Repd. in 1891 BCR as a form of Gujarati" and "Málvi, separately, as a dialect of Rajasthani. In 1901 *Malvi* (sic) was included in Rajasthani; and in 1911 *Málvi* (sic) was included in Gujarati, thus reversing the classification of ILN. *Málvi* is of course well known as the language of Málvá.

Of *Malvi*, a dialect of Gujarati, nothing is known, and it is likely that the 1891 spelling and classification was wrong. The accentuation of the Census Reports is necessarily liable to errors.

MÁNGELA.—ILN gives—"A mixture of Gujarati and Marathi sp. by Mángelas of Thana (Bombay)".

This did not occur in 1901 or 1911. The Mángelas are a fishing and labouring tribe, mainly in North Thana, but spreading into Surat District and Agency.

The dialect is included in the Vol. of the Ling. Survey dealing with Marathi.

MA'NG GA'RODL.—See Gárodi.

MEMONI.—1901 and 1911, from various localities,—largest individual record 1,193 persons in Bombay City 1911. Classified on both occasions as Gujarati. (It must be added however that in 1901 Kacchi was included under Gujarati.) ILN gives—"A form of Surti Gujarati sp. by Memons of Surat."

The large majority of Memons are located in Kathiawar, Cutch and Bombay City. There are two sub-castes, Halai (Háládi) and Cutchi. There is no Memoni language; but it is probable that Memoni if returned might in any given case be either Gujarati or Kacchi, and not always Gujarati.

MENGTWARI. 1911, Sind (1,118), classified as Sindhi; and **MENGWARI**, 1911, Sind (10), classified as Rajasthani, not in ILN, are both of them the dialect of the Menghwars, an untouchable caste in Sind, corresponding more or less with the Dheds of Gujarat. Reference to Sind elicited several reliable opinions that their dialect, where they have not taken to ordinary Sindhi, is a Rajasthani dialect.

MEWA'S.—ILN gives—"A Bhil language repd. in 1891 BCR as sp. in Khandesh. *Mavás* is the technical name for a Bhil stronghold."

Mehvas is the name used officially for the region of the Bhil estates in the North-west of Khandesh, as also for the form of land tenure. And *Mevás* as a language name means the Bhil dialect of that region. Dr. Hedberg informs me that *Mevás*, *Mevási*, *Movási* or *Mvasi* are all synonyms of *Dehavali*, for which *vide sub Vasava infra*.

MISHRA.—See Shikalgári.

MUGLI.—ILN gives—"Repd. in 1891 BCR as a name of Persian."

Mogli is apparently a name for Hindustani sp. in the territories of His Exalted Highness the Nizam, usually called the Mogalai. The 1891 Mugli was probably therefore not Persian but Hindustani.

MYA'NWA'LE or **LHA'RI.**—ILN gives—"A Gipsy lang. sp. in Belgaum (Bombay)." Not recorded either in 1901 or 1911. A proof of pp. 90, 91 of Vol. XI of the Ling. Survey was obtained. No estimate is given of the number of speakers. Dr. Grierson considers that "*myanwala*" means scabbard-maker, and that "*Lhari*" is a rapid pronunciation of "*Lohari*," i. e., the language of the Lohars. He adds, however, that no information is available about the people who bear the name *Myanwala*; and the assumption that the language is spoken by Lohars is dubious. The Lohars are blacksmiths and so far as is known always speak the local vernacular. The Ethnographic Survey gives no hint that they speak any other language. The specimens given show an "artificial argot built up on" a base of Dakhani Hindustani and Rajasthani, with a certain number of Dravidian words thrown in. The matter is very obscure.

NARIVAL. 1911 (misprinted Varival), U. S. Frontier Dist. 2 speakers, classified as Sindhi. Not in ILN. Ref. to Sind elicited the information that this dialect from the regions N. W. of Jacobabad is allied to Siraiiki. Its exact affinities are therefore uncertain, since Siraiiki may be either Sindhi or Lahoda.

NOYRI.—A Bhil dialect, sp. in the Akrani of West Khandesh, newly discovered by Dr. Hedberg.

PAIK.—1901 from Kanara. Classified as Kanarese. Not in ILN.

Several Kanarese caste names end in Paik, so the classification was probably correct.

PAJHANA'RI.—ILN gives—"A Gipsy lang. repd. in 1891 BCR as sp. in Khandesh. Not identified." Almost certainly a metathesis for Vanjhari.

PA'LI.—1901, Bombay City, M. 31, F. 4. Classified under Marathi. Not in ILN.

Páli is of course the ancient Buddhist lang. of Burma. But there is no guide to show what the Páli of 1911 was.

PA'RKARI.—1911, Sind (303), classified as Sindhi. This is really the Gujarati of Thar and Parkar, Ling. Survey, Vol. IX, Part II, p. 326.

PASTO.—1901, Khandesh (69), Belgaum (16), Dharwar (1). Classified as a Gipsy lang: ILN gives—"Pasto, i. e. *Pashto*, in the sense of an unknown or secret lang. Hence used as a name for *Nati*, the secret lang. of the Nats." Ref. to *Nati* in ILN shows that it is classed as a Gipsy lang. used by Nats in Behar and Orissa.

Since no Nats were returned in 1901 from Khandesh, nor any speakers of Pashtu, it is likely that the 1901 Pasto was simply Pashto or Pashtu, the language of Pathans in the town bazaars.

PATWEGA'RI or **PATNULI.** 1901 and 1911, from various localities. Classified in 1901, "*Patvegiri*" (sic) as Marathi, *Patnuli* as Gujarati; in 1911 "*Patvegári*" as Marathi, "*Patigar (Patnuli)*" (sic) as Gujarati. ILN classes *Patnuli* with Gujarati, and reports that the *Patvegári* of Belgaum and Dharwar is the same as *Patnuli*, and the *Patvegári* of Bijapur corrupt Marathi.

It is probable that a bad sample of *Patvegári* was sent from Bijapur to the Ling. Survey. The Patvegars are a community of Silk Weavers of Gujarat origin. On the other hand, in Hubli city they talk Marathi in public, this language coming to them possibly more easily than Kanarese. In ILN KHATRI is given as a synonym for *Patnuli*. The relation of the Patvegars of the Karnatak to the Khatris of Gujarat is discussed in the Chapter on Caste.

PURBI. 1911, 205 speakers, mainly in Sind. Classified as an entirely separate language, between Uriyá and Bengáli. ILN gives—" (1) A name sometimes used for *Arcáhi*" (which is a dialect of Eastern Hindi), and (2) "Another name for Western *Bhojpuri*" (which is a dialect of Bihári). As Bihári occupies the place between Uriyá and Bengáli in the Ling. Survey's latest list, it is clear that the 1911 classification was intended to refer the "Purbi" returns to this form of Bihári. But, as ILN says, "The word simply means the 'language of the east,' and is used by people living to the West of the languages referred to." It is impossible therefore to allocate the 1911 Purbi returns from the Presidency with any certainty.

RAMOSHI. ILN gives—"A Gipsy lang. repd. from Poona. Not identified." 1911 from Nagar, 5 speakers., classified as Gipsy.

The Ramoshis are a settled caste, and in no way Gipsy. According to the 1911 BCR (p. 150) they originally spoke Telegu, but have now generally adopted Marathi.

RANATI. ILN gives—"A (Gipsy lang. repd. in 1891 BCR as sp. in Khandesh. Not identified." *Ranati* is the ordinary Marathi term for "jungly" and is constantly used both of people and things. The "jungly" language of Khandesh would be Bhili (v. sub "jangli" in ILN).

RANGARI. 1901, Khandesh, M O F 32. 1911 East Khandesh, M. 31 F. 21. Classified on both occasions as Gujarati.

ILN gives—" (1) A name for the Koshti sub-dialect of Marathi when sp. by Rangaris in Ellichpur, Berar. It is merely the ordinary Marathi of the District. (2) A Dialect of Khandeshi sp. in Berar." The Khandesh returns are therefore probably Ahirani (= Khandeshi),—certainly not Gujarati.

RATHAURI. 1901 Kolaba, M 5, F O. Classified as Gipsy. ILN gives *Rathauri* as a name for the standard Panjabi of the Ferozporo District. The correct classification of the 1901 speakers is doubtful.

SHIKALGARI. 1891, as "*Mishra*" from Bijapur, as *Shikalgari* from Belgaum,—both classed as Gipsy. 1901 as *Shikalgari* from Dharwar, M 58, F 59. Classified as in 1891. In 1911, as "*Mishra Shikalgari*" from Dharwar: classified as Kanarese. ILN cites the 1891 ref. to *Mishra*, and adds—"Not identified." "*Shikalgari*" is given as a Gipsy lang. from Belgaum, and is recognised as No. 872 in the classified list, with ref. to Vol. XI (in the Press) and an estimated number of 25 speakers. Evidently the equation *Mishra* = *Shikalgari* escaped the notice of the Survey.

The 1911 classification seems to have been wrong. A proof of the passage in the Volume of the Linguistic Survey dealing with this language shows that the name was returned by Shikalgars. And similar returns were noted on this occasion. Shikalgars are wandering Musalman knife-grinders, and are said by the Ethn. Survey Bom. to be descended from Hindu Ghisadis and Lohars converted to Islam several centuries ago.

SUDIR and SUDRA. ILN gives—"Sudir, repd. in 1891 BCR as a form of *Gomantaki*, i. e., Konkani," and "*Sudra*, Repd. in 1891 BCR as a form of Marathi".

These two will be the same and will be the dialect of the Sudir or Shudra caste. They are cultivators, with a tradition of Kolhapur origin (Ethn. Survey Bom.) occurring mostly in the above-Ghat region of Haliyal and Supa in Kanara, where Marathi of a kind is the usual language. Their home speech may be either Konkani or Marathi, but if the Kolhapur tradition is correct it should be Marathi.

TAWADI. 1891 and 1901 from Khandesh, in 1901 only 4 speakers, all F. Classified on both occasions as Marathi. ILN cites the 1891 ref. without further elucidation.

Probably *Tawadi* is a metathesis for *Tadavi*, the dialect of the Tadavi sub-tribe of Bhils, returned both in 1891 and 1911. The 1891 ref. to *Tadavi* is cited by ILN. *Tadavi* is Bhili with a Hindustani admixture, as the *Tadavi* Bhils are Muslamans.

TIRGULI. 1891, Nagar, Poona, Satara, Sholapur. 1901, Poona (39), Satara (27), Sholapur (59). 1911, Nagar (174), Nasik (8), Poona (91), Sholapur (75), Kolhapur (1), S. M. C. States (9). In all cases classed as Gipsy. ILN cites the 1891 ref. and adds—"Not identified."

References were made to Districts, but elicited obscure replies. There is a caste of Turguls, who are betel-gardeners, and there is a Turgul sub-caste of Brahmans. Both were returned in 1901 from Khandesh and the North Deccan only. The Brahman Turguls claim to derive their name from Trikul (of three families), and give a fanciful explanation of it, clearly, as usual, an *ex post facto* artificial etymology. They, like the non-Turgul Brahmans, go in for betel-gardening. The district replies all denied the existence of any true Turgul language, and the tradition of the Turgul Brahmans is that they are degraded Deshasthas, and should therefore talk Marathi. The matter requires further elucidation. The existence of a small caste and a small Brahman sub-caste, with the same name and the same occupation, seems to imply immigration at some unknown point in the past, and from some unknown region. If immigration is correctly assumed the home dialect may originally have been the language of the country of origin. *Turgul* is quite possibly a variant pronunciation for *Telugu*, and the Turguls and Turgul Brahmans of this Presidency may be immigrant cultivators and cultivating Brahmans from the South East.

TRIMALI.—1891, Kolaba and Nagar. 1901, Nagar (123), Khandesh (20), Sholapur (29). 1911, Nagar, East Khandesh, Satara, Sholapur (total 15). In all cases classed as Gipsy. ILN cites the 1891 ref. and adds—"Not identified."

Tirmali or Kashikapadi is a caste of religious mendicants. Ref. to East Khandesh elicited the reply that *Trimali* or *Tirmali* is a mixture of Tamil and Kanarese.

TULU.—1911, Khandesh Mevas Estates, 122 speakers, besides returns under Tulu and Tuluva from Bombay City, Kanara and elsewhere.

Tulu is a recognised Language of South India. But the return of 122 speakers from the lonely Bhil country of the Khandesh Mevas raises a doubt whether Tulu is not also the name of a Bhil dialect. Ref. to the District failed to identify any such dialect, and Dr. Hedberg has not come across such a name.

ULARKHANDI.—1901, Nasik and Khandesh. M. 16; F. 6. Classified as a dialect of Western Hindi. Not in ILN. The termination *khandi* indicates a territorial name. The locality (N. E. of the Presidency) indicates immigrants from the Berar direction. Not identified.

VAGHIRKI.—1911, Sukkur. M. 11; F. 12. Classified as Sindhi. ILN gives *Vagadi*, with variant spellings as a Bhil dialect of Mewar, and this Bhili name was returned in 1911 from Mahi Kantha (4,746), and lesser numbers from Kaira, Thar and Parkar and Reva Kantha. But it is likely that the *Vaghirki* was a return by members of the Vaghri caste. The Vaghiris are of North Gujarat and probably speak Gujarati.

VARODI.—ILN gives—"Repd. in 1891 BCR as a form of Marathi sp. in Khandesh." Probably a misspelling for *Varhadi* (the Marathi of Berar).

VASAVA.—1891, 1901 from Khandesh, 1911 from West Khandesh. Classified in all cases as a form of Marathi. ILN cites the 1891 ref. without further elucidation.

Ref. to West Khandesh elicited the information (Mr A. M. Maemillan, I.C.S.) that a few people call themselves *Wasava* in the eastern part of Navapur. "The chieftain of Gangatha and his relatives call themselves *Wasavas*." Dr Hedberg sent me the following note: "*Vasavi*" is not the name of a language, though sometimes given as such in old official reports and Gazetteers. *Vasava* is the most respected or highest "*kul*" of the Bhils in this part of the Bhil Country. That is the reason why the dialect spoken by them has been so called. But that dialect is spoken by a number of other clans or tribes as well, *Valvis*, *Padvis* not a few *Garvis*, and others. The name of their language or dialect is *Dehvali* meaning the language of the plain,—See Ling. Sur. Rept. Vol. IX, Pt. III, pp. 158-167." (See also under *Mecras supra*.)

VITILIMA or VITOLIA. See KOTVA'LIA.

VOLIVKA.—A Bhil dialect, sp. in the Akrani of West Khandesh, newly discovered by Dr. Hedberg.

VRASH.—ILN gives—" Repd. in 1891 BCR as a form of Hindi sp. in Thana. "
Presumably *Vrash*=*Braj*, a well-known dialect of Western Hindi.

Lastly I give the following names from the 1911 Report, which are not in the Index of Language names, and are quite obscure. In most cases the name was returned by only one speaker or one family, and is probably due to some confusion or misspelling :—

GHARDAR, GOOSHKI (but for this see a suggestion of Mr. C. M. Baker in BCR 1911, para 205), JAVANI, KALADI, KIRANTI (but there is a Tibetan lang. of this name in ILN), KOISSRE, MAVID, OGANI, TOTANI, TOPANI, SIPI, RURLI.

It will be seen that the commonest cause of the occurrence of an obscure name is the practice of the Enumerator regarding the peculiar pronunciation and solecisms of a particular caste as equivalent to a separate language. On this principle the dialects of the London costermonger, the Somerset farmer, and perhaps the 'Varsity undergraduate would in England have to rank as "languages". Another common cause is misspelling, or miscopying. But even after eliminating these cases there still remain a fair number of interesting dialectic puzzles.

APPENDIX C.

Claims to New Caste Nomenclature.

Every Census brings a crop of applications asking that this or that community may be relieved of its previous Census name and given a new one, or may be removed from the group in which it was previously placed and advanced to a socially higher position. Many of these claims are based on the supposed position of the caste in the four *Varnas*. They are usually supported by references to doubtful tradition, improbable etymology, isolated quotations from the Hindu sacred writings, and purchased decisions of the heads of the Maths. The fiction of the four *Varnas* shows itself slow to die; and it is painful to see even the High Courts solemnly discussing whether this or that caste is of *Shudra* status or not. The four *Varnas* were a rough and ready classification of the ancient Aryan society into strata, according to occupation as combined with and determining social prestige; and it applied to the Aryan immigrants only. All the indigenous tribes and all foreigners were outside the *Varnas*. Subsequently the terms Brahman and Kshatriya became associated with contending political factions, of which the former proved the stronger, so that the Kshatriyas virtually disappeared. With the absorption into Hinduism of many of the indigenous hill tribes, most of the Dravidians of South India and enormous numbers of fresh invaders from the North the names of the four *Varnas* lost their purport, and were no longer needed. All subsequent employment of these terms is artificial. "Brahman" has been transferred as the name of a caste, many groups of which have little if any Aryan blood. Kshatriya, Vaishya and Shudra have ceased to have any reasonable application at all. The demands therefore of existing castes to high sounding titles ending with Kshatriya or Vaishya have to be regarded as necessarily fanciful. There is no objection to these titles being accepted by the Census, provided that (1) they do not conflict with existing names of other castes, (2) are believed to be more or less recognized by the rest of the community and (3) are accepted subject to the reservation that the term Kshatriya or Vaishya implies no direct descent from the Kshatriya or Vaishya social strata of the original Aryan immigrants. The claims that have been put forward at this Census are now given in detail.

The *Brahmabhatts* claimed separation from the caste Bhat or Bharot and recognition as a subcaste of Brahmans. From the correspondence it seems that the Superintendents of Census in some other Province have agreed to the whole of the claim. I was not however willing to include Brahmabhatts under Brahman as it would have prevented ready comparison of the figures of Brahmans as a whole recorded at this Census with those recorded in the past. Since however it seems probable that the Brahmabhatts were originally Brahmans who took to the profession of reciting genealogies, and have never been fully absorbed into the Bhat caste, it was decided to show them as an entirely separate caste, the figures to be given on this occasion however small they should prove to be. Opportunity was also taken to separate from the Bhats of Gujarat the criminal and apparently distinct Bhats of the Deccan.

A community calling itself *Somavanshi Arya Kshatriya* claimed that the following synonymy given in the 1911 Caste Index was incorrect.—"*Jingar*, synonyms—*Chitara*, *Dhigavan*, *Karanjkar*, *Arya Kshatriya*." They represented that Jingar or Dhigwan is separate and distinct from the other names, which should be Chitrakara, Karajgar, and Somavanshi Arya Kshatriya. Their claim was accepted to the extent of showing these two groups separately in the 1921 Caste Index, retaining however the name Chitara. The point is of academic interest only, as neither community is of sufficient numerical importance to demand tabulation in Table XIII.

The *Tapodhan Brahmans* demanded removal of the word "degraded" which appeared against them in 1911 Caste Index. As I was anxious to avoid anything unnecessary in the Caste Index, and the mention of which Brahman sub-castes are degraded and which are not is of no practical use, I removed the word degraded wherever it occurred.

A sub-caste known previously as *Savashe Brahmans* claimed that the word Savashe was a corruption of Sahavasi. Without for a moment accepting the fanciful origin of the name Sahavasi given by them I made the necessary entry in the Caste Index.

The *Panchals* claimed recognition as a sub-caste of Brahmans under the name *Vishva Brahman*. This is an old claim and recurs regularly at every Census both in Bombay and Madras. This community is not recognized as a Brahman community by the public generally. Their claim to inclusion with Brahman was therefore refused, but the words Vishva Brahman were added as a synonym of the caste both in the Caste Index and in Table XIII.

The *Pategars* (Patvegars or Patvekaris), a weaving caste of the Karnatak, claimed to be designated "*Samavanshi Sahasrarjun Kshatriya*", and to be identical with the *Khatris*. It is to be noted that the Khatris are mainly of Gujarat, and the Pategars of the Karnatak. The latter talk Gujarati in their homes, which necessarily indicates a Gujarat origin. At the last

Census Pategar was kept distinct, and Khatri was confused with Chatri, Kiliket or Katabu, and probably also Khetri. Of these Kiliket or Katabu is the name of a small caste which shaves buffaloes, and exhibits pictures on parchment. It is totally distinct. Khetri is the name of a cultivating caste in the Dharwar region. Chatri or Chattri is a hopelessly vague term, and though shown in the Caste Index as a synonym of Kiliket, might be a variant pronunciation of Kshatri or Khatri. The term Kshatri is also sometimes returned by Khatri. Ultimately it was decided for Table XIII to amalgamate "Patvekari, Pategar, Khatri (Kshatri) and Somavanshi Sahasrarjun Kshatriya" and show separately those of 1. Gujarat and 2. the Karnatak. Khetri and Kiliket were excluded. Instructions were issued to abstraction offices to be careful about these terms. But in view of the wide variations of spelling and pronunciation which prevail in India and the tendency to use the defunct title Kshatriya the correct tabulation of the Khatri weavers will always present a difficulty.

The *Jangida* Maithil Maha Sabha of Delhi wrote asking "that the Jangida community, which is erroneously enumerated by different names in different parts, such as Sutar, Khati, Tirkhan, Brahman and Jangida must be registered as (Jangil) or Jangida Brahmans." This community may occur in Sind where however the term Khati is known as that of a Washerman or Dyer Caste or in Bombay City. But the word Jangida is very little known in this Presidency. It appears to be an artisan community of the North corresponding to the Panchals of the South.

The *Sonars* claimed, as at every Census, to be classed as a sub-caste of Brahmans under the name *Daivadnya Brahmans*. This claim cannot be allowed to the extent of including the persons so returned among Brahmans as a whole. But as there is no harm in recording synonyms the caste has been designated in Table XIII "Sonar, Soni, Aksali and Daivadhya Brahman."

The *Devang* Dharma Prasarak Samaj of Hubli wrote asking that the Devang Caste should be clearly demarcated. Their contentions were, first, that persons returning as Koshti, Jed, Nekar, etc., might be either Devangs or Salis, and secondly that Lingayat Devangs should be shown as Lingayat by religion and Devang by caste. The difficulties in the way of both these requests have already been discussed in the body of the Report. So long as Lingayat is shown as a caste Lingayat Devangs are lost to the Devang caste. As regards Koshti, Jed, etc., it was quite impossible to issue further instructions to enumerators to the effect that persons returning these names should be asked whether they are Devangs or Salis. Nor am I satisfied that reasonable answers would have been obtained. A Marathi Koshti if asked if he were a Sali or a Devang would probably reply "Neither. The Salis I know; they are different. The Devangs I have only heard of. I believe they are some caste in the Karnatak." There was therefore no alternative but to follow the lines of past Censuses and group Koshti, Hatkar, Jed, Vinkar (Nekar) and Devang together. The interrelation of these weaving groups is very obscure and possibly no two investigators would come to the same opinion.

The *Hyderabad Deti-Leti* Committee wrote asking that, while the Hyderabad Amil Community might be included in Lohanas as before, the *Khudatadi Amil* community of Hyderabad might be separately shown, and that certain figures might be supplied to them showing the numbers of bachelors and spinsters in the community. I informed them that I was not prepared to order separate enumeration of any sub-caste of Lohanas, unless specially requested by the Commissioner in Sind. Nothing further was done in the matter, as I was not prepared to address the Commissioner, and the applicants did not do so. It ought of course to be possible for a small isolated community to collect such private information for itself without the machinery of the Census, and if the Census Department were to begin to tabulate special information for private persons or organizations there would be no end to the work. In passing, however, it may be remarked that in the opinion of many good judges the Amils generally ought at future Censuses to be separated from the rest of the Lohanas. This is an opinion which can only be accepted provided there is no doubt as to whether any Lohana is an Amil or not, in other words provided that Amil is a clear cut and definite term.

The *Ghanchi Sheikhs of Godhra* applied asking to be recorded as Sheikhs and not as Ghanchis. It was pointed out that the matter lay in their own hands, as the enumerator would enter the name given by them. In tabulation "Ghanchi Sheikh" would be tabulated as Ghanchi and not as Sheikh. But their object could be achieved by returning "Sheikh" without further specification.

The *Tambolis* of North India wrote asking for their caste to be recorded as *Nagbansi Kshatriya*. It was pointed out that Tambolis are not sufficiently numerous in this Presidency for exhibition in Table XIII, and the Caste Index was already prepared.

The *Twashita Kasar* community wrote protesting against their confusion with Tambats and Bogars, and making other remarks regarding their customs. They furnished an interesting map showing the results of a private Census taken by their own enumerators. The Caste Index recognized two castes (1) Bogar or Kasar of Belgaum and the South Konkan, and (2) Tambat, Kasar or Twashita Kasar of the Deccan and Konkan. As the figures on the map showed no occurrence of Twashita Kasar south of Kolhapur it looks as if the Caste Index was approximately correct, and as if Tambat and Twasta Kasar were synonymous. The point is of academic interest

only, as neither of these castes are numerous enough for exhibition in Table XIII. However the boundaries and interrelation of the various sections of the Kasar and Tambat communities seem to require further elucidation.

The Collector of Broach wrote recording his opinion that *Talavias*, who are numerous in his district, are not identical with *Dublas*. Unfortunately in the absence of evidence to the contrary I was bound by the views of the Ethnographic Survey which unites these two caste names. The point deserves further study.

A gentleman of the *Kudaldeshkar* sub-caste of Brahmins wrote protesting against the inclusion of this sub-caste in the general term *Gaud Sarasvat*. In view of the fact that the Ethnographic Survey confirms the Gazetteer opinion that the Kudaldeshkars are distinct in physical character from the other Gaud Sarasvats it was decided to tabulate them separately but alongside of the latter.

The inhabitants of two villages in *Broach* District wrote protesting against being entered in the schedules as *Kolis of Gujarat* and claiming to be *Rajputs* and mentioning amongst other things that their marriage market was being spoiled. Their main argument in proof of Rajput status was the use of Rajput Clan names such as Parmar, Solanki, etc., among them. It was pointed out that these clan names occur in a large number of castes which are admittedly not Rajputs. The ultimate decision was left to the local officers. Nothing more was heard of these memorialists. The case is an interesting example of how local groups can gradually pass up or down in the loosely knit Hindu Caste structure. Quite possibly, had there been no Caste column in the Census schedules, these villages would have been known and accepted as Rajput villages in a comparatively short time.

The *Guravs* of Wai (Satara District) wrote claiming to be admitted as a Brahman sub-caste under the name Shaiv Brahman. This request was refused. The Guravs as a matter of fact are a mixed lot, and contain some groups which approximate more and some less to the ordinary customs of the Deshasth Brahmins. Nevertheless even the highest groups are not in common parlance accepted as Brahmins.

The disposal of the claims of the *Gabits* to be reamalgamated with Marathas has been described above, in the body of the Report.

The General Secretary of the *Saini Kshatriya Mahasabha* for Rajputana and Sind wrote from Jodhpur asking that members of that community in Sind should be shown as Saini Kshatriyas and not, as hitherto, as *Malis*. The letter was not received till three days before the Census, which was too late for any enquiry to be made. Persons recorded as Mali in Sind have necessarily been included in "Mali" for Table XIII, Part I-A, while those who were recorded as Saini Kshatriyas will not have found their way into Table XIII at all. It is highly improbable that the Malis of Sind possess any caste cohesion with the Malis of the Deccan. The looseness of the term Mali has already been alluded to in the body of the Report. The point ought to be elucidated if possible.

The *Modh Champaneri Ghanchis of Gujarat* claimed to be a sub-caste of Vanis. On enquiry however it was found that they do not follow the customs of Vanis and are not recognized as such. The claim was therefore disallowed.

The Kulguru of the *Bedars* or *Talwars* claimed that the caste should be designated as *Walmiki*. As this name is not known or recognized the claim was disallowed.

APPENDIX D.

SIND ETHNOGRAPHY.

1.—*Musalman Tribes in Sind.*

As regards the Musalmans of Sind our information is very confused. Our only classificatory list is that prepared by Khan Bahadur Sadik Ali, who was Wazir of Khairpur State. But this is not considered very reliable. A note by Mr. C. M. Baker will be found in paragraphs 239—245 of the Census Report of 1911. There is however one important mistake in it. Mr. Baker stated that the tribes classed at the Census as Sindhi Aboriginal Tribes call themselves "*Jamotr*." Other authorities, whom I have consulted, unanimously say that this is not the case. "*Jamotr*" or "*Jamot*" is a name given by the Baluchis in the frontier Districts to all Sind tribes of the Indus valley, with some suggestion of contempt. Mr. P. R. Cadell, C.S.I., C.I.E., when Commissioner in Sind in 1920, suggested the following classification of the Sindhi Tribes—"(1) Sindhi Asal or aboriginal (*e.g.*, Muhanas, Koris, etc.); (2) Sindhi Rajput (*i.e.*, all '*Jamot*' Saman and Sumra tribes); and (3) Sindhi Jat or Seraiki (including Jat, Abra, and all tribes come down into Sind by the river, except such as clearly come within other classes)". Mr. N. H. Hey on the other hand wrote: "The great mass of Sindhis can be assigned to either Sindhi-Rajput or Sindhi-Jat origin. Sirais or the other hand are always either (*a*) people of South Punjab origin, and still bear the name of Punjab tribes (*e.g.*, the Khokhars), or (*b*) Baluchis who lived in the Punjab before moving into Sind, and had more or less adopted the '*Sirai*' dialect there, *e.g.*, Jatois and Lagharis. Though now largely merged in the Sindhis they really form a separate group by origin, and should be classed as such." Mr. Hey therefore seems to separate the Jats from the Sirais and does not mention the aboriginals. Mr. Baker in 1911 had classed the Sirais with the Jats (paragraph 241) as Mr. Cadell. He appears (paragraph 242) to have taken the same view of the tribes of Rajput origin as Mr. Cadell. And for the aboriginal also he cited the Koris, Macchis, Muhanas and Shikaris; but added that many of the aboriginals would be found among the Arabs. It is of course well known that the so-called "Arabs" of Sind are not Arabs at all. Apparently an individual new convert becomes on conversion a Sheikh, and at some future period (some say the seventh generation) his descendants become Arabs, whereas Mr. Hey says that when a Hindu Caste or part of a Hindu Caste is converted *en bloc* it retains its caste name. Another mistake in Khan Bahadur Sadik Ali's list is the citing of a separate tribe as "*Sheikh Ansari*". It seems to be admitted that there is no such thing as a Sheikh Ansari. All Ansaris are Arabs. The general position of the Baloch seems clear; but may be complicated, as pointed out by Mr. Baker (paragraph 240), by the presence among them of strangers,—Jats or others,—who, as "*being of the tribe in a way, though not of the kindred*", may get themselves returned as Baloch. The Brahuis are also clear, or should be, as also the trading communities of Bohras, Memons and Khojas, and the Pathans and Moguls or Mughals. But the position of the Slave Tribes seems difficult. These are of various origins (see Mr. Baker in paragraph 244 of the 1911 Report).

— Unfortunately all the Sind tribes will more readily return the name of the smaller intertribal divisions than the name of the main tribe itself. So that classification is most difficult, more especially as the same divisional name will occur in different tribes.

Circumstances were also against us at this Census. Mr. Baker, who had promised to draft some instructions for enumerators, went on leave before doing so. Mr. Cadell left Sind just at the time when we were beginning to see daylight through the mist. And Mr. Hey, Collector of Larkana, and Mr. Covernton, whom I was also consulting, were absent on leave at the critical period. Consequently no attempt has been made to effect any full classification of the Sind tribes for Table XIII. A few samples only are given. But, as there is some possibility of the Ethnographic Survey being extended to Sind, I instructed the Deputy Superintendent of Census at Karachi to keep a full list of names returned with figures by Talukas. This has been filed in the office of the Commissioner in Sind, and will be available to any officer appointed as Superintendent of the Ethnographic Survey. I would however remark that the problems involved are so difficult that I am disposed to think either (1) that the Survey should work like the Linguistic Survey on *estimates*; that is to say on the assumption that the Census *never could* get the true figures, or (2) that the Ethnographic work should be done first, and thereafter the necessary instructions to all Census officers at the next Census should be drafted on the basis of the information obtained in the survey.

2.—*Hindu Castes in Sind.*

Our knowledge of the Hindu Castes of the Presidency is fairly complete, at least to the extent of securing some accepted authority on the difficult question of what castes there are, and what their ordinary occupations, and what names on the other hand should be relegated to the limbo

of profession names or names of endogamous groups and exogamous divisions within the castes. This is due to the extraordinarily valuable and complete information contained in the District Gazetteers, compiled by Sir James Campbell, and recently collated by the Ethnographic Survey. But in the case of Sind very little is known. On page 227 of the 1911 Report will be found a list of Hindu Castes in Sind. This list was based mainly on Imperial Table XIII; Part II, Sind Division, in the Imperial Tables Volume of the 1901 Census. It adds some notes on the principal occupations of the Castes, one or two synonyms, and a few remarks. In 19 cases out of 59 the principal occupation was not known. In only four cases are synonyms given. And the most important of these, the equation *Dhed* = *Menghwar*, is very doubtfully correct. The Dheds are a Gujarat caste. The language of the Menghwars on the other hand indicates a Rajputana connection. It is doubtful whether they are untouchable in the same sense as the Dheds, or follow the same occupations. I attempted by means of a circular letter to the Sind Collectors, and one ex-Sindhi officer serving in the Presidency to collect some further information about these castes, together with any supplementary names of castes which might occur. For the latter purpose I printed a complete list of all Hindu Caste names which had occurred at the Hyderabad Abstraction office in 1911. It turned out that most of these names were names of *nukhas* or exogamous divisions. According to Mr. N. H. Hey they might be names of *nukhas* either among Amils, or Bhatias or Kirars, or possibly among castes of extraneous origin, such as the Sahtas, or Saits (who, he says, are of Rajput origin), and the Menghwars. In passing I am not quite sure to what caste Mr. Hey gives the name "Kirar." This word, spelt with a long 'a' and meaning a "coward," is mentioned as a synonym of Arora in the Glossary of Indian Castes and Tribes, 1905. It was not returned as a caste name in this Presidency in 1911. Thanks to the energy of several officers, I got some additional information from various sources, which I have collated below, in the form of rough notes, in the hope that if the Ethnography of Sind ever is examined, the Hindu Castes will not be forgotten, or be allowed to be obscured by the possibly more interesting, but certainly more recent divisions of the Musalman tribes.

NOTES ON HINDU CASTES IN SIND.

Part I.—Castes mentioned in the list on page 227 of the 1911 Report.

Abbreviations:—*GCT.* = Draft Glossary of Indian Castes & Tribes, Calcutta, 1905. *R.E.G.* = authority Mr. R. E. Gibson, I.C.S. *S.H.C.* = authority Mr. S. H. Covernton, I.C.S. *Bhe. M.* = authority Mr. Bherumal Mahirohand of Hyderabad. *C.D.K.* = authority the City Deputy Collector at Karachi in 1920 (name not communicated). *W.H.M.* = authority Mr. W. H. Marston, I. P. Names marked * are castes which seem to be well-known in other Presidencies. Names marked † require verification of spelling.

- * ARORA. Traders of the Panjab (v. *GCT*) (*Bhe. M.*). This is an important trading caste.
- * BHABHRA. Traders. They are Jains. There is a proverb—"only Bhabhras and buffaloes can contain themselves"—meaning that they are miserly and do not exhibit their wealth (*Bhe. M.*). The caste seems to be strong in the Panjab and to contain both Jains & Hindus (v. *GCT*).
- * CHUHAR. Donkey drivers and labourers (*Bhe. M.*). A synonym for Bhangi (*CDK*). Seems to be the same as Chuhra, which caste numbers more than a lac in the Panjab (v. *GCT*).
- GEND. No information. *Bhe. M.* suggests that it is a misprint. It goes back to the 1901 Table XIII, where 59 persons of this caste were returned from Karachi only.
- GUR. Priests (as Gurs of Menghwars, etc.) (*R. E. G.*). Priests; originally Rajputs; and some of them belong to Jesalmir (*Bhe. M.*). It would be interesting to know the true caste of persons recording themselves as Gurs in Sind. "Gur", "Gor" and "Guru" have always been rejected as caste names in the Presidency.
- GURUPOTA. Priests.—They are descendants of Guru Govind Singh (*Bhe. M.*).
- JAGIASI. Priests (*Bhe. M.*). Mendicants (*R.E.G.*).
- JAJRI. I find I have made a note in my copy of the 1911 Report of a variant spelling JAGRI and oco. Labourers. But I do not remember the authority.
- JAJAK. Drummers who perform at Hindu ceremonies (*Bhe. M. & R.E.G.*). The name is evidently an occupational term, as well as a caste name.
- JANDAHORA. Mill-stone makers (*Bhe. M.*).
- KHATI. Washermen, a synonym for Dhobi (*Bhe. M.*). Dyers (*R.E.G.*).
- KUCHRIA. Beggars, labourers and thieves (*Bhe. M. & R.E.G.*). A proverb says—"In the day they live on alms, and at night they take to arms" (*Bhe. M.*).
- MASAND. Priests (*Bhe. M. & R.E.G.*). For a reference to the Caste organisation of the Masands see p. 177 of the 1901 Report. I was told at Hyderabad that they are by religion Sikhs, but have no confirmation of this.
- NANGA. Priests (*Bhe. M.*). Mendicants, who go about almost naked and covered with dust (*R.E.G.*).
- SAHTA. Traders. This is well-known. But the caste does not seem to occur in other Presidencies.
- SUTHRIA. Mendicants. They go about knocking two sticks together, and begging (*Bhe. M.*).
- SANJOGI. Mendicants (*R.E.G.*). The Sanjogis are referred to in Chapter IV—Religion.
- † THAKOR. Cultivators (*R.E.G.*). Priests of river-worshippers (*Bhe. M.*).
- † VIGA. I suggest that this is the same as Vegu, which is a synonym for the Bhansalis.
- WANHAN. Grain parchers (*R.E.G.*). Ditto *Bhe. M.*, who adds a synonym Bhogri, from *Bhugro* = parched gram. See also *Barmonja* below.

Part II.—Additional names.

- BAJAZI. Cloth sellers (*S. H. C.*). Drapers; but it is a profession and not a caste name. They are commonly found hawking about the streets (*Bhe. M.*).
- BALESHAHI. Sweepers (*CDK. & Bhe. M.*). They are Mahomedans (*Bhe. M.*). Bhangi, Chuhara, and Motar are synonyms (*CDK*).
- BANHA. Means slave (*CDK*). But it is not clear whether it is a caste name.

*† BARAI. Carpenters, from Rajputana (*W. H. M.*). Barai is given as a caste numerous in the U. P. & C. P. (*GCT*). But Barai may be different from Barhai or Badhai.

BARMONJA or BARBONJA. Given by *CDK* as synonyms with Bhogri for grain parchers. See WANHAN above.

*BAZIGAR. A gipsy tribe. They are jugglers. It is a professional name (*Bhe. M.*). "Jugglers. There were some of this caste living near Larkana town, in *kutchha* huts adorned with flags. They earned their living by jugglery, dancing, begging and petty thefts. They buried the bodies of their chiefs in mounds under very large square white tombs, which looked like a block of white stone, but must, I suppose, have been of cement. They spoke a dialect, I believe some kind of gipsy language." (*S. H. C.*) There is no gipsy language which seems referable here in the Index of Language Names. The caste seems from *GCT* to be strong in the Panjab.

BHAGIA. They are cattle owners and sell milk. They are, however, all Mahomedans (*Bhe. M.*). Ghi sellers from Rajputana (*W. H. M.*).

CHABRIA. They are Shikarpuri Hindus, known by this surname, which signifies basket-makers (*CDK*). Dealers in a kind of grass called Chabar (*W. H. M.*).

CHAKI. Oil pressers (*CDK. Bhe. M. & S. H. C.*). It seems to be a profession name, and not that of a caste. *Bhe. M.* says they are all Mahomedans.

*CHANHAN. They are mostly snake charmers. The snake charmers of Sind are mostly disciples of Gogho Chanhan, whose temples will be found in the Kangra valley (*Bhe. M.*).

CHETRI. One professionally engaged in making wax bangles. They are mostly from Rajputana (*CDK*). Given in *GCT* as a subcaste of Musalman Nats.

*CHURIGAR. Ivory bangles makers (*S. H. C.*). *Bhe. M.* says the same, but adds that the name is a profession name, for any worker in ivory, from "churo" a bangle. *CDK* confirms this, and adds that MANIAR is a synonym. The caste Churigar or Churihar is given in *GCT* as strong in Bengal. Churihar, Manihar & Kachera are given as trade terms for Musalman bangle-makers.

DARAWAL. Musicians from Rajputana (*W. H. M.*).

DAKHRA or DAKHLA. A mendicant caste from Kathiawar (*CDK*).

DHABRIA. Cultivators from Rajputana (*W. H. M.*).

DHURDAI. More correctly DHURDHAI. Sweepers (*Bhe. M.*). It sounds like a profession name.

† GADRI, GAGAR, GAGRIA and GWAL. All names of cattle graziers from Rajputana (*W. H. M.*).

† GOGLA or GOGRA. A Cutchi mendicant class (*CDK*). Are these anything to do with the Gugli Brahmins?

KAKREJO. Dyers from Rajputana (*W. H. M.*).

KALAR with synonym KALIGAR. Tanners or else workers in leather (*S. H. C.*).

LABANS. Sikhs, who deal in punkhas (matting) and combs (*Bhe. M.*). But Labhana is the Northern form of Lamani; so there is danger of confusion.

*MIRASI. They are singers by profession, and usually found in company with dancing girls (*Bhe. M.*). Under the spelling Mirassi *GCT* shows this caste as numerous in the Panjab.

NUNARI. Salt manufacturers (*Bhe. M.*).

PURBI PASSI. Passis are dhooly-bearers and basket-makers. Purbi presumably means that they came from the East (*W. H. M.*).

ROHIRO. Drlers in whetstones (*W. H. M.*).

† SAIATH. Quern-makers (*W. H. M.*). A synonym for Patharwat (*GCT*).

† SELATA, SILATA or SILAVITA. Stone-masons (*Bhe. M. & W. H. M.*). These, and Silawat (*GCT*) are all variant spellings of the last.

† WADHWA or WADHAWA. Carpenters (*S. H. C.*). Probably the same as Barai (see above). The word seems to be Badhai or Barhai. It may be either a caste, or merely a professional name.

APPENDIX E.

SECTS OF JAINS.

At this Census I was directed to record the Sects of Jains. This order was unfortunately received after the Electro blocks for the Cover of the Enumeration Book were prepared; and in the Specimen entries on the Cover "Jain" alone was shown as a correct religion entry without a sect name. This was no doubt a cause in some cases for the failure to record sect.

In the Supplementary Instructions in the Code three sects were mentioned, as though it were a complete list of sects, viz:—Digambar, Svetambar and Stharakvasi. Unfortunately the third is a sub-sect of Svetambars, and there are other sub-sects also.

However even in 1901, when these difficulties had presumably not arisen, the return of Jain sects was anything but complete. The Table below gives a general summary of the returns in the two Censuses.

Subsidiary Table No. (ii)—General result of return of Jain Sects in 1901 and 1921.

	1901.	1921.
Total number of Jains	535,950	481,342
Svetambar	64,532	250,822
Digambar	67,645	146,954
Minor Sects	957	..
Sect not returned	402,816	83,566

The 1921 results were therefore more complete than those of 1901. With regard to that year Mr. Enthoven excused the incompleteness of the figures as follows:—"In explanation of this fact" (i.e., failure to return sect) "it may be noted that no attempt was made in the majority of the Feudatory States to record sectarian distinctions, and that a large section of the Jain community in the Southern Maratha country are cultivators, who are too ignorant to distinguish between the different forms of the Jain religion."* At this Census the States took much interest in Jain Sect returns; and in this, as in most Census details, their work was better than that of British Districts. Sind in this, as in most matters, shows up badly.

To come to the actual sects returned on this occasion it is not at all easy to know how to arrange the Jain sectarian names. The difficulties are discussed in the Punjab Census Report of 1911, by Pandit Harkishan Kaul, C.I.E. (p. 159). The following is a list of the sect names returned:—

Digambar	Shravak
Svetambar	Deravasi
Stharakvasi	Vaishnav
Dhundia	Lokagacch

Of these "Shravak" may be ruled out as being a general term for Jain Vanis in distinction to "Meshri", which is the general term for Hindu Vanis. "Vaishnav" may be ruled out also. It corresponds with Bishni, mentioned by Pandit Harkishan Kaul, and implies a confusion of ideas. It has already been pointed out in the body of the Report that Jains regard themselves and are sometimes regarded as Hindus. The term Vaishnav Jain is a concrete expression of the same fact. Lokagacch is a previously unknown term, and was returned by 9 males and 9 females in Junagadh. The Divan of Junagadh, to whom reference was made, replied that Lokagacch is a sub-sect of Svetambars, differing from the Stharakvasis in entering the ordinary Dehrasars of the Svetambars, but differing from the ordinary Svetambars in not worshipping the idols in the Dehrasars.

"Dhundias" are the mendicant Sect, which cover up their mouths with a piece of muslin. As regards the rest the main division of the Jains into Svetambars and Digambars is well-known.

* Bombay Census Report, 1901, p. 68.

Apparently the Svetambars are divided into Svetambar Deravasi, i.e., worshippers of idols, and Svetambar Sthanakvasi i.e., non-worshippers of idols. The only region in which the distinction was clearly made was Cutch, as will be seen from the figures below. In the Punjab 36 Sthanakvasis in 1911 returned themselves as Digambar-Sthanakvasi, but this was probably in ignorance. There is also a small sect named Terapanthi which, according to Pandit Harkishan Kaul, are 'undoubtedly Digambers'. As this name, however, was not returned, we are not concerned with it.

The following Table shows the sect returns :—

Subsidiary Table No. (iii)—Sects of Jains, 1921 (Both Sexes combined).

Region.	Svetambar.				Digambers.	Sect not returned.
	Sthanakvasi.	Deravasi.	Dhundia	Svetambers unspecified.		
Whole Presidency ..	40,057	40,076	115	165,574	146,954	83,566
Bombay City ..	242	..	..	5,187	1,225	17,230
Bombay Suburban Division.	55	..	..	48	13	1,873
Northern Division ..	2,899	722	63	36,096	5,166	14,420
Central Division ..	125	..	..	9,627	26,482	31,600
Southern Division ..	..	..	..	4,889	45,970	8,935
Sind ..	..	..	..	..	..	1,534
Kathiawar ..	20,505	..	..	74,414*	3,793	5,747
Cutch ..	20,538	39,354	..	1,482	1	..
Mahi Kantha ..	10	..	..	6,921	2,683	..
Reva Kantha ..	4	..	..	942	154	515
Palanpur Agency ..	341	..	52	22,336	173	874
Kolhapur ..	..	..	..	788	37,376	3
S. M. C. States ..	..	..	..	567	22,091	105
All other States ..	338	..	..	2,277	1,827	730

The two sexes are combined in the above Table. For the most part the proportions are roughly equal. But in Bombay City the males far outnumber the females under all heads, and in Cutch the 20,538 Sthanakvasis consist of 6,501 males and 14,037 females. These two cases of disparity are probably due to the same cause, namely the absence of males on business in Bombay. In the case of the Cutch Deravasis there is however only a slight excess of females.

* Includes 18 Lokagacch in Junagadh.

APPENDIX F.

SECTS OF MUSALMANS.

At this Census I was ordered to record the Sects of Musalmans. This order, as in the case of Jain Sects, was received after the cover was ready for printing, (see remarks in App. E.).

The following is a comparative Table of the general results in 1901 and 1921, similar to that given for Jains:—

Subsidiary Table No. (iv)—General results of return of Musalman Sects in 1901 and 1921.

	1901.	1921.
Total number of Musalmans	4,567,295	4,615,773
Sunni	975,213	4,107,221
Shia	113,986	144,427
Rest, and Sect not returned	3,478,096	364,125

Here also, as in the case of Jain Sects, it will be seen that our returns were very much more complete than those of 1901. For the 1901 failure Mr. Enthoven offered no explanation. At the same time it must be admitted that in Sind there were many cases of sect not returned. But these were all tabulated as Sunni by the Abstraction Officer. This procedure was not correct, and may have reacted unfairly as against the Shia figures.

At this Census the classification of Musalman Sects was more difficult than the classification of Jain Sects because of the multiplicity of names returned, and the difficulty of getting information about them. Many of them were caste names, or territorial names, *e. g.*, Sindhi, Pinjari, Pathan, Durani, Kalavant, and many others. Some were occupational names, *e. g.*, Maulvi, Mulani, and others. A few seem to be now family names, *e. g.*, Mansuri, Atpade, though possibly not so in origin.

First as regards the borderline sects—(see the discussion in the body of the Report)—it is apparently impossible to expect ever to get a correct return of adherents of the Pirana Cult, because it is so indefinite, and because it is possible to be a follower of this cult *in addition* to being either an ordinary Hindu or an ordinary Musalman. Among Christians the cult has its nearest analogies in the reverence of Saints. It is for instance possible for either a Roman Catholic or a Protestant to adopt a particular Saint as patron. The analogy is far from exact, but it may afford an aid to the appreciation of the position. Attempts were made to discover the strength of the sect, but without success. It appears from information given by the Surat Office that all but 3 Matias returned themselves as Hindus, and this is in accordance with tendencies noted in the body of the Report for the Matia Kanbis to revert to the Vaishnav religion. Of the Sheikhs of Broach 375 returned themselves as Hindus. It is impossible to say how many Sheikhs returned themselves as Musalmans, since the sect name Sheikh inevitably gets mixed with the ordinary Mahomedan “caste” name Sheikh. All converts to Islam in India become ordinarily Sheikhs, and presumably the converts of Imamshah used the ordinary designation. Of Momnas 2,733 in the British Districts of Gujarat returned themselves as Mahomedans, most of them being in Surat and Ahmedabad. Of Molesalams 12,424 in British Districts and many in the States returned themselves as Mahomedans. The three names Momna, Molesalam and Sanghar will be found in Imperial Table XIII.—Caste.

Of the regular Mahomedan Sects hardly any names were recorded except Sunni and Shia. One would have expected that the followers of the Aga Khan would have come out clearly as Ismailiyas or by some other name. But this was far from being the case. Thus in Bombay City, where the sect must be strong, there was no sign of it in the returns. Only in the Northern Division the three names Agakhani, Ismaili and Khoja accounted for 370 persons, and in the Gujarat States for 10 persons. But all Ismailis are not necessarily followers of the Aga Khan. A few persons who returned as Mahmadi may or may not be adherents of the Wahabi Sect, which sometimes uses that name. A very few persons returned themselves as Ahmadiya. But the number is so small, actually 10, that it is not worth tabulating. In passing it should be mentioned that in 1901, 11,087 persons returned themselves as Ahmadiya. It is possible that that sect has had its day, and is now disappearing; but the premises are too insecure to draw a definite conclusion. It was decided therefore to tabulate only three heads—Sunni, Shia and all others (including Sect not returned). As it may be of interest to have the figures by districts they are so given. But the Sind figures are not reliable, as explained above.

Subsidiary Table No. (v)—Sects of Mahomedans, 1921 (Both sexes combined).

Region.	Sunni.	Sbia.	All others and Sect not returned.
Bombay Presidency	4,107,221	144,427	364,125
Bombay City	124,673	21,635	38,377
Bombay Suburban Division ..	6,238	1,351	6,843
<i>Northern Division</i>	299,165	19,547	30,625
Ahmedabad	76,595	5,817	16,883
Broach	69,091	785	112
Kaira	55,053	1,819	8,343
Panch Mahals	19,390	1,122	3,173
Surat	48,182	5,993	2,075
Thana	30,854	1,011	39
<i>Central Division</i>	286,373	6,793	72,254
Ahmednagar	34,758	833	2,115
Khandesh East	75,257	1,541	30,711
Khandesh West	26,326	1,632	4,551
Nasik	41,452	701	4,305
Poona	14,631	1,641	30,245
Satara	35,637	352	....
Sholapur	58,312	93	297
<i>Southern Division</i>	277,352	1,683	176,166
Belgaum	79,440	194	658
Bijapur	90,395	133	5,597
Dharwar	40,403	635	101,999
Kanara	14,199	82	12,121
Kolaba	14,881	183	13,290
Ratnagiri	38,034	456	42,501
<i>Sind</i>	2,375,500	30,523	....
Hyderabad	406,100	5,616	....
Karachi	379,082	7,069	....
Larkana	496,895	2,658	....
Navabshah	311,998	9,137	....
Sukkar	356,971	1,425	....
Thar & Parkar	208,568	4,167	....
U. S. Frontier	215,826	451	....
<i>States and Agencies.</i>			
Cambay	6,911	1,563	797
Cutch	104,155	6,370	....
Kathiawar	276,005	44,138	12,421
Palanpur Agency	40,194	2,619	1,710
Mahi Kantha	17,327	1,762	1
Reva Kantha	20,460	1,472	6,601
Surat Agency	4,020	56	755
Bhor	426	28	1,135
Savantvadi	4,622	84	5
Kolhapur	34,185	312	13
S. M. C. States	52,000	256	....
Other States in the Presidency proper.	25,126	47	16,422
Khairpur	152,489	4,188	....

APPENDIX G.

SECTS OF CHRISTIANS.

1. In case of CHRISTIANS it has always been the practice to return sect. But at a Census like the present, when, as already explained, the instructions as to enumeration were often left quite unmastered, if even read, the sect returns were bound to be somewhat incomplete. The main trouble is to get enumerators and private persons to understand that Protestant is not a sect name. It is the harder for them to grasp this fact because in ordinary conversation almost all Christians would be relegated either to Protestantism or Roman Catholicism, and "Roman Catholic" is a correct sect name. As a matter of fact there are certain other main sects, but their combined numbers are very small. The following is a classification of the main Christian churches as ordered by the Census Commissioner :—

Roman Catholic.

Syrian (of five sects).

Armenian.

Abyssinian.

Greek or Orthodox.

Protestant. This last is not a church, in the same sense that the first and fifth are, but for Census purposes in India is divided into the following :—

Anglican Communion.

Lutheran.

Baptist.

Congregationalist.

Methodist.

Presbyterian.

Quaker.

Salvationist.

South India United Church.

Minor Protestant denominations.

Protestant Unsectarian.

Under the last head are included *Protestant, Sect not Specified*. But this is hardly fair on those bodies who belong to the Protestant faith and are genuinely anxious to do away with "sect" and "churches" and are therefore strictly Unsectarian. The vast majority of Protestants whose sect is not returned would belong to the Anglican Communion. Finally we have to allow for the simple return "Christian", i.e., main sect not returned. This gives seventeen main heads for Christians, the numerical importance of which naturally varies very much. The Greek Church is one of the largest of Christian Churches in the world generally, but very poorly represented in India, being returned mainly by a few Greek merchants, or Russian refugees.

2. The classification of minor Churches, as given above, is not entirely in accord with the latest authority, Fortescue.*

3. In the first place all the minor Eastern Churches have been and are heretical, and those that have survived are all referable to two particular heresies—the Nestorian and the Monophysite. All other heresies, of which there were many in the early history of the Church in the East, have died out. Fortescue's classification is as follows :—

NESTORIAN	..	..	The Nestorian Church. The original Church of Malabar.
MONOPHYSITE	..	..	The Coptic Church of Egypt. The Abyssinian or Ethiopic Church. The Jacobite Church in Syria. The bulk of the modern Church of Malabar. The Armenian Church.

The main points in which the Census classification differs from Fortescue's are: (1) the Coptic Church is omitted, (2) the first, second, fifth and sixth of Fortescue's list are all treated as one Church under the general name "Syrian", and (3) certain divisions of the Malabar Christians are included under Syrian, whereas Fortescue does not regard them as falling within his list of heretical Churches at all, but describes them as "Uniate", i.e., a portion of an heretical Church which has re-affiliated with Rome.

4. The difference between the Nestorian and the Monophysite heresies is of course profound. The doctrines upon which they rest diverge from the accepted Christian doctrine concerning the nature of Christ in opposite directions. Yet in the case of Malabar the two heresies meet.

* "The Lesser Eastern Churches", by Adrian Fortescue, Ph.D., D.D., London, 1913.

The Nestorian Church, which is the oldest of all the above, is now confined to (1) "a very small sect on either side of the Turkish Persian frontier,"* and (2) a small part of the Malabar Christians, estimated by Fortescue at only 8,000.

5. The Coptic Church is a large one, numbering, according to the same authority, half a million, almost all in Egypt. The Abyssinian Church is an offshoot of the Coptic Church, acknowledging the Coptic Patriarch, following the same doctrines, and using much the same rites.

6. The true Syrian Church is the Jacobite Church of Syria, with a Patriarch at Antioch. Its doctrines are more or less the same as those of the Copts, but its rites quite different.

7. The Church or Churches of Malabar are hopelessly confused. I give below in parallel columns a summary of the classification of the Census and of Fortescue :—

CENSUS.

(after) FORTESCUE.

All classed as Syrian—

1. Chaldaean.
2. Jacobite.
3. Nestorian.
4. Reformed.
5. Romo-Syrian.

I. Nestorian Heresy—

1. Nestorian (8,000).

II. Monophysite Heresy—

2. Jacobites of the Patriarch's party (about 200,000).
3. Jacobites of the Metran's party (about 200,000).

III. Uniates—

4. Very much the largest sect (over 400,000). These seem to correspond with the Chaldaeans and Romo-Syrians of the Census.

IV. Others—

5. Mar[†] Thoma Christians (about 100,000). This is the "Reformed" of the Census.

6. The Church of Anjur in British Malabar (small).

7. "Church of England Syrians" (i.e., those who have joined the C.M.S.). These would presumably return themselves as "Anglican Communion".

8. The Yoyomayans (a small sect of doubtful affinities).

8. The classification in the second column is according to the character of the sects. Fortescue arranges them in his actual list according to size (estimated number of adherents); but the argument seems to imply a position for each approximately as shown above. The "Mar Thoma" Sect is very hard to allocate. This Sect is of more importance than any of the others in this Presidency, since a Mission known as the National Missionary Society, working at several places along the Coast of North Kanara, would seem to belong here in the scheme of classification[‡]. Fortescue writes (op. cit. p. 374): "The reformers call themselves 'Mar Thomas Christians'. They are considerably Protestantized. They have no images, denounce the idea of the Eucharistic sacrifice, pray neither to Saints nor for the dead, and use the vernacular (Malayalam) for their services... They use St. James' Liturgy with a few alterations in the prayers." Later (p. 379) he definitely states that the Reformed Sect, called Mar Thomas Christians, was 'formed by the Church Missionary Society.' Consequently this Sect would seem to be a sort of stepping stone between the various other Sects and the 'Church of England Syrians', No. 7 in the above list.

9. The principal questions from the Census point of view are: (1) Is it justifiable to class the Nestorians as Syrians? Should they not have a separate main head? (2) Should not the Malabar "Uniates" be detached from the general head Syrian? And, if so, then should they be classed as Roman Catholics under a sub-head "Uniates", or should a separate main head be opened for Uniates generally?

10. As regards (1) there were 97 of the true Nestorians present at a refugee camp in a village near Uran in the Kolaba District at the time of the Census. Their Sect was returned as "Assyrian"[§]. This was transferred to Syrian-Nestorians in accordance with the standard Census Classification. But from what is said above it will appear that "Nestorian" ought to be a main head.

11. As regards (2) the matter is of only academic interest in this Presidency, and is presumably a practical problem only in Madras. Fortescue's book was published in 1913, and a second work on the Uniates was promised, and has probably been published, though not at the moment obtainable here.

* i.e., the pre-war frontier. The quotation is from Fortescue. As will be seen below, some of these persons were in this Presidency as refugees at the time of the Census. They have since gone away homewards. But reports of travellers speak of the Sect as having suffered much the same fate as the Armenians,—expulsion and massacre.

† "Mar" is a Syriac word meaning "Lord" and hence "Bishop".

‡ It will be seen, however, below that its influence on the Census figures of Kanara was virtually nil.

§ This has been the ordinary travellers' and Missionary name for them since their first discovery. But it is an incorrect name.

12. The Armenian Church presents less difficulties, being a definite church with a separate creed, separate rites and a separate supreme head. In 1913 Fortescue estimated its adherents at 4 millions; but they must be now terribly reduced.

13. The Roman Catholic Church is of course our most important Church in this Presidency. It embraces (1) the Goanese Christians, (2) the "East Indians," which is the name usually given to the Catholics of the parishes about Bombay and Thana, who were converts from the time of Portuguese occupation, (3) a good many English and Europeans—ecclesiastically under the Jesuit Mission, whose dioceses exist side by side with those of the Patriarch of Goa,—and (4) a certain number of Mangalurians, which name is usually given to the non-Goan Roman Catholics of the coastal regions south of Karwar.

14. The number of names which may be returned as "Sect" of Christians is enormous. In the Index of such names there are just over 200, not counting the names of "Indefinite beliefs" referred to in the body of the Report. A few of the names are Syrian or Roman Catholic. But the large majority are Protestant. Many are of course names of Missions. But the following samples will give some idea of the complexity of the nomenclature—"Assumption Church," "Disciples of Christ," "Irvingite," "Moravian," "Padroado," "Puritan," "Seventh Day Adventist," "St. Paul's Church," "Universal Church of God," "Zwinglian." It can hardly be expected either that the converts of the Missions supported by these obscure "Churches" will correctly return their sect, or that the enumerator will correctly enter it.

15. The following Table shows the strength of each sect so far as revealed by the Census. In Imperial Table XV the figures here given jointly for Europeans and Anglo-Indians will be found given separately for the two races. They are here amalgamated, partly to save overloading the Table, and partly because the boundary between the two is so vague and unreliable:—

Subsidiary Table No. (vi)—Races and Sects of Christians, Actual numbers, Whole Presidency.

Sect.	Europeans and Anglo-Indians.		Indians.		Total.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.
Total ..	28,479	13,875	128,311	106,100	156,790	119,975	276,765
Abyssinian .. ..	..	..	..	..	..	..	..
Armenian	84	73	..	..	84	73	157
Syrian	56	63	7	7	63	70	133
Greek	1	..	10	8	11	8	19
Roman Catholic	7,774	5,395	85,416	64,803	93,190	70,198	163,388
Protestant Total	19,856	7,692	34,913	34,287	54,769	41,979	96,748
1. Anglican	16,596	5,995	4,501	4,286	21,097	10,281	31,378
2. Baptist	113	30	739	512	852	542	1,394
3. Congregationalist	32	38	4,102	4,237	4,134	4,275	8,409
4. Lutheran	4	2	93	44	97	46	143
5. Methodist	555	236	7,008	6,235	7,563	6,471	14,034
6. Quaker .. ..	..	..	..	..	..	..	..
7. South India United Church .. ..	..	..	..	..	..	..	..
8. Presbyterian	826	262	4,247	4,037	5,073	4,299	9,372
9. Salvationist	21	25	3,725	3,629	3,746	3,654	7,400
10. Minor Protestant denominations .. ..	..	..	820	1,373	820	1,373	2,193
11. Unsectarian, or Sect not returned	1,709	1,104	9,678	9,934	11,357	11,038	22,425
Unspecified	708	652	7,965	6,995	8,673	7,647	16,320

16. The Armenians were mainly in Bombay City.

17. The Syrians consisted of the following:—

	Males.	Females.	Total.
Jacobite	3	..	3
Nestorian	42	55	97
Reformed	2	4	6
Unspecified	16	11	27

Of these the Nestorians have already been referred to. The remaining Syrians were returned from the following districts:—Bombay City (2), Thana (5), Nagar (11), Poona (3), Kanara (6), Sukkur (9). Of these the Poona returns were under Jacobite, the Kanara under Reformed and the rest unspecified. The Bombay City and Kanara figures are open to suspicion. In the former case it seems improbable that there were only 2 adherents of this Church in the huge cosmopolitan population. In Kanara, in view of the existence of the Mission referred to above, so small a number seems improbable. However the Hindu Enumerator may well be excused for failing to record correctly the obscure sects of a small Christian Church or congeries of churches, concerning which not one in ten thousand educated Christians could give correct information.

18. The one European adherent of the *Greek Church* was returned from East Khandesh and the 18 Indians from Sholapur. These figures are suspect. The existence of Greek traders in this Presidency is well known, and though some may be Roman Catholics, many must have been baptized in the Greek Church. There were also Russian *déténus* at Belgaum Fort. The 18 Indians of this Sect are also doubtful. The 1911 figures seem to have been more correct. The total was 173 (excluding Aden), of whom 93 were returned in Bombay and 56 at Karachi. On that occasion there were three Indians of this Sect; all returned from West Khandesh.

19. The *Roman Catholics*, who number more than in 1911, are spread over the Presidency, their principal centres being too well known to court discussion.

20. The *Anglican Communion* is also widely spread. The figures are slightly less than last time. But this is due to failure to return sect, as shown by the figures of *Protestant Unsectarian and Sect Not Specified*, which rise from 6,938 (excl. Aden) in 1911 to 22,425 in 1921. It is here that the missing members of the Anglican Communion would be found.

21. *Baptists* increase from 321 to 1,394. The returns are almost exclusively from Bombay City (78), Surat (322), Nagar (408), Poona (223) and Rajpipla (320). This distribution is utterly at variance with 1911, when small numbers were returned from many districts, and hardly any from Nagar, Surat or Rajpipla. The most important Baptist Mission on this side of India is the American "Church of the Brethren," which has several Stations. But the distribution of these, so far as known at the time of writing, is not exactly analogous to the distribution of the Baptist returns. The "Dunker" Brethren Mission, however, which is also Baptist, has several stations in the Surat District. Their adherents, if existent in 1911, probably went for reasons explained below into Minor Protestant denominations.

22. The *Congregationalist* total figure falls from 11,672 to 8,409. The reduction is probably apparent rather than real, the missing persons being lost in "Protestants—Sect not specified," as explained below. The distribution is the same as before, practically all the adherents being returned from the Deccan, and the vast majority from Nagar. The American Marathi Mission is the principal Congregationalist organisation, and probably all or almost all the returns are converts of that body.

23. *Lutherans* come mainly from the Karnatak, as in 1911, and represent converts of the Kanarese Evangelical Mission (late "Basel Mission"). The elimination of the German immigrant is well shown by the figures of

Locality.		Number.	
		1911	1921
Bombay City	..	145	3
Karachi	..	29	..
Rest of Presi-		28	3
dency.			

Lutherans—European and Allied Races, given in the margin. The fact that no Europeans are returned as Lutherans from the regions of the Mission is surprising. But perhaps the staff of the reformed Mission are not of that Sect. The Indians returning as Lutherans also fall from 1,096 to 137, a phenomenon due to the analogous causes. There is also a Lutheran Mission bearing the name of the "Swedish Alliance Mission" at work in West Khandesh; but no Lutherans were returned from that District.

24. *Methodists*, whose total number rises from 13,862 to 14,034, are almost entirely confined to Kaira and the adjacent districts and States. The principal Mission of this Sect seems to be the American Methodist Episcopal Mission. It is impossible for the Census Office to judge whether the rise in numbers, and another phenomenon, namely an apparent dispersion from Kaira into Broach and other adjacent regions, is due to actual mission operations or to the vagaries of the returns.

25. *Presbyterians* rise from 8,322 to 9,372. Their distribution in the North is almost the same as that of the last Sect. But there is a body of adherents in the Kolhapur region also. The Principal Missions are the Irish Presbyterian Mission, which works in Gujarat, and the American Presbyterian Mission which works in the Southern Maratha Country.

26. The adherents of the *Salvation Army* fall from 10,101 to 7,400. The sphere of operations of this mission seems to approximate to that of the last two; but it is strong also in Ahmednagar. On the whole there is a tendency for the Army's work to veer towards regions where handloom weaving is commonly pursued. It is impossible to say whether the decrease is due to actual decrease in the converts or to mistakes in classification at one Census or the other.

27. *Minor Protestant Denominations* rise from 1,703 to 2,193. The regional distribution is however wholly changed. In 1911 the returns were scattered through most districts of the N. D. and C. D. On this occasion this Sub-Head disappears from the N. D. and comes out strong in Ahmednagar, from which district it was formerly absent. Of the total numbers Ahmednagar (1,238), Poona (613), East Khandesh (186), and Nasik (149) account for almost the whole. The disappearance of this Sub-Head from the N. D. is probably due to altered classification. Last time the Dunker Brethren Mission, the Alliance Mission, Ahmedabad, and a good many others were not in the list circulated to Abstraction Offices; and it may be assumed that anything not in the list was taken to this head. It may also be mentioned that the following Missions, which in 1911 were specifically classified in the list as Minor Protestant Denominations, have this time been taken to Protestants Unsectarian:—"Church of America," Vanguard Mission, Poona and Inland Village Mission. The first of these names will be referred to below.

28. As for *Protestants Unsectarian and Sect not Specified* it has already been pointed out that this is an unsatisfactory head, embracing both genuine Unsectarians and also the incorrect term Protestant, which was all too common in many Cantonment and Railway centres. It has also been shown in the last paragraph that several important missions, which are known to have been classified as Minor Protestant denominations in 1911, have this time been taken to this head. Under the combined influence of these two causes the figures rise from 7,063 to 22,425. It would be useless to try to assign the increase in any local region to either one or the other of the two causes.

29. There is however one point to be noted. In 1911 the return "Church of America" was taken to Minor Protestant Denominations. On the present occasion it was pointed out by the Census Commissioner that there is no such thing as the "Church of America", and the return was directed to be taken to ProtestantSect not Specified. In a Presidency like Bombay with its large number of American Missions the return "American" or "American Church" is bound to occur in the schedules against some of the converts. And the Abstraction Offices would probably on this occasion take such entries as equivalent to "Church of America" instead of "American Marathi Mission", "American Methodist Episcopal Mission", etc., and would therefore classify as Protestants.Sect not Specified. We have seen above that the Congregationalists decrease in numbers. And since the bulk of the Congregationalists are converts of the American Marathi Mission, it is reasonable to suppose that many of them in the manner just explained found their way into this head.

30. The head *Sect not returned*, which means usually the simple entry "Christian", rises unfortunately from 533 to 16,320. I should like however to explain (1) that in 1901, a Census sometimes held up as a model, the figures of "Denomination not returned" amounted to 30,601, and (2) that the practice by which the Abstraction Offices fill up missing entries in the schedules by external and internal evidence was carried to greater lengths in 1911 than this time. That practice is excellent so long as only sound evidence is accepted. But it seems to have been carried to too great a length in 1911; and for that reason I hazard the opinion that the actual number of cases in which "Christian" alone without a sect name was returned in 1911 were really very much more than 533,—the sect in the remaining cases being filled up in the Abstraction Office by guesswork on the strength of the sects of missions known to be working in the region from which the incomplete entries came. This is borne out by certain internal evidence in the 1911 figures of a kind too technical to explain here.

31. The above examination of the Protestant Sect figures is somewhat perfunctory. But it is as full as is legitimate in view of the uncertainty of the figures and the vast amount of other matter demanding examination. Sect of Protestants is probably one of those cases like Language, in which skilled estimates would produce more reliable figures than a general Census Enumeration carried out almost entirely by ill-educated Hindu and Mahomedan Enumerators. The proper agency for framing such skilled estimates would be some Central Missionary Conference. From the point of view of Government it is doubtful how far the collection of statistics of Sects beyond the Main distinction into Roman Catholic and Protestant is worth the money. Administrative problems might here and there conceivably turn on the question whether the Christians in any district are mainly Methodist or mainly Baptist. But such questions would never be important. And the Census figures on such a point are not fully reliable. On the other hand we can collect through the ordinary Census agency figures of a reliable kind classifying Christians under the three main heads of Roman Catholics, Protestants and Others. And that seems as far as the Census ought to be asked to carry its investigations.

32. The following gives a summary of the Sect figures available since 1881 :—

Subsidiary Table (vii)—Sects of Christians, Bombay Presidency, 1881—1921.

Sect.	Year.				
	1881	1891	1901	1911	1921
Total Christian	145,154	167,001	216,093	242,853	276,765
Abyssinian	..	..	4	..	..
Armenian	35	49	91	57	157
Syrian	4	3	3	11	133
Greek	21	70	89	173	19
Roman Catholic	115,515	123,766	114,011	154,412	163,388
Protestant	25,839	39,171	71,294	87,675	96,748
Sect not returned	3,740	3,942	30,601	625	16,320
<i>Details of Protestant Sects.</i>					
Anglican	16,431	24,014	37,794	33,455	31,378
Baptist	820	894	260	321	1,394
Congregationalist	509	1,509	9,126	11,672	8,409
Lutheran	81	973	892	1,298	143
Methodist	979	1,844	4,773	13,862	14,034
Presbyterian	5,857	4,564	5,837	8,322	9,372
Salvationist	..	1,162	12,444	10,101	7,400
Others, & Sect not specified	1,162	4,411	168	8,644	24,618

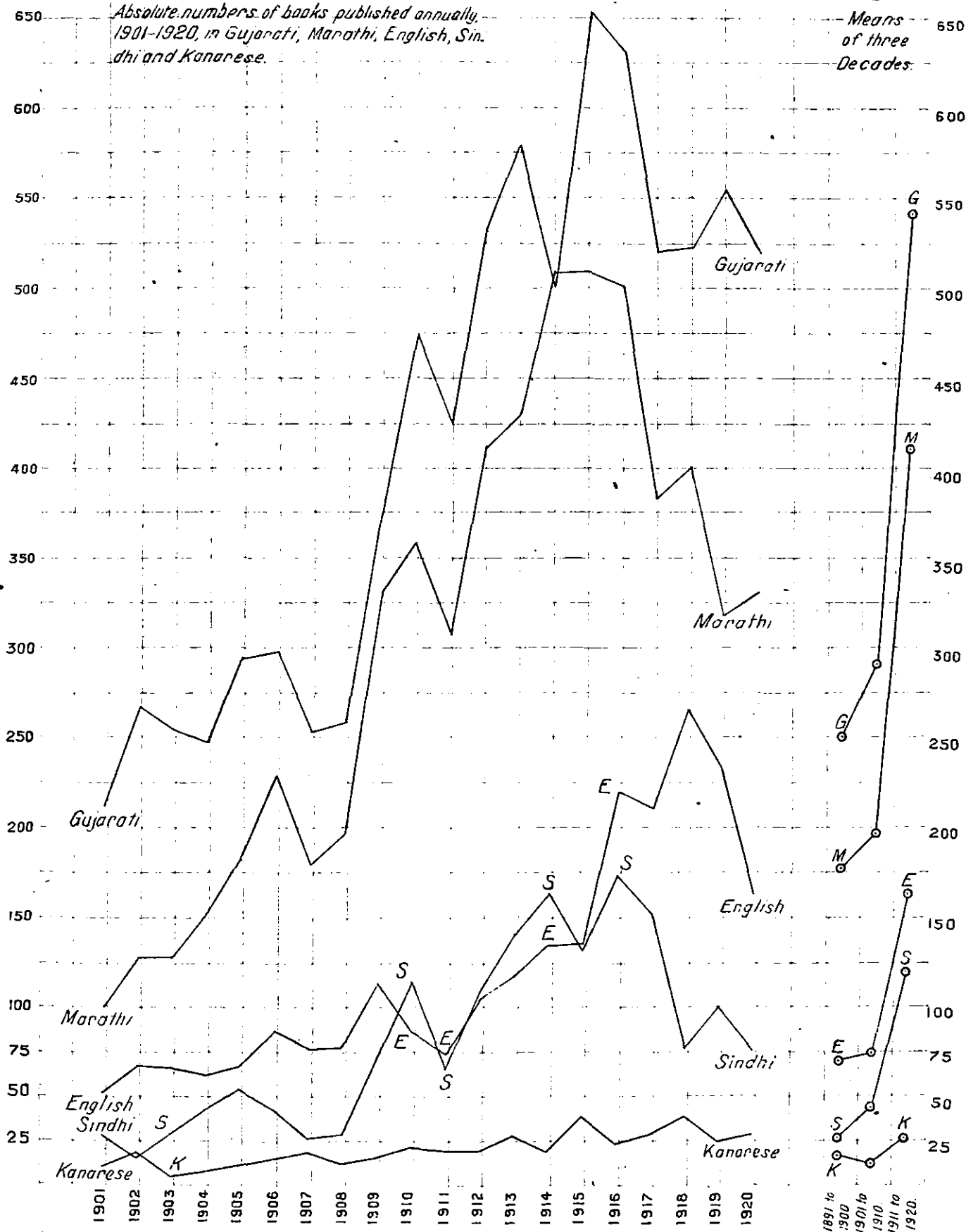
PUBLISHED BOOKS.

I

II

Absolute numbers of books published annually, 1901-1920, in Gujarati, Marathi, English, Sindhi and Kanarese.

Means of three Decades.



APPENDIX H.

PUBLISHED BOOKS.

In accordance with past practice a statement is appended showing the number of books published during each year of the decennium, and the totals of the decennium and the two previous ones. In addition to the Table a diagram is given of the actual number of books published in each year from 1901 to 1920 in the four main vernaculars and English as well as of the means of each of the three decennia. From the Table it will be seen that fewer books are published in Kanarese and Sindhi than in Hindi, and fewer in Kanarese than in Urdu. But these two languages are not included in the diagram partly because they are not official vernaculars, and partly to avoid over-loading the diagram and so making it confused.

The general course of the publishing trade appears to follow economic causes. It will be noticed that the numbers in 1901 stood at a lower figure than the mean of the preceding decennium, thus reflecting the economic depression caused by the great famine. There was then a recovery until 1907, when the bad season and the plague caused a set back. The rise is then steep until 1915, but with two set-backs, one in 1911 a famine year, and the other in 1914 (the opening of the war). After 1915 the gradual decline is probably mainly due to the high cost of labour and materials, and the decreased purchasing capacity of the intelligentia, which here (as in all countries) in contradistinction to the commercial community suffered by the war through the increased cost of living.

Subsidiary Table No. (viii)—Number of books published in each language.

Language.	Number of books published in										Total of decade.		
	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1911-1920	1901-1910	1891-1900
Total	1,417	1,802	1,917	1,902	2,019	2,299	1,921	1,797	1,720	1,524	18,318	9,344	8,593
English	76	107	121	137	137	220	212	266	233	163	1,672	756	734
Gujarati	426	533	580	503	656	634	522	625	556	522	5,457	2,937	2,539
Hindi	112	152	122	140	146	104	192	126	119	102	1,405	537	463
Kanarese	21	21	29	20	30	25	31	40	26	30	282	134	190
Marathi	308	413	432	513	514	502	387	403	320	334	4,126	1,989	1,802
Sindhi	66	112	143	163	184	176	154	80	101	77	1,206	453	293
Urdu	55	61	48	48	18	35	76	61	61	34	497	423	345
Classical(Sanskrit, Persian, Arabic and Zend)	130	145	102	153	129	204	127	122	96	94	1,398	709	707
Bilingual, Trilingual and Polyglot	217	258	250	225	246	309	220	174	208	168	2,275	1,406	1,460

The above Table being of actual numbers and the diagram being on the same basis the proportional increases are not rapidly ascertainable. The following Table gives the proportions of the ten-year totals in each language, the totals for the decennium 1891 to 1900 being taken as 1,000.

Subsidiary Table No. (ix)—Proportional changes in the number of books published.

Language.	Proportion borne by the means of the last two decennia to the mean of the decennium 1891 to 1900.		
	1891-1900	1901-1910	1911-1920
English	100.	102.9	227.7
Gujarati	100	111.7	214.9
Hindi	100	115.9	303.4
Kanarese	100	70.5	148.4
Marathi	100	110.3	228.9
Sindhi	100	154.6	411.6
Urdu	100	122.6	144.0
Classical	100	92.4	182.2
Bilingual, etc.	100	96.3	155.8

From the above it will be seen that the proportional increase has actually been highest in Sindhi, which probably follows rather from the rapid expansion of Karachi City, bringing with it increased facilities for printing, than from exceptional literary energy among the Sindhi

literate. Of the other main vernaculars the increase in Marathi is slightly higher than in Gujarati. Kanarese takes a low place. The high position of Hindi and its rapid proportional increase are interesting, this being a language that is in no sense a written vernacular of this Presidency, since in Musalman schools Hindustani is taught in the Urdu script. There are of course a fair number of literate Hindi speakers in Bombay City. But it seems that this Presidency, with its advanced industrial conditions, prints books in Hindi for consumption in Northern India. The Classical and Polyglot figures are of less interest, since they will mainly represent books of an educational nature.

But the only justification for giving statistics of published books in a Census Report is in order to study the figures in relation to total population and to the number of literates. These ratios are taken out below for the regions covered by each vernacular. It was necessary to decide what population was to be taken to each region. This was fixed as follows :—

Marathi Regions—

Thana and Bombay Suburban Districts,

All districts of the C. D.,

Kolaba and Ratnagiri,

One-half of Belgaum,

One-fifth of Kanara,

Half of Bombay City,

All Deccan and Konkan States,

Two-thirds of Kolhapur, the S. M.

C. States, Jath and Savanur.

Gujarati Regions—

Districts of the N. D. except Thana,

All Gujarat States and Agencies,

One-fifth of Bombay City.

Kanarese Regions—

Bijapur and Dharwar,

One-half of Belgaum,

Four-fifths of Kanara,

One third of Kolhapur, the S. M.

C. States, Jath and Savanur.

Sindhi Regions—

All Sind Districts,

Khairpur.

The first half of the Table—ratio of published books to speakers of each language—is based on the above for all years. The second half—ratio to literates—is based in the case of 1901, when literacy was taken out separately for each language, on the actual figures. For the other two Censuses it is based on the figures of literates in the regions as above defined, except in the case of Bombay City, where, for reasons given below, the apportionment of the literates between Marathi and Gujarati had to be made on a different principle from the apportionment of speakers.

In Bombay City, while the speakers of Marathi and Gujarati are taken at one-half and one-fifth of the population respectively for the purpose of calculating the ratio of books to persons, when calculating the ratio to literate persons the Marathi and Gujarati Literates are taken at one-fifth and two-fifths of the total Literates respectively. This is in accordance with the available figures of 1901. The reason for the difference between the proportions of Total persons and Literates is that the Gujarati speakers in Bombay City are mainly trading classes, and the Marathi speaking persons mainly working classes. Speakers of Kanarese and Sindhi are negligible in Bombay City. And speakers of Hindustani and English are excluded by the above arrangement.

In the case of the Districts a certain number of speakers of English and other languages are included among the vernacular speaking population, but the error is not important. Musalmans, if literate, are almost always literate in the local vernacular as well as Urdu.

The figures taken both for speakers of languages and for literates, based on regions as defined above, also do not take into account the strangers in each region. This may operate unfairly in the case of Gujarati, since the number and proportion of literate Gujaratis who are found in other regions is much higher than the numbers or proportions of Marathi-speaking literates. But the errors thus caused would be, even so, very small, and the figures in the Table, though only an approximation, are probably a very near approximation.

Subsidiary Table No. (x)—Promotion of published books to total persons and literate persons in different regions.

Language.	One book published during the decade for every					
	Person existing at the end of the decade.			Literate person existing at the end of the decade.		
	1891-1900	1901-1910	1911-1920	1891-1900	1900-1911	1911-1921
Gujarati	2,842	2,684	1,482	325	278	210
Marathi	6,277	5,985	2,704	326	297	178
Kanarese	17,107	24,040	11,154	864	1,441	889
Sindhi	11,639	8,250	2,879	276	267	153

The interesting fact brought out by the above Table is that the number of published books has in the last ten years increased proportionately far more rapidly than the number of literate persons. Information is not available of the number of copies of each book published. But there is no reason to think that the average of copies per book is lower than twenty years ago. So it may be deduced from the figures that the average literate individual reads more than formerly.

The low place taken by Kanarese throughout this study is possibly due in part to two causes—(1) that the educated Brahmans of the Karnatak are equally, if not better at home with a Marathi than a Kanarese book, and (2) that until 1919 there was no University education in Kanarese, so that there was less demand for educational works in that language.

The ratio of books published in English to persons literate in English can be studied in the same way.

Subsidiary Table No. (xi)—Proportion of books published in English total persons and persons literate in English.

	One book published for every					
	Person existing at the end of the decade			Person literate in English existing at the end of the decade		
	1891 to 1900	1901 to 1911	1911 to 1921	1891 to 1900	1901 to 1911	1911 to 1921
English	34,638	35,765	15,970	222	305	194

In the above Table the base for the first set of ratios is the total population of the Presidency at the Census in question, and the base for the second set of ratios the total number of Literates in English.

In the following Table the books published during the decennium are classified according to subjects.

Subsidiary Table No. (xii)—Classification of published books by subjects.

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Arts	39	39	49	41	39	23	6	25	17	7
Biography	39	55	53	56	59	58	43	62	49	35
Drama	58	74	79	53	62	69	63	50	43	33
Fiction	103	134	173	221	226	232	169	201	169	111
History	28	30	28	33	50	44	51	46	30	31
Language	95	123	130	138	156	189	155	160	184	126
Law	18	19	24	17	25	19	18	11	18	15
Medicine	26	28	51	52	44	29	39	22	26	21
Miscellaneous	298	412	377	455	512	667	550	498	430	438
Poetry	308	347	381	404	435	469	435	342	358	413
Politics	2	1	2	2	2	11	35	63	65	26
Philosophy	43	72	81	57	54	64	46	38	48	24
Religion	287	374	408	251	240	322	241	204	217	184
Science	71	87	71	119	109	100	68	73	61	56
Voyages and Travels	2	5	1	3	6	3	2	2	7	4
Total	1,417	1,802	1,917	1,902	2,019	2,299	1,921	1,797	1,720	1,524

The rapid increase under "Politics" is interesting. But it must be remembered that many of the books falling under other heads, especially Biography, have a political tinge. The sediment under "Miscellaneous" also probably contains many essentially political books. Of the rest many are educational.

I am indebted to the Oriental Translator for supplying the figures of published books, classified by language and subject, on which the above study is based.

In 1911 figures were also given of Newspapers and their circulation. This I have not done on the present occasion, because the increase in newspaper reading habit, which is undoubted, takes the form of increase in the circulation of existing, rather than the foundation of new papers, and the circulation of any paper is probably a matter of some uncertainty.

APPENDIX K.

DIVORCE.

In the matter of divorce we differ from the practice of some other parts of the Empire.

In the English Census of 1911 the schedule asked the householder to state whether "Unmarried", "Married" or "Widowed". Nothing was said as to how divorced persons were to return themselves, and it is mentioned in the Report that for this reason Divorced persons may have got into any of the three categories (p. 89 of the Census Report for England and Wales 1911 Census). Probably an ordinary private person who is divorced would be more likely to return "Unmarried" than "Widowed", and it may be assumed that the bulk of the Divorced got into Unmarried. In India it is specifically mentioned in the supplementary Instructions in the Code that Divorced persons are to be shown as Widowed.

From Tables 5A and 5B of Appendix D of the English Census Report of 1911 it appears that in most parts of the Empire only the three main conditions were recorded. But in Australia, New Zealand, the Union of South Africa and a few of the minor colonies the fourth condition, namely "Divorced" was separately recorded; in Canada in addition to Divorced a fifth condition, namely "Legally Separated", was also shown. On the other hand in a few of the minor colonies Unmarried and Widowed were amalgamated, making only two categories married at the moment and not married at the moment. In the case of Ceylon it is mentioned that Widowed and Divorced are amalgamated. In a few cases of minor colonies it is mentioned that Widowed included the Divorced "and those persons temporarily separated from their spouses".

It will be seen therefore that practice differs considerably. But what is more important is that whereas in Western countries the number of divorces and the divorce rate can be ascertained, because no divorce can be granted except by a Court, in India the figures can never be obtained except through the Census. In the same way we could not in India ascertain the number of marriages, nor the marriage rate and thence the probable ratio of married in the total population if we did not record civil condition at the Census. And it seems therefore desirable to record Divorced persons separately at future Censuses, both in order to study the prevalence of divorce in India, and also to afford a comparison with other countries.

In the case of divorce, just as in the case of marriage, custom in India is in a chaotic state, the Courts recognising as valid the diverse practices of different communities. Mr. P. B. Malabari, Bar.-at-Law, the Prothonotary and Registrar of the High Court, replied as follows to a letter—

"The Civil law of the country recognises as valid divorces granted among non-Christians (other than Parsees) by husbands or the various religious bodies according to circumstances. For instance, among Mahomedans, a husband can grant a divorce to his wife, and among Hindus of very low castes divorces are sometimes granted by custom, and the Civil Law recognises such divorces, if the custom is proved."

It will be seen therefore that only Christians and Parsees stand in with a regular legal basis for divorce. And only in their case therefore can any divorce rate be taken out. Mr. Malabari kindly supplied me with the following figures :—

Subsidiary Table No. (xiii)—Number of divorces granted during the Decade by the High Court, Bombay.

Year.	Original side.		Appellate (Decree of Subordinate Courts confirmed.)
	Parsees.	Christians.	Christians.
1911	3	3	2
1912	2	7	6
1913	2	3	5
1914	5	5*	14
1915	3	3	7
1916	1	6	4
1917	3	6	3
1918	2	4	8
1919	2	6	3
1920	6	5*	6
	29	48	58

*Includes in each case one divorce granted to Hindu parties under the Indian Civil Marriage Act.

The decrees of District Courts being only valid after confirmation by the High Court the above figures are complete figures for the decade, the number of Divorces being Parsees 29, Christians 104. These figures on the basis of the 1911 Census figures give the proportions shown below :—

Divorce rates in ten years.

		Divorces per 100,000 of population living at beginning of decade.		Divorces per 100,000 of married popu- lation.
Christians	..	45	..	106
Parsees	..	36	..	94

The 1911 figures are of course a rather inaccurate base for calculating the rates. But, as no more than a rough approximation is sought they will do. Whipple (op. cit. p. 201) quotes divorce rates for Massachusetts for certain years from 1880 onwards. His own rates are annual ones and are obtained from the annual divorce figures with the "mid-year population" as a base. His figures being for single years must be multiplied by 10 to afford comparison with those given above. In this way the corresponding Massachusetts figures rise from 320 and 860 in 1890 to 600 and 1,560 in 1914. The rates for Parsees and Christians in this Presidency are therefore in comparison with the United States figures exceedingly low.

In England and Wales, according to the Report of the Registrar General for 1918 (p. xiii), the numbers of divorces from 1911 to 1918 were as shown in the margin. The rapid increase after 1914 would seem to be due, not so much to the

Number of Divorces in England and Wales.

1911	..	1,160
1912	..	1,174
1913	..	1,154
1914	..	1,712
1915	..	1,360
1916	..	1,980
1917	..	1,406
1918	..	2,222

War, as to the coming into force in that year of the "Rules of the Supreme Court (Poor Persons) 1914". Under those rules divorce, which was previously impossible to those who could not afford the ordinary legal processes, was rendered

possible by the permission to sue *in forma pauperis*. Owing to the rapidly rising figures it is difficult to fix on any average. But taking 2,000 as an arbitrary estimate of the average number of divorces in England we get a rate of 56 per 100,000 persons and 153 per 100,000 married persons of the 1911 population in ten years. These rates are far below those of Massachusetts, but above those of either Christians or Parsees in this Presidency.

APPENDIX L.

EFFECT OF IRRIGATION ON POPULATION.

An attempt was made to study the effect of irrigation facilities on population of irrigated as compared with adjacent unirrigated tracts. It is of course a foregone conclusion that irrigation will cause colonization, and the taking up of new lands, and will also, by enhancing prosperity, cause an increase of the original inhabitants. And it is a matter of common knowledge that this is true in practice.

It is however sometimes an advantage to have definite quantitative proof even of a well-known fact.

The Taluka authorities of Bhimthadi and Indapur supplied figures of population of villages for past censuses so far as available, which in Bhimthadi meant figures back to 1891 for most villages, and in Indapur back to 1872. Village-war figures of 1872 and 1881 in Bhimthadi seem to be lost.

The following Tables were taken out. In the first Table 1911 was taken as the current population figure rather than 1921, because at the current Census the eastern portions of the Deccan were largely deserted. The second Table was taken out to show how far the irrigated villages withstood the effects of the 1918 famine. It will be seen that the irrigated villages stood the famine very well, the Bhimthadi villages which are further west and get the water first increasing from 1911 to 1921 by 21 per cent.

Irrigation therefore not only increases the population of the tracts which it serves, but prevents that violent upheaval from migration which was such a feature of the East Deccan at this Census. It is noteworthy that among the unirrigated Indapur villages which in 1911 showed a heavy increase over 1872, are those in the vicinity of the Railway, viz., Diksal, Takarwadi and Bhigvan; and these in spite of the railway showed heavy emigration in 1921.

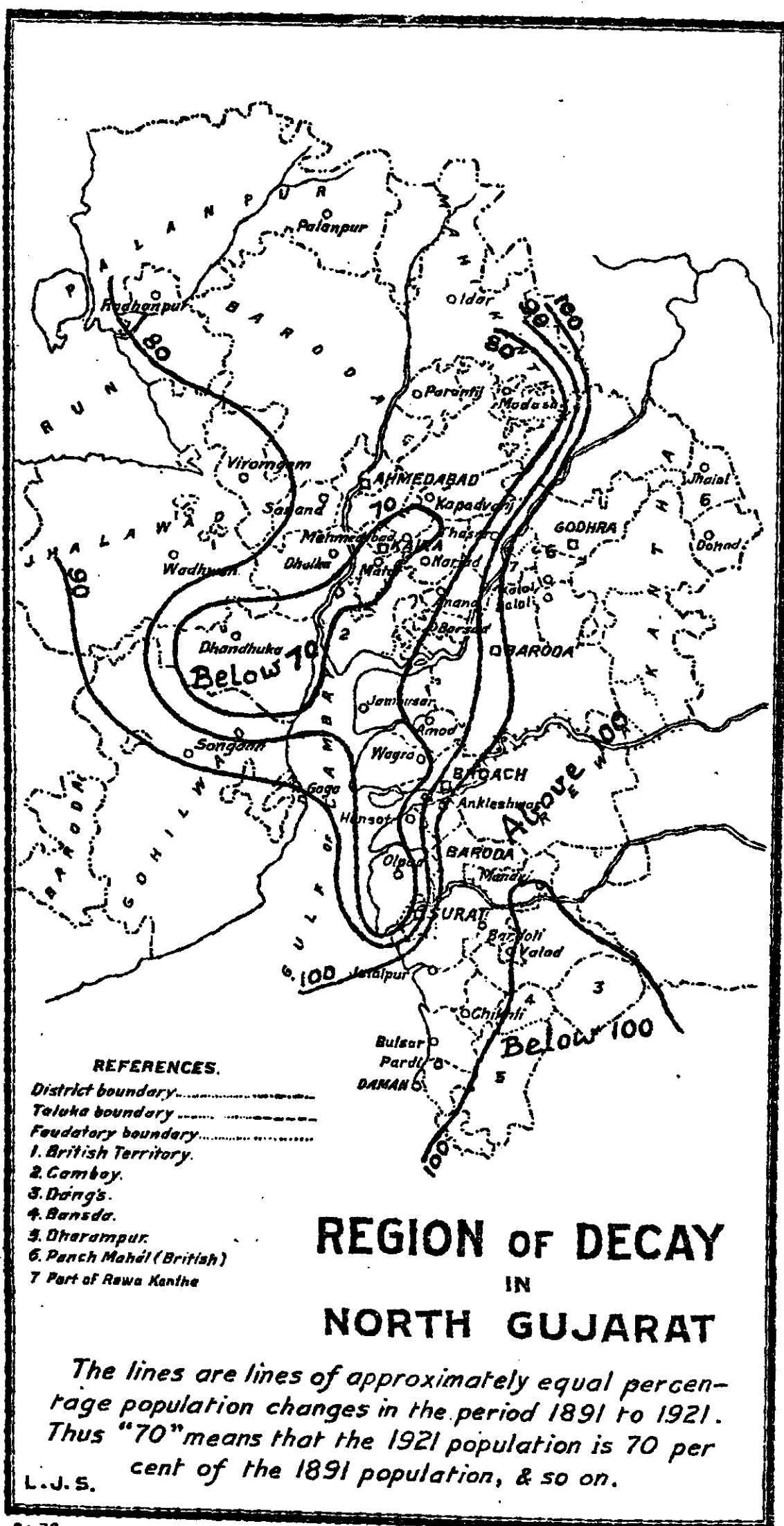
Subsidiary Table No. (xiv)—Effect of irrigation in Indapur and Bhimthadi.

Class.	Number of villages in which the 1911 population bore the following percentages to the 1872 population, Indapur, and to the 1891 population, Bhimthadi.								
	Increased					Stationary.	Decreased.		
	Over 300	250 to 300	200 to 250	150 to 200	110 to 150	90 to 110	75 to 90	50 to 75	Below 50
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
INDAPUR.									
Irrigated ..	3	1	3	10	15	4	..	..	..
Unirrigated ..	..	..	1	6	12	18	7	6	..
BHIMTHADI.									
Irrigated ..	2	1	1	10	8	5	..	..	2*
Unirrigated ..	..	..	1	..	7	24	13	4	..

*These two villages are Shirol & Malegaon Khurd. It seems probable that they were suffering from plague in 1911, since their 1921 population is much higher.

Subsidiary Table No. (xv)—Population of irrigated and unirrigated villages in the Indapur Taluka at the Censuses of 1872, 1911, and 1921, and the Bhimthadi Taluka at the Censuses of 1891, 1911 and 1921.

Class.	Total population of villages of each class.				
	Actual Numbers.			Percentages.	
	1872, Indapur, 1891, Bhim- thadi.	1911, both Talukas.	1921, both Talukas.	1911 on 1872 Indapur, 1911 on 1891 Bhimthadi.	1921 on 1911, both Talukas.
INDAPUR					
Irrigated.					
Nira Canals ..	19,978	28,770	29,400	144.0	102.1
Tanks ..	6,632	15,172	13,921	228.7	91.7
Unirrigated ..	26,924	31,034	17,211	115.2	55.4
BHIMTHADI.					
Irrigated ..	40,835	58,351	70,399	143.0	120.8
Unirrigated ..	45,112	47,326	27,383	102.7	58.0



APPENDIX M.

THE REGIONS OF DECAY IN AHMEDABAD AND KAIRA.

Attention has been drawn in the first Chapter to the fact that a large tract in North Gujarat seems never to have recovered from the "Chappanya" or great famine of Samvat 1856 (A. D. 1899—1901). A study of population changes Taluka by Taluka shows that within this tract two small areas stand out as areas not only of non-recovery, but of apparent decay. These are (1) the rice tract in Kaira formed by the Matar and Mehmedabad Talukas and the north-west strip of Nadiad, and (2) part of Dhandhuka in Ahmedabad. In the latter case the cause of the decay is as much the decline of the Gulf of Cambay ports and the diversion of the cotton traffic to the Railway as the effects of the famine. In the former case the famine and the subsequent displacement of rice by cotton seems to be the essential cause. It is not however the function of the Census Department to find out local and often obscure causes of change, but rather to provide figures for the local officers to analyse, and explain. And the above remarks are only by way of suggestion.

The following Table shows the ratio of the 1921 population to the 1891 population in all Talukas of Gujarat and some of the States.

Subsidiary Table No. (xvi)—Percentage population changes in Talukas of Gujarat, 1891 to 1921.

Taluka, etc.	Population in thousands.		Percentage which the 1921 population bears to the 1891 population.
	1891.	1921.	
AHMEDABAD.			
Daskrois, Dholka and Sanand (omitting Ahmedabad City)*	336	270	80
Prantij and Modasa	116	93	80
Virangam	152	135	89
Dhandhuka	125	88	70
Gogha	33	31	93
KAIRA.			
Anand	170	147	86
Borsad	162	144	89
Kapadvanj	102	82	81
Matar	79	56	71
Mehmedabad	92	68	71
Nadiad	171	139	81
Thasra	96	77	80
BROACH.			
Broach	113	110	98
Ankleshwar	44	46	105
Hansot	26	25	94
Waghra	37	29	79
Amod	39	35	91
Jambusar	82	62	76
PANCH MAHALS.			
Godhra	108	139	130
Dohad	69	80	117
Jhalod	49	49	99
Kalol	47	49	105
Halol	41	57	139
SURAT.			
Olpad	67	54	82
Chorasi	159	175	110
Baroli	57	61	107
Valod	27	27	99
Jalalpur	79	79	101
Mandvi	54	51	95
Bulsar	88	96	109
Chikhli	61	64	104
Pardi	58	66	114
MAHI KANTHA	582	450	78
PALANPUR AGENCY	646	519	80

*Owing to territorial changes it was necessary to amalgamate the figures of four Talukas. Ahmedabad City was however omitted, since its inclusion would have produced a misleading impression.

Taluka, etc.	Population in thousands.		Percentage which the 1921 population bears to the 1891 population.
	1891.	1921.	
KATHIAWAR : JHALAVAD PRANT.			
Dhrangadra	104	88	85
Vankanor	39	37	94
Limbdi	48	35	74
Wadhwan	42	38	80
Remainder	235	158	68
GOHILWAD PRANT.			
Bhavnagar	467	426	91
Palitana	61	58	95
Remainder	148	130	88

The following Baroda Divisional figures are also important:—

Baroda Division	701	613	87
Kadi Division	1,099	901	82
Naosari Division	319	340	107

The next Table shows the actual course of the population changes in all Talukas of Ahmedabad and Kaira only Census by Census from 1872.

Subsidiary Table No. (xvii)—Population of Talukas of Ahmedabad and Kaira, 1872—1921 (in thousands).

Taluka.	1872.	1881.	1891.	1901.	1911.	1921.
AHMEDABAD.						
*Daskrois	307	323	336	268	265	270
Sanand						
Dholka						
Prantij						
Modasa	107	108	116	87	87	93
Viramgam	128	137	152	113	117	135
Dhandhuka	125	123	125	99	95	88
Gogha	34	29	33	30	-30	31
KAIRA.						
Anand	150	154	170	143	143	147
Borsad	145	143	162	138	140	144
Kapadvanj	87	93	102	75	77	82
Matar	79	78	79	62	59	56
Mehmedabad	86	89	92	76	68	66
Nadiad	151	162	171	148	133	139
Thasra	86	85	96	74	72	77

*Omitting Ahmedabad City. Owing to territorial changes it was necessary to amalgamate these four Talukas

The above Table is given mainly in order to demonstrate that all Talukas show recovery except the three mentioned. Separate figures for Dholka were unfortunately not available. The attached map shows the approximate lines of equal percentage population changes, 1891—1921, and indicates the position of the areas of decay.

These areas are joined in the map by a narrow belt of Dholka and Cambay Territory. It was not possible to prove this point. Information was called for from the two Districts to show the population of villages at all past Censuses. This information was not in all cases available. No figures were available from Kaira prior to 1881, nor from Dhandhuka prior to 1891. For many of the Dhandhuka villages the 1891 figures were available but not the 1901 figures. For many individual villages, especially Talukdari villages, no information was received at all. In the case of Dholka no figures were available prior to 1911.

The map is as near an approximation as can be secured having regard to the scanty information available, and the lack of absolute regularity in the distribution of areas of increase and decrease.

(1) *Kaira rice tract.*

Returns were received for 59 villages of Mehmedabad, 74 of Matar and 19 of Nadiad. The latter were all in the strip of country west of the Nadiad-Kapadvanj Road and east of the Railway.

The extreme variation during the period 1891 to 1921 ranged from + 56 per cent. (Rasikpura, on the river between Kaira and Ahmedabad) to - 74 per cent. (Wansoli, in the north-east corner of Mehmedabad).

The worst area is the triangle formed by joining Mehmedabad, Mahudha and Nadiad. But the area north of this triangle, *i. e.*, north of the Mehmedabad-Mahudha road, is also bad, and all over the remaining area there are patches of large decrease.

The following is a summary of the percentage changes grouped into classes :—

Subsidiary Table No. (xviii)—Population of 1891 and 1921 compared for 154 villages in and near the Kaira rice tract.

Number of villages in which the 1921 population bears the following percentages to the 1891 population.							
Decreased.			Stationary.	Increased.			
Below 60	60—75	75—90	90—110	110—125	125—140	Above 140	
30	71	35	13	1	1	1	

A village in which the variation is not more than 10 per cent. either way may be legitimately called stationary.

(2) *Dhandhuka.*

Figures were furnished for 144 villages. These were divided by the local authorities into four tracts, *viz.*, (1) the *Panchal*, or hilly region west of Ranpur, (2) the *Kaner*, a strip from Ranpur on the West to Vagad-Barvala on the East, (3) the *Central Tract*, (North Central would be a better term) with Dhandhuka as the centre, and (4) the *Bhal*, *i. e.*, the whole eastern half of the Taluka to the Gulf of Cambay.

The extreme range of variation was much higher than in Kaira, lying between +293 (Bagad) and -100 (Jhanki). But these isolated cases are unreliable guides, an influx for a festival or an exodus on account of epidemic disease being liable to cause sudden fluctuations. The class distribution similar to that given for the Kaira Rice Tract is as follows :—

Subsidiary Table No. (xix)—Population of 1891 and 1921 compared for 145 villages in Dhandhuka.

Number of villages in which the 1921 population bears the following percentages to the 1891 population.							
Tract.	Decreased.			Stationary.	Increased.		
	Below 60	60—75	75—90	90—110	110—125	125—140	Above 140
Panchal	2	5	7	11	..	3	2
Kaner	3	13	16	5	..	1	4
Central	8	8	7	1	1	..	1
Bhal	19	15	5	4	2	..	3
Total	30	41	35	21	3	4	10

It is highly probable that some of the occurrences of considerable individual increases are accidental and technical only, being caused by changes of boundaries, or by the influences suggested above.

For the rest it is quite clear that the region of greatest decrease since 1891 is in the Bhal. The position of the class with the largest number of occurrences moves back regularly from Class IV "Stationary" in the Panchal to Class I "below 60" in the Bhal.

The Panchal was hardly hit at all by the famine, as the following population figures will show :—

*Subsidiary Table No. (xx)—Population of certain villages in four tracts of Dhandhuka, 1891—1921 (omitting 1901) *.*

Tract.	Number of villages examined.	Population.		
		1891.	1911.	1921.
Panchal	30	13,568	13,166	12,084
Kaner	42	36,788	31,785	32,734
Central	24	30,885	23,648	22,018
Bhal	48	36,385	24,480	21,112

* Mainly because, unfortunately, the Taluka authorities were not able to furnish the 1901 figures for all villages.

The above is rather interesting, because of the decrease in the Panchal at this Census. The same fact is brought out by the following figures of villages which have simply increased or decreased from 1911 to 1921.

Subsidiary Table No. (xxi)—Number of villages in the four tracts of Dhandhuka which showed absolute increase or decrease, 1911 to 1921.

Tract.	Number of villages.		
	Increased.	Decreased.	Identical.
Panchal	9	21	..
Kaner	18	24	..
Central	10	14	..
Bhal	22	25	1

The question naturally arises—Is the Panchal beginning to be affected by the decay which long ago set in in the Bhal? To this answer the local Officers must furnish the answer. It is possible that purely temporary causes were at work to produce this result. It is fairly well known that the Bhal is a tract which is decaying. The same cannot be said of the Panchal.

APPENDIX N.

THE BHILS—ARE THEY HINDUS OR ANIMISTS ?

By the Rev. Enoch Hedberg, D.Litt.

In trying to give a correct answer to this question another question presents itself to my mind. And it is, what is a Hindu ? If I were to give a definition of that term I would say—“ Anyone who professes himself to be a Hindu and conforms to the main points in Hinduism is a Hindu.” If this definition is a correct one, as I believe it is, how does it work when applied to the Bhils. Let us see.

All Bhils, even the most wild and backward, with the exception of a small number which has turned Muhammedans or Christians, declare themselves to be Hindus. And as such they are accepted by native Christians, Muslims and Hindus alike. In a tract where there are Christian or Muhammedan converts from among the Bhils, those who stick to their ancestral religion are everywhere and by everyone called Hindu-Bhils. This is the case, to give only one instance, even among the very wild Bhils of the Akrani. And to tell them that they are not Hindus would be an insult.

As to their conformity to the main points in Hinduism it is sufficient to mention—

- (1) that they observe caste,
- (2) celebrate the Hindu festivals, and
- (3) worship Hindu gods and goddesses.

It is true that their caste feelings on the whole are not so strong as among the Hindus in general. But caste is there ; and its spirit manifests itself strongly enough at certain occasions. The Mahars, Chamars, Mangs, Holars and other low caste Hindus are looked down upon by all respectable Bhils to whatever tribe or class they may belong. They would never take food from their hands or accept them by marriage into their caste. Even to touch them is defiling.*

The religious festivals or holy days kept by the Bhils are the same as those kept by the Hindus—Holi, Dasera, Divali. Even the petty Hindu festivals are more and more being observed by them.

The Hindu Pantheon of gods, goddesses, avatars, apotheosis, etc., has been taken over by the Bhils. They bring them their sacrifices and worship them. Admittedly they have their tribal or local deities too. But so have other Hindus all over India. A good deal of Animism and even Animatism is still practised among them. This is however more or less the case not only in the lower strata of Hinduism, but to a great extent among Bhudhists, Jews and even Muslims, not to speak of such Christians as uneducated Copts and Russian farmers.

There may still in most cases be noted a difference between a common Bhil and an ordinary Hindu. But the difference is more of a racial or ethnological nature than a religious one, and is rapidly disappearing.

Lastly, I have collected a good deal of Bhil folklore which I hope to be able to publish some day. It will, it is believed, throw light on this question, and prove what has been contained in this note.

To conclude, the Bhils should in this respect be accorded the same rights as are given to other Indians and professors of other religions the whole world over—to be taken at their word in religious matters. They are as good Hindus as many other low class people of this country. When they profess themselves to be Hindus they ought to be classified as such.

* This, however, is no proof. Mahomedans sometimes regard the untouchable Hindu Castes as defiling. L.J.S.

APPENDIX O.

THE REVENUE VILLAGE AND THE UNIT OF RESIDENCE.

1. In Chapter II of the report the fact that the Revenue village is not the true economic unit of residence, and that the use of the Revenue village as the unit in certain Imperial Tables is therefore liable to give a false impression, has been so fully discussed that reference is simply invited to that Chapter.

2. It was decided at the very commencement of the Census Operations to make an attempt to ascertain the actual relation between the two units. And in the General Village Register, which is the first form to be prepared, two columns were therefore provided one for the Revenue village and one for the "inhabited place". The following definitions were published in the first Chapter of the Code :—

"19. Village, wherever referred to, means the revenue village and not the separate residential hamlet.

"20. Inhabited place includes the gaonthan of any village, any separate residential hamlets, and any such places as temples, Railway gatemens' huts, ferrymen's huts and the like if situated at a distance."

And the following note was included in the instructions for filling up the Register :—

"Column 3—See the definition of 'inhabited place' in the last chapter. In this column it should not be forgotten to enter the gaonthan as one of the inhabited places. At a later stage of the operations a return of the number of villages, inhabited places, and deserted villages will be called for. This column should therefore not be neglected."

3. Unfortunately from the very commencement of my tour it became clear that very few Mamledars had really grasped the idea of the enquiry. The following Circular was therefore issued :—

CENSUS OF 1921.

No. Rept.—7 (Circular).

Poona, 24th June 1920.

TO ALL DISTRICT CENSUS OFFICERS.

It is clear that much misunderstanding exists as regards the meaning of "inhabited place" (Chap. I, Art. 20, and Gen. Vill. Reg., Col. 3.) One village returns 156 inhabited places, another 25 houses and 27 inhabited places; another breaks up the houses into blocks of *exactly* 50 each, and gives each block a separate name as an inhabited place. It is therefore necessary to explain the reason for calling for returns of inhabited places.

The Bombay village is purely an administrative unit, and not necessarily an economic unit. This is discussed in paragraphs 45 and 46 of the 1911 Report. Now if we want to find what is the average population of each village we have to divide the population of the district or taluka by the number of villages. For 1911 the figures for Murbad Taluka of the Thana District are 378·7, and for the Olpad Taluka of Surat 453·3. This would seem to imply that the conditions of life under which the residents of those talukas live are much the same. But anyone who has seen the Murbad Taluka knows that the noticeable feature is the tiny little hamlets each with only a few houses, whereas Olpad represents a tract of quite large villages. It is a matter of some economic interest to find out the average number of houses and average number of inhabitants per residential unit, as opposed to administrative unit. Expressed as averages of population per residential unit the Murbad figure would probably be about 50 and the Olpad figure about 400, a very different result. The only way of getting at these figures showing the size of the units into which residences are grouped in the various tracts is to call for returns of the number of "inhabited places". It is to be noted that these figures are not wanted for some time yet. The only reason why the collection of these statistics of inhabited places was directed to be made *pari passu* with the preparation of the General Village Register was because it was thought that it would save subsequent trouble. But the results as seen in certain districts, and as instanced above, show that the statistics now obtained are probably valueless almost everywhere. It is evident that Art. 20 of Chap. I of the Code was not happily worded. The following revised instructions are therefore issued.

Each Municipal area is one and only one inhabited place. In the same way a small town or large village with, say, a Maharwada at a distance of a few yards from the edge of the village proper is only one inhabited place. Where a town is made up of distinct Revenue villages in one common site these villages jointly constitute one

2. As to what constitutes an inhabited place the matter was very fully discussed last summer by means of Circulars. It is not intended to include under this term anything but *definite* village sites, hamlets and settlements. Where there are isolated huts they must be neglected, but if such huts are very numerous a note to that effect may please be made in the remarks column. Municipalities with their suburbs are only one inhabited place each. And absolutely contiguous village sites are also only one. The information is already collected in the General Village Register and only needs to be checked.

3. In the columns for uninhabited Revenue villages two blank columns are provided. It will sometimes be possible to give the figures for years of Revision Settlements, but Census years are of course to be preferred if known.

4. In Sind the "deh" should be taken as the Revenue village.

5. The return may please be sent by the 30th June next.

6. In the case of States and Agencies it is optional.

6. As the final result, figures were obtained from all districts. In two districts they were worthless, the Revenue village and the inhabited place being treated as synonymous terms! And in practically all cases in the following Table in which the word "uncertain" is entered in column 3 it is to be understood that the same mistake was made. It is just possible that in a few Talukas there really are exactly the same number of units of residence as there are Revenue villages, and in that case the elimination of the figure in column 3 will have been incorrect. But to be on the safe side the same principle was followed throughout. For the figures actually printed I must disclaim all responsibility. Though collected in response to a Census Circular these figures are not Census figures, but are supplied by, and vouched for by, the Collectors of districts.

7. For the most part the figures produce the result anticipated, that is to say they demonstrate that in the open tracts the village is the usual unit of residence, while in the forest tracts there are numerous small hamlets. Thus in Mahim the average population per Revenue village is 482 and per inhabited place, as reported, 175. In Murbad the figures are 318 and 133. In Karad on the other hand they are 1,281 and 566; and when we get still more out into the black soil they appear in Ron as 1,198 and 1,108. In the Presidency the lowest ratio per inhabited place seems to be Yellapur with 131 persons per village and 31 per place. In Surja they are 126 and 49. On the other hand as we get into the Mallad tract the number of persons per inhabited place rises to 121 in Mundgod. And this corresponds with the results as we go on east, Haliyal giving 212, and Kalghatgi 408. The figures quoted above accord with expectations. They demonstrate what has been said in Chapter II as to the danger of arguing from the Imperial Tables as to the average size of units of residence.

8. Along the coast of the South Konkan the Revenue Village as an administrative, political and social unit hardly existed from the beginning. The Revenue maps are a mass of names, mostly names of minute hamlets or (apparently) of localities, independent of all question of residence at all. The figures of Talukas from Dapoli southward bear this out.

9. In Sind the available figures indicate the wide divergence between the Revenue Collection Area, which gets into our Tables as a Village and the true unit of residence. Thus in Subsidiary Table III to Chapter II of the 1911 Report the average population per village in Thar and Parkar was given as 469, whereas, if the returns from that district in this enquiry are reliable, the average number of persons who live together in one village in the real sense is only 96.

10. The enquiry had best be left with the publication of the Table and the above cursory discussion. In the absence of figures for some Talukas and with the existing uncertainty regarding many others it was not worth while to go to the labour of working out and printing ratios.

11. It will be seen that in the same enquiry an attempt was made to ascertain whether there is any general tendency to desertion of existing villages. Very few Districts attempted to supply figures earlier than 1911. On the whole the tendency is definitely against desertion except in the Karnatak Mallad, where the figures for Bankapur, Dharwar, Hangal, Kalghatgi, Kod, Haliyal and Mundgod are distinctly suggestive of a decaying tract. For this reference is invited to the Appendix entitled—"Regions of Decay in the Karnatak".

Subsidiary Table No. (xxii)—Revenue Villages and Inhabited places.

Taluka or State..	Number of Revenue villages.	Number of Inhabited places.	Number of Revenue villages which contained no inhabited place in				Remarks.
			1921	1911	1901	1891	
1	2	3	4	5	6	7	8
Bombay Suburban Division.	....	....	....	....	....	....
Bombay Suburban District.	84	142	4	4	5	5	
South Salsette Taluka ..	84	142	4	4	5	5	
Northern Division.							
Ahmedabad District ..	898	Uncertain.	19	23			
Dhandhuka Taluka ..	155	Uncertain.	10	10			
Do. Gogha Petha ..	64	68	....	1			
Dholka ..	124	Uncertain.	4	4			
North Daskroi ..	80	Uncertain.	3	5			
Do. Sanand Petha ..	68	114	2	1			
Prantij ..	116	189	....	1			
Do. Modasa Petha ..	47	Uncertain.	....	....	
South Daskroi ..	69	93	....	....	
Viramgam ..	166	199	....	....	
Broach District ..	415	Uncertain.	13	18			The Collector notes that the reduction in the number of uninhabited revenue villages is technical only, being due to alteration of village boundaries.
Amod Taluka ..	53	Uncertain.	1	1			
Ankleshwar ..	57	56	2	4			
Do. Hansot Petha ..	47	71	....	1			
Broach ..	105	102	7	9			
Jambusar ..	83	98	2	3			
Vaghra ..	70	Uncertain.	1	....		
Kaira District ..	588	1,202	3	3			
Anand Taluka ..	74	138	....	....	
Borsad ..	90	120	....	....	
Kapadwanj ..	84	367	....	....	
Matar ..	81	85	....	....	
Mehmedabad ..	60	82	....	....	
Nadiad ..	90	130	....	....	
Thasra ..	100	262	3	3			
Panch Mahals District ..	692	Uncertain ..	28	25			
Dohad Taluka ..	122	175	....	....	
Do. Jhalod Petha ..	08	Uncertain..	1	1			
Godhra ..	238	484	13	14			
Kalol ..	68	129	3	3			
Do. Halol Petha ..	166	249	11	7			
Surat District ..	854	Uncertain ..	73	78			
Bardoli Taluka ..	94	Uncertain..	12	12			
Do. Valod Petha ..	43	135	3	4			
Baker ..	99	142	....	....	
Chikhij ..	63	Uncertain..	....	....	
Chorasi ..	82	70	10	10			
Jalalpur ..	95	Uncertain..	4	4			
Mandvi ..	163	426	26	26			
Olpad ..	134	Uncertain..	18	17			
Fardi ..	81	Uncertain..	....	....	
Thana District ..	1,597	4,323	47	50			
Bassein Taluka ..	89	220	....	....	
Bhilwandi ..	203	486	7	5			
Dahanu ..	138	716	....	....	
Do. Umbargaon Petha..	79	335	....	....	
Kalyan ..	235	392	11	11			
Mahim ..	193	530	5	5			

Taluka or State.	Number of Revenue villages.	Number of inhabited places.	Number of Revenue villages which contained no inhabited place in				Remarks.		
			1921	1911	1901	1891			
1	2	3	4	5	6	7	8		
Murbad ..	173	416	1	3	Not known.	Not known.			
North Salsette ..	56	163	6	6					
Shahapur ..	201	561	9	9					
Vada ..	106	187	5	7					
Do. Mokhada Petha ..	69	311	3	4					
Central Division.									
Ahmednagar District ..	1,376	Uncertain..	28	32	Not known.	Not known.			
Akola Taluka ..	157	Uncertain..	2	2					
Karjat ..	82	Uncertain..	1	1					
Do. Jamkhed Petha ..	59	127	1	1					
Kopergaon ..	125	139	1	4					
Nagar ..	121	159	3	3					
Newasa ..	140	150	1	4					
Parner ..	117	186	....	....			
Rahuri ..	116	304	4	2					
Sangamner ..	152	207	3	3					
Shevgaon ..	150	Uncertain..	8	9					
Do. Pathardi Petha ..	70	121	1	....				
Shrigonda ..	87	137	3	3					
Khandesh East ..	1,797	Uncertain..	345	349	....	....	Figures supplied are useless, as the Revenue village has been taken as the inhabited place throughout.
Khandesh West ..	1,423	1,809	159	189	Not known.	Not known.		Figures in Column 3 doubtful.	
Dhulia Taluka ..	153	154	34	34					
Nandurbar ..	161	230	5	9					
Nawapur ..	140	Uncertain..	6	1					
Sakri ..	128	238	16	16					
Shahada ..	155	163	16	17					
Shirpur ..	105	105	13	23					
Slindkheda ..	143	143	25	25					
Taloda ..	254	288	40	55					
Mewas Estates ..	184	343	4	7					
Nasik District ..	1,694	Uncertain..	45	48	Not known.	Not known.			
Chandor Taluka ..	109	228	3	4					
Dindori ..	128	Uncertain..	....	....			
Igatpuri ..	130	307	2	2					
Kalvan ..	193	Uncertain..	4	6					
Malegaon ..	153	172	5	5					
Nandgaon ..	93	144	2	2					
Nasik ..	137	248	2	2					
Niphad ..	121	Uncertain..	1	1					
Peint ..	245	Uncertain..	17	18					
Baglan ..	161	Uncertain..	5	4					
Sinnar ..	104	Uncertain..	2	2					
Yeola ..	120	Uncertain..	2	2					
Poona District ..	1,202	Uncertain..	25	14	Not known.	Not known.			
Bhimthadi Taluka ..	79	Uncertain..	....	....			
Do. Dhond Petha ..	50	127	....	....			
Haveli ..	145	202	....	2				
Do. Mulshi Petha ..	85	161	0	4					
Indapur ..	86	418	....	....			
Junnar ..	163	370	4	3					
Khed ..	178	378	1	1					
Do. Ambegaon Petha ..	66	331	....	....			
Mawal ..	167	236	13	3					
Poona Taluka ..	12	Uncertain..	....	....			
Purandhar ..	92	240	1	1					
Sirur ..	79	236	....	....			
The Mamledar shows the figure for Column 3 as 3,708 which is not understood.									

Taluka or State.	Number of Revenue villages.	Number of Inhabited places.	Number of Revenue villages which contained no inhabited place in				Remarks.
			1921	1911	1901	1891	
1	2	3	4	5	6	7	8
Satara District ..	1,354	Uncertain.	98	Not known.	Not known.	Not known.	
Javli Taluka ..	108	315	2	2	2	2	
Do. Malcolmpeth Petha. ..	58	Uncertain.	2	2	2	2	
Karad ..	102	231	....	....	....	....
Khenapur ..	90	44	45	Not known.	Not known.	Not known.	
Khatao ..	87	103	2	2	2	2	
Koregaon ..	74	57	38	38	38	38	
Man ..	77	Uncertain.	1	1	1	1	
Patan ..	205	Uncertain.	2	3	3	3	
Satara ..	151	233	1	1	1	....
Tasgaon ..	48	120	....	....	....	....
Wai ..	91	157	....	....	....	....
Do. Khandala Petha. ..	33	55	....	....	....	....
Walwa ..	59	97	3	3	3	3	
Do. Shirala Petha. ..	81	Uncertain.	....	....	....	....
Sholapur District ..	719	1,010	2	2			
Baral Taluka ..	123	140	....	....	
Karmala ..	123	166	....	....	
Madha ..	89	117	1	1			
Malsiras ..	69	108	....	....	
Pandharpur ..	86	98	....	....	
Sangola ..	77	174	....	....	
Sholapur ..	152	207	1	1			
Southern Division.							
Belgaum District ..	1,132	Uncertain.	239	238			
Athni Taluka ..	83	113	1	1			
Belgaum ..	113	39	99	99			
Do. Chandgad Petha. ..	90	145	1	1			
Chikodi ..	90	Uncertain	2	2			
Hukeri ..	115	Uncertain.	2	2			
Gokak ..	120	151	15	12			
Khanapur ..	240	Uncertain ..	25	25			
Parasgad ..	60	74	71	72			
Do. Murgod Petha ..	52	65	2	3			
Sampgaon ..	140	126	21	21			
Bijapur District ..	1,174	Uncertain ..	58	56			
Badami Taluka ..	182	166	14	14			
Bagalkot ..	113	Uncertain ..	7	8			
Do. Bilgi Petha ..	61	Uncertain ..	3	3			
Bagewadi ..	121	149	2	2			
Bijapur ..	102	103	9	10			
Hungund ..	169	163	10	10			
Indi ..	122	138	1	1			
Muddabihal ..	154	Uncertain ..	3	3			
Sindgi ..	150	177	4	5			
Dharwar District ..	1,473	Uncertain ..	183	160	Not known.	Not known.	
Bankapur Taluka ..	163	Uncertain ..	24	24	19	17	
Dharwar ..	173	114	47	33	Not known.	Not known.	
Gadag ..	61	70	2	2	3	3	
Do. Mundargi Petha ..	45	Uncertain ..	3	3	3	3	
Hangal ..	174	Uncertain ..	21	19	21	17	
Hubli ..	91	Uncertain ..	11	11	Not known.	Not known.	
Kalghatgi ..	130	97	38	33	32	27	

Taluka or State.	Number of Revenue villages.	Number of inhabited places.	[Number of Revenue villages which contained no inhabited place in				Remarks.
			1921	1911	1901	1891	
1	2	3	4	5	6	7	8
Karajgi ..	136	Uncertain ..	9	8	8	Not known.	
Kod ..	169	177	16	15	13	12	
Navalgund ..	57	Uncertain ..	....	....	....	....
Do. Nargund Petha ..	39	31	4	4	4	4	
Ranebennur ..	129	123	8	8	8	8	
Ron ..	86	93	....	....	....	....
Kanara District ..	1,419	3,750	149	131			
Ankola Taluka ..	88	359	3	3			
Honavar ..	94	359	13	18			
Do. Bhatkal Petha ..	65	367	4	5			
Karwar ..	61	31	....	....	Not known.	Not known.	
Kumta ..	126	257	8	11			
Siddhapur ..	202	617	3	6			
Sirai ..	265	797	15	15			
Haliyal ..	154	120	47	30			
Do. Supa Petha ..	120	307	4	1			
Yellapur ..	133	553	9	10			
Do. Mundgod Petha ..	111	83	43	37			
Kolaba District ..	1,634	3,260	239	246			
Alibag Taluka ..	206	396	29	32			
Karjat ..	184	400	14	13			
Do. Khalapur Petha ..	104	158	97	98			
Mahad ..	252	833	5	5			
Mangaon ..	231	414	5	5			
Panvel ..	243	272	39	53			
Do. Uran Petha ..	33	78	8	....		
Pen ..	151	329	20	19			
Do. Nagothana Petha ..	76	75	5	5			
Roha ..	154	305	17	16			
Ratnagiri District ..	1,838	9,077	22	23			
Chiplun Taluka ..	135	1,056	1	1			
Do. Guhagar Petha ..	78	590	....	..	
Dapoli ..	154	922	2	2			
Do. Mandangad Petha ..	97	426	3	3			
Dergad ..	129	929	8	8			
Khed ..	147	1,065	1	1			
Malwan ..	61	476	2	1			
Rajapur ..	184	1,193	2	2			
Ratnagiri ..	150	955	1	3			
Sangameshwar ..	192	1,263	2	2			
Vengurla ..	11	202	....	....	
Strd.							
Hyderabad District ..	925	4,451	127	108			
Badin Taluka ..	171	725	8	13			
Dero Mohbat ..	116	584	5	4			
Guni ..	205	899	101	78			
Hala ..	118	425	5	5			
Hyderabad ..	85	582	....	....	
Tando Allahyar ..	91	471	....	....	
Tando Bago ..	139	835	8	8			
Karachi District ..	856	Uncertain.	109	87	....	....	Figures supplied are useless, as the Deh. has been taken as the inhabited place throughout.

Taluka or State.	Number of Revenue villages.	Number of inhabited places.	Number of Revenue villages which contained no inhabited place in				Remarks.
			1921	1911	1901	1891	
1	2	3	4	5	6	7	8
Larkana District ..	758	Uncertain.	105	89			The figures, which are surprising, are discussed in the text.
Dadu Taluka ..	53	Do.	2	2			
Johi ..	101	501	18	6			
Kakar ..	76	Uncertain.	70	75			
Kambar ..	64	425	....	....	Not known.	Not known.	
Labdarya ..	63	Uncertain.	5	1			
Larkana ..	60	441	2	2			
Michar ..	69	Uncertain.	3	....		
Mirokhan ..	70	232	2	2			
Rato Dero ..	64	Uncertain.	....	....	
Schwao ..	70	310	2	1			
Warah ..	69	377	1	....		
Navabshah District ..	761	4,206	35	22	....	....
Kandiaro Taluka ..	85	966	4	2	....	....
Moro ..	84	873	7	5	....	....
Naushahro Feroz ..	94	750	2	2	....	....
Navabshah ..	183	442	10	2	....	....
Sakrand ..	90	529	9	6	....	....
Shahmadpur ..	93	369	3	3	....	....
Shinhoro ..	132	277	....	2	....	....
Sukkur District ..	714	3,188	49	42			
Sukkur Taluka ..	63	236	10	8			
Garhi Yasin ..	100	385	12	13			
Shikarpur ..	96	308	1	1	Not known.	Not known.	
Rohri ..	37	631	1	....		
Ghotki ..	89	523	4	7			
Pano Akil ..	94	597	8	8			
Mirpur Mathelo ..	90	191	8	5			
Ubauro ..	95	367	6	....		
Thar and Parker District ..	964	4,136	79	71			
Chachro Taluka ..	40	620	....	....	
Digri ..	71	156	2	4			
Diplo ..	42	420	....	....	c t n .	Not known.	
Jandesarabad ..	182	269	29	19			
Khiopro ..	125	394	10	14			
Mirpurkhas ..	123	444	3	5			
Mithi ..	46	394	2	2			
Nagar Parkar ..	31	423	....	....	
Pithoro ..	126	301	16	13			
Sanghar ..	67	313	....	....	
Umarkot ..	111	402	16	14			
Upper Sind Frontier District ..	430	1,484	25	15	....	..
Jacobabad Taluka ..	99	359	6	5	....	....
Kandhkot ..	88	363	2	....	....	....
Kashmor ..	62	239	2	....	....	....
Shahdadkot ..	85	173	13	8	....	....
Thul ..	96	350	2	2	....	....
States and Agencies.							
Cambay ..	88	106	2	3	....	....
Cutch Agency ..	....	....	....	....	....	....	No figures supplied.
Kathlawar ..	....	....	....	....	....	....	Figures supplied in a few cases. But such as were supplied were useless.
Mahl Kantha Agency ..	....	....	....	....	....	....

Figures supplied in a few cases. But such as were supplied were useless.

Taluka or State.	Number of Revenue villages.	Number of inhabited places.	Number of Revenue villages which contained no inhabited place in				Remarks.
			1921	1911	1901	1891	
1	2	3	4	5	6	7	8
Palanpur Agency—							
Palanpur State ..	539	56,861	10	9	....	....	Figures for the rest of the Agency useless.
Badhanpur State ..	....	....	....	....	....	....
Other Jurisdictional States, Civil Stations and Thana Circles.	....	....	....	....	....	....
Beva Kantha Agency—							
Balasitor ..	104	236	2	2	....	....	Figures useless.
Bariya ..	....	....	....	....	....	....
Chhota Udsipur ..	....	....	....	....	....	....
Lunavada ..	....	....	....	....	....	....
Narukot—(Jambughoda)	53	11	48	49	....	....
Bajpimpia ..	923	905	234	235	....	....
Sunth ..	201	614	1	1	....	....
Other Jurisdictional States, Civil Stations and Thana Circles.	597	636	50	49	....	....
Surat Agency ..	....	....	....	....	....	....	Figures useless.
Kolaba Agency—							
Janjira ..	289	227	50	55	....	....
Thana Agency—							
Jawhar ..	103	566	14	23	....	....
Balgaum Agency—							
Savantvadi ..	....	....	....	....	....	....	No figures supplied.
Sholapur Agency—							
Alkalkot ..	107	117	4	4	....	....
Poona Agency—							
Bhor ..	....	....	....	....	....	....	No figures supplied.
Satara Agency ..	147	909	81	43	43	43	
Aundh ..	73	205	30	42	42	42	
Phaltan ..	74	704	1	1	1	1	
Nasik Agency—							
Surgana ..	....	....	....	....	....	....	Figures supplied useless.
Bijapur Agency—							
Jath ..	119	169	....	....	....	....
Kolhapur ..	1,070	2,308	16	12	Not known.		
Southern Maratha Country States —							
Jamkhandi ..	....	....	....	....	....	....	Figures supplied useless.
Kurundwad (Senlor) ..	39	51	....	....	....	....	Figures supplied useless.
Kurunwad (Junior) ..	....	....	....	....	....	....
Miraj (Senlor) ..	64	131	....	....	....	....	Figures supplied useless.
Miraj (Junior) ..	....	....	....	....	....	....
Mudhol ..	....	....	....	....	....	....	Do.
Ramdurg ..	....	....	....	....	....	....	Do.
Sangli ..	245	238	37	275	7	4	
Dharwar Agency—							
Savanur ..	....	....	....	....	....	....	Figures supplied uncertain.
Sakkur Agency ..	....	....	....	....	....	....
Khalapur ..	120	652	2	1	....	....

APPENDIX P.

CHANGES IN THE POPULATION OF TALUKAS, 1911 TO 1921, STUDIED IN COMPARISON WITH THE INFLUENZA EPIDEMIC.

1. Reference is invited to Section 10 of Chapter I. The present subject is there studied by districts. It was considered interesting to see whether, in view of the fact that the district is certainly a bad statistical unit, there would be any closer degree of correlation between Influenza mortality and Population changes when the taluka is taken as the variate. At the same time it was obvious that the chance of exact correlation would be slight, since extraneous factors liable to mask the Influenza factor must necessarily exist for talukas as well as for districts.

2. The first necessity was, of course, to get a measure of the Influenza mortality for each taluka. There was considerable difficulty in doing this, since for vital registration the taluka is not the unit in which the statistics are arranged in the Sanitary Department's offices, but the Registration Circle. There are two types of circle, rural and urban. Consequently many Revenue talukas will consist of one rural circle and one or more urban circles. Col. Murphy's Table II shows the total death-rates from all causes in all Circles during the months of September to December 1918. Every district has urban circles. To have allocated these to their talukas would have necessitated recalculating the death rates *ab initio* for every case in which an urban circle and a rural circle had to be combined. This being a task for which I had not the necessary staff I have had to neglect the Urban Circles altogether and use only the Rural. It was also necessary in order to give a uniform basis to the maps to take into consideration the same months for all Talukas; and the rates are therefore taken for the four months, September to December, as in Col. Murphy's Table. For the sake, however, of any readers who are interested in the absolute death rate figures at the height of the epidemic it may be mentioned that the September and December rates were very nearly always much lower than those of the two inner months. In three rural circles, Baglan, Malsiras and Man, the death-rate in October alone was over 100, a rate, which, if maintained, would have annihilated the whole population in ten months. The necessity for excluding urban circles is unfortunate. Not only was the death-rate almost always lower in these circles, but the number and relative size of the urban circles differs in different talukas. However, so long as it is clearly understood that the maps are maps of death-rates by talukas for the rural portions of those talukas only, no actual misunderstanding will arise.

3. It was not desirable to include Sind for the purposes of this study by talukas, partly because in Sind the epidemic, as is shown in the Table in Chapter I, carried on into January, and partly because of the incompleteness of Vital Statistics in that Province.

4. The Table which follows is an ordinary Correlation Table of double entry. And the maps explain themselves:—

Subsidiary Table No. (xxiii)—Correlation between Influenza mortality and percentage population changes in Talukas of the Presidency proper.

		Absolute per mille death-rate (from all causes) in four months September— December 1918 in Rural Registration Circles.							
		0—30	31—45	46—60	61—75	76—90	91—105	106—120	121—135
Percentage population changes.	Increase above 12·5 ..	2	3	1	..	3	1	..	10
	Increase 7·6 to 12·5 ..	..	3	4	3	2	1	..	14
	Increase 2·6 to 7·5 ..	1	5	8	8	5	1	1	29
	Incr. 2·5 to decr. 2·5	4	5	12	11	5	4	..	41
	Decrease 2·6 to 7·5 ..	4	4	9	8	3	2	..	33
	Decrease 7·6 to 12·5 ..	..	1	4	6	6	5	5	27
	Decrease 12·6 to 17·5	..	..	3	5	2	1	2	16
	Decrease more than 17·5	..	1	..	5	1	6	2	16
		11	22	41	46	27	21	11	7

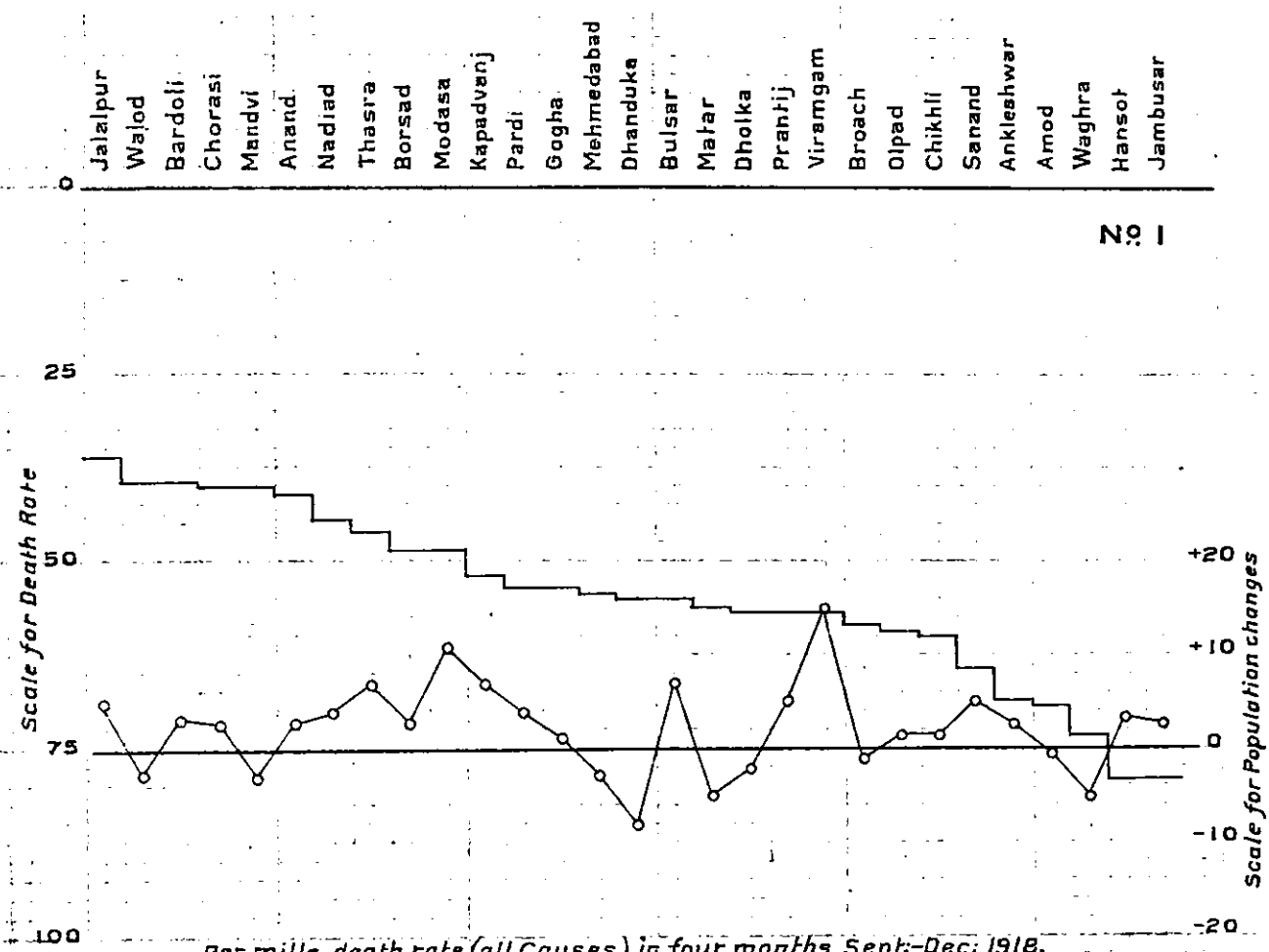
Note.—The table is shortened by combining the extreme horizontal classes. If the Classes had been fully shown, the bottom class in the scale of Percentage changes would be —47·6 to —52·5, and the top class +47·6 to +52·5. This would have given 21 horizontal lines instead of 8, and the scale for death-rates would have also had to be divided into 21 vertical columns. As it stands the Table cannot be used to compute the co-efficient of Correlation. But the arrangement of the figures distinctly suggests some degree of correlation, though not high. The absence of exact correlation is due to the many disturbing outside factors discussed in Chapter I and this Appendix. Thus of the figures in the bottom line most belong to the East Deccan, and the figures in the first vertical mostly to Kanara. Exact correlation would have been shown by the figures clustering closely along a diagonal line drawn from the left hand top corner to right hand bottom corner of the Table.

5. The exact death-rate figures for September—December 1918 in Rural Circles were then placed in serial order for the Talukas of certain homogeneous tracts and the percentage Increase or Decrease at this Census placed beside them in the same form as the Tables already given for Districts. The same facts were also exhibited in the Diagrams number I to VI.

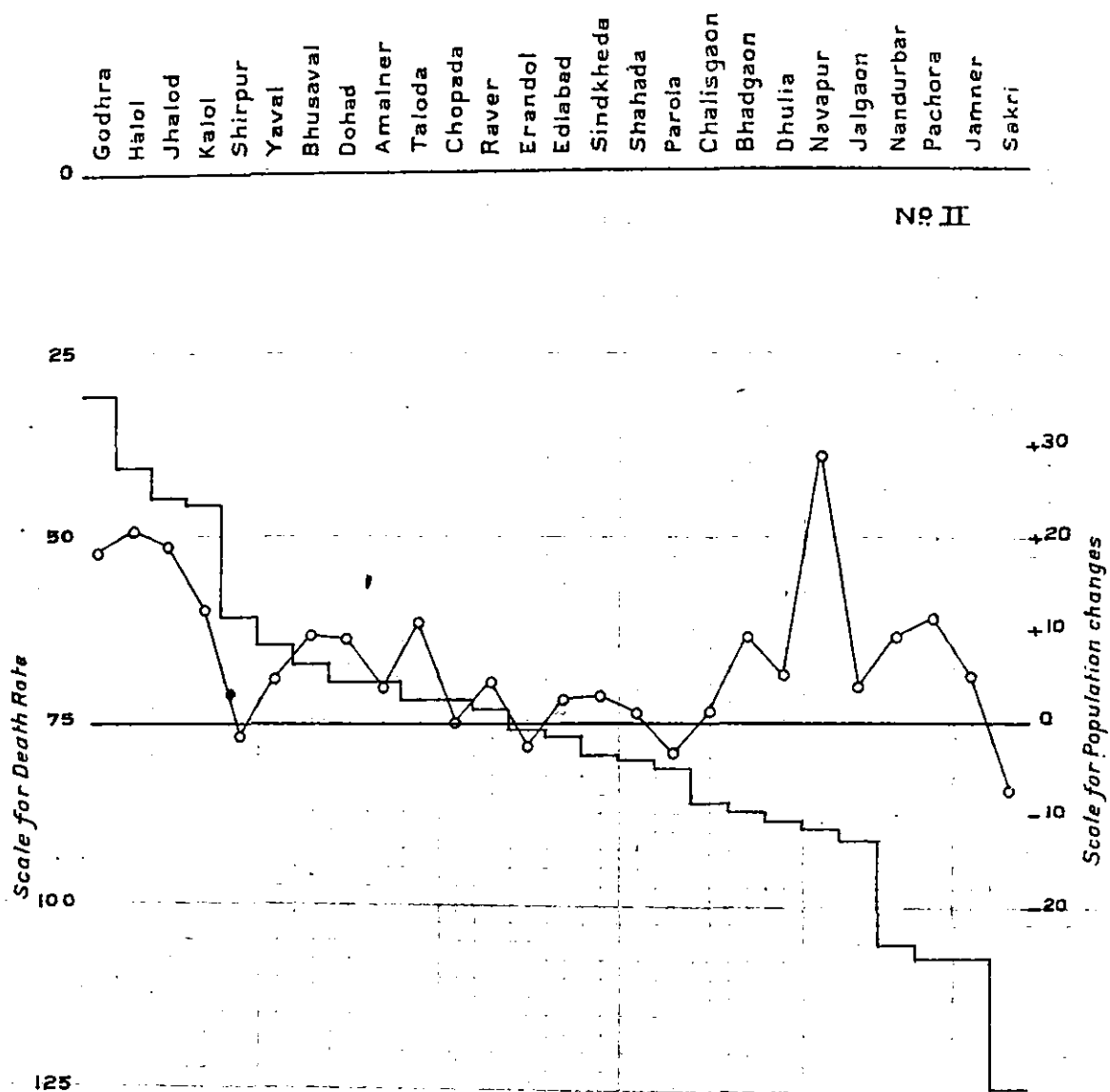
Subsidiary Table No. (xxiv)—Comparison of Influenza mortality with percentage population changes in the Talukas of Ahmedabad, Kaira, Broach and Surat.

Taluka.	Absolute per mille death-rate (from all causes) in four months September—December 1918 in Rural Registration Circles.	Percentage Increase or Decrease in population.	
		Increase.	Decrease.
Jalalpur	36	5.5	
Valod	39		2.4
Bardoli	39	3.7	
Chorasi	40	2.9	
Mandvi	40		3.1
Anand	41	2.3	
Nadiad	44	4.0	
Thasra	46	7.0	
Borsad	48	2.8	
Modasa	48	10.7	
Kapadvanj	52	7.4	
Pardi	53	4.1	
Gogha	53	1.9	
Mehmedabad	54		2.5
Dhanduka	55		8.0
Bulsar	55	7.4	
Matar	56		4.5
Dholka	57		1.9
Prantij	57	5.2	
Viramgam	57	14.8	
Broach	58		1.2
Olpad	59	1.7	
Chikhli	60	1.7	
Sanand	64	5.0	
Ankleshwar	68	2.8	
Amod	69		0.1
Waghra	73		4.6
Hansot	79	3.7	
Jambusar	79	2.6	

This Table corresponds with the Diagram marked No. I.



*Per mille death rate (all Causes) in four months, Sept-Dec: 1918.
in Rural Registration Circles of AHMEDABAD (omitting Daskroi),
BROACH, KAIRA, & SURAT—
Compared with
Percentage Increase or Decrease of Population in the corresponding
Talukas, 1911-1921.*



*Per mille: death rate (all causes) in four months Sept.-Dec: 1918,
in Rural Registration Circles of EAST KHANDESH, WEST KHANDESH
& The PANCH MAHALS*

*Compared with
Percentage Increase or Decrease of Population in the corresponding
Talukas, 1911-1921.*

Subsidiary Table No. (xxv)—Comparison of Influenza mortality with percentage population changes in the Talukas of the two Khandesh districts and the Panch Mahals.

Taluka.	Absolute per millo death-rate (from all cau- ses) in four months September—De- cember 1918 in Rural Registration Circles.	Percentage Increase or Decrease of population.	
		Increase.	Decrease.
Godhra	30	18·7	
Halol	40	21·1	
Jhalod	44	19·7	
Kalol	45	12·4	
Shirpur	60		1·6
Yaval	64	4·8	
Bhusaval	67	9·9	
Dohad	69	9·2	
Amalner	69	4·1	
Taloda	72	11·2	
Chopda	72	0·1	
Raver	73	4·2	
Erandol	76		2·2
Edlabad	77	2·5	
Sindkheda	79	2·9	
Shahada	80	1·5	
Parola	81		2·6
Chalisgaon	86	1·9	
Bhadgaon	87	9·6	
Dhulia	88	5·8	
Navapur	89	28·5	
Jalgaon	91	4·2	
Nandurbar	105	9·7	
Pachora	107	11·5	
Jamner	107	4·8	
Sakri	124		7·5

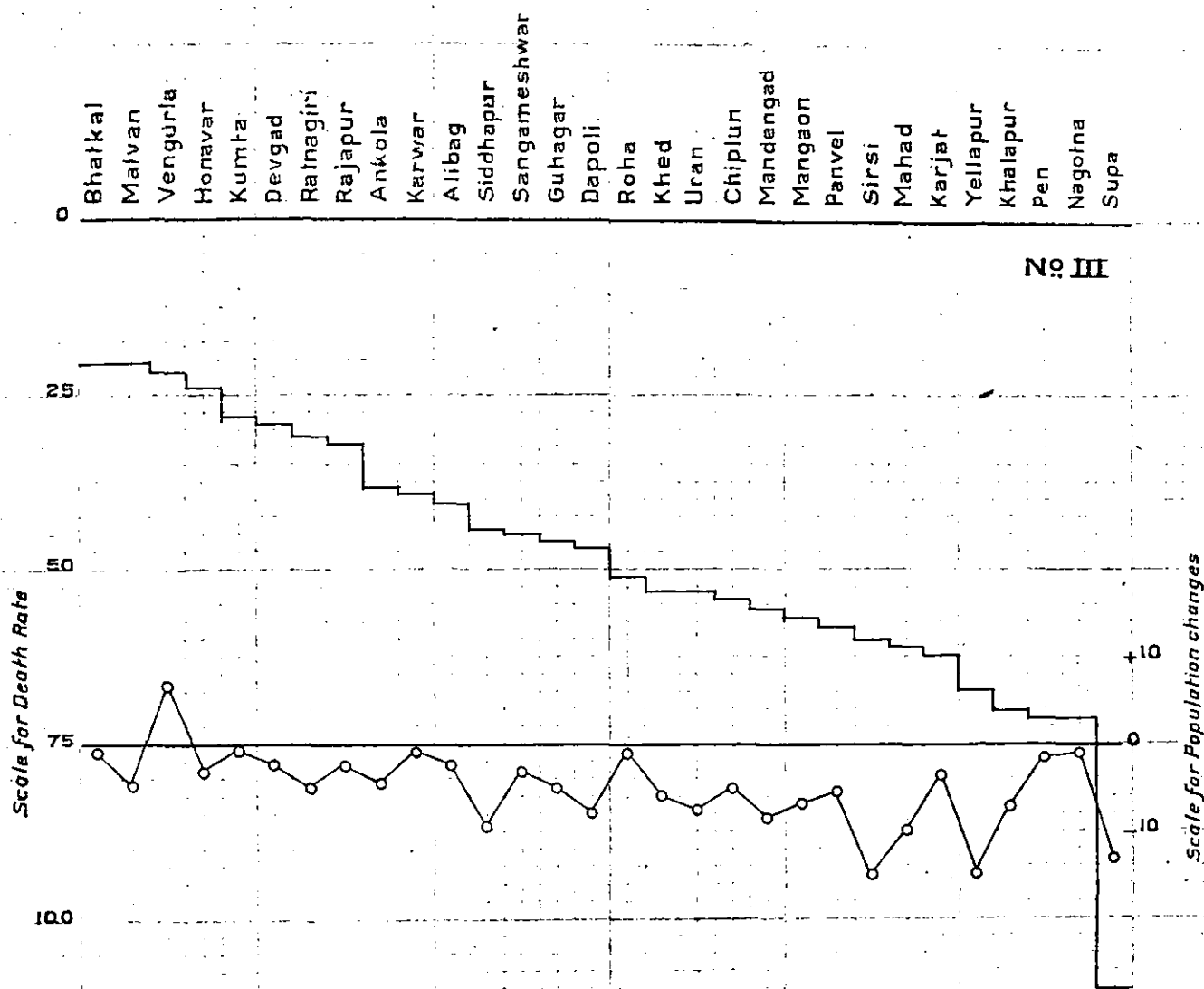
This Table corresponds with the Diagram marked No. II.

Subsidiary Table No. (xxvi)—Comparison of Influenza mortality with population changes in the Talukas of Kolaba, Ratnagiri and Kanara (excluding Mundgod and Haliyal).

Taluka.	Absolute per mille death-rate (from all causes) in four months September—December 1918 in Rural Registration Circles.	Percentage Increase or Decrease of population.	
		Increase.	Decrease.
Bhatkal	21	6.6	1.1
Malvan	21		4.6
Vengurla	22		
Honavar	24		3.3
Kumta	28		0.4
Devgad	29		2.1
Ratnagiri	31		4.7
Rajapur	32		2.1
Ankola	33		4.3
Karwar	39		0.6
Alibag	41		2.1
Siddhapur	44		9.5
Sangameshwar	45		3.3
Guhagar	46		5.0
Dapoli	47		7.9
Roha	51		0.9
Khed	53		5.9
Uran	53		7.6
Chiplun	54		4.7
Mandangad	56		8.1
Mangaon	57		6.7
Panvel	58		5.6
Sirsi	60		14.3
Mahad	61		9.9
Karjat	62		3.8
Yellapur	67		14.5
Khalapur	70		7.0
Pen	71		1.7
Nagotna	71		1.0
Supa	110		13.3

This Table corresponds with the Diagram marked No. III.

No. III

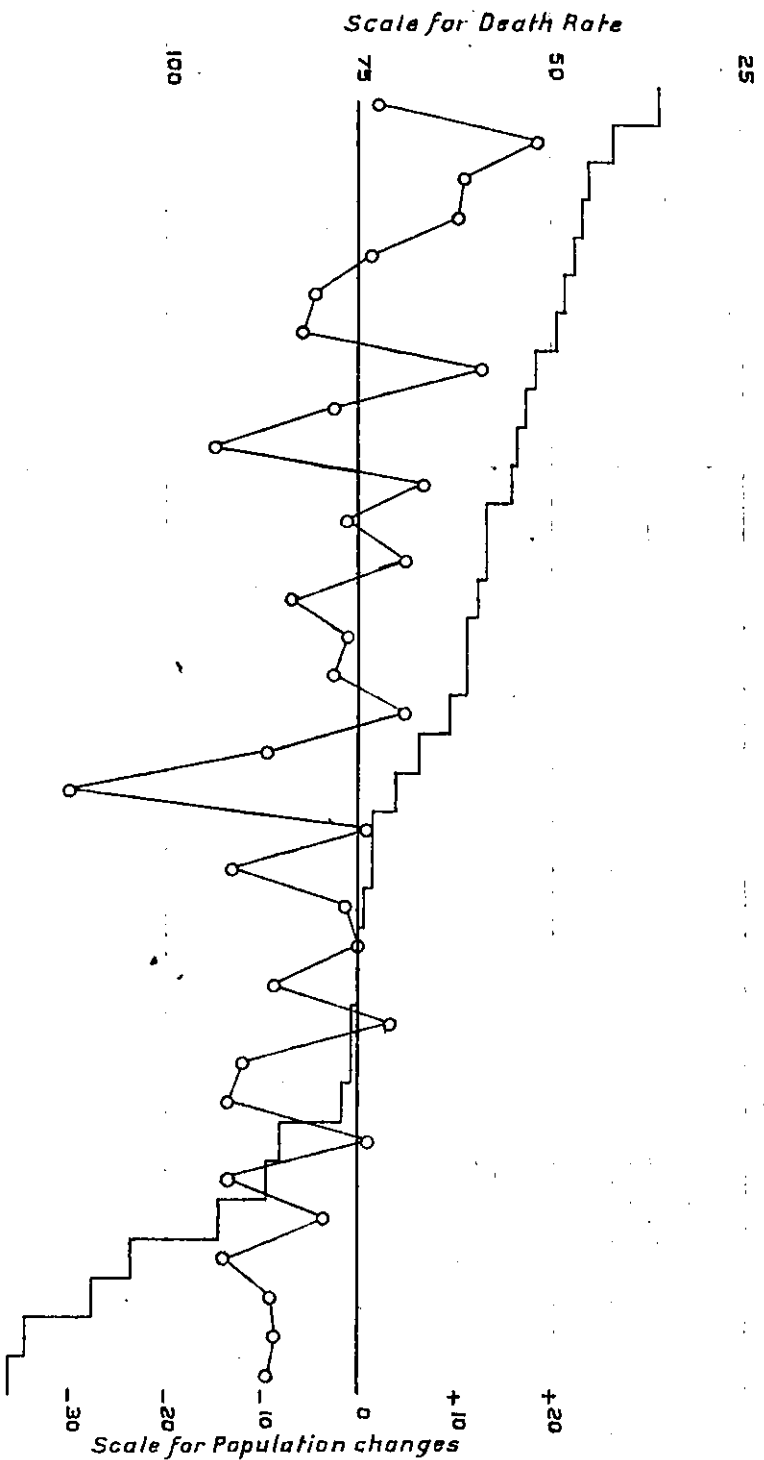


Per mille death rate (all causes) in four months Sept.-Dec. 1918.
in Rural Registration Circles of KOLABA, RATNAGIRI & KANARA
(excluding Haliyal & Mundgod).

Compared with
Percentage Increase or Decrease of Population in the corresponding
Talukas, 1911-1921.

- Parasgad
- Navalgund
- Ron
- Nargund
- Dharwar
- Sampgaon
- Murgod
- Gadag
- Khanapur
- Kalghatgi
- Belgaum
- Chandgad
- Hubli
- Hungund
- Karajgi
- Bankapur
- Gokak
- Bilgi
- Mundgod
- Ranebennur
- Mundargi
- Hukeri
- Bagalkot
- Badami
- Chikodi
- Hangal
- Haliyal
- Athni
- Kod
- Bijapur
- Bagewadi
- Indi
- Sindgi
- Muddebihal

No IV



Per mille death rate (all causes) in four months, Sept-Dec: 1918.
in Rural Registration Circles of BELGAUM, BIJAPUR & DHARWAR
and mundgod & Haliyal of KANARA
Compared with
Percentage Increase or Decrease of Population in the corresponding
Talukas, 1911-1921.

Subsidiary Table No. (xxvii)—Comparison of Influenza mortality with percentage population changes in the Talukas of Belgaum, Bijapur and Dharwar, and the Haliyal and Mundgod Talukas of Kanara.

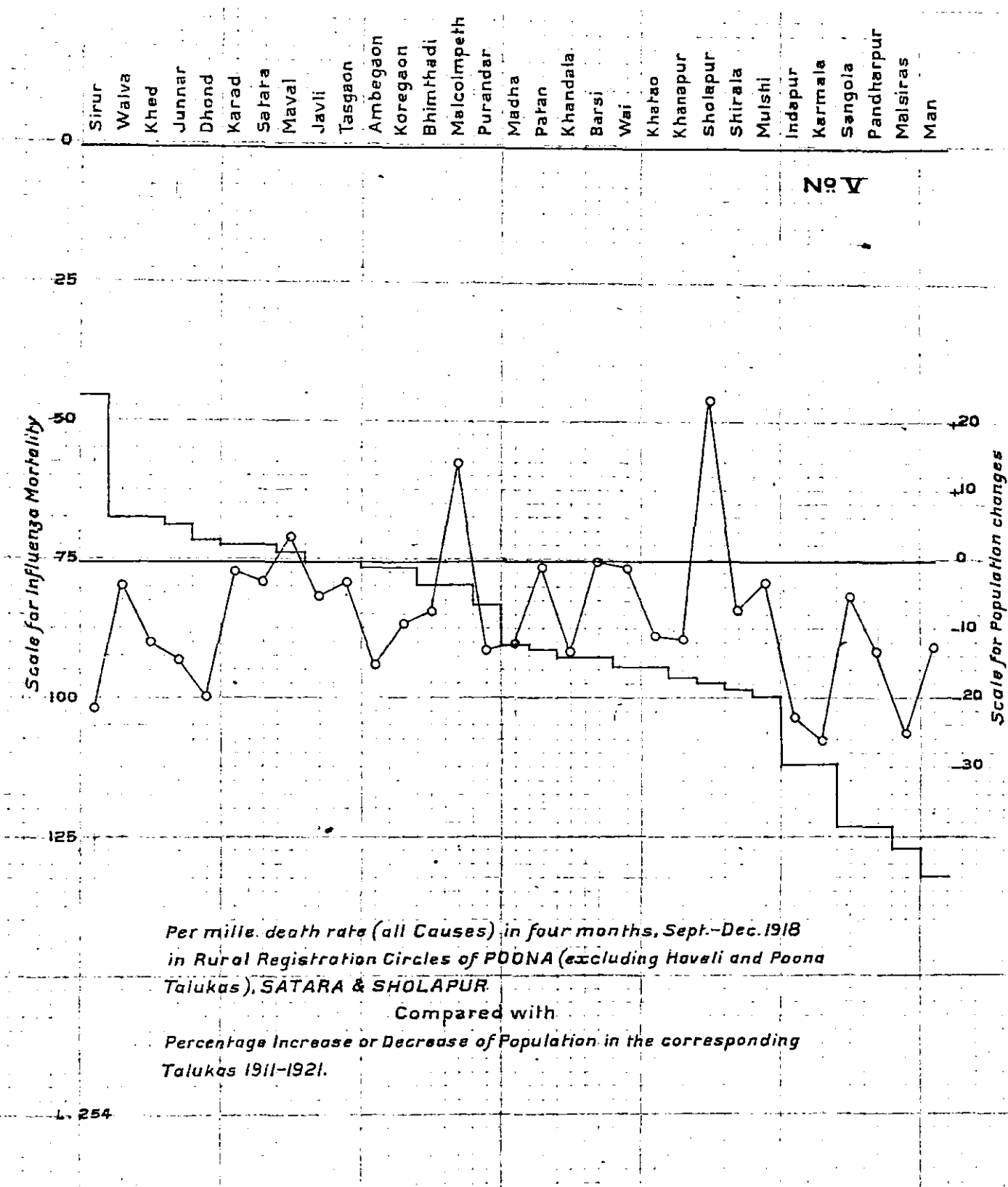
Taluka.	Absolute per mille death-rate (from all causes) in four months September—December 1918 in Rural Registration Circles.	Percentage Increase or Decrease of population.	
		Increase.	Decrease.
Parasgad	36	2.1	
Navalgund	42	18.7	
Ron	45	10.7	
Nargund	46	10.2	
Dharwar	47	1.7	
Sampgaon	48		4.2
Murgod	49		5.8
Gadag	52	12.5	
Khanapur	53		2.3
Kalghatgi	54		14.8
Belgaum	55	6.5	
Chandgad	58		0.9
Hubli	58	5.1	
Hungund	59		7.2
Karajgi	61		0.7
Bankapur	61		2.1
Gokak	63	4.5	
Bilgi	67		9.5
Mundgod	70		29.9
Ranebennur	73	1.2	
Mundargi	73		12.6
Hukeri	74		1.2
Bagalkot	75		0.0
Badami	75		8.3
Chikodi	76	3.7	
Hangal	76		11.9
Haliyal	77		13.8
Athni	85	1.1	
Kod	87		13.7
Bijapur	93		2.8
Bagewadi	104		13.9
Indi	109		8.7
Sindgi	118		8.4
Muddebihal	120		9.7

This Table corresponds with the Diagram marked No. IV.

Subsidiary Table No. (xxviii)—Comparison of Influenza mortality with population changes in the Talukas of the Poona (excluding Haveli and Poona Talukas), Sholapur and Satara.

Taluka.	Absolute per mille death-rate (from all causes) in four months September—December 1918 in Rural Registration Circles.	Percentage Increase or Decrease of population.	
		Increase.	Decrease.
Sirur	45		20·7
Walva	67		3·5
Khed	67		11·7
Junnar	68		13·9
Dhond	71		19·8
Karad	72		1·4
Satara	72		2·4
Maval	73	3·9	
Javli	75		4·4
Tasgaon	75		3·2
Ambegaon	76		14·3
Koregaon	76		8·6
Bhimthadi	79		7·3
Malcolmpeth	79	14·1	
Purandar	83		12·3
Madha	90		11·9
Patan	91		0·6
Khandala	92		12·6
Barsi	92	0·0	
Wai	94		0·9
Khatao	94		10·9
Khanapur	96		11·6
Sholapur	97	23·6	
Shirala	98		7·2
Mulshi	99		2·6
Indapur	112		22·4
Karmala	112		26·0
Sangola	123		5·1
Pandharpur	123		13·5
Malsiras	127		24·8
Man	132		13·3

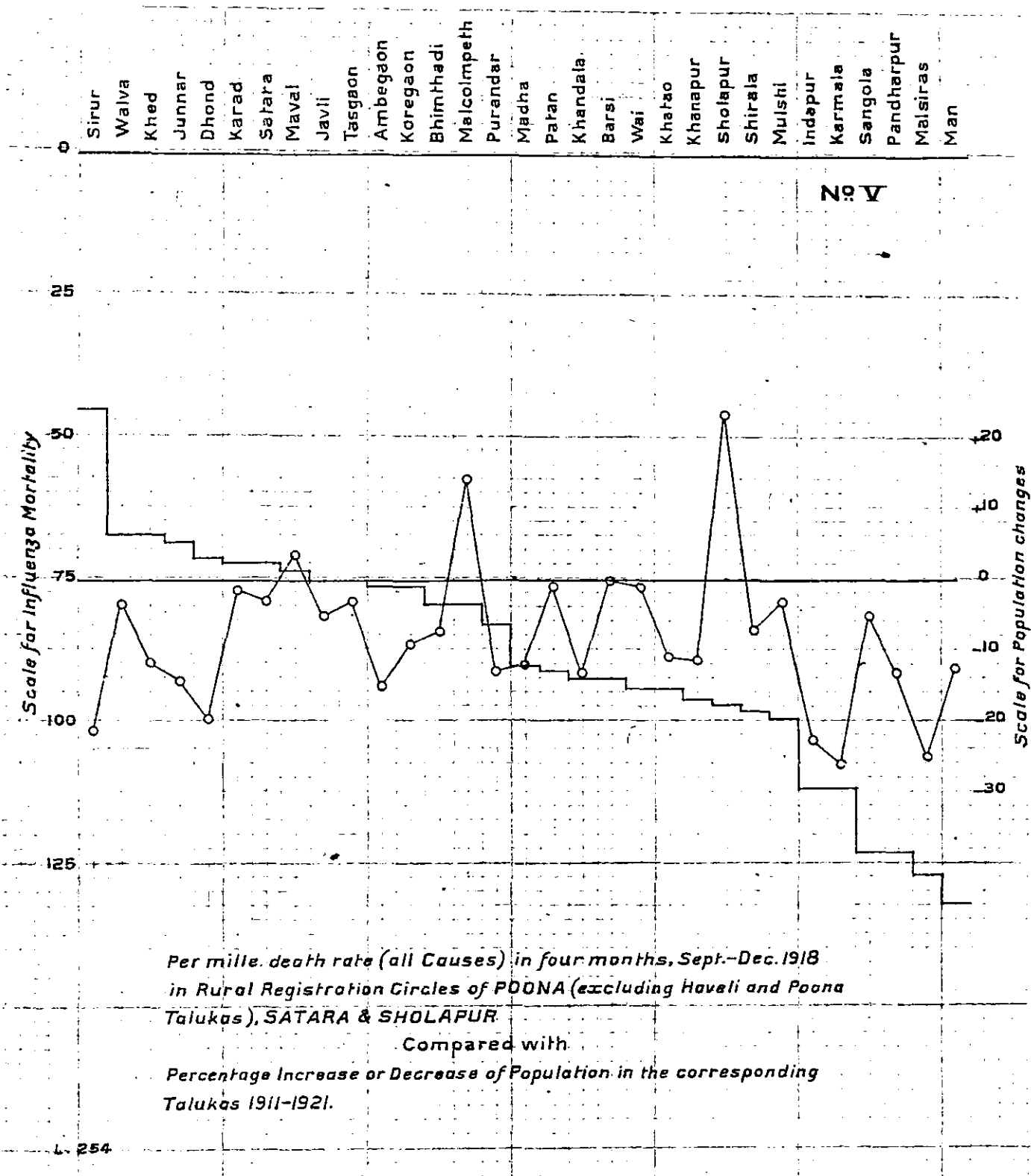
This Table corresponds with the Diagram marked No. V.

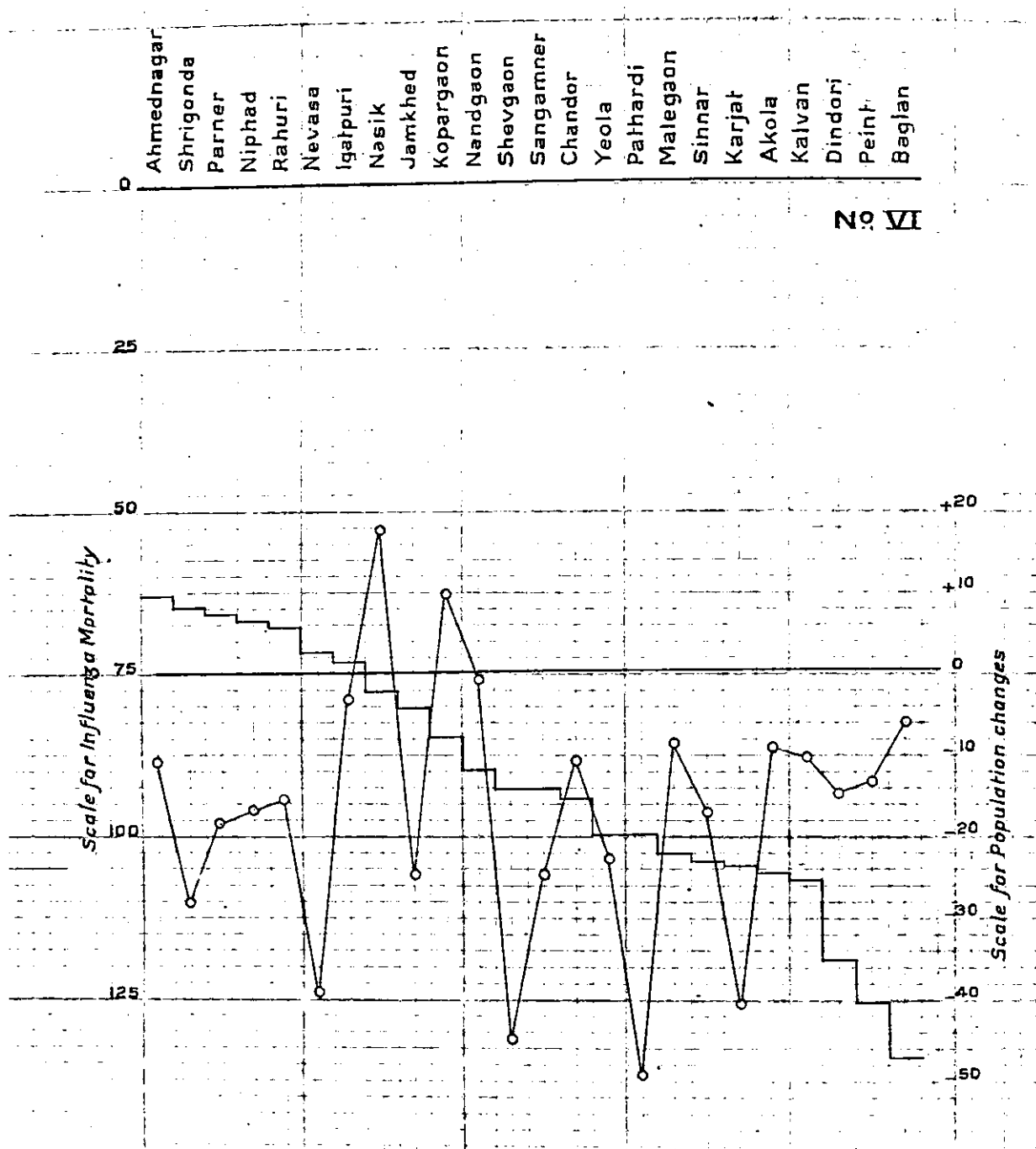


Subsidiary Table No. (xxviii)—Comparison of Influenza mortality with population changes in the Talukas of the Poona (excluding Haveli and Poona Talukas), Sholapur and Satara.

Taluka.	Absolute per mille death-rate (from all causes) in four months September—December 1918 in Rural Registration Circles.	Percentage Increase or Decrease of population.	
		Increase.	Decrease.
Sirur	45		20.7
Walva	67		3.5
Khed	67		11.7
Junnar	68		13.9
Dhond	71		19.8
Karad	72		1.4
Satara	72		2.4
Maval	73	3.9	
Javli	75		4.4
Tasgaon	75		3.2
Ambegaon	76		14.3
Koregaon	76		8.6
Bhimthadi	79		7.3
Malcolmpeth	79	14.1	
Purandar	83		12.3
Madha	90		11.9
Patan	91		0.6
Khandala	92		12.6
Barsi	92	0.0	
Wai	94		0.9
Khatao	94		10.9
Khanapur	96		11.6
Sholapur	97	23.6	
Shirala	98		7.2
Mulshi	99		2.6
Indapur	112		22.4
Karmala	112		26.0
Sangola	123		5.1
Pandharpur	123		13.5
Malsiras	127		24.8
Man	132		13.3

This Table corresponds with the Diagram marked No. V.





Per mille death rate (all Causes) in four months Sept.-Dec. 1918
 in Rural Registration Circles of the Talukas of NASIK and
 AHMEDNAGAR

Compared with
 Percentage Increase or Decrease of Population in the corresponding
 Talukas, 1911-1921.

Subsidiary Table No. (cxix)—Comparison of Influenza mortality with population changes in the Talukas of Nasik and Ahmednagar.

Taluka.	Absolute per mille death-rate (from all causes) in four months September—December 1918 in Rural Registration Circles.	Percentage Increase or Decrease of population.	
		Increase.	Decrease.
Ahmednagar	63		11·0
Shrigonda	65		28·4
Parner	66		18·1
Niphad	67		16·9
Rahuri	68		15·6
Nevasa	72		39·3
Igatpuri	73		3·5
Nasik	78	17·3	
Jamkhed	81		24·7
Kopargaon	85	9·9	
Nandgaon	90		0·3
Shevgaon	93		45·6
Sangamner	93		24·7
Chandor	94		10·8
Yeola	100		23·4
Pathardi	100		49·5
Malegaon	103		8·7
Sinnar	104		17·7
Karjat	105		40·4
Akola	106		9·7
Kalvan	107		10·6
Dindori	119		15·0
Peint	126		13·5
Baglan	134		6·1

This Table corresponds with the Diagram marked No. VI.

6. The results of this study and the Diagrams which accompany it are of much interest. It will be seen that the same scales have been used throughout, and that the line of constant population is always placed so as to align with the point 75 on the scale of death-rate. Consequently not only can one Taluka be compared with another on the same diagram, but any two tracts can be compared.

7. The tracts chosen do not coincide with the Natural Divisions. Tract I is for the Gujarat Districts excluding the Panch Mahals, the population changes in which suggest different influences. The Daskroi Talukas of Ahmedabad were omitted. Tract III comprises the three Southern Konkan Districts, but omitting Haliyal and Mundgod in Kanara. These two Talukas approximate to Karnatak rather than Konkan conditions, their rainfall being under 50 inches, and their crops the same as those of the Mallad Talukas of Dharwar and Belgaum. Supa, Siddhapur, Sirsi and Yellapur also lie partly above ghats. But the conditions of those talukas approximate more to the Konkan than to the Karnatak. The rainfall is mostly very heavy, the forests high, and the crops mainly transplanted rice and spices. The Ghats in this region are very low, and there is not the same difference between the Konkan and the ghat crest as there is further North. In an Appendix a more minute subdivision of Kanara is made. But for the present purpose the tract indicated by Diagram III is sufficiently homogeneous for study.

8. Tract IV is the Karnatak, namely, the three Karnatak Districts and the two Talukas of Kanara excluded from III.

9. Tract II, consisting of the two Khandesh Districts and the Panch Mahals, is more open to criticism. These districts, though separated by the long stretch of Reva Kantha Territory, were treated as one, because, for reasons given above, it was believed that the Bhil element was the most potent factor in their population changes.

10. Tract V consists of the South Deccan Districts of Poona (excluding Haveli and Poona Talukas) Satara, and Sholapur.

11. Tract VI consists of Ahmednagar and Nasik.

12. It will be seen that—more from accident than design—Thana is not included. There are however reasons for not including Thana in this study. The Talukas of North Salsette, Kalyan and Bassein have come under the influence of suburbanisation, or so it would seem, and the District does not fit in well with any of the other tracts.

13. To come to a study of the diagrams—the mortality figures are in each case arranged in descending series. If there were exact correlation between the death-rate in the four months concerned and the population changes, the curve of the percentages would also be a steadily falling curve. Whether it falls as steeply as the death-rate curve, or more or less steeply, would depend entirely on the scale. Thus in diagram III if each square were given the value of plus or minus 5 instead of 20 the general direction of the curve of population changes would have been parallel with the general direction of the death-rate curve.

14. The questions to consider are—(i) do the curves of population changes fall continuously and gradually from left to right as the death-rate curve does?, (ii) do the curves of population changes show approximately the same degree of fluctuations? and (iii) do the positions of the two curves on the six diagrams indicate that approximately the same degree of mortality in any two tracts produced approximately the same degree of population change?

15. The answers to these questions are as follows :—

(i) In Diagram III the general direction of the curve of population changes falls steadily. In Diagram IV, in spite of the more violent fluctuations the general direction falls in the same way. In Diagram II there is possibly a faint indication of a general downward slope. In none of the other three Diagrams can the curve be in any way said to show a gradual fall. The result is very remarkable, and is tantamount to a proof that although from various other indications we know that Influenza was the most potent factor in the change of population in the decade—yet, when a definite region is taken for examination, and the Taluka is taken as the unit, only in three out of six cases is any correlation observable, and then only slight.

(ii) The difference in the fluctuations is very pronounced. The order of degree of fluctuation, proceeding from the steadiest to the most inconstant, is—Konkan, Gujarat, Bhil Country, Karnatak, South Deccan, North Deccan.

(iii) as regards this it must be emphasised that the position of constant population (the horizontal line) was placed against 75 on the death-rate scale mainly for convenience of drawing. But wherever the horizontal line were placed the relative positions of that line and the two curves should have obeyed constant laws. Thus, if, with the death-rate curve far above the horizontal, the curve of population changes lies a little below it, as in Diagram III, then, when the death-rate curve moves far down so as to be more below than above the horizontal, and also becomes steeper, as in II, the other curve should have moved far down also, and should also have shown not only a continuous fall, but a fall steeper than in III.

16. These points really take us back once more to the questions that have already been discussed in Section 10 of Chapter I and need not therefore be further examined here.

17. All that need be done is to indicate some of the possible causes for the more extreme peaks and depressions in the curves of population changes. To save trouble these will be suggested in tabular form.

Diagram I.

Viramgam.—High position due to industrialisation.

Bulsar.—High position due to Railway.

Dhandhuka.—Low position due to decadence of the Bhal reason (see Appendix—"The Regions of decay in Ahmedabad and Kaira.")

Mehmedabad and Matar.—See Appendix "The Regions of decay in Ahmedabad and Kaira."

Diagram II.

Navapur.—High position possibly due to the high proportion of Bhils. But Bhils are proportionately nearly as numerous in Taloda, which, though higher in the death-rate scale, does not show so high a rise in population.

Diagram III.

Vengurla.—High position due to Port.

Siddhapur, Sirsi and Yellapur.—Low positions due to decline of inland tracts of Kanara (see Appendix "Regions of decay in the Karnatak.")

Pen and Nagothna.—Position higher than would have been expected. Causes not known.

Diagram IV.

Gadag.—High position due to industrialisation.

Kalghatgi and Mundgod.—Low positions due to decadence of the Mallad tract (see Appendix "Regions of decay in the Karnatak.")

Diagram V.

Sirur, Dhond, Indapur, Karmala, and Malsiras.—Low positions due to famine emigration.

Sholapur.—High position due to industrialisation.

Malcolmpeth.—High position due to increase in the population connected with the Hill Stations.

Maual and Mulshi.—High positions due to industrial enterprises.

Diagram VI.

Shrigonda, Nerasa, Shergaon, Pathardi and Karjat.—Low positions due to famine emigration.

Many of the other Talukas show the same phenomenon in a less degree.

Nasik.—High position due to the town, and to the effects of the Sinhast festival.

Kopergaon.—High position due to effect of new irrigation.

APPENDIX Q.

REGIONS OF DECAY IN THE KARNATAK AND KANARA.

In the Note which was issued on the Provisional Totals attention was drawn to a region of apparent decay, represented by what is usually known as the "Mallad" tract of the Karnatak and the above-ghat portions of Kanara. It was decided to attempt to trace the exact area of decay in rather more detail by getting down to the population changes for individual villages. The following study is the result.

2. The cause of the decay of the region indicated is both obscure, and also controversial. In paragraph 68 of his Census Report for 1911 Mr. Macgregor attributed the decline in the population of the four above-ghat Talukas of Kanara to *malaria*, in support of which view he cited the report of a Survey Officer, who, working in 1887, had stated that a wave of malaria suddenly struck the region during the operations and affected his survey parties. This malaria was said to have been not previously noticed in an epidemic form, and Supa was said not to have been previously considered unhealthy. In paragraph 78 Mr. Macgregor attributed the decline in Belgaum and Dharwar to plague.

3. The decline of the population of the two latter districts in 1911 was to a certain extent due to plague. But it is necessary to isolate those Talukas known as the Mallad, in which the diminution of the population had been going on for some decades, and could not therefore be attributed exclusively to plague. Moreover it is believed that plague affected the open country more than the Mallad, though on this point I am uncertain.

4. As regards Supa, Mr. Enthoven on page 32 of his 1901 report, in commenting on the decrease of between 11 and 12 thousand in this small Petha, attributed it to the fact that in 1891 the Ulvi festival had coincided with the Census. He estimated 9,000 as the approximate number of pilgrims. Unfortunately owing to the loss of the Village Tables in that Petha for all years prior to 1911 we do not know the Ulvi population at the 1891 Census. But Mr. Enthoven's conclusion can be accepted. The boundaries of the Petha have changed slightly since 1901. We can therefore only give the approximate population for the Petha for the Censuses of 1901 and 1891, which is all we want. It stands thus—

	1891.	1901.	1911.	1921.
	21,000 +9,000	19,000	17,522	15,185
<i>The same expressed as percentages, treating the 1921 figure as 100.</i>				
	138	125	115	100

These figures are very important. It will be seen from the Tables that, if the above percentages are anywhere near correct, the Supa Petha is *by no means the most decaying tract*. The worst tract is the western portions of Bankapur and Kalghatgi: and Supa is not much worse hit than Sirsi and Yellapur.

5. Nor can the decline of the above-ghat tract of Kanara be attributed solely to a sudden outbreak of Malaria in 1887. And even supposing that it were true that Supa (and by inference the other Talukas) was considered healthy prior to that year, and supposing that malaria suddenly made its appearance, *and has since remained*, is there any underlying factor which has enabled the disease to get this permanent footing in a tract previously exempt?

6. There are probably *many* causes at work. And since not only does the isolation of those causes demands expert local knowledge, but the whole phenomenon of the decay of this region has, as is well known, been for several years made a ground for political agitation, the Census department must stand aside from all discussion of causes, and be content with merely putting forward figures for the contending parties to examine.

7. In order to study the subject it was decided, in consultation with the Collectors of Kanara, Dharwar and Belgaum, to divide the country into the following tracts.

I. *The Coastal Tract*, i. e., the strip of country which may be described as lying between the forests and the sea.

II. *The Inland or Below-Ghat Tract*, i. e., the belt of country between Tract I and the foot of the Ghats.

III. *The Above-Ghat Forest Tract*, using this term in the sense of the belt of country of high and often evergreen forest, growing wet rice and spices between the Ghat Crest and Tract IV.

IV. *The Inner Mallad*, i. e., the tract to the east of the evergreen forest growing dibbled rice and hill millets, and containing the cream of the teak forests.

V. *The Outer Mallad*, i. e., the tract between the teak forests and the open country growing dibbled rice only in the hollows, and a good deal of Jowari in the uplands, and containing inferior dry forests, and

VI. *The Black soil*, using this term to include any soil (it is mostly black) in the open eastern parts of those Talukas, any part of which falls in Tracts V or IV.

8. The Talukas chosen for study were (1) in Belgaum—Khanapur, (2) in Dharwar—Dharwar, Kalghatki, Bankapur, Hangal and Kod, those being the only Talukas which have an appreciable portion of Mallad in their borders, and (3) in Kanara—all Talukas. The Hubli Taluka of Dharwar contains a small portion of what might be described as Outer Mallad. But it is very little, and passes rapidly into the open country; and the inclusion of Hubli would have raised a difficulty, in regard to the City, with its urbanising effects.

9. From the Talukas above stated it was necessary to exclude certain villages, namely (i) in Khanapur the villages of Holda and Kelil, which, being below the Ghat on the Goa frontier, do not come into the Inner Mallad, and are yet so far distant from the Below-Ghat tracts of Kanara as to negative the idea of including them there. (ii) The villages of Dhornagiri, Kakalli, Muski, Shirasgaon and Shirgani in Sirsi, which were added to the Sirsi Taluka in 1915. The population figures for these villages prior to 1911 were not available.* Their population for 1911 and 1921 was 442 and 390, respectively. (iii) The villages of Phutgaon Badni, Kundikop, Konerikop and Kankapur in Bankapur, which are situated at a considerable distance from the eastern boundary of the rest of that Taluka. (iv) The village of Niralg (Inam) in Hangal, the population of which was 279 in 1921, and 504 in 1911, and was not reported for former years.

10. The fixing of the boundaries of the Tracts was not at all easy. The Mamledars of some Talukas made obvious errors in assigning villages, all of which had to be checked off on the Taluka maps. In the case of Kod in Dharwar the Mamledar's lists gave no sort of homogeneous distribution into tracts on the map, and I had to consult Mr. R. P. Pandit, the Sub-divisional Officer, who cleared up the difficulties in that Taluka and made some valuable improvements in the Hangal distribution also.

11. After the lists were fixed the population of every village had to be traced out for 1921 on the current Village Registers in the Central Compilation Office, and often, owing to variations of spelling in closely similar names, had to be checked against the villages on the maps. The work involved in preparing the Tables in this Appendix has therefore been considerable.

12. It is regrettable that the population figures for many past Censuses in many Talukas could not be found. Theoretically the figures ought everywhere to be available back to 1872. But carelessness in the Record rooms has caused many of the early "Village Registers" to disappear. This defect has seriously modified the value of the present study, as will be seen by a glance at the Tables.

13. The population of any Taluka at this Census is the sum of the tract figures given in the Tables, less any figures excluded as explained in paragraph 9, plus the figures for floating population of Ports, population of Running Trains and population of "Encampments," not taken in the Village Tables to any village but shown at the end as assignable to the Taluka. *The correctness of the 1921 figures is guaranteed.* The correctness of the figures of past Censuses cannot be guaranteed, as it is not within the power of the Census office to check it. For 1911, while the numbers excluded for Ports, Running Trains and Encampments is known for the District as a whole from Imperial Table III, it is not known in the Census office for individual Talukas. But it is believed that these figures have not been included in the Mamledars' returns as part of the village figures of any tract. The Kanara population in 1911 was 430,548. The population shown in the various tracts for that year in the Tables in this Appendix is 428,639. To this add 442, being the ascertained 1911 population for the Sirsi villages excluded under item (ii) of paragraph 9, and 1,740 shown in Imperial Table III of the 1911 Census as population of Boats, Running Trains and Encampments and we get 430,821, which is in excess of the district population of that year by 233. There is therefore a small error or errors somewhere, the difficulty of detecting which only those who have handled population figures can appreciate. But the error is so small that, even if assigned wholly to one tract, it would make no appreciable difference to the percentages. For the year 1901 the Boat, etc., population is known by Talukas. The population shown in these Tables added to the last mentioned population will give the exact 1901 figures for all the Coastal Talukas. But this is because of the method used in this office. It happened that in the case of the lists of villages in the Coastal Tract there was so much uncertainty regarding Municipal population and population of the separate revenue villages comprising the Municipal limits that it was impossible to use the lists for totalling but only for checking the villages on the maps.

* The population of these villages for Census prior to their transfer to Sirsi is not included in the figures of the Taluka from which they came.

Consequently, after checking the villages, the totals were struck for the inland tracts only and the sum of these plus the boat, etc, population was simply deducted from the 1901 population of the Talukas to get the population of the Coastal Tract. In the Inland Talukas the sum of the tract figures in the Tables plus the Running Train and Encampment population approximates to, but does not exactly tally with, the 1901 population of the Talukas. Usually the error is so small as not to affect the percentage figures. The only case of wide divergence is an excess of 1,414 in Halyal. The encampment population of 1901 in that Taluka was 1,547, a high figure, probably due to Forest operations. It is possible therefore that the rule of excluding Boat, Train and Encampment population from the village figures was not attended to. And this might account for the high figure of the population of the Above-Ghat Tract of that Taluka in that year. Supposing that the population of that tract of Halyal in 1901 should have been 9,837—1,547=8,290, it would reduce the percentage value from 147 to 124; and as a matter of fact it will be seen from the Table that that is the more natural figure. But this is the only case of a wide possible error in 1901. In the other cases the possible error appears to be within ± 2 per cent. For 1891 and previous Censuses the Boat, Train and Encampment population is believed not to have been excluded from the village figures at all. Consequently all the population figures prior to 1901 are slightly too high, and the percentage values will be the same. In the Coastal Tracts for 1891 a deduction of 500 per taluka might be made for Boat population; but this will exercise little effect on the percentages. In the Inland or Below-Ghat Tract there cannot be Boat or Train population, and population of "Encampments" is not very likely. In the various above-ghat tracts the chances of encampments are slightly higher, and in some cases there might be trains enumerated. But the following figures for the Districts as a whole in the last three Censuses will show that the error introduced by this means is not likely to have ever been high.

Population excluded from Towns and Villages in Imperial Table III, 1901 to 1921, in the three Districts.

			1901.	1911.	1921.
Kanara	..	..	5,220	1,740	1,447
Dharwar	..	..	2,703	20	244
Belgaum	..	..	1,787	82	142

It is not known why the 1901 figure should have been so high; but if that was the first year in which the arrangement was introduced into the Census tabulation it is possible that a somewhat wider applicability was attached to the word "encampment" than we now give it. In the single case of Supa, where figures are available only for two Censuses, and the whole Petha comes into one tract, the Mahalkari's lists of villages has not been used for ascertaining the population figures but the Total figure has simply been taken from Provincial Table I in each case. The 1921 figure includes 118 persons enumerated in a running train at Castle Rock. It was not possible (as explained above) to give the 1901 and earlier figures because of readjustment of boundaries.

14. The tracts are fairly exactly outlined in the accompanying map. It will be seen that if the Inner Mallad boundary is taken, as in the map, down through the Sirsi and Siddhapur Talukas, it means that the Mallad as a whole draws much nearer to the sea in the South. This is doubtfully true. The Inner Mallad is called "Malnad" in the Collector of Kanara's lists. This, though the two words are only variant spellings, may possibly conceal the fact that Malnad is used in a laxer sense in Kanara than Mallad in Dharwar. The portions of Sirsi and Siddhapur shown in the Kanara lists as Malnad are very much wetter than the true Inner Mallad of Halyal, Kalghatgi and Bankapur. The boundary line in Sirsi actually runs through Ekambi, which contains some of the biggest ever-greens in the District. Consequently in the Tables I have included only the Halyal and Mundgod Malnad with the Inner Mallad of Dharwar, and have kept the Sirsi and Siddhapur Malnad distinct as a separate type altogether.

15. The Tables which follow distinctly suggest that the worst region of decay is the west of Kalghatgi and Bankapur. And as the Mundgod Mahal forms an angle between these two, the northern portion at any rate of the Inner Mallad of that Petha would almost certainly form part of this decaying core. It is an extreme pity therefore that the Mundgod figures are not available for any Census before 1911: but the ratio of the 1911 to the 1921 population distinctly suggests that the above inference is correct. There seems reason to believe that, if all figures were available back to 1891, we could represent the region of decay by a series of irregular contours around this core.

16. An attempt to trace such contours is made in the second map. It is largely speculative; but such evidence as is afforded by the Tables seems to bear out the conclusions on which the contours are based. The population of the Coastal Tract stands higher now than in 1891; and the population of the Black soil of the Talukas examined stands at almost the same figure now as then. The Inland Tract of Kanara below Ghats would probably, if we could complete the figures, show a percentage value for 1891 of about 110. The 110 contour line on the east can only be inferred. The wide difference between the percentage values of the Mallad and

the Black soil would seem to imply not only that the 100 line must lie a little beyond the commencement of the Black soil, but also that the "gradient" (to borrow a term from Meteorology) must on the East be fairly steep, or, in other words that the contours will succeed one another rapidly. The Kod Outer Mallad values imply a sweeping round of the 110 contour line from East to West. The Khanapur figures are difficult. The 1891 percentage is Inner Mallad 118, Outer Mallad 122, which shows an inversion. But the 1901 and 1911 percentage values show the natural order. Moreover it seems that, as the Ghat crest passes along the western boundary of the Taluka, there should have been a tract of Above-Ghat type to bring the Taluka into line with the Kanara classification. The figures for the Kanara Above-Ghat Tract are singularly incomplete, and the only one that goes back before 1891, namely Halyal, is suspect, both on account of the high figure in 1901, already discussed, and also on account of the low figure in 1891. Moreover the total figure for this tract of Halyal is too small to allow of irregularities to be smoothed away, as always happens when sufficiently large figures are dealt with. The alignment of a contour between 110 and 140 on the West is therefore excessively speculative, and a contour of value 125 has been drawn with some misgivings. On the South the figures for the Malnad Tract of Sirsi and Siddhapur imply that this contour, as well as the next higher, will draw out east-ward at that point. The contours for 140 and 150 indicate what is believed to be the decaying core, and their position is determined by the figures for the Sirsi Malnad, and the Inner and Outer Mallad of all Talukas. As regards Supa it is possible either that we should assign a secondary 140 contour line to enclose the bulk of that Petha, or else that the 1891 figure for Halyal Above-Ghat is really incorrect or was due to exceptional causes, in which case the 140 line would sweep west so as to include most of Halyal and Supa. There is one point in connection with the 1891 figure for Halyal, and that is that the Above-Ghat tract of Halyal is close to Ulvi, and it is possible that several thousand persons were absent at the festival.

17. Whatever is thought of the map it is believed that few would dispute that the Tables definitely establish the existence of what I have called the decaying core, which embraces the West of Bankapur, the West and South of Kalghatgi, the North-East portion of Mundgod and probably parts of the South of Dharwar.

Subsidiary Table No. (xxx).—Population of various Tracts of the Talukas of Kanara, and certain Talukas of Dharwar and Belgaum for the current and past Censuses, and the percentage borne by the population of the past Censuses to the population of 1921.

A. COASTAL TRACT—KANARA.

Taluka.	1872.	1881.	1891.	1901.	1911.	1921.
Karwar	40,080	43,258	45,247	44,791
Honavar	34,990	37,259	37,638	36,368
Bhatkal	28,469	32,139	33,328	33,167
Kumta	103,539	112,656	116,215	114,326
			56,065	56,146	57,548
Ankola	168,721	172,361	171,674
				28,599	27,815
					200,958	199,689

Percentage values of the population of previous Censuses, treating the 1921 population as 100.

Karwar .. ..	....	....	89	97	101	100
Honavar .. ..	....	....	96	102	103	100
Bhatkal .. ..	....	....	86	97	100	100
Kumta .. ..	....	....	91	98	102	100
			....	98	98	100
Ankola .. ..	....	....	....	98	100	100
				....	103	100
					101	100

B. INLAND OR BELOW GHAT TRACT—KANARA.

Karwar	10,367	11,953	13,031	14,214	14,187	13,987
Honavar .. ..	....	23,636	24,416	24,907	24,324	23,279
Bhatkal .. ..	....	35,589	37,447	39,121	38,511	37,266
		....	5,648	5,423	5,130	4,880
Kumta .. ..	....	....	43,095	44,544	43,641	42,146
			....	9,291	8,330	6,411
Ankola .. ..	....	....	....	53,835	51,971	48,557
				....	8,559	7,973
					60,530	56,530

Taluka.	1872.	1881.	1891.	1901.	1911.	1921.
---------	-------	-------	-------	-------	-------	-------

Percentage values of the population of previous Censuses, treating the 1921 population as 100.

Karwar	74	85	93	102	101	100
Honavar	....	102	105	106	104	100
Bhatkel	....	95	101 115	105 111	103 105	100 100
Kumta	....	....	102	106 145	104 130	100 100
Ankola	....	....	....	111	107 107	100 100
					107	100

C. ABOVE GHAT TRACT—KANARA.

Karwar	170	196	167	195	229	127
Halyal	4,932	6,870	5,639	9,837	8,094	6,666
	5,102	7,066	5,806	10,032	8,323	6,793
Sirsi	....	....	38,449	37,308	33,942	36,469
			44,255	47,340	42,265	36,459
Yellapur	....	....	....	23,241	20,302	17,404
				70,581	62,567	53,863
Ankola	....	....	....	....	1,400	1,125
Siddhapur	....	....	....	....	25,403	22,691
Mundgod	....	....	....	....	2,214	2,212
Supa	....	....	....	....	17,522	15,185
					109,116	95,076

Percentage values of the population of previous Censuses, treating the 1921 population as 100.

Karwar	74	The figures are too small to justify percentages.				100
Halyal	....	103	84	147	121	100
	75	104	85	147	122	100
Sirsi	....	....	129	126	115	100
			121	130	116	100
Yellapur	....	....	....	134	117	100
				131	116	100
Ankola	....	....	....	....	124	100
Siddhapur	....	....	....	....	112	100
Mundgod	....	....	....	....	100	100
Supa	....	....	....	....	115	100
					116	100

D. MALNAD TRACT—SIRSI AND SIDDHAPUR, KANARA.

Sirsi	....	....	15,493	15,763	13,891	11,471
Siddhapur	....	....	....	....	12,079	10,910
					25,970	22,381

Percentage values of the population of previous Censuses, treating the 1921 population as 100.

Sirsi	....	....	135	137	121	100
Siddhapur	....	....	....	....	111	100
					116	100

E. THE INNER MALLAD—BELGAUM, DHARWAR AND KANARA.

Khanapur	....	20,460	21,896	21,327	19,780	18,564
Kalghatgi	....	19,851	20,326	20,035	17,355	13,179
		40,311	42,222	41,362	37,135	31,743
Bankapur	....	....	13,894	12,708	9,737	7,992
Haugal	....	....	29,534	28,206	26,457	22,236
			85,650	82,276	73,329	61,971
Dharwar	....	....	....	10,397	8,974	8,286
Halyal	....	....	....	25,153	21,353	18,719
				117,826	103,656	88,976
Mundgod	....	....	....	....	10,805	7,613
					114,461	96,589

Taluka.	1872.	1881.	1891.	1901.	1911.	1921.
---------	-------	-------	-------	-------	-------	-------

Percentage values of the population of previous Censuses, treating the 1921 population as 100.

Khanapur	..	..	....	110	118	115	107	100
Kalghatgi	..	..	....	150	154	152	132	100
				127	133	130	120	100
Bankapur	..	..	....	....	174	159	122	100
Hangal	..	..	....	....	133	127	119	100
					138	133	118	100
Dharwar	..	..	....	....	....	126	107	100
Halyal	..	..	....	....	....	134	114	100
						132	116	100
Mundgod	..	..	....	....	....	....	142	100
							118	100

F. THE OUTER MALLAD—BELGAUM AND DHARWAR.

Khanapur	..	..	....	58,646	63,501	59,469	52,453	51,953
Kalghatgi	..	..	....	30,786	35,309	32,887	29,099	26,396
				89,432	98,810	92,356	81,552	78,349
Bankapur	..	..	....	....	16,106	16,297	12,852	11,468
Hangal	..	..	....	....	27,256	29,862	26,467	23,488
Kod	..	..	....	....	67,137	75,751	74,740	65,133
					209,309	214,266	195,611	178,438
Dharwar	..	..	....	....	....	29,960	23,582	21,707
						244,226	219,193	200,145

Percentage values of the population of previous Censuses, treating the 1921 population as 100.

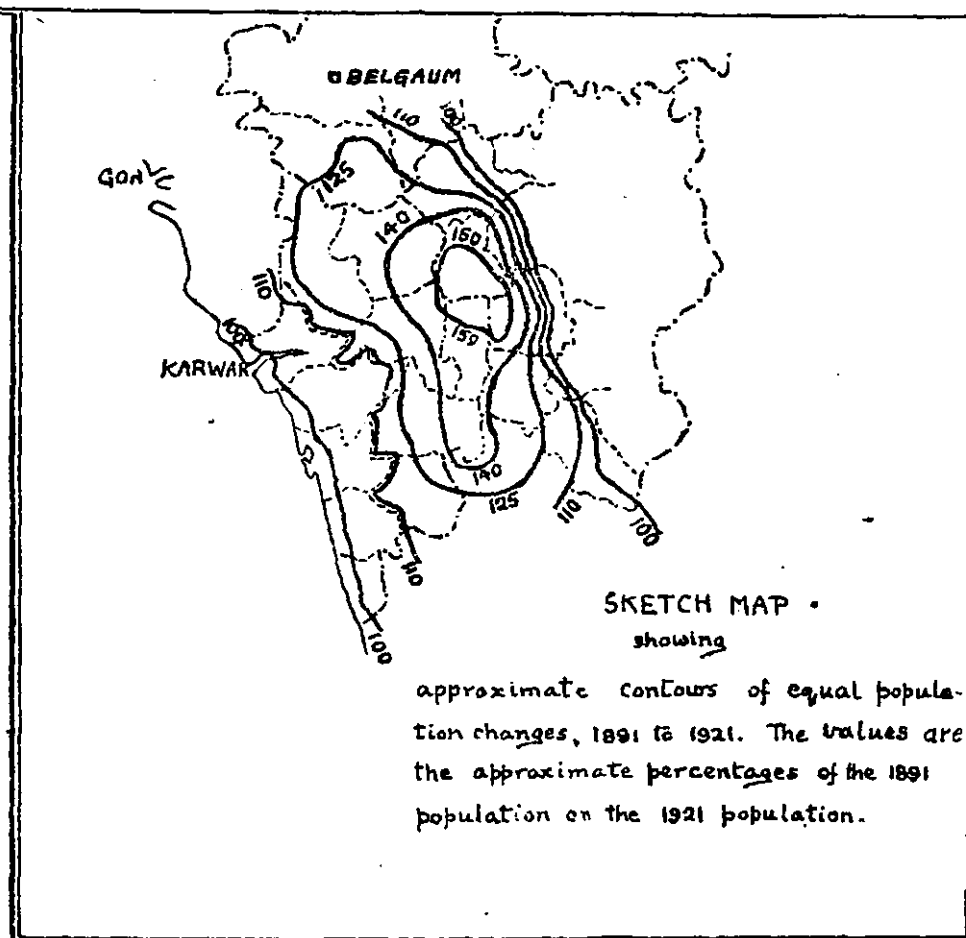
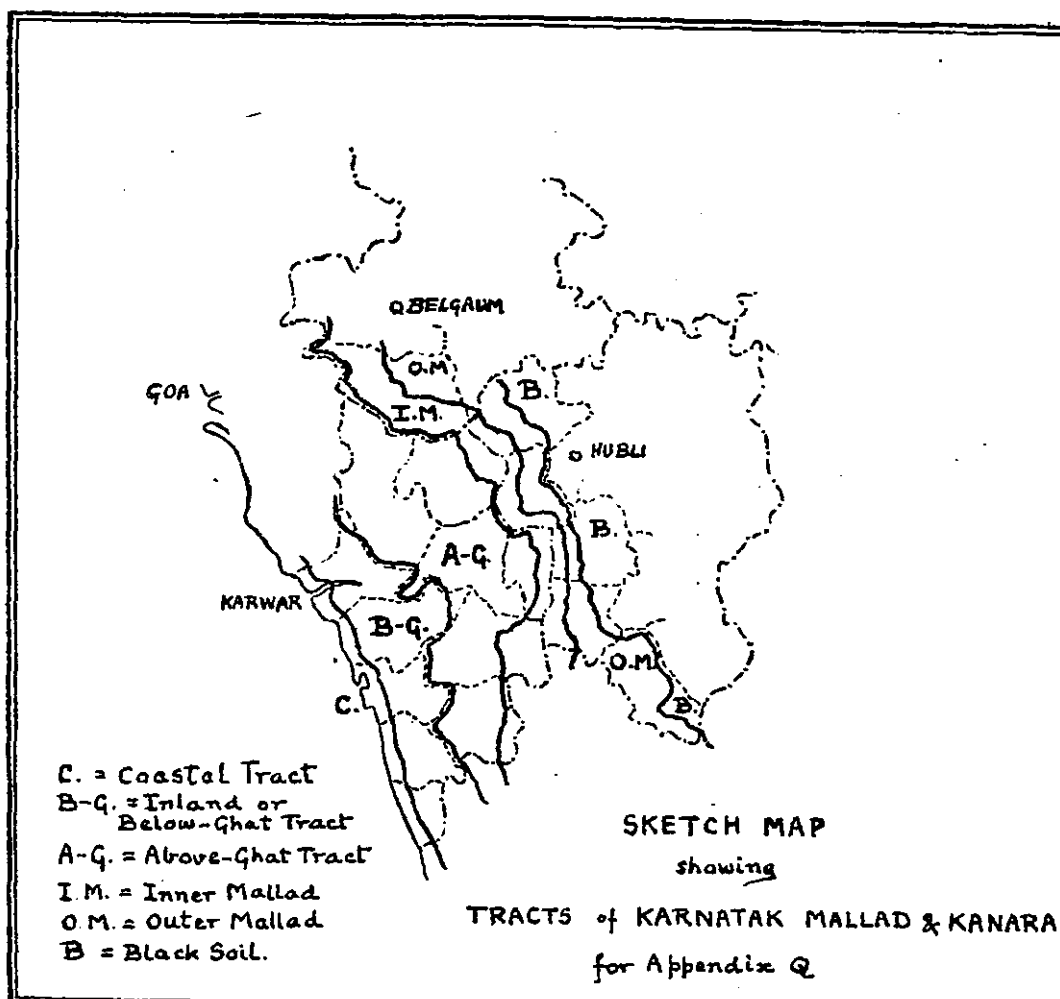
Khanapur	..	..	....	113	122	114	101	100
Kalghatgi	..	..	....	117	134	124	110	100
				114	126	118	104	100
Bankapur	..	..	....	....	140	141	112	100
Hangal	..	..	....	....	116	127	113	100
Kod	..	..	....	....	103	116	114	100
					118	120	110	100
Dharwar	..	..	....	....	....	138	109	100
						122	110	100

G. THE BLACK SOIL—DHARWAR.

Bankapur	..	..	....	....	54,444	59,373	52,927	54,589
Hangal	..	..	....	....	16,494	18,553	17,962	16,474
Kod	..	..	....	....	17,713	20,494	21,716	18,058
					88,651	98,420	92,605	89,121
Dharwar	..	..	....	....	....	83,656	75,020	78,244
						182,076	167,625	167,365

Percentage values of the population of previous Censuses, treating the 1921 population as 100.

Bankapur	..	..	....	....	100	109	97	100
Hangal	..	..	....	....	100	112	109	100
Kod	..	..	....	....	99	114	121	100
					100	110	104	100
Dharwar	..	..	....	....	....	107	96	100
						109	100	100



APPENDIX R.

ARYAS and BRAHMOS.

1. The figures of Hindu-Arya and Hindu-Brahmo since 1881, when they first began to be separately shown, are as follows:—

Year.	Total numbers in the Presidency.	
	Hindu-Arya	Hindu-Brahmo.
1881	....	43
1891	....	34
1901	371	161
1911	578	135
1921	1,512	4

It will be seen that the Aryas increase their returns, while the Brahmos practically disappear.

2. As regards the Aryas the returns are patchy. Of the 1,512 adherents 780 were returned from the Surat District alone; and these came mainly in lumps from particular villages. Of the rest 700 were returned from Sind, and those mainly from three districts. Hyderabad, where the Sect might have been expected to come out strong, returned none. Except for 12 persons from Nagar there were no Aryas returned south of Gujarat.

3. The 4 persons of the Brahmo Sect were all returned from Poona.

4. It is extremely doubtful whether these two heads Hindu-Arya and Hindu-Brahmo should not be omitted from the Census Tables next time. Adherence to either of these sects is a matter of educated personal opinion. Both are regarded usually as Sects of Hinduism, and not as separate religions. Consequently a child of Arya or Brahmo parents is in the opinion of many an ordinary Hindu; and its ultimate adherence to the sect of its parents (or in some cases one of its parents) will depend upon personal considerations in after life. The patchy character of the returns of Aryas shows that a wandering preacher may have an effect (in all probability merely transient) on some particular village or community. But the Arya cult demands philosophic and historical study, and is analogous more to such phases of thought as the "Oxford movement" in the Church of England rather than to a true main religion, or even a true Sect.

5. The term Brahmo is usually taken to include the Prarthana Samajes of Western India. And it is well known that that these Samajes have a good many adherents. I made some attempts to get at the true figures by private enquiry, and circulated the following note to a few likely correspondents in advance of the actual Tabulation of Religious.

CENSUS OF 1921.

A note on the Brahmo Samaj sect for census purposes.

Imperial Table VI, Religion, includes under the general heading Indo-Aryan the following sub-heads—Hindu Brahmanic, Hindu Arya, Hindu Brahmo, Sikh, Jain, and Buddhist. By Hindu Brahmo is understood the Brahmo Samaj. The separate tabulation of this sect, although we do not tabulate Hindu sects generally, is due (as also in the case of the Arya sect) to the great interest which the foundation and progress of these sects evinced; and this again is due largely to the writings of Max Mueller and Lyall. There is reason however to think (1) that the boundaries between the Brahmo sect and ordinary philosophic Hinduism are rather vague, and (2) that the numbers of the Brahmo sect came out far below their correct figure at the 1911 Census. A further point of great importance in this Presidency is whether the Prarthana Samaj is part of and included in the Brahmo Samaj.

In 1911 the Brahmo sect came out at only 135 members, as compared with 161 in 1901. These 135 persons were distributed as follows:—Bombay City 6, Surat 9, Poona 13, Hyderabad 51, Karachi 52, Reva Kantha 4. From this it is almost inevitable to assume (1) that many Brahmos were enumerated as Hindus, and (2) that the Prarthana Samaj was not counted as part of the Brahmo sect.

In the India Report Mr. Gait, in commenting on the gain of 36 per cent. in the figures of Brahmos in the whole of India—a rate of increase which he considered slow, and contrasted with the much more rapid increase of the Aryas—remarked that the greater latitude of thought then apparent among Hindus especially in Bengal, had diminished the attractiveness of the Brahmo cult, which had, in fact, in his opinion, ceased to supply a need.

A cursory examination of the Bombay City work shows that certain persons known to be Brahmos HAVE BEEN RETURNED AS HINDUS, and tabulated as Hindus. In one case it was found that the adults of a family were returned as Hindu (Brahmo) but the children simply as Hindu. No case is known of "Brahmo" alone being returned. And no case is known of "Prarthana Samaj" being returned.

With a view therefore to explaining the figures for "Hindu-Brahmo" which will appear in Table VI the undersigned would be glad of the following—(1) considered opinions on the question whether the Prarthana Samaj is part of the Brahmo Samaj, or failing that then so closely allied to it as to deserve inclusion in Table VI under Hindu-Brahmo, and (2) any reliable estimates of the strength of the Brahmo Samaj and Prarthana Samaj in various localities. Even if these estimates are received from only a few districts it will nevertheless be possible, by comparing their figures with those appearing in Table VI, to arrive at some conclusion as to the extent to which the strength of the community as recorded at the Census is incomplete.

6. This circular elicited some interesting replies. I am indebted to Mr. Hotchand D. of Hyderabad Sind for supplying me with following figures of members of the Brahmo Samaj known to have been resident in his town on the date of the Census—

Adults.		Children.	
Males.	Females.	Males.	Females.
20	25	36	34

He also supplied the following interesting information regarding the relations of the Brahmo and Prarthana Cults:—

"The *Prarthana Samaj* is a part of the Brahmo Samaj and should be shown as such in the Census report. In Sind we have no Prarthana Samaj, the one at Karachi having long ago changed its name to Brahmo Samaj.

So far, I believe, no one has attempted to define clearly the distinctive features of the Prarthana Samaj.

My personal opinion and the opinion of the Brahmos when I have consulted, is that in their religious faith and beliefs the members of the two Samajes are at one, but when it comes to Social customs or even religious ceremonies such as the *Dikhsha* or initiation ceremony, the members of the two Samajes differ. The Prarthana Samajist does not take *Dikhsha* and does not bind himself down to the marriage and death ceremonies of the Brahmos, and in this sense the Brahmos proper are called *Anusthanic* and those who do not observe Brahmo ceremonies *Ananusthanic*."

7. The Assistant Secretary, Brahmo Samaj, Karachi, also kindly wrote intimating that the strength of the Samaj in that city on the date of the Census was about 120.

8. I extract the following also out of a letter from Dr. Y. V. Bhandarkar of Bombay:—

"The Prarthana Samaj of Bombay is so closely allied to the Brahmo Samaj as to deserve inclusion in Table VI under Hindu-Brahmo. It was resolved by the managing committee of this Samaj about the time of the Census of 1911 that its members should return themselves Brahmos in the Census then in progress.

This resolution held good for the last Census also, and accordingly some members have returned themselves as Brahmo. In the case of others either through carelessness on their part or of the Returning Officer in filling up the Column of religion in the return without making enquiry of the persons enumerated, they escaped being returned as Brahmo."

9. Professor H. L. Kaji of the Sydenham College of Commerce and Economics wrote as follows:—

"Any reliable estimates of the strength of the Prarthana Samaj in various districts are not possible at present for the following reasons:—(1) Members of the Prarthana Samaj return themselves as Brahmos or ordinary Hindus according as the member and the enumerator are or are not particular and careful; (2) Even when the members do return themselves as Brahmos, their wives and children are usually not returned as such unless they too have expressly, by a solemn affirmation, joined the Samaj; (3) The Prarthana Mandirs at various centres keep a list of their own members; but migrations, temporary or permanent, prevent any reliable estimates being formed of the actual strength of the Samajists by districts."

10. Point (2) in the above extract was also confirmed by a letter from Mr. Manilal K. Desai of Broach.

11. A communication of interest was also received from Mr. Morarji Naranji of Surat dealing mainly with the historical aspect of the question.

12. Mr. Mukerjee, the Superintendent of Census, Baroda State, also wrote mentioning that several well known Prarthana Samaj families of Baroda were found to have returned themselves as simply "Hindu" and also that there is a definite danger of the orthodox enumerator receiving the reply Hindu-Brahmo, Brahma Samaj or Prarthana Samaj in answer to his religion question, but entering "Hindu". Mr. Mukerjee will probably have referred to this matter in his Baroda Report, which was not out at the time of sending this to Press.

13. Subsequently, in October 1921, the Managing Committee of the Prarthana Samaj in Bombay decided to make a private Census of "the members of the Prarthana Samaj and persons in their families, *who are willing to return their religion as Brahmo.*" (The italics are mine). The Secretary accordingly circulated a schedule, in which two of the columns were headed—"Religion" and "Whether a Member of any Prarthana or Brahmo Sama." The particular form of the headings is noticeable. The word Samaj is used for the local organisation, and not, as sometimes, for the sect or cult generally.

14. As a result 99 persons were returned. But of these some were living at Bangalore, Indore and other places outside the Presidency. The numbers in the Presidency were Bombay City, Males 21, Females 20; Mofussil, Males 24, Females 19.

15. The remarks column of the schedule elicited some interesting notes, from which I extract the following :—

(1) "Bombay Prarthana Samajists have no right to call their religion 'Brahmo,' so long as they are against calling their Samaj the 'Brahmo Samaj'."

(2) "Religion to be returned as 'Hindu' or 'Hindu-Brahmo,' but not simply as Brahmo."

(3) In contradistinction to this another gentleman entered his religion as "Brahmo and Brahmo only."

16. The Samaj was treated throughout as the Local organisation, and many persons returned themselves as members of more than one Samaj. Thus—"Member of the Bombay Prarthana Samaj and the Sadharan Brahmo Samaj, Calcutta." "Bombay Prarthana Samaj and Indore Brahmo Samaj," and so on. Children were usually shown as Brahmo by religion, but never of course, as members of a Samaj. One gentleman, who returned himself as a member of the Prarthana Samajes of Bombay and Ahmedabad, declined to enter his religion as Brahmo, but returned "Liberal Religion", as mentioned in Mr. ————'s certificate of the Theological College, Oxford."

17. The only conclusion which can be arrived at is that the Brahmo cult is too indefinite to be classed as a separate main religion. The Arya cult is a "movement" within Hinduism. The Brahmo cult is a movement on the fringe of Hinduism, some of its adherents reaching a hand back to the religion of their ancestors and others reaching out towards something new. But they are "movements" only, not sects, still less main religions. They are also, and especially the Brahmo cult, movements in which none but intellectuals can take part.

18. The Aryas are essentially Hindus, and should be included with ordinary Hindus at future Censuses. The Brahmos should be included as Hindus, unless the individual definitely declines to be so recorded, or returns some special description such as "Liberal Religion"—in which case he should be taken to "Indefinite Beliefs."

APPENDIX S.

COST OF CEREMONIES.

Their position in the economic life of the people.

In the discussion of Family Budgets in a later Appendix attention is drawn to the importance of Ceremonial expenditure in the general total expenditure of the Indian householder. In that enquiry Ceremonies and Charity are amalgamated. Ceremonies also include the ordinary domestic worship. The present enquiry relates only to Ceremonies in the narrow sense of the Birth, Funeral, Marriage, Pregnancy and Thread Ceremonies.

The Honorary correspondents who sent in replies to the questionnaire were:—

1. Professor H. L. Kaji, Sydenham College of Commerce and Economics, who collected information largely through his students, and himself supplied a very full and lucid commentary.
2. Mr. D. R. Gadagkar, B.A., L.L.M., of Mudhol.
3. Mr. C. N. Joshi, B.A., District Deputy Collector, Panch Mahals.
4. Rao Saheb A. K. Kulkarni, B.A., District Deputy Collector, Ahmednagar, who also received and forwarded information supplied by the Mamledar of Nevasa (Mr. A. N. Pradhan).
5. Mr. Mahamad Hashimali, District Deputy Collector, Navabshah.
6. Mr. Manilal K. Desai of Broach.
7. Mr. M. G. Datar, Personal Assistant to the State Karbhari, Jamkhandi.
8. Mr. Aildas Madhavdas Prithiani, Nasirabad, Larkana.
9. Mr. Hotchand Dialal of Hyderabad, Smd.
10. The State Census Officer, Dhrangadra, Kathiawar.
11. Rao Bahadur Venkatesh Shrinivas Naik, Ranebennur.
12. Mr. Daryadinomal Nanikram, B.A., Resident Magistrate, Mehar, Larkana.
13. Mr. Budhamal Kevalchand, Nasik.
14. Mr. M. M. Shah, Jhalod, Panch Mahals.

Opinion on the point whether the cost of ceremonies has risen *pari passu* with the cost of living varies a good deal. Some correspondents state that the rise is proportionate. But the weight of opinion is in favour of the view that the cost of ceremonies has not risen proportionately. It seems that on account of the rise in the cost of living persons on fixed incomes have had to keep down the cost of ceremonies to their original level or near it by curtailing them or making them simpler.

Professor Kaji writes:—

“There has been a phenomenal rise in prices during the last quinquennium, and a rise in the cost of ceremonies is but an easy corollary. But it is certain that this rise is not quite proportional to the general rise of prices. The ‘Dowry’ is unaffected. But feasting, clothes and ornaments are greatly affected by the rise in the cost of materials and in the wages of labour, and the expenditure under these heads has increased by about 75 per cent. The ‘other items’ group is however easily adjusted to meet the new situation to some extent. Where the father went to the length of getting the house coloured and painted on the occasion of his son’s marriage he now more often contents himself with whitewashing; a less costly *mandap* and a less imposing procession satisfies him. In funerals the higher prices have been a blessing in disguise to some extent. The change in sentiment about giving a caste dinner has been accelerated, and people, professing merely to postpone the funeral feast in order to escape importunity or approbrium, quietly drop it altogether.”

The consensus of opinion on the point whether the cost of ceremonies is a leading cause of indebtedness in India is in the affirmative. Some correspondents did not answer this question. Those who did answer it all confirmed the idea.

The following actual cases cited by Mr. Budhamal Kevalchand of Nasik City are interesting inasmuch as he has given the total annual income and expenditure of the family as well as the cost of a particular ceremony.

Caste.	Ceremony.	Cost of Ceremony.	Annual Income of family.	Annual Expenditure of family.
Brahman	Marriage of daughter	5,500	7,000	6,000
Do.	Marriage of niece	1,600	3,000	3,000
Jain Wani	Marriage of daughter	7,000	5,000	4,000
Bohra (Shia)	Marriage of nephew	5,000	4,000	3,500
Jain Wani	Marriage of younger brother	5,000	5,000	3,000
Pardeshi	Marriage of daughter	900	725	500
Brahman	Marriage of daughter	600	500	500
Do.	Third marriage of nephew	200	2,000	1,500
Do.	Funeral of father	100	1,080	1,000
Jain Wani	Funeral of father's mother	1,200	1,700	1,000
Brahman	Funeral	700	12,000	7,500
Do.	Funeral of father's brother	500	2,000	1,500

The cost of celebrating *Births* is negligible, except in the case of the first son, and sometimes (apparently) the first two children ; and even in these cases it is not excessive, and in all cases much lower than the cost of funerals.

There are also ceremonies in connection with *Pregnancy*. Professor Kaji has collected many cases of these, with expenditure ranging from 15 to Rs. 2,400. He supplies the following remarks :—

“ *Pregnancy*.—It is customary among some communities to celebrate the occasion “ of the first pregnancy of the wife by giving presents of clothes and ornaments to her and “ by also giving a caste dinner, usually during the seventh month. It is not such an expensive ceremony as to press sorely on even the poor. The caste dinner, where obligatory, “ would certainly be a serious drain particularly felt by the lower middle class, since this “ occasion following soon after the marriage ceremony, leaves but little time for the father-in-law to recover from the previous strain. The obligation is fast disappearing, and “ pregnancy has become, practically among all communities, a minor ceremony only, with “ feasting still as the chief item and clothes close behind ”.

The range of expenditure on *Funeral* Ceremonies seems to be very wide. There is also a marked tendency for expenditure under this head to be higher in the North. Thus Ranebennur, Dharwar, from Rs. 50 to Rs. 200, according to Caste and status. Mudhol, actual cases—Rs. 20 to Rs. 1,000. Dry talukas in east of Nagar, Rs. 10 to Rs. 2,000. Dhrangadra, Rs. 250 to Rs. 2,000. Sind Rs. 65 to Rs. 2,500, with one case of 13th Day Ceremony at Rs. 7,500. There is uncertainty whether this appearance of increase as one goes North is brought about by accident. But it certainly seems that in Sind expenditure on Funerals is higher than in the Presidency proper.

Mr. Hotchand Dialal of Hyderabad explains that the cost varies with the age of the deceased. Thus in his well-to-do Amil type he shows normal expenditure as follows :—

	Rs.
Funeral of child under 10	65
“ of unmarried boy or girl	300
“ of young married person	500
“ of older person	1,000 to 2,500

In the Presidency proper the cost of funerals is not inordinately high, according to the information given. But it is not negligible.

Professor Kaji's examples range from Rs. 65 to Rs. 4,900. It is noteworthy that the latter example, though occurring in Bombay, is of a Lohana (a Sindhi immigrant); which again bears out what is said above.

Professor Kaji's interesting note may be given *in extenso*.

“ *Funeral*.—This is certainly an occasion of considerable importance. The entries “ relate to expenditure consequent upon the death of *old* persons. When children die or “ when adults are cut off in their prime, the expense is not considerable. The occasion is “ too sad ; no feasting can possibly be thought of ; and the main items of expenditure are “ those relating to the ceremonies and to feeding the priests. But, when the aged die, the “ expenditure swells to a considerable figure. The dividing line between the old and the “ young is generally not fixed by caste rules but is left to custom to determine. Usually “ however people over forty are regarded as old enough for this purpose.

“ Ceremonies assume greater importance on this occasion than perhaps on any other. Whatever the scriptures as revealed and customs as interpreted by priests ordain is will ingly done as a last service to the departed. The ceremonies with the Hindus last usually for thirteen days. For the first ten days, the relatives of the deceased are subjected to a species of quarantine (*sutak*) and the ceremonies proper begin, after thorough purification of the house and its inmates, on the tenth and end on the thirteenth day when the Brahmin priest receives presents of clothes and ornaments belonging to and used by the deceased. The idea of these presents seems to have had its origin in the desire of the relatives to remove beyond their sight everything that may remind them of the departed dear one, and to have found support in the Brahminical teachings, which inculcated the doctrine that the dead receive things vicariously through the priests. The bed and mattress, clothing and ornaments, all had thus to be given away; but now the presents are restricted to as few articles as the purse and inclination of the heir and the good nature of the priest permit. When an old person dies, the Hindus seem to regard it rather as an occasion for satisfaction; at least so say philosophically friends and sympathisers to the bereaved family. The deceased having played his part, having tasted enough of the joys and sorrows of life, cannot have much attraction left in this world and should therefore be allowed to march on to the next and the better world, unhampered and unmolested by the exhibition of grief and without pulling him back and keeping him chained to this world by the keenness of sorrow and strength of love lest he be otherwise forced to assume more or less a ghostly existence. Be this as it may, one can understand the feeding of Brahmin priests; but there seems no sense in feasting the caste people. Sense or no however, the fact remains that the caste has to be feasted and feasting thus becomes the most important item in the cost of this ceremony. But feasting on this occasion is elastic enough for all purses and temperaments and the present tendency seems to be to gradually do away with feasting the caste people on the occasion of a funeral.”

“ Charity ” seems to be an item almost as important as feasting in the case of Funerals. Thus of 35 examples cited by Mr. D. R. Gadagkar from Mudhol,—total expenses ranging from Rs. 20 to Rs. 1,000—in 7 cases amounts spent on charity exceed those spent on feasting, and in 1 case equal them.’

It is also difficult to decide where expenses in connection with the dead cease. The funeral does not complete them. Mr. Manilal K. Desai of Broach remarks that while the amounts shown by him for funeral expenses (Rs. 15 to 30) are low, the expenses incurred during the first year after the decease run into big figures.

The *Thread Ceremony* is of course of the utmost importance in the life of the Hindu of those castes which wear the thread. Professor Kaji deliberately refrained from collecting figures on this head in order to ensure the greater accuracy of the others. Rao Bahadur V. S. Naik of Ranebennur cites the following minimum and average expenditures on this ceremony :—

Caste.	Minimum Expenditure.	Average expenditure by middle class family.
	Rs.	Rs.
Brahman	200	500
Panchal	150	130
Kshatri	150	250

It is noticeable that in each of these cases the amounts shown for Thread Ceremony is twice or three times that shown for Funerals.

Cost of this ceremony in Hyderabad Sind is shown as ranging from Rs. 750 to Rs. 3,000.

Marriage remains much the most important and expensive item in the ceremonial expenditure of an Indian. I give first actual cases collected by Professor Kaji’s senior students during their vacation. The figures are exactly as supplied by him. The following notes are entirely from his pen, and serve both to explain his figures and also to indicate the main facts brought out by them.

“ The various items need but little explanation; a few words will suffice to explain the significance attached to each.

“ (i) *Ceremonies*:—The cost of the actual ceremonial including petty gifts to priests, enjoined by custom or religion is separately entered here, and is intended to bring out clearly the relative insignificance of this item, and to show how the celebration of the occasion is responsible for by far the greater part of the expenditure incurred.

“ (ii) *Feasting*:—This includes also dinners given in honour of the occasion to friends and relatives on days preceding or succeeding the grand feast.

“(iii) *Clothes* :—All clothes got ready for and in honour of the occasion for the use of members of the family or for gifts to others are included in this item.

“(iv) *Ornaments* :—All ornaments, similarly, made for and in honour of the occasion for the use of members of the family or for gifts to others are included in this item. In addition, this item includes ornaments given away to priests or others, whether made previously or for the occasion.

“It may perhaps be contended that items (iii) and (iv) should not be held to add to the cost of ceremonies since they may have to be made sometime or other. But in the first place, costly embroidered silk garments and ornaments are not usually made except for and on an occasion ; and even if these have to be made sometime or other, the fact that they are got ready on the occasion, increases the financial pressure on the head of the family who has thus to find a large sum of money for these among other equally quasi-obligatory items. These items cannot therefore rightly be excluded or held not to constitute a burden.

“(v) and (vi) *Dowry* :—The word dowry is here used a little loosely and includes all payments made in cash or in kind by one party to the other on the occasion of a marriage.

“It is customary for the bridegroom to pay to the bride a pretty large sum of money agreed upon at the time of betrothal, in cash or ornaments, which constitutes the bride's own property, *stridhan*, regulated by a different law of succession, the daughter being preferred to the son, and reverting back to the husband in the event of the lady predeceasing him, without leaving any issue. This payment is, in no sense, the bride-price. Theoretically and in most cases in actual practice, the giving away of the bride is *Kanyā-dān*, the gift of the maiden ; but there are cases too where the deficiency of females is marked enough to produce an unhappy result, stimulating the rival aspirants to seek to advance their claims by offering to settle a large sum of money or ornaments on the girl and to purchase the father's good will and assent by another large sum. It is this payment to the father which amounts practically to the bride price. Luckily such cases are getting rarer. It is only when widowers, in their forties or fifties or bachelors in their twenties, having but little to commend them to favourable notice in the marriage market and left out so far like so many social weeds, seek marriage and it is only again when the father of the girl has his instincts blunted by poverty, ignorance or association, or when, the father having left his family in penury, a villainous uncle or cousin seeks to enrich himself by persuading the widowed and necessitous mother, that the *Kanyā-dān* becomes *Kanyā-vikraya* (sale of the maiden). The cost of the marriage ceremony in such a case is enormous to the groom, while it is a negative quantity to the bride's family. But in an investigation like this, such shady transactions cannot appear since neither party would willingly admit having paid or received anything. Dowry paid by the groom would thus only refer to the amount paid to the bride only. As such it will certainly be an item of expenditure to the bridegroom's father while the corresponding entry of Dowry received in the case of the marriage of a daughter cannot enter into the total cost, since the bride's father cannot possibly appropriate it to his own uses.

“In almost all castes, it is customary for the bride's father to pay a certain sum of money agreed upon at the time of betrothal to the bridegroom. This is appropriated by the groom's father and thus, while being as Dowry paid an item in the total cost to the bride's father is a source of income to the groom's father. But there are communities like the Parsis and the Brahmakshtriyas, where the male is at a premium and receives from his father-in-law a fairly large sum retained by himself and of no use to his father towards meeting the cost of the marriage. This custom taxes terribly the father of many girls and has been a potent cause for late marriages, enforced spinsterhood and indebtedness. The true dowry given to the bride by her father is usually not large and is often given as gifts of ornaments during the marriage ceremony. This item would hence appear as ornaments in the case of the marriage of a daughter.

“Acting upon these instructions, information was collected by the student-investigators and the figures enable us to deduce many important results, confirming or refuting ideas previously entertained on the subject. The great majority of the instances being for Bombay City and Gujarat, the results deduced, it should be noted, should also be held to be true of the Gujaratis only.

“*Marriage of a Son* :—This is generally the most expensive of the ceremonies. Feasting is more or less an obligatory item. If you accept dinners, you have got to give dinners too. Besides, the variety and richness of the dishes form an index though a crude one to the economic position of the host ; and as economic position determines the chances of his younger sons in the marriage-market, he has often to launch out in a manner which he can ill afford. But times are swiftly changing. Caste dinners are fast ceasing to be obligatory ; a rich feast is not now held to denote prosperity ; the traditions of one's house are no longer sought to be slavishly upheld ; education is coming to be regarded

“ as a factor of prime importance in matrimonial calculations, and eligibility is determined more by the boys’ own qualifications than by those of his father or family. Feasting however does remain an important item of expense and the locality is of great significance in this connection. Villagers do not expect considerable richness and variety in the dishes. Great Cities develop fissiporous tendencies and weaken the community sentiment; the feast is hence there not a caste dinner but rather a dinner to friends and relatives. But the fashions of a great city like Bombay and the higher prices that rule there more than counterbalance the advantage of a smaller number of guests. It is therefore that we find feasting relatively not so burdensome in villages and small towns. The Patidars (Nos. 1 to 13) furnish quite a good illustration; the larger the town, the greater the numerical strength of the community and the higher the social status of the father (cf. No. 12), the greater is the incidence of this item. The Parsis (Nos. 14 to 34) reveal the same tendencies. From Rs. 50 at Navsari (No. 28) the cost rises to Rs. 700 at Broach (No. 34), Rs. 1,250 at Surat (No. 30) and Rs. 1,800 at Bombay (No. 16). Of course, divergencies are great, as indeed could have been expected in the case of an advanced community where custom loses its force, individualistic tendencies have freer play and adjustment to economic position is therefore nicer. The entries for the Lohanas (Nos. 64 to 68) show the expense in feasting of a rich metropolitan (No. 64), a rich provincial (No. 65) and a poor villager (No. 66). The Brahmins have a range from Rs. 50 at Balasinor, a small town (No. 44) to Rs. 500 at Porbunder (No. 47) and the Banias from Rs. 150 to Rs. 1,000. On the whole, one is justified in concluding that feasting is an item elastic enough and presses somewhat severely on the lower middle class in large towns.

“ ‘Clothes’ appear to be relatively more important with the non-Hindus but are very easily adjusted to the needs and resources of the parties and do not act to any very great extent as a burden to the poor. There is certainly the natural desire on an occasion like this to have nice clothes for the family, but the desire is also in some cases gratified by the lower middle and poor classes by borrowing costly *saris* from friends and relatives. These remarks are more true of ‘Ornaments’. These are frequently borrowed and even obtained on hire and very little is generally spent by the *pater-familias* on this item. The large sums entered in many cases arise chiefly from the confusion between this and the next item. The former is quite adjustable; the latter is governed more rigidly by custom. The case entered as No. 54 gives figures which I am assured are quite reliable and accurate, except in the first entry, ceremonies—Rs. 60, and clearly shows that where the entry in ‘Dowry paid’ is correctly made, the item of ‘Ornaments’ loses its significance. Another very reliable case is shown in No. 43 and bears out the same interpretation. Even in the case shown in No. 14, relating as it does to a very rich Parsi family, the amount of Rs. 10,000 is largely made up by the gifts of ornaments made by the bridegroom to the bride, which should have been properly shown according to instructions as ‘Dowry paid.’

“ ‘Dowry’ is the all important item. At first sight, there seem to be but very few cases indeed where dowry is paid: but the previous remarks will have made it clear that to understand the incidence of this item, the item ‘Ornaments’ and ‘Dowry Paid’ must be considered together. The divergencies are great indeed but still there are indications of a ‘mode’, the deviation for the rich being very pronounced. Unfortunately, the ‘mode’ for each community and sub-castes is undiscernible from the few instances gathered together here and the ‘mean’ is useless for our purpose. It appears however that the Parsis give larger dowries or presents to the bride than other communities, the Banias and Brahmins have a mode at about Rs. 600 and the Surat Ghanchis at about Rs. 200. In some castes (No. 51) the sum to be paid to the bride is fixed by the caste rules, the root-idea being to prescribe the minimum which would maintain the wife should she unfortunately lose her husband soon after marriage and be left otherwise unprovided for. But the minimum is a relative term; what is the bare minimum to one may well be quite decent to another. The poorer brethren cannot afford to pay a large sum and yet do of course want to marry. Hence they successfully strive to bring down the fixed sum and instead of prescribing the minimum, make it also the maximum, so that it ceases to be any longer in the nature of insurance.

“ Almost all communities seem to receive dowries. This is, of course, no item in the cost of ceremonies, but rather just the reverse, unless the sum received belongs exclusively to the bridegroom, when it ceases to count at all in the calculation of the total cost of the ceremony of his father. The Parsis run into thousands and the Bombay Parsi is distinguished from his upcountry coreligionist by more often exceeding the Rs. 5,000 limit. With the Patidars Rs. 301 seems to be the model dowry. The Banias and Brahmins receive but little and what little is thus received is appropriated by the father and helps him to meet the marriage expenses. It is clear from this that while in the case of the Parsis, the father of girls is penalised and may find himself forced to contract debts, in the case of the Brahmins and Banias, it is the father of sons who, though not to the same extent, is hard put to it to find wives and dowries and may be thrown in the arms of the money-lender.”

“The ‘Other items’ assume importance, since they include the cost of the *mandap*, procession, bands, gifts of some useful articles to caste people, whitewashing and colouring the house and a host of other minor items. The father receives help towards meeting these expenses in two ways—one, from the father-in-law by way of *peherāmni* (dowry received) and the other, by way of wedding gifts (*chānllā*) usually in cash. The entry in ‘other items’ represents therefore the difference between the cost of unspecified items and these *chānllā*. It is therefore sometimes possible to find that the receipts exceed the expenditure and the result may have then to be shown as negative expenditure (of No. 44). Almost all these items are sufficiently elastic and admit of considerable adjustment to the economic position of the father.”

“*Marriage of a daughter*:—This occasion is usually held to be a little less important than the marriage of a son, and the father, instead of launching out, reserves himself for that occasion. The entries reveal the existence among the Hindus of a custom corresponding to the English custom of the bride’s father giving the wedding breakfast. It is he who has to entertain the groom’s party with a grand feast where many other guests have to be invited, to meet them as it were. The Brahmins, Banias and Patidars all seem to be spending more in feasting on this occasion than on the son’s marriage, while the Parsis seem to be doing just the reverse; and it would appear as if the party receiving the larger dowry has to stand the grand feast. Clothes, ornaments and dowry do not particularly call for any special remarks and with respect to ‘other items’ it may be noted that the expenses under this head are less than on the occasion of the son’s marriage.”

Examples of Expenses of Marriage Ceremonies collected by Professor Kaji’s students.

Serial Number.	Place.	Caste, etc.	MARRIAGE.															
			Son.								Daughter.							
			Ceremonies.	Feasting.	Clothes.	Ornaments.	Dowry paid.	Dowry received.	Other Items.	Total.	Ceremonies.	Feasting.	Clothes.	Ornaments.	Dowry paid.	Dowry received.	Other Items.	Total.
1	Tarapur, Gujarat	Patidar	Rs. 10	Rs. 30	Rs. 150	Rs. 250	Rs. ..	Rs. 301	Rs. 150	Rs. 298	Rs. 212	Rs. 700	Rs. 500	Rs. 700	Rs. 301	Rs. ..	Rs. 250	Rs. 2,473
2	"	"	19	25	100	250	..	701	150	..	19	700	250	700	501	..	300	2,470
3	"	"	24	25	150	300	..	301	140	338	25	800	350	800	101	..	270	2,346
4	"	"	20	29	150	275	..	1,001	200	..	25	750	400	500	301	..	350	2,326
5	"	"	22	40	208	500	..	901	150	19	29	1,000	300	1,200	301	..	100	3,020
6	"	"	22	47	101	409	..	1,201	211	..	30	800	708	1,500	301	..	447	3,786
7	"	"	21	35	80	200	..	500	124	..	25	600	410	1,000	301	..	310	2,604
8	"	"	25	50	300	500	..	301	200	774	30	1,200	700	1,500	301	..	300	4,031
9	Vaso, Gujarat	"	12	115	280	25	..	1,200	280	..	32	875	770	1,800	301	..	360	4,135
10	"	"	15	110	125	75	..	301	250	274	35	825	100	1,800	301	..	410	3,171
11	"	"	13	125	120	35	..	301	235	227	30	1,100	825	1,725	301	..	375	4,356
12	Nadiad, Gujarat	"	10	315	485	..	..	301	410	919	25	1,675	915	1,910	301	..	427	5,253
13	Savali, Gujarat	"	17	135	175	..	..	301	330	356	20	1,225	720	1,825	301	..	485	4,576
14	Bombay	Parsi	50	4,000	1,500	10,000	..	5,000	1,000	11,550	20	2,000	2,000	2,000	5,000	..	1,200	12,220
15	"	"	150	1,500	3,000	3,000	..	8,000	400	50	150	1,000	1,000	1,000	7,500	..	300	10,950
16	"	"	320	1,800	4,500	5,800	..	8,000	500	4,920	260	1,150	2,600	1,500	7,000	..	350	12,860
17	"	"	340	680	2,100	1,500	..	4,000	170	770	200	350	1,700	700	4,400	..	180	7,510
18	"	"	250	3,200	900	800	..	5,000	250	400	200	1,700	1,000	800	4,000	..	500	8,200
19	"	"	200	2,000	900	800	..	5,500	400	..	175	1,500	1,450	1,100	6,000	..	250	10,475
20	"	"	150	550	150	100	..	2,000	50	..	150	550	500	500	2,000	..	50	3,750
21	"	"	..	..	..	..	..	..	..	..	125	2,400	1,500	3,500	10,000	..	100	17,025
22	"	"	75	4,500	1,450	800	..	6,000	80	905	..	..	..	..	..	..	..	..
23	"	"	..	..	..	..	..	..	..	..	60	600	550	1,500	2,000	..	50	4,760
24	"	"	50	700	1,000	1,050	..	2,000	250	1,050	50	550	300	500	2,500	..	150	4,950
25	"	"	100	8,000	2,000	1,000	4,000	5,000	2,000	12,100	50	3,000	1,500	1,000	3,000	..	1,000	9,550
26	"	"	150	625	450	625	..	1,000	..	850	150	600	850	775	1,000	..	..	3,311
27	Bulsar, Gujarat	"	..	..	..	..	..	..	..	..	110	300	260	125	500	..	50	1,345
28	Navasari, Gujarat	"	80	740	315	95	..	500	..	730	80	740	365	380	500	..	..	2,061
29	"	"	80	3,000	400	300	1,500	2,000	1,000	4,230	25	500	300	200	1,200	..	500	2,721

Serial Number.	Place.	Caste, etc.	MARRIAGE.															
			Son.								Daughter.							
			Ceremonies.	Feasting.	Clothes.	Ornament.	Dowry paid.	Dowry received.	Other Items.	Total.	Ceremonies.	Feasting.	Clothes.	Ornaments.	Dowry paid.	Dowry received.	Other Items.	Total.
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
30	Surat	Parsi	270	1,250	1,700	2,200	..	4,000	500	1,920	200	1,300	1,200	1,000	4,500	..	450	8,650
31	"	"	200	420	1,100	1,450	..	2,000	370	1,540	170	260	900	700	2,500	..	150	4,680
32	Umarsadi (Dist. Surat)	"	260	380	900	1,100	..	2,000	450	1,090	150	220	1,300	450	2,500	..	340	4,260
33	Broach	"	..	..	..	..	..	..	..	..	100	275	190	150	500	..	75	1,290
34	"	"	125	700	500	400	..	1,500	100	325	100	500	650	500	2,000	..	150	3,200
35	Bombay	Roman Catholic (Indian).	25	150	700	500	..	10,000	75	..	..	..	300	100	6,000	..	75	6,475
36	"	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
37	"	"	20	200	500	200	..	3,000	100	..	..	400	300	300	..	..	60	1,060
38	"	"	13	400	700	950	..	1,500	250	793	..	..	..	..	..	..	..	..
39	"	"	31	1,000	1,500	1,500	..	1,000	607	3,638	..	..	..	..	..	..	..	..
40	" (Dandra).	"	..	..	..	..	..	..	..	..	11	650	750	286	1,750	..	1,010	4,467
41	Ahmedabad	Brahmin (Ralkwal).	80	150	350	800	1,000	550	200	2,230	120	800	200	200	150	1,350	50	170
42	Broach	Brahmin (Khedwal)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
43	Bhadoli (Bulsar, Gujarat).	(Anavil)	25	200	100	..	400	1,250	165	..	75	300	..	..	1,500	1,000	35	910
44	Barasmer State	(Modh)	10	50	50	..	500	50	..	500	50	350	70	100	40	500	-5	115
45	Amalsad (Gujarat)	"	15	250	100	200	..	..	100	605	15	500	..	75	10	..	45	654
46	Jamnagar (Kathia-war).	(Andich).	50	200	300	400	..	200	50	800	100	500	850	1,500	500	..	100	3,550
47	Porbandar (")	"	100	500	200	900	..	..	100	1,800	..	..	..	..	..	..	..	..
48	Malwan (Konkan)	(Gaud Saraswat).	30	400	300	500	..	500	200	930	39	400	300	300	500	..	300	2,030
49	Redi (")	"	30	120	400	800	..	1,200	100	250	30	200	700	200	800	..	100	2,030
50	Navsari (Gujarat)	Bania	50	450	200	..	550	..	250	1,500	40	400	150	..	..	550	100	140
51	Bhavnagar (Kathia-war).	"	25	900	500	1,000	..	100	3,200	5,525	25	900	300	50	200	1,000	100	575
52	Ahmedabad	"	25	150	300	125	..	175	200	621	70	500	150	175	625	..	50	1,570
53	Surat	Dasha Lad Bania	50	1,000	200	500	750	200	200	2,500	50	800	100	200	200	725	100	725
54	"	"	60	375	225	..	600	..	50	1,310	..	..	..	..	..	..	..	..
55	Broach	Lad Bania	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
56	Surat	Shrimall Bania	30	200	200	100	500	100	100	1,030	30	300	200	50	100	..	50	730
57	Ahmedabad	Dasha Shrimall Bania	..	..	..	..	..	..	..	..	50	500	500	200	..	200	..	1,050
58	"	"	25	300	500	100	412	151	200	1,386	25	150	100	450	250	..	50	1,025
59	Norvi (Kathiawar)	Modh Bania	100	400	550	1,000	..	150	250	2,150	..	..	..	..	..	..	..	..
60	"	"	..	..	..	..	..	..	..	..	100	200	125	75	..	..	50	550
61	Broach	"	100	600	100	500	250	..	150	1,700	100	700	300	200	..	..	100	1,400
62	Porbander (Kathia-war).	Sorathia	50	150	100	500	..	..	80	880	..	..	..	..	..	..	..	..
63	Kalol (Gujarat)	Jain, Dikamber	25	200	250	1,200	..	..	200	1,975	25	300	350	200	..	..	50	925
64	Bombay	Lohana	200	3,500	500	1,000	5,000	2,000	1,000	9,200	50	4,500	500	1,000	2,500	5,500	1,000	4,050
65	Salaya (Jamnagar)	"	100	1,500	400	150	1,500	200	250	3,700	10	500	400	200	400	1,750	300	..
66	Madihoopur (Kathia-war).	"	75	150	50	350	..	..	50	675	..	..	..	..	..	..	..	..
67	Porbandar (")	"	100	200	75	300	..	..	50	725	..	..	..	..	..	..	..	..
68	"	"	..	..	..	..	..	..	..	..	100	200	100	40	..	..	50	490
69	Sukkur (Sind)	Bhatia	250	500	200	200	..	400	150	900	150	300	300	300	100	..	150	1,300
70	Bombay	"	150	1,000	1,050	1,500	..	500	500	3,700	200	1,000	3,000	3,000	5,000	..	500	12,700
71	Surat	Ghanchi (Oil sellers).	40	2,000	500	..	200	..	500	4,240	..	..	..	..	..	..	..	..
72	"	"	30	250	100	50	250	..	75	755	..	..	..	..	..	..	..	..
73	"	"	35	1,500	150	250	300	..	175	2,410	55	400	50	125	..	..	100	730
74	Rander (Near Surat).	"	25	500	300	..	300	..	175	1,300	25	400	225	300	..	..	50	1,000
75	Bulsar (Dist. Surat).	Damania, Soni (Goldsmith).	50	180	75	500	..	150	100	755	..	..	..	..	..	..	..	..

"The percentage distribution of the total marriage expenses over different items in the cases cited by Mr. Budhamal Kevalchand of Nasik is as follows :-

Case No.	Percentage in different cases on the items shown in Column 1.							
	1	2	3	4	5	6	7	8
"Hunda or Dowry"	45	31	..	..	..	..	46	..
Dowry	..	..	36	..	..	39	..	..
Clothes	13	6	21	14	14	27	8	..
Ornaments	..	..	..	30	40	..	..	..
Feasting and other perishable commodities	40	39	39	43	43	20	42	75
Travel	..	19	..	10	..	11	..	..
Miscellaneous	2	5	4	3	3	3	4	25

The most detailed account of marriage expenditure is by Mr. Mahamad Hashimali of Kandiaro. He cites a particular instance of a marriage of a Hindu's son, and gives the following items :-

ORNAMENTS—

	Rs.	Rs.
Nose-ring	400	
Bangles and Armlets	500	
2 earrings and 4 rings	125	
Necklaces and locket	500	
Clothes for bride and groom	500	
		2,025

FEASTING—

Second day before marriage—sweets	250	
Day before marriage— feasts to friends	300	
Day of marriage— feasts to all Hindus of village	500	
Day after marriage— feast to friends	300	
		1,350
CEREMONIAL		500

Gross Cost	3,875
Dowry received	729

NET COST .. 3,146

Mr. Daryadinomal Nanikram of Mehar also gives full details of expenditure on Marriages. He mentions that his account is of Hindu Banias only. These he divides into Upper, Lower and Middle Class. I quote his account *in extenso*.

"(i) The upper class—

They give dowry to the daughter as[under :—

	Rs.
1. Dowry	500
2. Full bedding (silk) }	
3. Cot	100
4. One trunk	10
5. Two complete dresses to the daughter	120
6. One complete dress to the son-in-law	30
7. Ornaments	500
8. Dharmao	100

"To this is to be added the expense of marriage —

"i.e. 1. Entertainment of guests

"2. travelling expenses. If the bride-groom and bride belong to different places, the bride's relations go to the bride-grooms' place, and all the guests have to go with the bride. These expenses depend on the social position and the extent of relationship.

"3. Payments to relations. If already married daughters come on the marriage of their sister, along with their husbands, and each girl gets from her father about Rs. 100.

After the marriage, after about a month or so, the girl comes to meet her parents and she gets somewhere about Rs. 700.

For the second visit whenever that may happen she gets Rs. 125.

For the third visit Rs. 100.

" Besides the girl gets from her father—

For the first year Rs. 100
 „ second year „ 50
 „ third year „ 25
 and
 subsequent years till she is alive

The father besides sends sweetmeats to his daughter on every holiday. This costs Rs. 5 at least for each holiday.

" The father of the bride-groom undergoes the following expenses.

	Rs.	
(1) Distribution of sweetmeats in the village	} 1,000	Depends on the social position and extent of relationship and friendships.
(2) Entertainment of guests relations and friends		

(3) Payment of *deti leti* to sisters and daughters as under :—

Sister of the bride-groom	.. ..	15
Sister of the bride-groom's father	.. ..	10
Bride-groom's mothers' near relations i.e., father and mother	.. ..	150
Other relations	.. ..	20
Mother's sister	.. ..	10
Mother's other relations	.. ..	10
Other relations	.. ..	50

" (ii) The Middle Class.

1. Dowry	.. ..	300
2. Bedding and cot	.. ..	60
3. 2 dresses to the bride	.. ..	100
4. One dress to the bride-groom	.. ..	30
5. Ornaments	.. ..	200
6. <i>Dharmaoo</i>	.. ..	200

" The brides father has to give this, besides he has to incur the expenditure as shown above according to his position. He also gives less to relations.

" Similarly the father of the bride-groom in this class incurs expenditure according to his position and it is less than for Class i.

" (iii) The Lower Class.

The Brides' father gives only Rs. 100.

"In the Upper and Middle classes the father if in straitened circumstances will give at least something to his daughter in marriage, but some people in the third class accept money for their daughters, or in other words actually sell their daughters. The payment depends on the circumstances of the bride-groom. A man of the upper class or middle class having or being old, or marrying a third or a fourth wife, not being able to get a wife from his own sphere buys a wife on payment from the third class. In some cases the price has been Rs 2,000."

Mr. D. R. Gadagkar of Mudhol supplied the following instances of marriage expenses. He states that he has not taken into consideration amounts spent on dowry, ornaments and travel.

Examples of marriage expenses in Mudhol.—(Excluding cost of Dowry, Ornaments and Travelling).

No.	Caste.	Net cost in the above limited sense.	Feasting.	Clothes.	Other.
1	Mahratta	500	200	150	150
2	"	400	150	100	150
3	"	400	200	150	50
4	"	200	100	50	50
5	"	500	200	200	100
6	"	600	250	200	150
7	"	1,000	500	300	200
8	"	200	100	50	50
9	"	300	150	100	50
10	Rajput	300	125	100	75
11	Lingayat	1,500	800	600	100
12	Brahman	800	400	200	200
13	"	800	400	300	100
14	"	500	250	150	100
15	"	1,500	800	500	200
16	"	1,000	600	300	100
17	"	2,000	800	800	400
18	"	400	200	150	50
19	"	3,000	2,000	500	500
20	"	1,000	600	300	100
21	"	500	300	100	100
22	"	500	200	150	150
23	"	400	200	75	125
24	Mahomedan	200	75	75	50
25	"	400	200	100	100

Examples of expenses on marriage in the poorer communities were not often given. The following are cited as average expenses from the Eastern tract of Ahmednagar—

Caste	Marriage of as	
	Son	Daughter
Bhil	75	50
Mahar, Mang, Chambhar	50 to 100	25 to 50
Dhangar	125	100

and these from Ranebennur

Depressed classes, Marriage (whether of son or daughter not stated), Minimum expenditure Rs. 100, normal Rs. 200.

Expenses like these must press even more heavily on the castes concerned than expenses like Rs. 20,000 cited from the same tract of Nagar as the highest expenditure on marriage by the richer Marwaris.

APPENDIX T.

DENSITY BASED ON CULTIVABLE AREA.

1. Reference is invited to Section 11 (para 88) of Chapter I, where the difference between absolute density (density on total area) and a second type of density figures, namely, density on cultivable area are discussed, and it was mentioned that consideration of density on cultivable area would be given in an Appendix. The figures of cultivable area having been supplied by the Agricultural Department I quote the definition of Dr. Mann who considered the problem most carefully on my behalf. He writes—

“ The area which has been classed as cultivable in the Presidency Proper has included—
 (1) the actual nett cropped area (i. e. the gross cropped area minus the double cropped area),
 (2) the current fallows (i. e. land not sown owing to unfavourable seasons, land spoilt for cultivation by prickly pear, weeds, salt efflorescence, and hence not sown, and current fallows in rotation), and (3) the whole of the area classed in the records as “culturable waste”, whether occupied or unoccupied, assessed or unassessed. In fact the only areas not included in the cultivable land are (1) forest lands, including kuran and free pasture, (2) really uncultivable waste classed as such under various designations, and (3) the areas occupied by rivers, nalas, tanks, buildings, roads, village sites, etc. ”

2. Excluding for a moment the problem of Sind, which requires separate treatment, it is to be considered whether the presentation of the figures of density to cultivable area is scientifically justified. Dr. Mann suggests two possible uses of figures calculated on this basis—

“ (1) to compare the population with the land capable of providing food for human beings so as to get some relationship between population and food producing capacity, or
 (2) to compare the pressure of the population on the land *which they are allowed to occupy or which is worth occupying.* ”

He then remarks that if the first use were sought there would be no justification for excluding pure grazing land and forests (other than reserved forests where no grazing or admittance is allowed) “for this does indirectly produce food through the grazing of animals”. To this I would add two further arguments, first, that most forest land is potential agricultural land of the finest quality, and secondly, that much of the excluded land, besides forests and pure grazing lands, does help to support cattle. For instance large numbers of milk-producing goats are grazed almost exclusively on the types of land included under (3) at the end of the definition quoted above, without ever going near the forest or pure grazing land at all. However Dr. Mann goes on to suggest that the second use is really the use to which the figures are expected to be put. In other words it is sought “to compare the pressure of the population on what I may call ‘occupiable’ land in various parts of the country, and has nothing to do *directly* with the land as a source of food supply”. I am afraid that the purpose of the figures as obtained in past Censuses has not been argued out to such a fine point. Mr. Gait in his report on the Census of India 1911, while justifying the use of “cultivable area” as a basis on which to calculate density in India, a country dependent in the main on agriculture, was rather cautious in avoiding any refinement of the argument, and closed the discussion (p. 26) with the following words :—

“ In India there is no doubt whatever that it ” (i. e. density) “ is dependent, if not solely on the area under cultivation, at least on the sum total of the agricultural conditions, of which this is one of the most important, which taken together determine the productiveness of the soil ”.

Mr. MacGregor (p. 3 of the Bombay Report, 1911) spoke of the figures as “a guide to the population that a particular area can support and the fertility of the soil in terms of the population.” This distinctly suggests Dr. Mann’s first possible use for the figures.

3. I find the following objections to the use of “cultivable area” as a basis for calculating density :—first, the obscuration of the grazing and allied cattle industries, secondly, the falsity of the implied assumption, that all food consumed is produced on the spot, and thirdly, the omission to take into consideration subsidiary sources of food supply not dependent on land. As an example of the first I would draw attention to the densities of Thasra in Kaira and Viramgam in Ahmedabad in the maps of the 1911 Report. These Talukas are largely occupied by graziers and support a normal grazier population. Such regions are necessarily sparsely inhabited, since grazing requires wide spaces. But when we calculate their density to cultivable area we get the impression of a thickly populated region. The whole method seems to me unsound, because in the second calculation the figures for graziers are included in density calculations based on a limited area which they themselves do not utilise. It may be objected to this that the graziers do utilise this area by consuming its produce. In the same way it may be conversely argued that we ought to have maps of density based on available grazing land, since cultivators consume milk and purchase cattle. With regard to the second objection it can hardly be denied that isolation of individual small regions in India is gradually passing away.

In the great famine in Orissa in the middle of the last century the high death-roll was due to the wrong assumption that grain would move from where it was produced to where it was wanted ; and the failure of that assumption was the direct cause of the whole of our subsequent famine relief system. But in recent famines, though there has been need to import into India proper food from Burma, Australia and elsewhere, when once that food was in the country there was no need to compel its movement toward the affected regions. Both imported food and locally produced food move freely nowadays in accordance with economic demands. Consequently the argument that any Taluka will only support so many people as it is likely to be able to produce food for is hardly sound. As an example of the third objection, a fairly considerable population on the coast supports itself by fishing, thereby materially enhancing the food supply. As this population has to live somewhere, it lives in the coast villages, thus—to use Mr. MacGregor's phrase—enhancing the impression of the “fertility of the soil in terms of population.” It is true that Mr. MacGregor in his report mentioned these fishermen. But *the maps did not*.

4. To turn to the case of Sind it will be seen from the 1911 Report that while the density was calculated on cultivable area in the Presidency proper, it was calculated on *cultivated* area in Sind. This had all the more drastic effect on the figures because the ratio of cultivated to cultivable area in Sind is far lower than in the Presidency. The result was a composite Table and a composite map, based on two different bases (see the second map opposite p. 3 of the 1911 Report). As I was not satisfied with this arrangement I consulted Dr. Mann who replies as follows :—

“ In Sind the 1911 map is no longer based on the cultivable, but on the actually cultivated area.... I can quite see why this was done, for the system of agriculture adopted in a large part of Sind involves the assumption that land *can* only be cultivated once in several years, and that hence, the really cultivable land in any year is not much more than the actually cultivated land, and that the pressure of population on cultivable land is better indicated by taking the land actually cultivated as cultivable. I do not agree with this assumption at all. Better methods of agriculture, increased supplies of water, and many other things may make possible a larger proportion of cultivated area, or may even bring part of the desert under cultivation, and, if it does so, the maps and table for succeeding censuses will be in no sense comparable. I certainly think that your maps in Sind should compare the population with the whole of the cultivated land.... This has the advantage of giving you a figure comparable with that in the Presidency proper, and in other parts of India, and gives the pressure of the population on the land, if the maximum possible of the latter is cultivated.”

I think this argument is eminently sound. In the 1911 Report (p. 3) Mr. MacGregor justified the taking of the actual cultivated area in Sind as the base by the argument that “even the desert would grow crops if irrigation were available, and the extent of cultivation varies with inundation.” So far I can see the same argument might be applied anywhere. For instance in the East Deccan new storage reservoirs would render cultivable areas now unoccupied, and the extent of cultivation in any year varies with the rainfall. Nor is the system of rotational fallows confined to Sind. To use a slang but very expressive phrase—Sind is in the same position as the Deccan only more so. The change in the basis of the calculations with regards Sind must be carefully borne in mind when comparing the map of the last Census with the Table given at the end of this Appendix.

5. Even after the problems raised above had been decided, it was found difficult to arrive at the ratio of population to cultivable area, for the following reasons. The Agricultural Department had supplied figures of cultivable area by Talukas. But these figures were for the “reporting area” only. Reporting area means those villages which supply returns of crops, etc., to the Agricultural Department. But the only convenient population figures available were those for entire Talukas. In order to arrive at density to cultivable area it was necessary to exclude the population of those villages which do not report. To have ascertained the *names* of such villages from Collectors (the Agricultural Department could not supply them since their returns are received consolidated from Districts) and to have then traced the name of each into the Registers of population by Villages in the Central Compilation Office was utterly impossible. I therefore consulted the Office of the Director of Land Records, and found that that Officer had just received from Districts one of his larger returns, in which a number of statistics were given for each Survey class of village in each Taluka, including the consolidated population of those villages. By “survey class” I mean the classes into which villages are divided in relation to their tenure and the character of their survey and settlement. It was found from the returns that the following are the classes—Ryotwari, Non-ryotwari Permanently settled, Non-ryotwari Temporarily settled, and Alienated. And these four classes were further cross-divided into eight according to whether the figures were based on Survey or on Estimate. Of these eight classes I was informed that only Surveyed Ryotwari and Surveyed Alienated submit returns to the Agricultural Department. Consequently the population given for these two classes in the returns in the Office of the Director of Land Records is the population figure utilised for

this Appendix. As a precaution the populations of the eight different classes in the District were summed and compared with the current population at this Census.

It was found that some Collectors had utilised the Provisional and some the Final Census Totals. But the difference between these is negligible for the purposes of this study. I am satisfied that the population taken is correct, *provided that it is true that the figures of cultivable area supplied by the Agricultural Department are for villages of only the two Survey classes mentioned.*

6. It will be seen from the Table at the end of this Appendix that some Talukas show a less density on cultivable area than on total area. This is explicable on the assumptions (1) that in those Talukas the uncultivable area is very small, and (2) that the non-reporting villages contain proportionately a denser population than the reporting. As a purely imaginary example—

Total area 500 square miles.

Total population 50,000 persons.

Absolute density, 100 persons per square mile.

Non-reporting villages, area 150 square miles : population 25,000 persons.

Reporting villages, area 350 square miles : population 25,000 persons : cultivable area 300 square miles.

Density to cultivable area in reporting villages $25,000 \div 300 = 83$ persons per square mile.

7. Unfortunately in the 1911 Report there is no explanation of the method of arriving at the figures, either by defining "cultivable area" or by explaining what population was excluded. Nor are Talukwar figures given in that report, so that, while we know from the maps certain limits within which the Taluka density must have fallen, we do not know the exact densities per square mile. Certainly some method must have been followed more or less on the lines indicated above to arrive at the ratios, since the figures approximate, though they do not exactly tally. Thus, in the case of Gujarat with an increased population, while the Absolute Density rises from 276 to 292, the Density on Cultivable Area falls from 357 to 344. Though such an apparent paradox may be due to difference of method it is perfectly possible that it might occur even if exactly similar methods were followed. Thus, every new surveyed Alienated village will necessarily alter the figure of Density on cultivable area, sometimes very minutely, but sometimes to an appreciable extent. Resurveys of Ryotwari villages, survey corrections otherwise than at resurvey, and so on, unavoidably alter the area classifiable as cultivable.

8. In view of the shifting and uncertain character of the two sets of figures which form the bases of the ratio of persons to cultivable area I have not thought it desirable to prepare maps. But the full figures are given by Talukas.

9. The only region in which the differences between the two types of Density are extreme is Kanara, where the exclusion of the vast Forest areas makes a noticeable change. Generally speaking the Coastal tracts, as would be expected, show a much higher density than the inland tracts. The Charotar of Kaira also shows high density, though the small divergence between the two sets of figures show that uncultivable land is there very small in extent. The influence of cities and towns shows clearly through the Table, density rising wherever there is any large urban population.

10. There is some doubt whether it will ever again be possible without great trouble to arrive at this type of density by Talukas, since the Agricultural returns have been changed from the Taluka to the District basis, and the year which the Director took for his figures of cultivable area (1914-15), was the last year under the old system.

Subsidiary Table No. (xxxi). Absolute Density and Density on Cultivable Area compared by Talukas, Districts and Natural Divisions, 1921.

NOTES.—1. Cultivable area (defined in text) is the figure for 1914-15.

2. In the Column for Density per Square Mile of Total Area the figure differs from that shown in Subsidiary Table No. 23 in the following cases—Whole Presidency, Decan and West Khandesh, owing to the exclusion in this Table of the Mewas Estates.

Natural Division, District or Taluka:				Density per square mile on the total area, 1921.	Density per square mile of cultivable area, 1921.	Density per square mile on the total area, 1911.	Density per square mile of cultivable area, 1911.
ALL DISTRICTS	..	..	..	148	222	160	308
GUJARAT	..	..	..	292	344	278	357
AHMEDABAD	..	..	..	233	249	215	277
Dhandhuka	..	..	..	91	63		
Do. Gogha Petha	..	..	..	124	102		
Dholka	..	..	..	1,824	2,295		
North Daskroi	..	..	..	209	187		
Prantij	..	..	..	211	189		
Do. Modasa Petha	..	..	..	200	157		
South Daskroi, and	..	..	..	
Sanand Petha	..	..	..	
Viramgam	..	..	..	
BROACH	..	..	..	210	288	209	283
Amod	..	..	..	199	236		
Ankleshwar	..	..	..	232	303		
Do. Hansot Petha	..	..	..	439	534		
Broach	..	..	..	161	234		
Jambusar	..	..	..	84	138		
Vaghra	..	..	..	
KAIRA	..	..	..	445	512	433	509
Anand	..	..	..	602	678		
Borsad	..	..	..	703	774		
Kapadvanj	..	..	..	295	356		
Matar	..	..	..	259	304		
Mehmedabad	..	..	..	386	453		
Nadiad	..	..	..	620	701		
Thasra	..	..	..	299	350		
PANCH MAHALS	..	..	..	233	224	201	287
Dohad	..	..	..	213	212		
Do. Jhalod Petha	..	..	..	239	256		
Godhra	..	..	..	256	199		
Kalol	..	..	..	
Do. Halol Petha	..	..	..	
SURAT	..	..	..	408	531	396	513
Bardoli	..	..	..	396	449		
Do. Valod Petha	..	..	..	460	558		
Bulsar	..	..	..	382	418		
Chikhli	..	..	..	1,538	2,178		
Chorasi	..	..	..	432	4608		
Jalalpur	..	..	..	183	273		
Mandvi	..	..	..	174	269		
Olpad	..	..	..	406	463		
Pardi	..	..	..	
KONKAN	..	..	..	222	512	227	509
KANARA	..	..	..	102	673	109	722
Ankola	..	..	..	104	753		
Honavar	..	..	..	230	1,256		
Do. Bhatkal Petha	..	..	..	211	1,119		
Karwar	..	..	..	287	1,106		
Kumta	..	..	..	102	505		
Siddapur	..	..	..	81	435		
Sirsi	..	..	..	38	338		
Haliyal	..	..	..	36	326		
Do. Supa Petha	..	..	..	
Yellapur	..	..	..	
Do. Mundgod Petha	..	..	..	

Natural Division, District or Taluka.	Density per square mile on the total area, 1921.	Density per square mile of culti- vable area, 1921.	Density per square mile on the total area, 1911.	Density per square mile of culti- vable area, 1911.
KOLABA	260	310	274	470
Alibag	410	705		
Karjat	229	413		
Do. Khalapur Petha	232	127		
Mahad	219	86		
Mangaon	336	576		
Panvel	235	431		
Do. Uran Petha	225	167		
Pen				
Do. Nagothna Petha				
Roha				
RATNAGIRI	289	694	302	465
Chiplun	280	1,138		
Do. Guhagar Petha	294	671		
Dapoli	274	712		
Do. Mandangad Petha	244	328		
Deogad	446	709		
Khed	248	600		
Malvan	344	848		
Rajapur	229	467		
Ratnagiri	745	1,181		
Sangameshwar				
Vengurla				
THANA including BOMBAY SUBURBAN DISTRICT.	255	529	396	513
Bassein	394	911		
Bhiwandi	288	559		
Dahanu	248	524		
Do. Umbargaon Petha	327	578		
Kalyan	229	523		
Mahim	157	320		
Murbad	839	1,288		
North Salsette	128	319		
South "	121	277		
Shahapur				
Vada				
Do. Mokhada Petha				
DECCAN	162	226	172	268
AHMEDNAGAR	111	145	143	186
Akola	118	191		
Karjat	47	65		
Do. Jamkhed Petha	81	154		
Kopergaon	194	218		
Nagar	184	240		
Newasa	87	101		
Parner	93	124		
Rahuri	135	181		
Sangamner	103	153		
Shevgaon	87	99		
Do. Pathardi Petha	89	111		
Shrigonda	76	101		
EAST KHANDESH	236	329	227	291
Amalner	240	364		
Parola	239	341		
Bhusaval	197	291		
Do. Edlabad Petha	224	339		
Chalisgaon	263	265		
Chopda	307	419		
Erandol	196	249		
Jalgaon	255	319		
Jamnor	232	386		
Pachora	243	414		
Do. Bhadgaon Petha				
Raver				
Yaval				

Natural Division, District or Taluka.				Density per square mile on the total area, 1921.	Density per square mile of cultivable area, 1921.	Density per square mile on the total area, 1911.	Density per square mile of cultivable area, 1911.
WEST KHANDESH				113	225	107	154
Dhulia	..	..	..	180	293		
Nandurbar	..	..	..	
Navapur	..	..	..	107	172		
Sakri	..	..	..	
Shahada	..	..	..	145	225		
Shirpur	..	..	..	95	263		
Sindkheda	..	..	..	182	231		
Taloda	..	..	..	45	388		
NASIK				142	211	154	223
Chandor	..	..	..	127	158		
Dindori	..	..	..	120	158		
Igatpuri	..	..	..	193	283		
Kalvan	..	..	..	113	201		
Malegaon	..	..	..	130	200		
Nandgaon	..	..	..	109	178		
Nasik	..	..	..	286	397		
Niphad	..	..	..	188	247		
Peint	..	..	..	123	280		
Baglan (or Satana)	..	..	..	108	192		
Sinnar	..	..	..	115	152		
Yeola	..	..	..	118	144		
POONA				188	252	200	267
Bhimthadi	..	..	..	133	167		
Do. Dhond Petha	..	..	..	
Haveli	..	..	..	449	628		
Do. Mulshi Petha	..	..	..	
Poona Taluka	..	..	..	107	136		
Indapur	..	..	..	167	230		
Junnar	..	..	..	159	224		
Do. Ambegaon Petha	..	..	..	
Maval	..	..	..	186	295		
Purandhar	..	..	..	149	199		
Sirur	..	..	..	101	120		
SATARA				209	283	224	299
Javli	..	..	..	160	266		
Do. Malcolmpeth Petha	..	..	..	
Karad	..	..	..	347	454		
Khanapur	..	..	..	148	185		
Khataav	..	..	..	158	189		
Koregaon	..	..	..	207	268		
Man	..	..	..	88	126		
Patan	..	..	..	225	382		
Satara	..	..	..	330	441		
Tasgaon	..	..	..	233	291		
Wai	..	..	..	210	323		
Do. Khandala Petha	..	..	..	
Walva	..	..	..	292	359		
Do. Shirala Petha	..	..	..	
SHOLAPUR				163	186	169	193
Barsi	..	..	..	223	248		
Karmala	..	..	..	90	107		
Madha	..	..	..	144	161		
Malshiras	..	..	..	89	106		
Pondharpur	..	..	..	183	203		
Sangola	..	..	..	117	133		
Sholapur	..	..	..	276	312		
KARNATAK				187	240	190	225
BELGAUM				207	270	205	263
Athni	..	..	..	160	168		
Belgaum	..	..	..	223	395		
Do. Chandgad Petha	..	..	..	
Chikodi	..	..	..	331	363		
Hukeri	..	..	..	317	391		
Gokak	..	..	..	192	242		
Khanapur	..	..	..	112	204		
Parasgad	..	..	..	157	185		
Do. Murgod Petha	..	..	..	
Sampgaon	..	..	..	276	315		

Natural Division, District or Taluka.				Density per square mile on the total area, 1921.	Density per square mile of culti-able area, 1921.	Density per square mile on the total area, 1911.	Density per square mile of culti-able area, 1911.
BIJAPUR				140	156	151	168
Badami	..	..	..	161	222		
Bagalkot	..	..	..	180	223		
Do. Bilgi Petha	..	..	..	124	131		
Bagewadi	..	..	..	131	141		
Bijapur	..	..	..	197	226		
Hungund	..	..	..	108	114		
Indi	..	..	..	142	151		
Muddebehah	..	..	..	109	113		
Sindgi	..	..	..	225	270	223	266
DHARWAR				219	273		
Bankapur	..	..	..	251	324		
Dharwar	..	..	..	199	233		
Gadag	..	..	..	209	275		
Do. Mundargi Petha	..	..	..	415	456		
Hangal	..	..	..	144	225		
Hubli	..	..	..	215	257		
Kalghatgi	..	..	..	208	265		
Karajgi	..	..	..	183	191		
Kod	..	..	..	241	314		
Navalgund	..	..	..	239	251		
Do. Nargund Petha	..	..	..	
Ranebennur	..	..	..	
Ron	..	..	..	
SIND				71	124	75	Not known.
HYDERABAD				130	159	Not	known.
Badin	..	..	..	103	117		
Dero Mohbat	..	..	..	81	98		
Guni	..	..	..	89	119		
Hala	..	..	..	187	258		
Hyderabad	..	..	..	394	603		
Tando Allahyar	..	..	..	91	100		
Tando Bago	..	..	..	97	103		
KARACHI				48	93	44	Not known.
Ghorabari	..	..	..	67	109		
Do. Ketu Bandar Petha	..	..	..	20	131		
Jati	..	..	..	146	126		
Karachi	..	..	..	19	103		
Kotri	..	..	..	
Do. Munjhand Petha	..	..	..	135	216		
Do. Kohistan Petha	..	..	..	23	118		
Mirpur Ratoro	..	..	..	25	16		
Mirpur Sakro	..	..	..	119	207		
Shah Bandar	..	..	..	32	205		
Suajaval	..	..	..	
Tatta	..	..	..	
LARKANA				118	160	131	Not known.
Dadu	..	..	..	155	208		
Johi	..	..	..	42	52		
Kakar	..	..	..	99	108		
Kambar	..	..	..	164	177		
Labdarya	..	..	..	211	366		
Larkana	..	..	..	360	431		
Mehar	..	..	..	167	203		
Mirakhan	..	..	..	153	210		
Rato Dero	..	..	..	225	314		
Sehwan	..	..	..	32	562		
Warah	..	..	..	139	190		
NAWABSHAH				108	159	Not	known.
Kandiaro	..	..	..	173	248		
Moro	..	..	..	112	164		
Naushahro Feroz	..	..	..	144	200		
Nawabshah	..	..	..	39	86		
Sakrand	..	..	..	106	156		
Shahdadpur	..	..	..	158	189		
Sinjhoro	..	..	..	91	105		

Natural Division, District or Taluka.	Density per square mile on the total area, 1921.	Density per square mile of cultivable area, 1921.	Density per square mile on the total area, 1911.	Density per square mile of cultivable area, 1911.
SUKKUR	91	169	103	Not known.
Ghariyasin	156	242		
Ghotki	121	196		
Mirpur Mathelo	24	147		
Pano Akil	106	179		
Rohri	47	65		
Shikarpur	224	297		
Sukkur	362	618		
Ubauro	79	111		
THAR AND PARKAR	29	126	33	Not known.
Chachro	18	29		
Digri	95	102		
Diplo	12	99		
Jamesabad	77	84		
Khiopro	16	75		
Mirpurkhas	99	108		
Mithi	26	96		
Nagar Parkar	25	56		
Pithoro	66	73		
Sanghar	40	48		
Umarkot	31	72		
UPPER SIND FRONTIER	90	126	99	Not known.
Jacobabad	162	203		
Kandhkot	97	131		
Kashmor	67	110		
Shahdadkot	42	70		
Thul	100	115		

APPENDIX U.

THE INTER-RELATION BETWEEN THE VARIOUS CAUSES OF DEATHS.

Reference is invited to paragraphs 54 to 58 in Chapter I of this Report, and the diagrams there shown. In that passage it was pointed out (1) that the curves of the numbers of deaths from (i) Fever, (ii) Dysentery and Diarrhoea, (iii) Respiratory diseases, and (iv) "Other Causes" (as there defined) obey the same laws, and always rise and fall together, and (2) that the curves for Plague Cholera and Smallpox are (i) independent of one another, (ii) independent of the four main causes of death just mentioned, and (iii) insufficient even when combined to control the general curve of total deaths.

In order to test this matter further Colonel Murphy asked three of his Assistant Directors of Public Health to take out death-rates and curves for selected areas. Before discussing their reports it would be as well to eliminate the phenomenon mentioned under (2) (iii) above. It seems that this is an arithmetic question pure and simple. An epidemic of any disease such as plague may be sufficiently severe to control the number of deaths for any year or years. And there will be every degree of passage between such an epidemic-control year, and the ordinary year when neither Plague nor Cholera, nor the two combined with one another and with smallpox, result in mortality sufficient to affect the vast number of deaths which necessarily occur daily in a population of nineteen millions. And it is a fact that in the curves supplied by one Assistant Director for four Districts of the Central Deccan Plague is a factor of sufficient importance to modify materially, and sometimes to control the general death curve. In the the Kaira District and in the Dhulia and Nasik Talukas examined by the other two Assistant Directors Plague was never sufficiently important to assume control.

Eliminating that phenomenon we are left with the (to the layman) curious fact that, while the deaths from bowel complaints, respiratory diseases, fevers and the like are interconnected they are wholly independent of Plague, Cholera and Smallpox. And this fact is borne out by the enquiries of the three Assistant Directors.

It would seem that in this Presidency we do not suffer from the *epidemic* form of malaria, such as is a potent controlling factor in the Punjab. If this is so it is permissible to arrive at the deduction that only the more noticeably epidemic diseases are independent of general conditions, and that the only epidemic diseases isolated and recognised in this Presidency are Plague Cholera and Smallpox. A definitely violent epidemic disease such as these may appear in a year which is otherwise either healthy or unhealthy. It will cause more or less deaths according to the power of its own virus, and will be wholly independent of any other cause of mortality. This is the more clearly proved because, from the enquiries of the Assistant Directors, it does not appear that deaths from bowel complaints classed as "Dysentery and Diarrhoea" are really correlated with deaths from Cholera. The true epidemic Cholera is apparently a clearly recognised occasional phenomenon, while deaths from non-epidemic bowel complaints go on all the time, are identified to some extent by the village officers, and are not to any considerable degree confused with the other.

When it comes to suggesting the cause of the inter-relation or parallelism between the non-epidemic causes of death there is a divergence of opinion among the Assistant Directors. Dr. Munsiff says—

"The agencies and conditions producing different diseases being different there could not be a common cause which would account for a relative rise in the curves of all these diseases unless one could accept a general term like "unhealthiness" as a reason for this rise. Hence one must attribute this coincidence to faulty registration".

Dr. Shiveshwarkar, however, takes a different view, and attributes the parallelism to the "Mills Reincke Phenomenon". This phenomenon, which seems to be alternatively called the "Hazen theorem", is stated in Hazen's own words as follows— "Where one death from Typhoid fever has been avoided by the use of better water, a certain number of deaths, probably two or three, from other causes have been avoided".

Dr. Shiveshwarkar writes—

"In the present state of our knowledge the only item which, in the absence of any peculiar circumstances such as modern industries, largely influences the life of a community in India is water. It has now been ascertained that even where a polluted water supply does not carry specific germs, it may so undermine health or lower resistance as to favour infections not usually associated with the digestive tract, such as Pneumonia and Tuberculosis, and the diseases responsible for infant mortality. The effect of impure water supply. may result in deranged digestion, altered metabolism, irritation of delicate membranes or sensitive organs and structures, which may lead to or hasten the course of chronic diseases."

To an Indian like Dr. Shiveshwarkar any theory which attributes the general unhealthiness or healthiness of a locality to the general character of its water must be particularly attractive.

It is well-known that in India, without any idea of specific disease-carrying germs, everything is attributed to water. Where the European goes away for a "change of air", the Indian seeks a "change of water". Where the European does not find the "climate" of a place suitable to his health, the Indian attributes that unsuitability to its water. Dr. Shiveshwarkar's view of the cause of the rise and fall of non-epidemic diseases necessitates the assumption that the water supply not only differs by locality but also in time. In one year the supply must be better, in another worse. Thus in 1910 and 1912 the water must everywhere have been specially unhealthy, in 1911 and 1915 specially healthy. Now experience shows that there is a certain degree of inverse correlation between rainfall and deaths. Excluding the great famines, a dry season is a healthy one; and a wet season, which fills the pockets, fills also the graveyards. In India everyone is more or less affected by malaria. Malaria does not often directly kill, but it undermines the constitution. The severity or otherwise of malaria must be determined more or less by the actual number of mosquitos. An alternative to Dr. Shiveshwarkar's theory therefore offers itself, namely that the main non-epidemic causes of death have a better chance in years when the number of mosquitos is large. But of course the co-existence of *both* factors is easily possible. In a wet season the water supply is derived more from surface drainage and less from percolation, whereas in a dry season the people are compelled to have recourse more and more to fresh holes in the sand of river beds, temporary wells dug in dry tanks and the like; and all such sources of water supply are to a greater or less degree automatically filtered.

To sum up—deaths in India are due either to (i) spasmodic and sometimes violent specific epidemics each of which runs an independent course, and is not interrelated to any other disease, epidemic or non-epidemic, and (ii) a number of non-epidemic diseases, which are interrelated, and are governed by some unknown common factor (or factors), which determines the general amount of mortality for any given period of time.

APPENDIX V.

ANALYSIS OF FAMILIES.

Section I.—Methods and Definitions.

1. As has already been explained in Chapter I the old method of ascertaining the average size of families was by simply dividing the number of persons by the number of occupied houses in Imperial Table I. On the present occasion it was decided to attempt something more. Certain Analysis sheets were therefore printed and supplied to Abstraction Offices, with instructions. The results are shown in the General Summary, or Table I below.

2. The primary classification is by Regions, Occupations and Types of Locality. Occupation means the occupation of the head of the family only.

I. *Regions.* These are the same as the Natural Divisions adopted in the Report, except that, as the Sholapur and Poona offices handled partly Konkan and partly Deccan districts, and no instructions were issued to keep the Analysis for these distinct, it has been found necessary to amalgamate them in the tables, and that the Karnatak includes Kanara.

II. *Occupations* and III. *Localities.* Certain broad types of occupation were kept distinct; and since, to be fully normal, example of such occupational types must be recorded from the types of locality in which they are usually found, the localities from which instances of each type might be taken were defined. The types were called classes; and the subjoined is a list of the classes, and the types of locality.

Class.	Occupations included in it.	Types of locality from which recorded.
A	Barristers, Pleaders, Doctor (not Hakim or Vaidya), Government servant (higher grades only), Newspaper Editor.	Towns and Cities.
B	Shopkeeper (all kinds of shops), Money-lender.	Villages and small Towns.
C	Do. do.	Large Towns and Cities.
D-1	Clerk (all kinds), school-master, Postmaster.	Villages and small Towns.
D-2	Do. do.	Large Towns and Cities.
E	Agricultural Rent Receiver ..	Villages and small Towns.
F	Cultivator (whether cultivating his own land or paying rent).	Villages only.
G	Ordinary Agricultural labourer ..	Villages only.
H	Peon (all kinds), Postman, Telegraph Messenger, Chawkidar.	Towns and Cities.
J	Unskilled operative in spinning and weaving mills, ginning factories, cotton pressing factories, oil mills.	Large Towns and Cities.

3. The localities require some definition. "*Towns*" means places treated as towns for the presentation of Census statistics, in other words places appearing in Imperial Tables IV & V. Some Deputy Superintendents however did not stick to this exact definition, but interpreted the word "*town*" in their own way. The resulting divergences, however, will not have affected the figure prejudicially:—more especially in view of the fact, emphasised in Chapter II, that the selection of places as towns for the Imperial Tables referred to is somewhat haphazard. The limit between "*large*" and "*small*" towns was fixed at 10,000 inhabitants. "*Villages*" of course means all places not treated as towns or Cities. "*Cities*" means the seven places treated as Cities throughout.

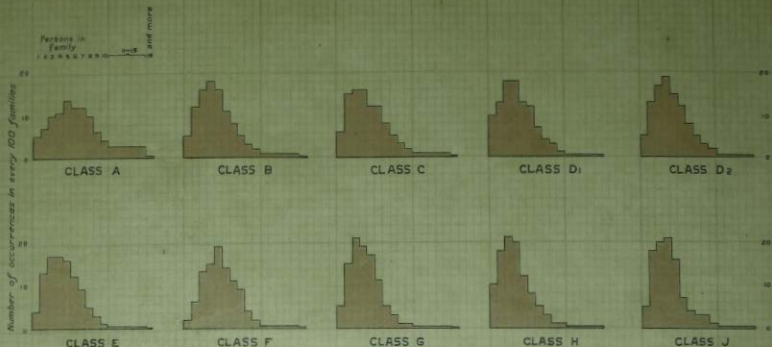
4. The following definitions of age periods are necessary. "*Children*" means in the case of males, ages 0-14, and in the case of females, ages 0-11.

"*Adults*" means in the case of males, ages 15-54, and in the case of females, ages 12-49.

"*Aged*" means in the case of males, ages above 54, and in the case of females, ages above 49.

"*Infirm*" means persons shown as suffering from one or more of the four Census infirmities.

5. As regards the definition of "*Family*" this is of course used in the Census sense. In villages and non-Municipal towns it is identical with the Census "*house*", and means the commensal family, that is to say "a number of persons living together, and eating together in a



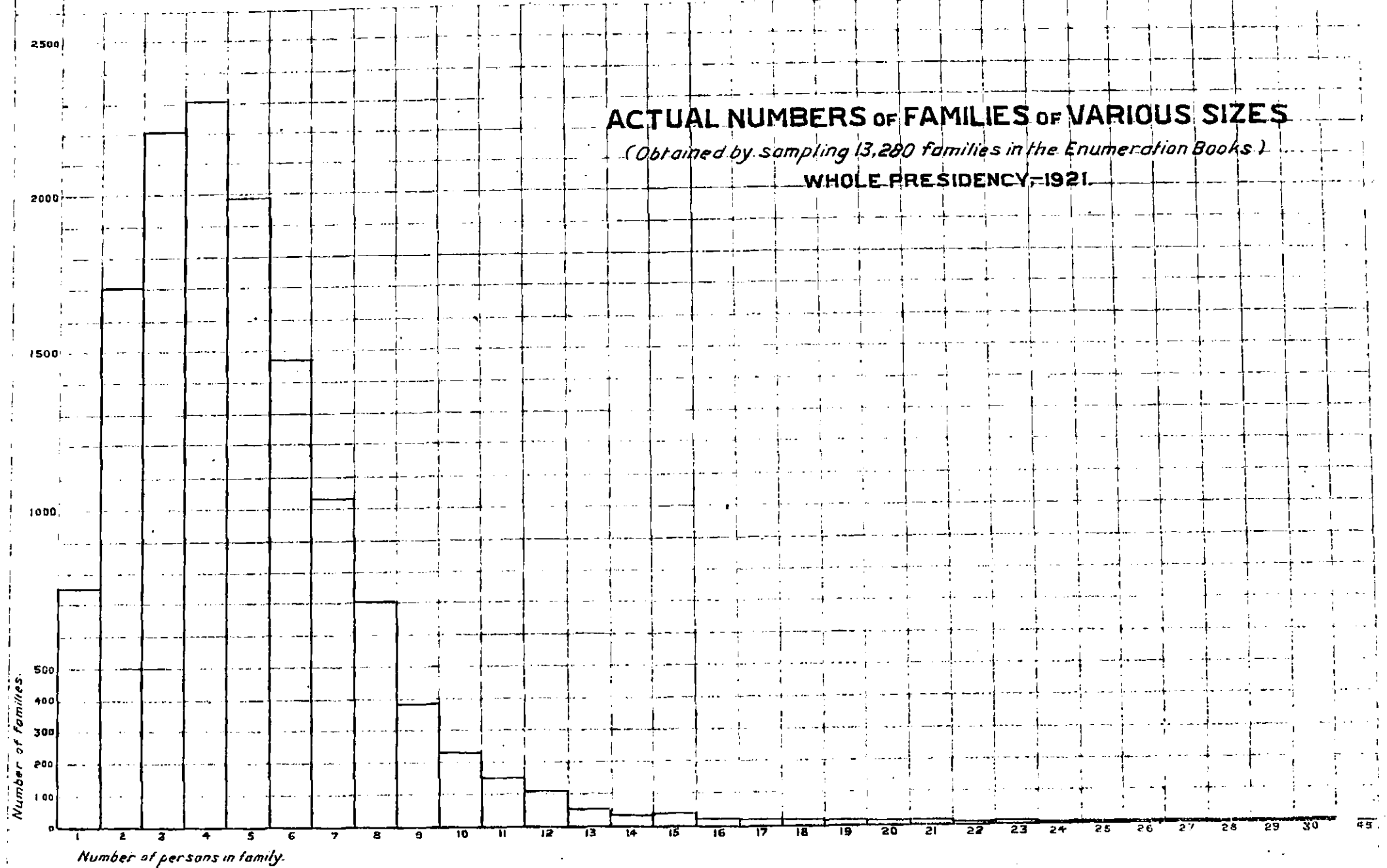
FREQUENCY AREAS OF PERCENTAGE DISTRIBUTION OF FAMILIES OF DIFFERENT SIZES IN EACH OCCUPATIONAL CLASS

Explanation. The total area of each of the figures is 50 small squares, each small square having a value of 2%. The small squares are distributed into different shapes according as the families are mainly of small values (few number of persons), as in Class H, or largely of high values (several or many persons) as in Class A. Up to 10 persons the individual percentage frequency is given. From 11-15 persons the mean is given in order to eliminate irregularities caused by errors of sampling. The families above 15 persons, having a percentage value of less than 0.5 in Classes D₁, D₂, H and J are absent from these classes in this diagram; and in the remaining classes are aggregated into one vertical rectangle, which is always too small to be satisfactorily shown.

ACTUAL NUMBERS OF FAMILIES OF VARIOUS SIZES

(Obtained by sampling 13,280 families in the Enumeration Books)

WHOLE PRESIDENCY, 1921.



common mess together with their dependants, resident servants and guests". In the case of Municipal towns in which the commensal family was not the unit for house-numbering, reliance had to be placed on the general rule that in such cases the separate families within the structural or other unit adopted as the "house" were to be separately indicated in the schedules. It was a rule in Enumeration that a line was to be left blank after each family and this rule was for the most part observed. There was also the further rule that any persons not entered at the preliminary enumeration, but found in the house on the Census night were to be entered at the end of the enumeration book as a continuation of the family concerned. Consequently, in order to make sure that all members of a family had been included in the Analysis sheet, the clerk preparing the sheet would have to verify in each case, by looking at the end of the book to see whether any additions had been made. The degree of accuracy attained in this particular would vary according to the intelligence and industry of each worker, and the care exercised in supervision by the officers over him. On the whole it is probable that understating of the size of the family through failure to look at the end of the book will have occurred more frequently than the amalgamation of two families into one by the failure of the enumerator to leave a line blank. But both types of error will have occurred very rarely.

6. In order to insure that the families examined should be genuine households it was directed that only those families should be admitted, which in the House List were shown as residing in a dwelling house, except that in the case of classes B and C the entry "dwelling house and shop" was accepted, and in the case of class J the entry "Chawl". This arrangement was necessary in order to avoid the classification as a family of either individuals residing on the Census night in isolated places such as chowkies, and otherwise uninhabited buildings, or of heterogeneous collections of persons residing in dharmashalas and the like. Here also there would be some tendency to understate the size of the family, since absent members would be omitted. Those absent on casual visits as guests in other families would be set off by guests present in the family under examination; but not those absent on journeys, nor those absent on duty.

7. Beyond the above limitation as regards dwellings further strict instructions were given as to the admission of families to the Tables. In the first place only Indian families were admitted. This excludes of course both Europeans and Anglo-Indians, as well as all other foreigners. The occupations mentioned for each Class were ordered to be rigidly adhered to. In any case of doubt the family was to be excluded. Care was also ordered to be paid to the record of actual workers and dependants, and especially to the chance of the women of the house being shown as actual workers under the designation "house-work" or other analogous term. Here also in all cases of doubt the family was ordered to be excluded. It was however emphasised that subject to the exclusion of doubtful cases there was to be no further selection, but all families otherwise admissible were to be entered in the orders in which they occurred.

8. The identification of resident servants was necessarily a matter of individual judgment. It was based on recorded occupation. But even so considerable care is required. Thus an individual whose occupation is recorded as "cook" would, if recorded in the house of a Barrister, usually be a servant, but on the other hand, if recorded in the house of a Telegraph Messenger, he would usually be a guest. However, provided that the work was done intelligently, the instinct of the clerk preparing the Analysis sheet would be a fairly safe guide.

9. The words "of the same caste" mean also (in the case of the larger castes, such as Brahmans) of the same sub-caste. Thus if an Audicch Brahman employs a resident Modh Brahman cook, the cook is classified as "of other castes".

10. There is only one point in which I am not satisfied that the result attained to the ideal laid down, and that is the matter of "dwelling house". It will be seen in what follows that a very high proportion of families come out with only one person. The number is so high that I am led to believe that either one of two things must have happened, viz:- (i) that the abstractors did not obey the instruction in this particular, but took all Census families independent of the description of the "house" or (ii) that the description "dwelling-house" in the House Lists was loosely used to cover buildings or tenements which do not really contain a genuine family. Of course there must be a fair number of adult males and adult females, who live totally alone, attending to their own domestic economy, and possessing no wife or husband, as the case may be, and no children. But I am doubtful whether the number of these lonely dwellers is really so high as the Tables indicate.

11. It is therefore safer to assume that the present study is a study of "Census Houses" rather than of true "families", and that a certain number of isolated individuals got included, who are really possessed of a family, though that family was not on the Census date living with them.

Section 2.—Results.

12. The results obtained are exhibited in the form of Table of the end of this Appendix.

I.—AVERAGE SIZE OF FAMILIES.

13. Table II will be discussed first. This Table with its summaries gives the average sizes of families. The larger diagram (opposite) shows that 4 persons is the most frequently recurring type, with 3 persons a close second. If we take Imperial Table I, and divide the number of persons by the number of "Occupied Census Houses" we get an arithmetic mean of 4.89 persons per house. The arithmetic mean of the sampled families is 4.69, which is slightly lower and not—as I had fully expected—higher than the other. The Median is 3.86. The mode, as will be seen by the Diagram, is 4.* As the idea of a fraction of a person is a mere abstraction, it would be more correct to say that the commonest type of family is 4 persons, but that owing to the presence of a fair number of families with large number of persons the "average" (in the ordinary sense) is 5 persons.

14. The second diagram, or series of 10 small diagrams, shows the frequency distribution for each Class taken separately. In order to compare the classes one with another the frequencies were reduced to percentage rates. It may be stated as a fact (or at least as a probability amounting almost to fact) that, if the number of families sampled for each Class had been larger, the stepping of the different figures in the diagram would have become more regular. Thus in Class A the step from 3 persons to 4 persons would not have been less than the step from 4 persons to 5 persons; and again in classes C, D and E a single mode would have emerged instead of a mode showing an equal degree of frequency for families with 3 and 4 persons. Nevertheless the general appearance of the ideal frequency area (given a sufficiently large number of samples) can be readily deduced for any Class. In Class A the families tend to be considerably larger than in any other Class, a phenomenon due to better economic conditions, and to larger buildings, enabling joint brothers to live together more than is the case with the other classes. Classes G (Agricultural Labourers) and H (Peons, Messengers, etc.) evidently have very small households, which is no doubt due to the low economic conditions prevailing. The Mill-hands (Class J), in spite of being often immigrants, seem at first sight to have larger households than classes G and H, which may be partly due to the much more lucrative character of mill-employment.† Class F (Cultivators) show an area approximating most closely to the normal Frequency Curve, with a strongly marked mode at 5 persons.

II.—COMPOSITION OF FAMILIES.

Consideration by regions.

15. It is necessary to issue a warning that, while it is correct to compare the results in any one Class for the different regions separately, it is incorrect to compare by regions the results of totalled classes. The reason for this is that the total families examined in the different regions contain widely divergent proportions of the different classes. Thus—

		Deccan and Konkan.	Karnatak.
Class A	.. ..	405	250
Class E	.. ..	310	639

It is found that when the classes are totalled for all regions together they exhibit different compositions. The total composition of the total families (all classes) in any region is therefore determined by the varying proportions of the classes. In the Karnatak the proportion of workers is higher and dependants lower than in the other Mofussil regions; but this is solely due to the presence of a larger number of Agricultural families in the families examined, and not to any regional difference as such.

* In the Appendix on Family Budgets it is mentioned in a footnote that in a frequency distribution of the type shown in this diagram the Median is always higher than the Mode, and the Arithmetic Mean higher than the Median. It may be therefore objected that this is not borne out by the above figures in which the Median (3.86) comes out lower than the Mode (4). The explanation is that the Arithmetic Mean and the Median are here stated for a smoothed curve in a continuous series, while the Mode is stated as for a series of rectangles in a discrete series. If the centre of the top of each rectangle is marked, and a smooth curve passed through the marked points it will be found that the curve passes considerably above the 2,300 horizontal before reaching the marked point on the 4 person rectangle and descends to meet that point. The Mode therefore (the series considered as continuous) would be below 4 persons, and in fact below 3.86. But, as the series is discrete, the Mode cannot be reduced to the abstraction implied by the values quoted for the other averages. A discrete series is one in which each class value is definite and there is no gradual transition to the next class. In the Family Budget Tables the series are continuous, since there is always a gradual transition from Class to Class, when the values of those classes are money values, and the class interval is more than the value of the smallest coin of the realm. And the same applies to all other series in which the class values are divisible into still smaller values. In the present case, if we restate the Median and the Mean in terms of whole persons, we shall find that the Mode (or most frequently recurring type) and the Median (or middle family of the series) are both 4, and the Arithmetic Mean is 5. This therefore again is a case in which the "average", as usually adopted by the public, is not equal to the most frequently recurring type.

† On the other hand, in view of the small proportion of dependants among millhands (see discussion of Table I), it is possible that a good many of the "families" in this case consisted, not of husband, wife and children, but of husband, wife and brother, or even of two or more male workers living in a sort of "chummary."

Consideration by classes.

16. The composition of the families in the different classes (all Regions together) is as follows :—

Distribution of Workers, Dependants and Resident Servants in every 100 persons in the families of each Class.

	Workers.	Depend- ants.	Resident servants.
Class A	20	74	6
Class B	32	67	1
Class C	30	68	2
Class D1	28	71	1
Class D2	29	70	1
Class E	29	70	1
Class F	34	65	1
Class G	47	53	..
Class H	38	62	..
Class J	52	48	..

The proportion of dependants is therefore much the highest in Class A, Professional Classes, and lowest in Classes G, Agricultural Labourers, and J, Mill-hands. In the latter Class the proportion of dependants is kept down by the fact that mill-hands are often immigrants who have left their dependants in their original homes. On the other hand, in this Presidency, Agricultural Labourers are seldom immigrants.

17. The distribution of every 100 workers is as follows :—

*Distribution by sex and age of every 100 Actual Workers in each Class
(all Regions together).*

	Children.	Adults.		Aged and Infirm.
		Males.	Females.	
Class A .. .. .	..	90	1	9
Class B	1	76	11	12
Class C	1	78	8	13
Class D1 .. .. .	..	91	4	5
Class D2 .. .. .	..	94	2	4
Class E	4	65	16	15
Class F	6	69	13	12
Class G	6	54	30	10
Class H	2	88	4	6
Class J	5	71	19	5

18. These results, though following lines which would have been expected, are, I think, very interesting as an index of the extent to which women and children are employed in the various occupations. Women are proportionately far more numerous as workers in Agricultural Labour (G), than in any other of the selected occupations. They are numerous in Mill-hands (J), Agricultural Rent Receivers (E), and Cultivators (F), and in Shopkeepers (B) and (C). On the contrary they are few in Peons, Messengers, etc. (H), Clerks, Schoolmasters, etc. (D1 and D2), and almost absent in the Professions (A). The proportions of children and aged also follow expected lines.

19. The extent to which adult males can be supported as dependants is shown by the

Distribution of every 100 adult males among workers and dependants in each class (all regions together).

	Workers.	Depend-ants.
Class A ..	67	33
Class B ..	86	14
Class C ..	79	21
Class D1 ..	89	11
Class D2 ..	79	21
Class E ..	78	22
Class F ..	87	13
Class G ..	94	6
Class H ..	94	6
Class J ..	95	5

marginal figures. It is to be noted that adult means in the case of males, ages 15—54. The proportions of adult male dependants does not therefore cover only the “drones” who under the joint family system subsist on the incomes of their hardworking male relatives, but presumably covers also students of 15 and upwards, whose numbers will probably very much exceed the number of drones. Consequently it is in the better educated occupations that we find the highest proportions of adult male dependants.

20. Lastly we can ascertain the distribution of the persons in each class into (i) Children, (ii) Adults and (iii) Aged and Infirm. Servants are excluded.

Distribution of every 100 persons (both sexes combined) in the Families of each Class into Children, Adults and Aged and Infirm.

Class.	Children.	Adults.	Aged and Infirm.
Class A	37	56	7
Class B	34	56	10
Class C	31	58	11
Class D1	37	55	8
Class D2	32	61	7
Class E	37	52	11
Class F	35	53	12
Class G	35	56	9
Class H	31	62	7
Class J	28	65	7

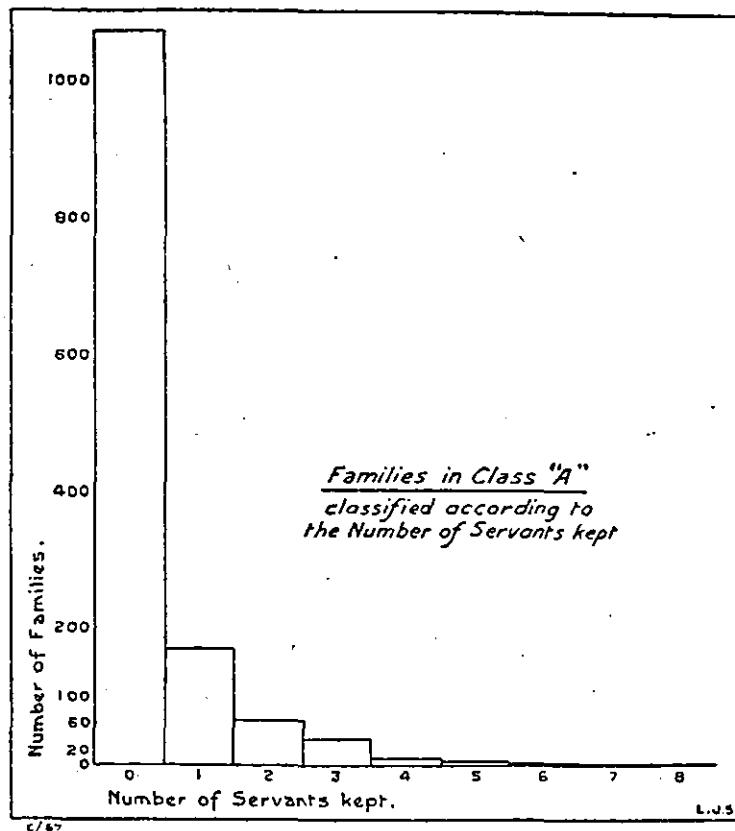
In considering the above figures the exclusion of servants should be borne in mind.

21. A comparison of the different tables given in paragraphs 16, 17, 19 and 20 will show that they really present the same picture from different points of view. And it is unnecessary to prolong the discussion further. One point might however be emphasised,—and that is the wide difference which evidently exists between conditions in large towns and cities on the one hand, and small towns and villages on the other. The contrast can be seen by taking the pairs of identical occupations represented by B and C, and D1 and D2, respectively. The villages and small towns contain a greater proportion of children and a smaller proportion of adults in the total number of persons. There is however no observable difference in the age at which work is commenced. When the workers alone are considered it is found that there is a higher proportion of Female workers. And when adult males alone are considered it is found that there is a smaller proportion of dependants. The distribution of the whole population into workers and dependants therefore remains fairly constant, this being brought about by the opposite factors of more children and fewer adult non-workers in the villages and small towns. In the large towns and cities families are smaller and the age of retirement commences earlier. On the other hand it is quite possible that the last deduction is not correct, and that the higher proportion of adult Male dependants in large towns and cities is here also (as hinted above in paragraph 19) brought about by a higher proportion of students of 15 and upwards.

III.—RESIDENT SERVANTS.

22. The last Table illustrates the extent to which resident servants are kept. Non-resident servants could not be considered in this study. The proportion of persons supported by domestic service as an occupation can be ascertained from the General Occupation Table, discussed in Chapter XII of this Report. In the whole population of the Presidency 14 per 1,000 are supported by domestic service, and in the families examined for this study 13 per 1,000 are resident servants. It is possible therefore to infer that of the total supported by domestic service approximately 1 in 14 only is a non-resident servant or the dependant of such. The number of families examined is however so small in comparison with the number of families in the Presidency that it is impossible to assume that they form a perfect sample. Moreover the occupations were selected, and a good many important occupations are non included. Consequently the above figure 1 in 14 must be accepted with reserve. All we can say for certain is that evidently a very high proportion of servants are resident in their masters' houses.

23. Classes G, H and J keep practically no servants. And only Class A keeps servants to any considerable extent. Even in this Class out of 1,355 families examined no less than 1,070 keep no servants. The number of families keeping—0 servants, 1 servant, 2 servants, etc., etc., are shown in the annexed diagram. The curve is of the type known as the "hollow curve"—a recognised type which occurs in many diverse studies.



24. The second part of the Table was designed to ascertain whether, when servants are kept, these are of the caste of the employer or of other castes. It is obvious from the results that the tendency is strongly for the servant to be of a different caste. This feature is especially characteristic of Gujarat and Sind. In the Deccan, Konkan and Karnatak the proportion of servants of the same caste as the employer is much higher. This is no doubt due to the fact that in those regions the Maratha and the Lingayat are so widespread, and of such diverse social strata that servants of those castes are available to employers. The number of Brahman sub-castes is also there much lower. In Gujarat the Brahman sub-castes are numerous, and various semi-degraded Brahmans such as the Modhs are available to Brahman employers, while the Leva Kanbi can secure a Kadava Kanbi or even a Koli as his servant. In Sind, where there are the traditional "Slave Castes", such as the Khaskhelis, the tendency is for servants to be of those castes, rather than of the castes of their employers.

Analysis of Families—Table I—General Summary.

Region and Occupational Class.	Total number of families examined.	Number of persons (including resident servants) in families examined.			Distribution by occupation (both sexes combined).			Analysis of Actual Workers. (Col. 8.)				Analysis of dependents. (Col. 7.)			
		Total.	Males.	Females.	Actual Workers.	Dependents.	Resident Servants.	Children (both sexes combined).	Adults.		Aged and infirm (both sexes combined).	Children (both sexes combined).	Adults.		Aged and infirm (both sexes combined).
									Males.	Females.			Males.	Females.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Class A.															
Total ..	1,355	8,373	4,540	3,833	1,697	6,100	486	2	1,532	13	150	2,931	758	2,077	424
Bombay City & Suburban ..	100	693	428	265	164	300	139	..	147	2	15	148	71	157	19
Gujarat ..	270	1,559	880	679	340	1,110	109	..	291	..	49	462	163	400	85
Deccan and Konkan *	405	2,433	1,291	1,142	469	1,880	84	..	420	2	47	872	243	613	152
Karnatak †	250	1,863	989	874	336	1,432	95	2	303	7	24	608	179	467	88
Sind ..	330	1,825	952	873	388	1,378	59	..	371	2	15	756	102	440	80
Class B.															
Total ..	1,346	6,687	3,464	3,223	2,131	4,515	41	31	1,625	228	247	2,246	278	1,570	422
Bombay City & Suburban ..	Class not returned.														
Gujarat ..	200	1,062	561	501	265	784	13	1	219	15	30	407	68	270	39
Deccan and Konkan ..	320	1,657	858	799	511	1,136	10	13	378	49	71	440	95	399	202
Karnatak ..	626	3,033	1,580	1,453	1,105	1,913	15	17	799	160	129	1,007	101	676	129
Sind ..	200	935	465	470	250	682	3	..	229	4	17	302	14	225	51
Class C.															
Total ..	1,580	7,728	4,092	3,636	2,324	5,275	129	31	1,822	176	295	2,303	500	1,038	534
Bombay City & Suburban ..	300	1,159	666	473	484	623	52	5	421	33	25	283	38	266	36
Gujarat ..	200	1,243	635	608	322	900	21	7	250	15	50	418	98	321	73
Deccan and Konkan ..	570	2,589	1,370	1,219	714	1,847	28	9	580	27	96	632	219	701	295
Karnatak ..	310	1,681	892	789	549	1,118	19	9	389	76	75	575	94	365	79
Sind ..	200	1,056	509	547	255	792	9	1	182	25	47	400	56	285	51
Class D-1.															
Total ..	1,148	4,915	2,518	2,397	1,402	3,473	40	3	1,278	53	68	1,817	164	1,200	202
Bombay City & Suburban ..	Class not returned.														
Gujarat ..	200	753	408	345	234	515	4	..	214	12	8	267	33	184	31
Deccan and Konkan ..	300	1,249	643	606	350	893	6	..	306	10	25	446	51	295	101
Karnatak ..	438	2,025	1,043	982	572	1,436	17	3	514	22	33	742	69	509	116
Sind ..	210	888	424	464	246	629	13	..	244	..	2	362	11	212	44
Class D-2.															
Total ..	1,670	7,854	4,316	3,538	2,273	5,536	45	8	2,146	41	83	2,539	568	1,978	457
Bombay City & Suburban ..	800	1,305	760	545	495	802	8	1	474	8	12	384	86	325	57
Gujarat ..	280	1,342	748	594	353	984	5	1	332	7	13	466	108	364	46
Deccan and Konkan ..	600	2,996	1,596	1,400	746	2,243	7	..	688	18	40	1,040	216	734	244
Karnatak ..	280	1,432	734	698	365	1,061	6	1	344	8	12	468	113	395	85
Sind ..	210	779	478	301	314	446	19	..	308	..	6	222	45	100	19
Class E.															
Total ..	1,149	5,487	2,689	2,798	1,608	3,840	30	63	1,040	256	249	1,940	360	1,260	340
Bombay City & Suburban ..	Class not returned.														
Gujarat ..	100	446	241	205	117	326	3	1	91	6	19	149	36	118	23
Deccan and Konkan ..	310	1,359	636	723	363	992	4	12	239	30	73	448	83	349	112
Karnatak ..	639	3,082	1,528	1,554	986	2,098	20	40	681	211	144	1,084	167	645	172
Sind ..	100	600	284	316	143	454	3	1	129	..	13	259	14	148	33

* Konkan does not include Kanara District.
† Karnatak includes Kanara District.

Region and Occupational Class.	Total number of families examined.	Number of persons (including resident servants) in families examined.			Distribution by occupation (both sexes combined).			Analysis of Actual Workers. (Col. 6.)				Analysis of dependents. (Col. 7.)			
		Total.	Males.	Females.	Actual Workers.	Dependents.	Resident Servants.	Children (both sexes combined).	Adults.		Aged and infirm (both combined).	Children (both sexes combined).	Adults.		Aged and infirm (both sexes combined).
									Males.	Females.			Males.	Females.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Class F.															
Total ..	1,405	7,949	4,189	3,760	2,729	5,186	34	155	1,881	369	324	2,012	239	1,682	603
Bombay City and Suburban ..					Class not returned.										
Gujarat ..	100	551	287	264	133	418	..	..	115	4	14	219	37	144	18
Deccan and Konkan ..	380	1,802	934	868	621	1,180	1	48	880	100	93	369	87	373	351
Karnatak ..	845	4,977	2,611	2,366	1,754	3,190	33	102	1,180	265	207	1,811	153	1,015	311
Sind ..	100	619	357	262	221	398	..	5	206	..	10	213	12	160	26
Class G.															
Total ..	1,265	5,460	2,693	2,767	2,570	2,877	3	148	1,402	771	240	1,781	87	765	244
Bombay City and Suburban ..					Class not returned.										
Gujarat ..	100	474	240	234	146	328	..	..	113	18	15	181	15	121	11
Deccan and Konkan ..	319	1,128	538	590	495	632	1	22	273	125	75	303	24	201	104
Karnatak ..	746	3,386	1,656	1,730	1,758	1,626	2	123	861	623	151	1,154	47	322	103
Sind ..	100	462	259	203	171	291	..	3	155	5	8	143	1	121	26
Class H.															
Total ..	1,338	5,322	2,881	2,441	2,023	3,299	..	47	1,781	88	107	1,622	110	1,308	259
Bombay City and Suburban ..	100	417	260	148	238	179	..	8	214	11	5	66	9	93	11
Gujarat ..	300	952	568	386	430	522	..	10	386	15	19	275	14	215	18
Deccan and Konkan ..	300	1,250	656	594	429	821	..	16	349	31	33	383	34	309	95
Karnatak ..	288	1,361	609	662	438	923	..	13	349	31	45	467	49	830	77
Sind ..	350	1,342	601	651	488	854	..	..	483	..	5	431	4	361	58
Class J.															
Total ..	1,024	4,294	2,372	1,922	2,243	2,050	1	120	1,576	430	117	1,083	77	710	180
Bombay City and Suburban ..	260	1,096	625	471	652	443	1	20	472	185	25	225	10	177	26
Gujarat ..	100	413	257	156	208	205	..	9	169	24	6	98	18	77	12
Deccan and Konkan ..	310	1,265	662	603	574	691	..	33	387	107	47	365	21	226	79
Karnatak ..	254	1,093	582	511	620	464	..	58	369	164	38	262	22	141	39
Sind ..	100	427	246	181	180	247	..	..	179	..	1	183	..	89	25

Analysis of Families—Table II—Frequencies of families of different sizes
(including resident servants).

Number of persons in family.	Number of families containing the persons shown in Col. 1 in					Number of persons in family.	Number of families containing the persons shown in Col. 1 in				
	Bombay City.	Gujarat.	Deccan and Konkan.	Karnatak.	Sind.		Bombay City.	Gujarat.	Deccan and Konkan.	Karnatak.	Sind.
1	2	3	4	5	6	1	2	3	4	5	6
Class A.						Class B.					
1	2	7	21	3	29	1	2	19	42	6	
2	4	17	33	13	30	2	18	43	74	26	
3	9	33	46	13	36	3	31	39	103	40	
4	10	35	45	20	34	4	35	55	103	45	
5	9	53	60	30	39	5	35	43	111	23	
6	13	33	40	25	48	6	28	29	75	22	
7	14	33	42	36	35	7	22	23	49	15	
8	10	15	43	27	41	8	8	30	23	8	
9	8	13	19	28	12	9	9	13	14	5	
10	8	13	13	19	8	10	2	11	13	6	
11	4	8	18	7	6	11	4	7	1	1	
12	5	3	9	5	4	12	3	3	3	2	
13	1	5	4	5	3	13	1	2	2	..	
14	1	1	3	5	..	14	..	..	3	1	
15	1	1	4	8	1	15	1	..	1	..	
16	..	..	2	2	2	16	..	1	3	..	
17	1	..	..	3	..	17	..	..	1	1	
18	..	..	1	..	..	18	..	..	1	..	
19	..	..	1	..	..	19	..	..	..	..
20 and over	..	..	1	1	2	20 and over	1	2	4	..	
Class C.						Class D-1.					
1	29	..	46	15	12	1	26	47	38	4	
2	57	12	98	34	35	2	35	30	54	35	
3	62	28	91	46	25	3	33	45	74	49	
4	62	27	89	49	23	4	40	59	63	50	
5	34	29	64	44	25	5	24	41	66	24	
6	24	35	70	36	23	6	23	32	55	22	
7	16	13	50	32	12	7	13	21	32	12	
8	5	17	22	15	17	8	5	13	21	8	
9	4	12	12	8	8	9	1	4	16	3	
10	3	9	9	5	3	10	..	5	10	2	
11	..	4	5	6	7	11	..	2	5	..	
12	3	4	7	8	4	12	..	..	2	..	
13	..	2	..	3	..	13	..	..	..	..
14	1	2	2	..	1	14	..	..	..	..
15	..	2	1	2	1	15	..	1	12	..	
16	..	2	1	1	1	16	..	..	..	..
17	..	..	2	1	2	17	..	..	..	..
18	..	1	..	2	1	18	..	..	..	..
19	..	..	..	1	..	19	..	..	..	..
20 and over	..	1	1	2	..	20 and over	..	..	..	1	
Class D-2.						Class E.					
1	26	7	25	14	14	1	..	23	23	3	
2	51	27	69	27	42	2	16	46	74	7	
3	45	53	93	40	46	3	17	55	118	10	
4	57	55	87	59	53	4	19	65	109	13	
5	37	48	98	38	25	5	23	40	101	16	
6	35	36	76	34	16	6	12	22	80	11	
7	22	27	59	22	8	7	8	26	57	13	
8	10	11	48	16	3	8	2	15	25	11	
9	6	8	21	9	1	9	2	8	10	..	

Number of persons in family.	Number of families containing the persons shown in Col. 1 in					Number of persons in family.	Number of families containing the persons shown in Col. 1 in				
	Bombay City.	Gujarat.	Deccan and Konkan.	Karnatak.	Sind.		Bombay City.	Gujarat.	Deccan and Konkan.	Karnatak.	Sind.
1	2	3	4	5	6	1	2	3	4	5	6
10	3	3	12	8	1	10	Class not returned.	1	2	6	2
11	3	3	5	5	1	11		..	4	4	5
12	2	..	2	1	..	12		..	3	3	2
13	1	1	2	2	..	13		..	1	3	1
14	..	..	..	1	..	14		..	..	1	..
15	1	..	1	2	..	15		..	..	1	..
16	1	..	1	1	..	16		..	..	2	..
17	..	..	..	..	..	17		..	..	2	..
18	..	..	1	1	..	18		..	..	..	..
19	..	..	..	..	..	19		..	..	12	1
20 and over.	..	1	..	..	..	20 and over.	..	..	..	..	..
1	Class not returned.	Class F.		4	1	1	Class not returned.	Class G.		21	3
2		3	26	34	6	2		4	35	98	18
3		8	58	90	16	3		15	62	137	24
4		11	60	130	12	4		18	80	158	11
5		13	62	171	16	5		11	63	146	15
6		15	42	120	12	6		16	41	92	11
7		17	27	103	8	7		15	17	43	6
8		13	25	86	11	8		10	9	26	6
9		8	0	39	5	9		4	6	8	2
10		7	0	10	2	10		5	3	..	..
11	Class not returned.	3	1	8	4	11		..	2	4	..
12		2	4	12	2	12		1	..	3	3
13		..	4	5	1	13		..	1	2	..
14		..	3	2	..	14		..	..	1	1
15		..	1	..	1	15		1	..	..	..
16		..	..	4	..	16		..	..	1	..
17		..	..	1	1	17		..	..	..	..
18		..	2	2	2	18		..	..	1	..
19		..	1	2	..	19		..	..	..	1
20 and over.		..	1	4	..	20 and over.	..	..	..	5	..
1	Class not returned.	Class H.		23	..	1	Class not returned.	Class J.		14	2
2		4	77	49	74	2		15	6	52	20
3		19	57	53	98	3		52	18	74	20
4		27	47	68	88	4		45	18	69	22
5		15	55	47	35	5		51	22	46	11
6		14	22	27	28	6		40	19	24	11
7		5	25	17	14	7		19	6	10	5
8		6	8	5	10	8		7	3	10	4
9		5	3	13	3	9		5	4	8	3
10		2	2	4	..	10		7	..	8	..
11	Class not returned.	2	2	6	..	11		1	1	3	2
12		2	1	5	..	12		3	2	1	2
13		1	..	1	..	13		2	..	2	..
14		..	..	1	..	14		1	1	1	..
15		..	3	1	..	15		..	1	..	..
16		..	..	1	..	16		1	..	1	..
17		..	..	..	..	17		2	..	..	..
18		..	1	..	..	18		..	..	..	..
19		..	..	..	..	19		..	..	..	..
20 and over.		..	..	2	..	20 and over.	..	..	..	..	..

ANALYSIS OF FAMILIES—TABLE II—SUPPLEMENT.

Details of Families containing twenty persons and over.

Region.		Class.	One family containing the following number of Persons.					
Deccan and Konkan	..	A	21	..	..	..	..	..
Do.	..	B	20	23	..	..	..	..
Do.	..	C	22	..	..	..	..	..
Do.	..	F	20	..	..	..	..	..
Karnatak	..	A	30	..	..	..	..	..
Do.	..	B	20	27	29	45	..	..
Do.	..	C	20	23	..	..	..	..
Do.	..	F	20	20	21	22	..	..
Do.	..	G	20	21	28	30	21	..
Do.	..	H	24	26	..	..	..	..
Bombay City and Suburban	..	No family containing persons twenty and over in any of the classes.						
Gujarat	..	B	21	..	..	..	..	..
Do.	..	C	21	..	..	..	..	..
Do.	..	D2	21	..	..	..	..	..
Sind	..	A	23	25	..	..	..	..
Do.	..	D1	20	..	..	..	..	..

ANALYSIS OF FAMILIES—TABLE II—SUMMARY BY CLASSES.

Classes.											All Classes Total
Persons in Family.	A	B	C	D1	D2	E	F	G	H	J	
1	62	69	102	115	86	49	34	63	126	49	755
2	97	161	236	154	216	143	82	193	234	188	1,704
3	137	213	252	201	277	200	179	259	280	203	2,203
4	144	238	250	212	311	206	215	243	267	217	2,303
5	191	212	196	155	246	180	264	218	164	162	1,988
6	159	154	188	132	197	134	191	135	112	76	1,478
7	180	109	123	78	188	104	151	67	71	37	1,038
8	136	69	76	47	88	53	130	42	36	34	711
9	80	41	44	24	45	34	60	18	16	26	387
10	61	31	29	17	27	11	33	6	11	7	233
11	43	13	22	7	17	13	15	7	10	10	187
12	26	11	26	2	5	8	18	3	3	5	107
13	18	5	5	..	6	5	9	2	1	3	54
14	10	4	6	..	1	1	3	1	4	1	81
15	15	2	6	3	4	1	1	1	..	2	35
16	6	4	5	..	3	2	4	..	1	2	27
17	4	2	5	..	..	2	2	..	1	..	16
18	1	1	4	..	2	..	6	1	..	..	15
19	1	..	1	..	..	3	3	1	..	..	9
20 .. ..	..	2	1	1	..	..	3	1	..	..	8
21	1	1	1	..	1	..	1	2	..	..	7
22 .. ..	..	..	1	..	..	..	1	..	..	..	2
23	1	1	1	..	..	..	..	..	..	..	3
24 .. ..	..	..	..	..	..	..	..	..	1	..	1
25	1	..	..	..	..	..	..	..	..	..	1
26 .. ..	..	..	..	..	..	..	..	..	1	..	1
27 .. ..	..	1	..	..	..	..	..	..	..	..	1
28 .. ..	..	..	..	..	..	..	..	1	..	..	1
29 .. ..	..	1	..	..	..	..	..	..	..	..	1
30	1	..	..	..	..	..	..	1	..	..	2
45 .. ..	..	1	..	..	..	..	..	..	..	..	1
Total Families examined ..	1,355	1,346	1,580	1,148	1,670	1,149	1,405	1,205	1,338	1,024	13,280

ANALYSIS OF FAMILIES—TABLE II—SUMMARY.

Percentage distribution of Families according to the number of persons in each.

Classes.											Total all classes combined.
Persons in family.	A	B	C	D1	D2	R	F	G	H	J	
1	5	5	6	10	5	4	2	5	10	5	5.6
2	7	12	15	13	13	13	6	15	18	18	12.8
3	10	16	16	18	17	17	13	21	21	20	16.6
4	11	18	16	18	19	17	15	19	20	21	17.3
5	14	16	12	13	15	16	19	17	12	16	15.0
6	12	11	12	12	12	12	14	11	8	7	11.2
7	12	8	8	7	8	9	11	5	5	4	7.9
8	10	5	5	4	5	5	9	3	3	3	5.4
9	6	3	3	3	3	3	4	1	1	3	2.0
10	4	2	2	1	2	1	2	1	1	1	1.7
11—15	8	3	4	1	1	2	3	1	1	2	2.9
16 and over	1	1	1	..	..	1	2	1	..	..	0.7

ANALYSIS OF FAMILIES—TABLE III—RESIDENT SERVANTS.

Part I—Extent to which Servants are kept.

Region and Class.	Total Number of families examined.	Number of families containing								
		No Servants.	One Servant.	Two Servants.	Three Servants.	Four Servants.	Five Servants.	Six Servants.	Seven Servants.	Eight Servants.
1	2	3	4	5	6	7	8	9	10	11
Class A.										
Total	1,355	1,070	168	64	37	8	4	2	1	1
Bombay City and Suburban	100	42	14	10	13	5	3	1	..	..
Gujarat	270	208	36	17	4	2	1	1	..	1
Deccan and Konkan	405	343	46	10	6	..	..	..	..	..
Karnatak	250	187	43	11	6	3	..	..	..	..
Sind	330	290	29	7	3	..	..	..	1	..
Class B.										
Total	1,346	1,312	30	3	..	..	1	..	..	..
Bombay City and Suburban	..	..	..	..	Class not returned.					
Gujarat	200	189	9	2	..	..	..	..	..	..
Deccan and Konkan	320	310	10	..	..	..	..	..	..	..
Karnatak	626	616	8	1	..	..	1	..	..	..
Sind	200	197	3	..	..	..	..	..	..	..
Class C.										
Total	1,580	1,490	51	20	4	4	2	..	..	..
Bombay City and Suburban	300	271	16	7	3	2	1	..	..	..
Gujarat	200	184	11	5	..	..	..	..	..	..
Deccan and Konkan	570	550	15	4	..	..	1	..	..	..
Karnatak	310	299	6	3	1	1	..	..	..	..
Sind	200	195	3	1	..	1	..	..	..	..
Class D1.										
Total	1,113	1,115	27	5	1	..	..	..	..	..
Bombay City and Suburban	..	..	..	..	Class not returned.					
Gujarat	200	197	2	1	..	..	..	..	..	..
Deccan and Konkan	300	296	2	2	..	..	..	..	..	..
Karnatak	438	425	10	2	1	..	..	..	..	..
Sind	210	197	13	..	..	..	..	..	..	..
Class D2.										
Total	1,670	1,630	33	6	..	..	..	..	..	..
Bombay City and Suburban	300	292	6	1	..	..	..	..	..	..
Gujarat	280	277	1	2	..	..	..	..	..	..
Deccan and Konkan	600	593	7	..	..	..	..	..	..	..
Karnatak	280	270	2	2	..	..	..	..	..	..
Sind	210	192	17	1	..	..	..	..	..	..
Class E.										
Total	1,119	1,126	16	3	3	..	..	..	..	1
Bombay City and Suburban	..	..	..	..	Class not returned.					
Gujarat	100	97	3	..	..	..	..	..	..	..
Deccan and Konkan	310	303	1	..	1	..	..	..	..	..
Karnatak	639	624	9	3	2	..	..	..	..	1
Sind	100	97	3	..	..	..	..	..	..	..
Class F.										
Total	1,405	1,382	16	4	2	1	..	..	..	..
Bombay City and Suburban	..	..	..	..	Class not returned.					
Gujarat	100	100	..	..	..	..	..	..	..	..
Deccan and Konkan	360	359	1	..	..	..	..	..	..	..
Karnatak	846	823	15	4	2	1	..	..	..	..
Sind	100	100	..	..	..	..	..	..	..	..
Class G.										
Total	1,265	1,263	1	1	..	..	..	..	..	..
Sind	100	100	..	..	..	..	..	..	..	..
Class H.										
Total	1,333	1,336	..	..	..	..	..	..	..	..
Class J.										
Total	1,024	1,023	1	..	..	..	..	..	..	..

ANALYSIS OF FAMILIES—TABLE III—RESIDENT SERVANTS.

Part II—Servants by Sex, Caste, etc.

Region and Class.	Total Number of Families examined.	Total Number of Servants.	Analysis of Servants					
			of same caste.			of different caste.		
			Actual workers.		Depend-ants.	Actual workers.		Depend-ants.
			Males.	Females.		Males.	Females.	
1	2	3	4	5	6	7	8	9
Class A.								
Total	1,355	486	84	31	3	295	66	7
Bombay City and Suburban	100	139	11	3	1	91	31	2
Gujara	270	109	3	..	..	89	12	5
Deccan and Konkan	405	84	24	20	2	33	5	..
Karnatak	250	95	42	7	..	40	6	..
Sind	330	59	4	1	..	42	12	..
Class B.								
Total	1,346	41	14	1	1	23	2	..
Bombay City and Suburban	..	..	Class not returned.					
Gujarat	200	13	..	..	..	12	1	..
Deccan and Konkan	320	10	2	1	..	6	1	..
Karnatak	626	15	9	..	1	5	..	..
Sind	200	3	3	..	..	..	..	..
Class C.								
Total	1,580	129	49	5	4	56	14	1
Bombay City and Suburban	300	52	26	3	3	16	4	..
Gujarat	200	21	1	..	..	18	4	..
Deccan and Konkan	570	28	11	2	..	11	3	1
Karnatak	310	19	8	..	1	7	3	..
Sind	200	9	3	..	..	6	..	..
Class D1.								
Total	1,148	40	3	3	2	26	4	2
Bombay City and Suburban	..	..	Class not returned.					
Gujarat	200	4	..	..	..	4	..	..
Deccan and Konkan	300	6	..	1	2	..	1	2
Karnatak	438	17	3	2	..	11	1	..
Sind	210	13	..	..	..	11	2	..
Class D2.								
Total	1,070	45	5	3	1	25	11	..
Bombay City and Suburban	300	8	3	..	1	2	2	..
Gujarat	280	5	..	..	..	5	..	..
Deccan and Konkan	600	7	1	3	..	1	2	..
Karnatak	280	6	1	..	..	4	1	..
Sind	210	19	..	..	..	13	6	..
Class E.								
Total	1,149	39	3	1	..	32	1	2
Bombay City and Suburban	..	..	Class not returned.					
Gujarat	100	3	..	..	..	3	..	..
Deccan and Konkan	310	4	..	..	..	1	1	2
Karnatak	630	20	2	1	..	26	..	..
Sind	100	3	1	..	..	2	..	..
Class F.								
Total	1,405	34	13	1	..	17	3	..
Bombay City and Suburban	..	..	Class not returned.					
Gujarat	100	..	..	..	..	..	..	..
Deccan and Konkan	360	1	..	..	..	1	..	..
Karnatak	845	33	13	1	..	16	3	..
Sind	100	..	..	..	..	..	..	..
Class G.								
Total	1,265	3	..	..	1	2	..	..
Class H.								
Total	1,338	..	..	..	..	..	..	..
Class J.								
Total	1,024	1	..	1	..	..	..	..

APPENDIX W.

FAMILY BUDGETS.

1. This enquiry is an attempt to ascertain the true economic position of the Bombay Family, elsewhere than in the large Cities. It has nothing to do with the enquiry into Family Budgets of Workmen in Bombay conducted by the Labour Office. The existence of two separate enquiries of the same character at the same time is a pure accident. This enquiry was begun before the Labour Office enquiry, and neither Mr. Shirras nor myself had any idea at first that the other was working the same problem. The only result of learning about the Bombay enquiry was that I definitely limited my own enquiry to the mofussil.

2. Apart from covering quite different ground the two enquiries have been conducted by entirely different means. In contradistinction to the Bombay enquiry the present figures were collected with no expenditure but the cost of printing the slips and instructions, and of tabulating the results. *None of the Honorary Correspondents mentioned in the lists below received a single pie either as remuneration or for expenses.* Secondly, while the Bombay enquiry collects and enters for any family the figures of actual expenditure in actual months in absolute detail, in the present enquiry the Honorary Correspondents were expected to make their own enquiries into detail and actual expenditure, and put the result down in the form of *normal annual expenditure* under certain broad heads.

3. I should be far from suggesting that the results attained by the methods employed give as accurate figures for any individual family as the results attained by the more detailed and more expensive methods of the Labour Office. But it is hoped that such errors as exist in individual families are compensating errors, which balance out and disappear when the figures are compiled into the larger units of the Natural Divisions as presented in the Tables. And I confidently hope that when—if ever—the detailed methods of the Labour Office are applied to the Mofussil, the picture here presented will be found to have been correct in its main outlines.

4. Of the gentlemen who at first expressed their willingness to act as Honorary Correspondents for the Census a good many withdrew when they saw the work which they were asked to perform. The names of those who ultimately sent in returns together with the number of families examined in each case, are given below.

List of Honorary Correspondents in Gujarat.

1. The Thandar, Lodika Thana, Halar Prant, Kathiawar	..	..	101
2. Mr. N. N. Anklesaria, Bar-at-Law, Anklesvar, Broach	..	..	100
3. Mr. D. A. Patel, Kaira	..	..	100
4. Mr. Morarji Naranji, Rander, Surat	..	..	100
5. Mr. C. N. Joshi, District Deputy Collector, Panch Mahals	..	..	100
6. Mr. S. D. Gandhi, B.A., LL.B., Kapadvanj, Kaira	..	..	100
7. Mr. M. M. Shaha, Mahalkari, Jhalod, Panch Mahals	..	..	100
8. Mr. V. G. Trivedi, Chief Vakil, Bhavnagar	..	..	100
9. The President, Umreth Municipality, Kaira	..	..	98
10. Mr. M. F. Contractor, President, Dohad Municipality, Panch Mahals	..	..	98
11. Mr. Manilal H. Udani, Rajkot, Kathiawar	..	..	97
12. The Karbhari, Balasinor State, Reva Kantha	..	..	96
13. Mr. M. K. Desai, Broach	..	..	90
14. Mr. A. P. Trivedi, Jalia Diwani, Bhavnagar	..	..	57
15. Mr. C. A. Pandya, LL.B., Borsad, Kaira	..	..	50

List of Honorary Correspondents in the Konkan.

1. Mr. S. V. Raje, Sai, Kolaba	..	..	232
2. Mr. M. B. Lalaji, District Deputy Collector, Thana	..	..	101
3. Mr. R. K. Karandikar, President, Taluka Local Board, Chiplun, Ratnagiri	..	..	100
4. Mr. R. D. Nadkarni, Head Master, High School, Ratnagiri	..	..	100
5. Mr. P. M. Dalal, Dahanu, Thana	..	..	98
6. Mr. M. M. Save, Chinchni, Thana	..	..	70
7. Professor H. L. Kaji, M.A., B.Sc., F.S.S., I.E.S., Sydenham College of Commerce and Economics	..	..	27*

* Actually Professor Kaji returned particulars for 50 families. But as 23 of these were from Bombay City, they were, for the reasons given above, excluded.

List of Honorary Correspondents in the Deccan.

1. Mr. P. B. Bhalerao, Parner, Ahmednagar	102
2. Mr. D. R. Gadagkar, Mudhol, S.M.C.	100
3. Mr. N. G. Datar, Jamkhandi, S.M.C.	100
4. Mr. N. L. Joshi, Head Karkun, Chopda, East Khandesh	100
5. Mr. Budhamal Kevalchand, Nasik	100
6. Mr. L. S. Ohaudhari, B.A., LL.B., Jalgaon	100
7. Mr. V. R. Kulkarni, Nasirabad, East Khandesh	98
8. Mr. S. N. Deshmukh, Vice-President, Taluka Local Board, Shevgaon, Ahmednagar	97
9. Rao Saheb A. K. Kulkarni, B.A., Deputy Collector, Ahmednagar	95
10. Mr. K. G. Deshpande, B.A., Shirgaon, Satara	94
11. Mr. L. K. Kirloskar, Kirloskarwadi, Satara	56
12. Mr. R. G. Gharpure, Baramati, Poona	51
13. Mr. G. Bhalerao, Amalner, East Khandesh	50
14. Mr. S. E. Ghanta, Lonavla, Poona	50
15. Mr. M. V. Ghore, LL.B., Ahmednagar	49
16. Mr. A. R. Ranade, Jalgaon	48
17. Mr. N. G. Mujumdar, Sholapur	19

List of Honorary Correspondents in the Karnatak.

1. Mr. V. V. Chitrao, Nidoni, Bijapur	202
2. Mr. T. S. Kallapur, Bagalkot, Bijapur	101
3. Mr. L. Y. Ankalgi, Bail-Hongal, Belgaum	100
4. Mr. N. W. Hingolkar, Gadag, Dharwar	101
5. Mr. S. S. Mangsulli, Athni, Belgaum	100
6. Rao Bahadur Venkatesh Srinivas Naik, Ranebennur, Dharwar	100
7. Mr. S. M. Mali, B.A., LL.B., Bail-Hongal, Belgaum	100
8. Mr. H. P. Suryavanshi, B.A., LL.B., Dharwar	99
9. Mr. K. G. Kalghatgi, Dharwar	96
10. Mr. V. A. Desai, Belgaum	79
11. Mr. V. P. Wagle, Hubli	50
12. Mr. M. S. Kulkarni, Gadag-Bettigeri, Dharwar	50
13. Mr. R. P. Pandit, M.A., LL.B., District Deputy Collector, Dharwar	49
14. Mr. M. S. Sinhasan, Chief Officer, Guledgud Municipality, Bijapur	48
15. Mr. V. S. Phadnis, Khanapur, Belgaum	45

List of Honorary Correspondents in Sind.

1. Mr. C. Judd, Bar-at-Law, Sehwan, Larkana District	150
2. Mr. Hotchand Dayalal Jagthani, Hyderabad	105
3. Mr. H. Dharmadas, Larkana	101
4. Mr. Mahamad Hashimali, Kandiaro, Navabshah	101
5. Mr. Dwarkadas Gyanchand, Shikarpur	101
6. Sheth Lalchand Tekchand, Shikarpur	100
7. Mr. Muthram Valiram, Superintendent of Census, Khairpur State	100
8. Mr. Aildas Madhavdas Prithiani, Nasirabad, Larkana	100
9. Mr. T. A. Fernandez, Deputy Collector, Sukkur District	99
10. Mr. Asandas Lilaram, Navabshah	76
11. Mr. Daryadinomal Nanikram, B.A., Resident Magistrate, Mehar, Larkana	67
12. Mr. Jethanand Thanwardas, LL.B., Jacobabad	50
13. Mr. Hiranand Ramchand, B.A., Jacobabad	49
14. Mr. Tekchand Hassansing, Tandò Adam, Navabshah	35
15. Mr. Melhumal Kungulmal, B.A., Mirpurkhas	33

5. The correspondents were particularly warned not to select their families, since any kind of selection would vitiate the results. They were asked to take either a whole village, or definite quarter of a village, or the whole of some street or quarter of a town, and then give particulars for every family in the area chosen. For the most part this direction seems to have been well followed. And no case has been noticed of obvious selection of such a kind as to clearly vitiate the results, *e.g.*, deliberate selection of poor families, or specialized occupations.

6. One thing I should like to emphasise and that is—that the picture presented in this study is likely to have erred in the direction of giving a gloomy view of economic conditions rather than a rosy one. When anyone is asked for particulars of his financial position human nature will almost invariably induce him, sometimes unconsciously, to make it out worse than it is. The following extract from a letter of one of the Honorary Correspondents bears out this point:—

7. "It was impossible to glean full particulars of agriculturists for the reason that these folk took me to be an Income-Tax Assessing Officer and supplied me with particulars which if put on paper would give any one an exaggerated notion of their poverty. The children of these people were literally loaded with gold and silver jewellery and their women folk were clad in fine silk saris which any ordinary middle class woman would envy. This was chiefly noticeable in the black soil villages of this district."

8. The letter quoted, however, raises another point; and that is that the bulk of the returns are not of agricultural conditions, but of conditions in small mofussil towns. Some examples are given later of the occupations of the persons included in some of the better-filled books. The occupations are mostly small shopkeepers, clerks, artisans, and the like, with a fair number of professional men and well-to-do Landholders and Moneylenders, and a fair number of labourers and domestic servants. The small shopkeeper, the artisan, the village accountant, and the lower grade Municipal clerk may be said to occupy about the middle point in the picture. But these are possibly just about the true average or middle point of the social and economic life of the small mofussil town. The petty shopkeeper in a small town or moderate-sized village has only a trivial turnover in the year. Whether rightly or wrongly he was almost always treated as having an income below the taxable minimum for Income-tax when that minimum was Rs. 1,000 per annum. The income of the blacksmith and the carpenter will be slightly lower again. The accountant and lower grade clerk draw salaries from Rs. 20 to Rs. 40 per month. And all these classes handle a good deal less money in the course of a year than does the small cultivator with ten or twenty acres of good land. There is not in the small towns any great class of Industrial labourers. A perusal of the occupation lists, following paragraph 48 will, I think, satisfy the reader that the general labouring classes of the small town are sufficiently represented, as well as the well-to-do landlord or bigger trader.

9. It will also be seen that the Rural returns give the impression of a slightly lower level of economic life than the Urban returns. But I am not fully satisfied that this is genuine and is not due to the causes outlined in the letter quoted above.

10. The form of the slip on which the details of the family income and expenditure were collected was as follows:—

Serial No. of Family	Locality.
Religion	Caste.
Occupation of Head of Family	
Number of members—Adult Males	Adult Females
Children	Total
Income of all members combined from all sources in one year Rs.	
Average expenditure during one year on—	
Ra.	
1. Rental	8. Ceremonies
2. Food	9. Amusements
3. Clothing	10. Travel
4. Furniture	11. Luxuries
5. Education	12. Charities
6. Servants	13. Taxation
7. Doctor's fees, etc. ..	Total
Ra.	
Balance available for investment	
Is the family now indebted to money lenders?	

11. The following were the instructions:—

"ADULT" means in the case of males 16 years and over, and in the case of females all who are living or have lived with a husband, or have attained 16 years.*

* In the end no distinction was made in the matter of the age of members of the family.

"INCOME" means Net Income only, after deducting cost of cultivation, business expenses, etc., but not taxation which is provided for under Expenditure.

"RENTAL" means actual amount paid, or normal rental if house owned; but not rent of business premises, which should be deducted from Income as part of business expenses.

"FOOD" includes drinks and also expenses of entertaining guests otherwise than for Ceremonies. In the case of Cultivators who use part of the produce of their crops and cattle for domestic consumption the value of the produce so consumed should be added both to Income and "Food".

"CLOTHING" includes money spent on toilet apparatus, soap, artificial teeth, boot polishes and spectacles.

"FURNITURE" includes all moveable property required for household use, cost of fuel, petty repairs to building or its contents, oil or other form of lighting and bedding.*

*In Western countries when enquiries of this kind are made there is usually a main head for "Fuel and Lighting". And such a main head might be necessary in an enquiry in the largest Indian Cities. But the present enquiry is entirely limited to mofussil, where the cost of fuel and lights is very small. Fuel is usually cowdung cakes, the dung collected at odd moments by the women and children and made easily into cakes which are plastered on walls or rocks to dry. Lamps are very small and inefficient, and the hour for going to bed very early. In some of the families examined in towns like Dharwar, Nasik, etc., the expenses under this head might be appreciable. And this is one of the reasons why the percentages under "Other Compulsory Expenditure" are usually fairly high in the classes with higher income. In the classes with lowest income the actual expenditure on this head must be very small, and in villages almost negligible.

"SERVANTS" includes Washerman's and Barber's charges, and Water charges other than Municipal Taxation.

"CEREMONIES" includes domestic and temple religious expenditure, cost of entertaining guests at times of Ceremonies, and cash payments to guests and relatives at such times,—but not charities, nor the cost of pilgrimages.

"TRAVEL" does not include journeys for business, which are treated as part of business expenses, but includes the cost of pilgrimages, both the expense of getting there and back, and also amounts spent at the shrines visited.

"TAXATION" includes all kinds of direct taxation both Government and Municipal.

"LUXURIES" includes cost of private carriages (other than pay of Coachman), smokes, recreation expenses,* post and telegram charges, newspaper subscriptions, and one-tenth of the amount of money spent on jewellery.

*This was an oversight. Recreation expenses should have been taken to item 9, Amusements.

"AMOUNT AVAILABLE FOR INVESTMENT" includes nine-tenths of the amount spent on jewellery, all money spent on purchase of immoveable property, or erection of buildings, and payments to Insurance Companies.

To the Question—"IS THE FAMILY INDEBTED" it was directed that simply "Yes" or "No" was to be entered, and that indebtedness does not include simply ordinary goods taken on credit.

It was further directed that if any important items of expenditure, such as payment of interest to money-lenders or expenditure on law-suits, was noticed in the case of any family, the item and amount should be entered in the margin of the slip.*

*The item "payment of interest" (otherwise than on business loans) was an omission from the original slip, where it should have appeared as a regular item. Many of the most careful correspondents made entries in the margin for this type of expenditure. In a few cases, where a family is more or less permanently involved in law-suits, expenses of law-suits were entered in the margin.

12. For the Tabulation of the results four Tables were designed. The figures were abstracted separately for each return (i.e., the book or books sent in by each correspondent) and compiled for the purposes of this Appendix by Natural Divisions.

13. In all Tables the unit is the family.—"Urban" means "from localities having a population of 10,000 or over. "Rural" means "from localities having a population of less than 10,000. "Mixed" means that the return in question contained families from each type of locality.

14. Table I gives the annual net income by Classes, i. e., the number of families in which the *per capita* income, as stated, falls within certain class limits. The *per capita* income is obtained by dividing the net income of the family by the number of members in that family, without distinction of age or sex. It should be noted that where, as often, there is more than one wage earner in a family, the combined income of all wage earners is taken as the family income.

15. A perusal of Table I and the percentages in I-B will show that, except in the Konkan the commonest class is Class IV, the median value of which is Rs. 100 per head per annum. The Sind class figures show a slightly higher type of income than those of the Deccan, Karnatak or Gujarat. The Konkan figures are of quite a different character from the others. Out of 728 families no less than 99 are shown as having *per capita* incomes of less than Rs. 25 per annum. There were only 7 Konkan returns; and of the 99 families in question 62 occur in one return from Sai in the Kolaba District and 29 in another return from villages near Chiplun.

16. An analysis of the 62 in the first case gives the following by castes and by a more detailed classification :—

Caste.	Per capita income per annum.*			
	Below Rs. 10	Rs. 10—15	Rs. 15—20	Rs. 20—25
Agri	4	26	10
Maratha	1	2
Nhavi	1	....
Chambhar	1	1	1
Katkari	2	6	2	1
Mahar	2	2

* Incomes exactly at Rs. 10, Rs 15, and Rs 20 come into the next class in this Table. Thus Rs. 10—15 means Rs. 10 (exact) to Rs. 14·9. Incomes of exactly Rs. 25 are not, therefore, included at all.

The Katkaris are of course exceedingly poor; and, as they supplement their food supplies by wild fruits and roots, it is possible that the *per capita* income is really as low as this. Even so some of Mr. Raje's Katkari families are shown as living on income that is almost incredible, e.g., 1 adult male, 2 adult females, 4 children, total 7 persons, net income (total) per annum Rs. 60 or Rs. 5 per month, giving from 10 to 11 annas per month for each member. The village as a whole is mainly composed of Agris, and these are shown as receiving incomes varying from Rs. 12½ to nearly Rs. 200 *per capita* per annum.

17. Mr. Karandikar's return shows 29 families with *per capita* incomes below Rs. 25. These are from villages in the Chiplun Taluka, and the families are mainly Mahars, and poor Musalmans, with a few Kunbis.

18. Generally speaking the Konkan returns are more from Rural and less from Urban localities than the returns from the other Natural Divisions. And this largely causes the lower level of net income for Table I. In all the Natural Divisions there is a tendency for the Rural families to show a lower level of income.

19. Excluding a few returns in which it was impossible to fix a position the number of cases in which the greatest numerical weight falls in each of the classes is as follows. The method adopted was a rough one. Where any one class contained a definitely larger number of families than any other it was counted as 1; where two adjacent classes contained approximately the same number as one another but each more than any other class it was counted as ½ to each class; and where three adjacent classes contained approximately the same number the middle class was counted as 1. The few excluded returns are those in which there were a few families only in each of a long series of classes.

	Class II.	Class III.	Class IV.	Class V.	Class VI.
Rural	5½	6	10½	....	....
Urban	1	4½	24	5½	....
Mixed	½	4	1½	2	....

Of the 10½ cases of Rural returns in which the greatest weight falls in Class IV 5 occur in Sind.

20. In all other Natural Divisions there were more Urban than Rural returns. But in the Konkan out of seven returns and 728 families only 1 return and 100 families were from an Urban locality.

21. Nevertheless, even after making allowances for this, there were no cases in which returns from the other three Natural Divisions showed such sediments of poverty in any one locality as those of Messrs. Raje and Karandikar. This is best showed by the following:—

Division.	Type of Locality.	Total number of		Number with <i>per capita</i> incomes below Rs. 25.	
				Returns.	Families.
Gujarat ..	Urban	11	1,020	6	10
	Rural	4	358	1	2
Konkan ..	Urban	1	100	1	2
	Rural	5	601	5	99
	Mixed	1	27	1	1
Deccan ..	Urban	9	565	3	5
	Rural	6	544	4	23
	Mixed	2	200	2	4
Karnatak ..	Urban	8	645	3	8
	Rural	3	326	2	15
	Mixed	4	349	2	17

22. An analysis of the *per capita* incomes of employees of Messrs. Kirloskar Bros. from Kirloskarwadi, Satara, may be of interest. A few cases of families consisting of only 1 adult

male have been excluded. All the families shown are therefore genuine families, even though in some cases there were no children.

					Management.	Clerical and Foremen.	Skilled Labour.	Unskilled Labour.
Class	I—Rs.	0—25	..	..	....	....	....	....
Class	II—Rs.	25—50	..	..	....	....	1	3
Class	III—Rs.	50—75	..	..	....	....	6	2
Class	IV—Rs.	75—125	..	..	....	4	7	2
Class	V—Rs.	125—175	..	..	....	6	6	2
Class	VI—Rs.	175—225	..	..	....	6	1	....
Class	VII—Rs.	225—275	..	..	....	2	....	....
Class	VIII—Rs.	275—325	..	..	1	....	....	....
Class	IX—Rs.	325—375	..	..	1	1	....	....
Class	XVIII—Rs.	775 and over	..	..	1	....	....	....

It would seem that approximate position of the normal *per capita* income for an average sized family is—Clerical and Foremen Rs. 175, Skilled Labour Rs. 100, and Unskilled Labour Rs. 70.

23. The following is an analysis of some Railway servants returned from Lonavla. Excluding families consisting of only 1 adult male there are 26 families returned, of which 7 are Brahmans, 1 Mahomedani and 18 middle class Hindu Castes,—Maratha, Shimpi, Mali, etc. :—

Class	III—Rs.	50—75	..	..	..	..	1
Class	IV—Rs.	75—125	..	..	..	..	7
Class	V—Rs.	125—175	..	..	..	..	6
Class	VI—Rs.	175—225	..	..	..	..	7
Class	VII—Rs.	225—275	..	..	..	..	3
Class	IX—Rs.	325—375	..	..	..	..	1
Class	XII—Rs.	475—525	..	..	..	..	1

24. In Professor Kaji's returns there are 25 families of cultivators from two villages in the Ratnagiri District. Of these 19 are Brahmans and 6 Kunbis. A few of the Brahmans are shown as having a second occupation in addition to agriculture. The analysis of incomes is as follows :—

Class	I—Rs.	0—25	..	..	..	..	2
Class	II—Rs.	25—50	..	..	..	..	7
Class	III—Rs.	50—75	..	..	..	..	2
Class	IV—Rs.	75—125	..	..	..	..	5
Class	V—Rs.	125—175	..	..	..	..	5
Class	VI—Rs.	175—225	..	..	..	..	3
Class	VII—Rs.	225—275	..	..	..	..	1

25. Of purely agricultural *per capita* incomes we can take the following from a return by Mr. M. M. Save, from villages near Chinch, Thana District. No family is included unless the occupation is entered as Agriculture pure and simple :—

Class	I—Rs.	0—25	..	..	..	..	3
Class	II—Rs.	25—50	..	..	..	..	24
Class	III—Rs.	50—75	..	..	..	..	11
Class	IV—Rs.	75—125	..	..	..	..	11
Class	V—Rs.	125—175	..	..	..	..	3
Class	VI—Rs.	175—225	..	..	..	..	1

26. Perhaps the most interesting] of all the returns is that of Mr. V. V. Chit Rao, since it presents a picture of apparently a complete purely agricultural village, namely Nidoni in the Bijapur District. The following are the occupations of the heads of families :—

Agriculture only	..	..	..	..	88
Agriculture and trade	..	..	..	..	14
Agriculture and labour	..	..	..	..	27
Agriculture and begging	..	..	..	..	5
Agriculture and Village officer	..	..	..	..	2
Sheep rearing	..	..	..	..	12
Village servant	..	..	..	..	3
Trade	..	..	..	..	9

Priest and begging	..	..	..	4
Begging	..	..	..	3
Artisans	..	..	..	4
Artisan and Labour	..	..	..	2
Labour	..	..	..	25
Labour and trade	..	..	..	1
Prostitute	..	..	..	1
Not stated	..	..	..	2
				202

The following is the analysis of *per capita* incomes in this village:—

Class I—Rs. 0—25	..	..	..	14
Class II—Rs. 25—50	..	..	..	30
Class III—Rs. 50—75	..	..	..	64
Class IV—Rs. 75—125	..	..	..	83
Class V—Rs. 125—175	..	..	..	5
Class VI—Rs. 175—225	..	..	..	2
Class VII—Rs. 225—275	..	..	..	4

27. The four families in Class VII are an agriculturist (single adult male); a Lingayat (occupation not stated, one adult male and one adult female); a Priest and Beggar (single adult male); and the Prostitute (single adult female).

28. Reasons are given below (in the discussion to Table II) for thinking that the Incomes shown by Mr. Chit Rao are—as average Incomes over a long term of years—understated. But that is additional evidence for the deduction that even in this purely agricultural village in a tract liable to constant famines the most frequently recurring type of *per capita* Income is not below Rs. 70.

29. On the whole after making allowances for the irregularities introduced by the differences in the types of locality selected it may be inferred that in the Presidency proper the most common level of *per capita* income is in Urban localities about Rs. 100, and in Rural localities about Rs. 75 subject however to the doubts expressed elsewhere regarding Rural conditions. But there are a few castes in which many families are very much poorer, and in almost castes there are numerous instances of much richer families in a fair number of cases running up into four figures *per capita per annum*.

30. In Sind alone there were 7 Urban, 6 Rural, and 2 Mixed returns. The number of cases with a definite selection for any one class were:—

	Class III.	Class IV.	Class V.	Class VI.
Urban	....	2	4	1
Rural	1	5	....	....
Mixed	$\frac{1}{2}$	$\frac{1}{2}$	....	....

The prevalent types are therefore slightly higher than in the Presidency, being about Rs. 100 for Rural and Rs. 140 for Urban localities.

31. In a study of this nature the Arithmetic mean (usually called the “average” in popular parlance) would be a misleading type of average to take, because the long tail of high value classes containing a few families in each would result in the Arithmetic mean coming out considerably higher than the position of the most frequently recurring Income. Thus in the Konkan in Table I, taking the value of Class I as Rs. 20, and of Class XVIII as Rs. 900 (these being values justified by an inspection of the returns), and for all the other Classes taking the median value of the Class Interval (e.g. in Class II Rs. 37.5; in Class III Rs. 62.5; in Class III Rs. 100, and so on), the Arithmetic mean works out at Rs. 99.32,* whereas the most commonly recurring type of Income is between Rs. 25 and Rs. 50.

32. A third type of average is the Median, that is to say the Income of that family which has an equal number of families above and below it (in this case the mean of the two median families, since the number examined is an even number). In Classes I and II together there are 334 families, and in Classes III to XVIII inclusive there are 394 families. We have therefore to take 30 families from Class III and add them to Classes I and II, which will leave 364 in each half. If we take $\frac{30}{129}$ from Class III to get the median family we have to take the $\frac{30}{129}$ from the Class interval Rs. 25 (Rs. 75 minus Rs. 50) to get the median Income, which works out at Rs. 55.81.

* This is obtained by multiplying the number of families in each Class by the Class Value as stated, summing the whole of the products, and dividing by the total number of families examined.

33. We therefore have the following averages for the Konkan Incomes :—

Position of most frequently recurring type	..	--	..	..	..	37.50
Income of the two middle families	..	--	..	..	..	55.81
"Average" (Arithmetic Mean) Income	..	--	..	..	..	99.32

34. It is possible (but by no means probable) that, if we could secure particulars for a very much larger number of families than the number examined in this study, the Arithmetic Mean and the Median would not show such wide divergence from the most frequently recurring type. *But they would always be higher than it, and the Arithmetic Mean would always be higher than the Median.**

35. I have now to advert to Table V. This Table was taken out to meet a possible criticism that a *per capita* income somewhat higher than the commonly accepted figure might have been obtained owing to the correspondents, either wilfully or accidentally, selecting families containing less than the average number of members. Table V was therefore taken out as a check. It shows the distribution of the families examined according to the number of members in each. We have fortunately an exact comparison available in the discussion of families contained in Appendix V; and a glance at that Appendix will show at once that the families examined in the present enquiry are fully normal in size. The possible criticism that had been anticipated is therefore averted.

36. Table II was taken out as a sort of check on the quality of the work. Obviously the normal annual expenditure can only be very much higher than the normal annual income if a considerable capital is being continuously expended, which in India would usually take the form of sale or mortgage of lands or jewelry. Certainly some such cases must occur.† But the occurrence of a large number of families in the Class having expenditure about double income would usually mean either a considerable understatement of income or a considerable overstatement of expenditure. Of the 102 families in the Karnatak shown in the top or worst class 51 occurred in Mr. Chitrao's Rural return from the Bijapur District.

37. Mr. Chitrao's work was most careful and complete, and an examination of these cases in detail shows that they are not due to carelessness. In no case does he make the expenditure of any person such as a labourer, who has no security to offer for a loan and no capital to spend, amount to anything appreciably above his income. On the other hand many of his Agriculturists are shown as spending hundreds, and in a few cases thousands per cent of their income. What has happened is this. Mr. Chitrao's enquiries come on the top of a series of bad years, and the cultivators have been spending savings, and selling or mortgaging land. In several cases the income is specifically mentioned as being "the mean of three years". One of his families which is shown as spending far in excess of income is also noted as having money *lent* out at interest. This state of things is possible only in a tract like Bijapur, where good years come seldom, but when they do come bring huge returns. The agricultural returns from the Konkan naturally do not show these cases of expenditure far in excess of income, because in the Konkan there is always at least a fair crop, and the difference between the worst year and the best year is fairly narrow. Really speaking, to get approximately correct results from family budgets in a tract like Bijapur it would be necessary to state both income and expenditure for a term of at least ten years, in order to get them to balance out reasonably.

38. Table III is a simple table based on the question at the foot of the slip. It shows simply the numbers and proportion of families with various classes of income who are in debt to money-lenders. The proportions are high, but not higher than would be expected in India, where the majority of householders (especially in the Mofussil) are either borrowers or lenders, and often both.

39. In relation to this Table I quote the following note by Dr. H. H. Mann, to whom I had shown the figures :—

"I think your figures understate the proportion of families who are in debt. At least my figures in the Deccan, under village conditions, place the proportion of indebted families higher. But when so much outcry about indebtedness is made, it ignores what is almost a necessary condition of agricultural life everywhere, and particularly in a region of peasant proprietors. It is not the extent of indebtedness which ought to worry us (for this is a part of the agriculture without capital, which is the essence of peasant proprietorship) but the high rate of interest which is charged. In the two villages I have carefully studied this came to an average of just under 20 per cent. in the west of the Poona District, and 23 per cent. in the east of the same District."

* This is a non-controversial fact, the reason for which cannot be given here, as it is too technical. But both the fact and the reasons for it can be ascertained by reference to any text-book of Statistical Theory. The fact may be stated as follows. When dealing with a number of individual cases of any variable divided up into classes, if the most frequently recurring type is situated in any of the lower classes, and the whole series shows a long tail of high value classes with even only a few cases in each, the Median is always higher than the most frequently recurring type and the Arithmetic Mean is always higher than the Median.

† One careful correspondent noted against a family showing expenditure for above income that the family was living by raising loans, and spending capital.

40. Table IV is in many ways the most important of all. It is an attempt to ascertain the percentage distribution of expenditure under various heads.

The heads chosen were—

Compulsory.

1. Food.
2. Clothing.
3. Rental.
4. Ceremonies, Charity, etc.
5. Other compulsory.

Voluntary.

6. Education.
7. Doctors fees, medicine.
8. Other voluntary.

Of this list Heads 1 and 2 explain themselves. They were also, in contradistinction to all other Items on the slips, filled up for every family in every return.

41. Head 3, *Rental*, was to include actual rental where dwelling rented, or normal rental, where dwelling owned. But this rule was not in all cases observed. A good many books showed rental "nil" in all cases of owned houses, which of course covers the cases of the majority of cultivators. On the other hand there really are cases in which a domicile is not only not rented but would be more or less unrentable. For instance Mr. C. N. Joshi's return from the Panch Mahals contained a large number of Labhana (Lamani) families; and since these mostly reside in huts in settlements of the Caste away from villages, and anyone can construct his own hut, it is probable that Mr. Joshi's "nil" entries for the rental of these Labhanas is in accordance with facts.

42. Nevertheless the omission to record normal rental in some cases has resulted in the percentage expenditure under this head coming out somewhat too low in the Table. And in order, therefore, to test the average expenditure under this head, I give below the percentages obtained on selected individual returns, in which rental was filled up for all or almost all families.

43. On the other hand, before giving the figures, it is desirable to quote the following note by Dr. H. H. Mann:—

"I think that in all villages owned houses should be entered as without rent. In practice, if the house is not lived in, it falls to pieces, and is not rented to anyone else. It is in fact *unrentable*. I think, therefore, that your observers, who put the rent as *nil* in villages, were usually right. Hence, so far as villages are concerned, I do not agree with you that the percentage expenditure on rental is too low. But this remark does not of course apply to the semi-urban conditions of a Taluka town."

Samples of percentage expenditure on rental in returns in which rental was entered for all or almost all families.

Natural Division.	Return.	Percentage expenditure on Rental alone.			
		Classes I to III.	Classes IV and V.	Classes VI to IX.	Classes X to XVIII.
GUJARAT	Mr. M. K. Desai, Broach, <i>Urban</i>	3.4	2.8	1.5	2.0
	Mr. M. M. Shah, Jhalod, Panch Mahals, <i>Urban</i>	4.5	4.7	6.0	No families.
	The Karbhari, Balasinor State, <i>Urban</i>	3.8	3.6	3.1	No families.
	The Thandar, Lodhika Thana, Halar Prant Kathiawar, <i>Rural</i>	1.7	1.7	.5	No families.
KONKAN	Mr. M. B. Lalaji, District Deputy Collector Thana, <i>Rural</i>	2.4	2.8	1.2	.6
	Mr. R. K. Karandikar, Chiplun, <i>Rural</i>	3.0	4.6	3.7	Only one family.
	Mr. R. D. Nadkarni, Ratnagiri, <i>Urban</i>	4.7	6.0	6.2	5.5
DECCAN	Mr. R. G. Gharpure, Baramati, Poona, <i>Urban</i>	6.5	7.8	15.4	No families.
	Mr. L. K. Kirloskar, Kirloskarwadi, Satara, <i>Rural</i>	.6	.8	.8	One family.
	Mr. D. R. Gadagkar, Mudhol, <i>Mixed</i>	8.3	0.9	8.4	5.1
	Mr. N. L. Joshi, Chopda, East Khandesh, <i>Urban</i>	5.2	3.4		Only a few families.
	Mr. Budhammal Kevalechand, Nasik, <i>Urban</i>	4.8	5.2	4.4	5.0

Natural Division.	Return.	Percentage expenditure on Rental alone.			
		Classes I to III.	Classes IV and V.	Classes VI to IX.	Classes X to XVIII.
KARNATAK	Mr. S. E. Ghanta, Lonavla, Poona, <i>Urban</i> ..	7.6	6.8	9.0	16.1
	Mr. M. V. Ghore, Ahmednagar, <i>Urban</i> ..	13.3	9.7	9.2	10.1
	Mr. V. R. Kulkarni, Nasirabad, East Khandesh, <i>Urban</i> ..	5.2	4.4	3.2	3.3
	Mr. M. S. Kulkarni, Gadag-Bettigeri, <i>Urban</i> ..	5.4	5.0	4.4	No families.
	Mr. S. S. Mangsulli, Athni, Belgaum, <i>Mixed</i>	4.0	4.4	4.9	3.1
	Mr. K. G. Kalghatgi, Dharwar, <i>Urban</i> ..	3.9	5.0	3.3	3.5
	Rao Bahadur V. S. Naik, Ranabennur, <i>Mixed</i> ..	5.1	3.7	3.4	1.5
	Mr. V. S. Phadnis, Khanapur, Belgaum, <i>Rural</i> ..	4.5	3.2	3.2	3.3
	Mr. V. V. Chitrao, Nidoni, Bijapur, <i>Rural</i> ..	.6	.6	1.0	No families.
	Mr. Asandas Lilaram, Navabshah, <i>Rural</i> ..	6.7	5.2	4.6	3.6
SIND	Mr. C. Judd, Bar-at-Law, Sehwan, Larkana, <i>Mixed</i> ..	4.1	4.7	5.1	3.5
	Mr. Jethanand Thanvardas, LL.B., Jacobabad, <i>Urban</i> ..	No families.	6.5	4.4	2.9
	Mr. Mahomed Hashimali, Kandiaro, Navabshah, <i>Rural</i> ..	3.7	3.4	4.7	7.2
	Mr. Tekchand Hassansingh, Tando Adam, Navabshah, <i>Urban</i> ..	10.4	9.3	10.0	4.8
	Mr. H. Dharmadas, Larkana, <i>Urban</i> ..	3.3	1.8	2.6	2.7

44. The inclusion of Head 4, *Ceremonies, Charity, etc.*, under "Compulsory" would perhaps seem strange to a Westerner. In India expenditure on Ceremonies is important and unavoidable. In another Appendix a few samples of expenditure on Ceremonies are given. Expenditure on Charity occupies much the same position as expenditure on Church offertories would occupy in a similar study in England. It is not compulsory to the same extent as expenditure on Ceremonies. But it is much the smaller of the two items in this Head, and it was thought best to keep them together, largely because ceremonial occasions are the principal occasions on which money is given in Charity. Expenditure on this head does not appear against all families in all returns. And in many cases, instead of stating an annual average sum, the amount entered, especially against Item 8, Ceremonies, on the slip was clearly a special amount spent in a particular year. Nevertheless in the case of any return in which this method was adopted it follows that these special expenses when worked out as an average percentage on all the families in a Class will for the most part produce the required result, namely, an annual average for the whole number. Consequently the percentage expenditure on this Head will be seen to keep within fairly well-defined limits and to obey fairly constant laws.

45. The items included under Head 5, *Other Compulsory*, are Furniture (in the sense above defined, *i.e.*, including fuel and lighting and repairs to buildings) and taxation. These items Nos. 4 and 13 on the slips were rather irregularly filled up. In some books No. 4, Furniture, was only filled up for the richer families, although every family, even the poorest, must incur *some* expenditure on cooking utensils, bedding, etc. In many books taxation was very rarely entered. Undoubtedly the large majority of families in India are not directly taxed, *e.g.*, shopkeepers and artisans in non-Municipal towns and villages, whose income does not rise to the Income Tax level, very many of the poorer families even in Municipal towns, and practically the whole of the labouring classes. Some doubt may also have been felt as to the treatment of assessment on land in the cases of cultivators. Of course where the cultivator is a tenant, and the terms of the lease do not impose upon him the obligation to pay the assessment, the expenditure under this item falls upon him indirectly in the form of the enhanced rental. But it seems from the returns that a good many cultivators who cultivate their own land have not been entered as taxed, and in such cases it is to be inferred that the assessment has been treated as part of business expenses and deducted from the income. On the whole, except where the number of families in any class for any Natural Division are very few, the percentage on this Head works out well in spite of the above remarks,—keeping within defined limits and obeying constant laws.

46. Some sample returns are however given so as to enable the incidence of taxation to be better judged. The percentage incidence is given *on total net income and not on expenditure*, mainly because people are more accustomed to consider taxation on the income basis. If taken as a percentage on total expenditure the percentages would have been slightly lower in most returns and much lower in Karnatak No. I.

47. Here also, before giving the figures, it is desirable to mention the opinion of Dr. H. H. Mann. He states that assessment on land should have come into business expenses, and should not have been entered as part of expenditure at all. "Assessment is certainly not taxation in the ordinary sense, and if it is so considered it will lead to misunderstanding." He adds that where the samples include assessment under taxation the impression given is that the land-owning classes are more highly taxed in proportion to income than is really the case.

48. It should also be emphasised once again that only direct taxation is considered. It is not possible in a study of this kind to arrive at any idea of the incidence of indirect taxation.

SAMPLES OF TAXATION IN THE SOUTH DECCAN (SOUTHERN MAHRATTA COUNTRY).

A village near Mudhol town, and part of Mudhol town, mixed. Mr. D. R. Gadagkar.

Total number of families	..	..	..	..	100
Number of families in which occupation of head of family is recorded as —					
Agriculture and grazing	..	..	..	..	35
Clerical (including servants of the State)	..	..	..	..	32
Labour and service	..	..	..	..	16
Trade	..	..	..	..	2
Artisans	..	..	..	..	3
Professions	..	..	..	..	1
Begging or priest	..	..	..	..	4
Living on income	..	..	..	..	7
Number of families in which taxation bears the following percentage to total net income—					
No taxation	..	..	..	..	4
0— 1 per cent of income	..	..	..	..	42
1— 2 " " " "	..	..	..	..	24
2— 5 " " " "	..	..	..	..	7
5—10 " " " "	..	..	..	..	13
10—20 " " " "	..	..	..	..	7
Above 20 " " " "	..	..	..	..	3

In this return Land Revenue assessment has clearly been included under taxation.

SAMPLES OF TAXATION IN THE KARNATAK.

I.—Nidoni, Bijapur, purely rural. Mr. V. V. Chit Rao.

Total families examined	..	..	..	..	202
(The occupations for this return have already been given).					
Number of families in which taxation bears the following percentage to total net income—					
No taxation	..	..	..	..	62
0— 1 per cent. of income	..	..	..	..	24
1— 2 " " " "	..	..	..	..	17
2— 5 " " " "	..	..	..	..	54
5—10 " " " "	..	..	..	..	18
10—20 " " " "	..	..	..	..	21
Above 20 " " " "	..	..	..	..	6

In this very careful return Land Revenue assessment has been included, and the figures are most reliable, fractions of a rupee being given in many cases.

II.—Ranebennur Municipality, Urban. Rao Bahadur V. S. Naik.

Total number of families	..	..	..	..	100
Number for which occupation of head of family recorded as —					
Landholders	..	..	..	..	16
Clerical (including Government and Municipal services)	..	..	..	..	9
Trade	..	..	..	..	13
Artisans (weavers)	..	..	..	..	43
Labour	..	..	..	..	8
Begging	..	..	..	..	11

Number of families in which taxation bears the following percentage to total net income—

No taxation	..	..	..	..	4
0— 1 per cent of income	..	..	..	..	42
1— 2 " " " "	..	..	..	..	24
2— 5 " " " "	..	..	..	..	7
5—10 " " " "	..	..	..	..	13
10—20 " " " "	..	..	..	..	7
Above 20 " " " "	..	..	..	..	3

In this return Land Revenue assessment has evidently been entered under taxation, since all the cases of high percentage are Landholders. The persons shown as "begging" are not wandering street beggars but religious beggars of Brahman caste.

III.—Khanapur, Belgaum District, Rural (small town). Mr. V. S. Phadnis.

Total number of families	..	..	..	..	45
Number for which occupation of head of family is recorded as—					
Private income (mainly Landholders with a few pensioners, priests, etc.)	..	..	..	..	26
Clerical (including Government servants)	..	..	..	..	7
Trade	..	..	..	..	1
Ordinary cultivators	..	..	..	..	6
Labour and service	..	..	..	..	5

Note.—In this return occupation is very exactly recorded, and many of the persons shown under "Private income" have more than one occupation, e.g., "Priest and receiver of profits from Service Watans and Money-lender."

Number of families in which taxation bears the following percentage to total net income—

No taxation	..	..	..	..	4
0— 1 per cent of income	..	..	..	..	8
1— 2 " " " "	..	..	..	..	5
2— 5 " " " "	..	..	..	..	8
5—10 " " " "	..	..	..	..	8
10—20 " " " "	..	..	..	..	8
Above 20 " " " "	..	..	..	..	4

Here also Land Revenue assessment has been included under taxation on the slip; and the instances of high taxation are the Landholders.

SAMPLES OF TAXATION IN SIND.

I.—Villages in Sukkur District, purely rural. Mr. T. A. Fernandez.

Total number of families examined	..	..	..	..	100
Number in which occupation of head of family recorded as—					
Agriculture	..	..	..	..	55
Zemindar ..	..	..	..	..	17
Zemindar and trade	..	..	..	..	3
Agriculture and trade	..	..	..	..	5
Zemindar and Government service	..	..	..	..	2
Agriculture and Government service	..	..	..	..	9
Government service	..	..	..	..	5
Artisans	..	..	..	..	2
Pensioners	..	..	..	..	1
Agriculture and labour	..	..	..	..	1

Number of families in which taxation bears the following percentages to total net income—

No taxation	..	..	..	..	2
0— 1 per cent of income	..	..	..	..	4
1— 2 " " " "	..	..	..	..	9
2— 5 " " " "	..	..	..	..	22
5—10 " " " "	..	..	..	..	35
10—20 " " " "	..	..	..	..	21
Above 20 " " " "	..	..	..	..	7

In this return agricultural assessment was definitely included under taxation.

II.—Larkana Municipality, Urban. Mr. H. Dharmadas.

Total number of families	..	..	..	..	101
Number for which occupation of head of family is recorded as—					
Living on income	..	..	..	..	7
Government and Municipal service	..	..	..	..	16

Professions..	..	..	..	..	..	6
Trade ..	..	..	..	..	..	53
Religion ..	..	..	..	..	..	1
Artisan ..	..	..	..	..	..	13
Agriculture	..	..	..	..	..	1
Labour and Service	..	..	..	..	..	3
Not stated	..	..	..	..	..	1

Number of families in which taxation bears the following percentage to total net Income :—

No Taxation	..	..	..	..	..	75
—2 per cent of income	..	..	..	..	..	9
2—5 „ „ „ „	..	..	..	..	..	12
5—10 „ „ „ „	..	..	..	..	..	4
10—15 „ „ „ „	..	..	..	..	..	nil
15—20 „ „ „ „	..	..	..	..	..	1

III. Navabshah, Rural (Small town): Mr. Asandas Lilaram.

Total number of families	76
--------------------------	----	----	----	----	----	----

Number in which occupation of head of family stated :—

Living on Income	..	..	..	..	..	8
Government Service	..	..	..	..	..	8
Trade ..	..	..	..	..	..	32
Agriculture	..	..	..	..	..	15
Artisans ..	..	..	..	..	..	8
Private service	..	..	..	..	..	4
Religion ..	..	..	..	..	..	1

Number of families in which taxation bears the following percentage to total Income :—

No Taxation	..	..	..	..	..	71
0—2 per cent of Income	..	..	..	..	..	3
2—5 per cent of Income	..	..	..	..	..	2

In this return Land Revenue Assessment has evidently not been included under Taxation.

49. Heads 6, *Education* and 7, *Doctor's fees*, etc., are easily intelligible and should have caused no misunderstanding. The percentages under these may therefore be accepted as approximately correct. The inclusion of 7, *Doctor's fees*, etc., under Voluntary may cause some surprise. But I think it is in accordance with Indian conditions, where household remedies are resorted to more than the modern West. In these matters one has to compare the Indian Mofussil of to-day with Europe in the time, say, of Queen Elizabeth; and I feel that at that period employment of doctors or purchase of medicines would hardly have been a compulsory head of expenditure.

50. Head 8, *Other Voluntary*, includes Servants, travel (otherwise, of course, than on business), pilgrimages, amusements, luxuries, postage, etc., and one-tenth of the cost of jewelry. The latter item was based on the idea that for the most part jewelry is an investment, but that thefts, breakages and losses prevent its being entirely so. The items on the slips covering this head were entered as *nil* in a very large number of families. But this is, I think, more or less correct, since many families certainly do not spend money on these things. Or if they do, for instance on postage and travel, the annual normal expenditure will be almost negligible. For most of the richer families entries were made, and in some of the returns evidently much care had been used. The percentages obey constant laws, though the limits are rather wide.

51. Mr. C. N. Joshi's Labhana families from the Jhalod Mahal in the Panch Mahals are worth studying. There were 26 families as follows :—

Per capita Income.

Class II—Rs. 25—50	..	4	Not in debt	..	..	7
Class III—Rs. 50—75	..	13	In debt ..	..	..	19
Class IV—Rs. 75—125	..	8				
Class VI—Rs. 175—225	..	1				

The picture presented by the percentage distribution of expenditure is:—

<i>Compulsory.</i>			<i>Voluntary.</i>		
1. Rental	..	0.0	5. Education	..	0.6
2. Food	..	59.9	6. Servants	..	2.5
3. Clothing	..	9.7	7. Doctor's fees, etc.	..	..
4. Furniture	..	6.4	9. Amusements.	..	..
8. Ceremonies and	}	1.9	10. Travel	..	..
12. Charity			11. Luxuries	..	3.4
13. Taxation	..	5.8			
14. Interest	..	13.8			
<i>Total, Compulsory</i>			<i>Total, Voluntary</i>		
.. 93.5			.. 6.5		

This seems to me a fair picture of the expenses of a Labhana, except that the percentage under Ceremonies is too low. The general cost of birth, marriage and death ceremonies must average out at more than 1.9 of the Income. And in the actual slips almost all the 1.9 falls under Charity. Mr. Joshi has shown a balance available for investment against most of these Labhana families, sometimes a large sum. I think that this will mostly be absorbed in the long run by the cost of ceremonies. Mr. Joshi is one of the correspondents who has entered Ceremonies only against the few families in whose case there had been actual expenses in some particular year. And although the percentage arrived at on his whole return works out fairly well under the Head 4 in the Table IV, the result is attained by certain items under ceremony for families other than these Labhanas.

52. For this Table the returns were divided into *Urban* and *Rural*. Mixed returns were taken to Urban. The four types of income adopted were Classes I to III of Table I, *i.e.*, families having a *per capita* income up to Rs. 75, Classes IV and V, *i.e.*, income from Rs. 75—175, Classes VI to IX, *i.e.*, income from Rs. 175—375, and Classes X upwards, *i.e.*, income above Rs. 375. These were chosen as giving four strata of society based on income. The choice of limits like this is necessary arbitrary. But Rs. 75 is well below the normal salary of the clerical class. Government Clerks start now on Rs. 35, and a family of husband, wife and one child on a salary of Rs. 35 per month means a *per capita* of Rs. 140 per annum. The first combined class is therefore typical of the working of poorer artisan class, the second of the lowest clerical and better artisan class, the third of the higher clerical, poorer professional, poorer trading classes, the four of the richer professional and richer trading classes.

53. The general laws which emerge from the percentage distribution in Table IV seem to be as follows:—

(1) The percentages of total expenditure under Food and Clothing fall steadily from poorest to richest classes.

(2) The percentage under Rental is variable, but on the whole does not perceptibly decrease or increase when passing from class to class.

(3) The percentages under all other heads rise steadily from poorest to richest, with the exception that the percentage under Education is often as high or higher in the third combined class (*per capita* income Rs. 175—375) than in the fourth combined Class (*per capita* income Rs. 375 and over).

(4) As between town and country the expenditure on food is usually (except in Sind) proportionately higher in the country at any rate in the two classes with *per capita* income below Rs. 175.

(5) Rental is definitely lower in the country.

(6) The following seem to be normal limits for percentages of expenditure under the different heads, taking town and Country together:—

	Poorest.		Richest.	
1. Food	..	68.0	..	36.5
2. Clothing	..	15.0	..	12.0
3. Rental	..	4.0	..	4.0
4. Ceremonies, Charity, etc.	..	4.0	..	11.5
5. Other Compulsory	..	3.0	..	10.0
<i>Total, Compulsory</i>		.. 94.0	.. 74.0	
6. Education	..	0.7	..	3.0
7. Doctor's fees, etc.	..	0.3	..	2.0
8. Other Voluntary	..	5.0	..	21.0
<i>Total, Voluntary</i>		.. 6.0	.. 26.0	

54. In the Tables which follow the number of families stated as examined for Table I holds good for Tables II and III also. When the number stated as examined for Table IV is compared with the number stated for Table I it will be found that the Deccan figure is 100 short. This is due to the exclusion of a whole book of 100 families, in which the details of expenditure seemed to give unreliable percentages. In the case of three other Divisions the number exceeds the number in Table I by from 1 to 3 families. This is due to the exclusion of a few individual families from Tables I to III and their inclusion in IV.

FAMILY BUDGETS—TABLE I—(A. ACTUAL FIGURES).

Annual Net Income by Classes.

[The unit is the family—and income means net *per capita* income of family. Net means after deducting business expenses. *Per capita* means total income divided by the number of persons in the family without distinction of age and sex.]

Class of <i>per capita</i> income.		Natural Divisions.				
		Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.
Total families examined ..		1,387	728	1,309	1,320	1,267
Class.	Rs.					
I ..	0—25	12	99	32	40	8
II ..	25—50	159	235	213	172	99
III ..	50—75	327	129	311	320	175
IV ..	75—125	441	111	329	377	321
V ..	125—175	218	58	151	154	226
VI ..	175—225	83	26	97	72	138
VII ..	225—275	57	13	52	55	86
VIII ..	275—325	27	12	29	28	37
IX ..	325—375	16	17	21	24	61
X ..	375—425	15	9	17	16	31
XI ..	425—475	2	4	8	13	17
XII ..	475—525	13	3	8	12	15
XIII ..	525—575	1	2	2	6	2
XIV ..	575—625	7	1	12	4	11
XV ..	625—675	1	2	6	3	3
XVI ..	675—725 .. ..	..	2	1	1	3
XVII ..	725—775	1	1	1	5	3
XVIII ..	775 and over	7	4	19	18	31

FAMILY BUDGETS—TABLE I—(B. PERCENTAGES).

[These are the percentages of the distribution by classes in Table I-A.]

Class.	Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.
I	0·9	14·6	2·5	3·0	0·6
II	11·5	32·3	16·3	13·0	7·8
III	23·5	18·7	23·7	24·3	13·8
IV	31·7	15·3	25·1	28·5	25·3
V	15·7	8·0	11·5	11·7	17·8
VI	6·0	3·6	7·4	5·5	10·9
VII	4·1	1·8	4·0	4·2	6·8
VIII	2·0	1·6	2·2	2·1	4·8
IX	1·2	2·3	1·6	1·8	3·0
X to XVIII	3·4	3·8	5·7	5·9	9·2

FAMILY BUDGETS—TABLE II.

Ratio of expenditure (as shown) to Income (as shown).

[This Table is intended only as a check.]

Percentage of Expenditure to Net Income.	Number of families.				
	Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.
188 per cent. and over	25	21	47	102	46
163 per cent. to 188 per cent.	9	8	36	49	31
138 „ to 163 „	35	19	61	64	55
113 „ to 138 „	140	82	198	190	166
88 „ to 113 „	740	433	675	648	568
63 „ to 88 „	336	145	235	197	306
38 „ to 63 „	90	13	50	56	82
13 „ to 38 „	9	3	5	8	10
below 13 per cent.	3	4	2	6	..

FAMILY BUDGETS—TABLE III.

Extent and distribution of indebtedness by Classes.

[“ In debt ” means definite loans from money-lenders, and not merely goods on credit.]

			Actual Numbers.				Percentages.			
			Classes I—III per capita income	Classes IV and V	Classes VI—IX	Classes X to XVIII	I—III.	IV and V.	VI—IX.	X— XVIII.
			Rs. 0—75.	Rs. 75— 175.	Rs. 175 —375.	Rs. 375 and over.				
Gujarat—										
Not in debt	234	398	143	38	47	60	78	81		
In debt	264	261	40	9	53	40	22	19		
Konkan—										
Not in debt	107	155	43	19	32	52	63	70		
In debt	227	143	25	8	68	48	37	30		
Deccan—										
Not in debt	212	226	132	48	38	47	66	66		
In debt	345	254	67	25	62	53	34	34		
Karnatak—										
Not in debt	246	328	120	63	46	62	67	81		
In debt	286	203	59	15	54	38	33	19		
Sind—										
Not in debt	24	389	228	102	22	53	70	88		
In debt	83	343	96	14	78	47	30	12		

FAMILY BUDGETS—TABLE IV.

Percentage distribution of expenditure by heads.

[Expenditure means normal annual expenditure.]

“Urban”—means from localities with population 10,000 and over.

“Rural”—the rest.

Other Compulsory.—Furniture, repairs, fuel and lighting, bedding, taxation and interest on loans.*Other Voluntary*.—Servants, travel (including pilgrimages), amusements, luxuries, one tenth of cost of jewelry, postage.*Gujarat.*

Main Head.	Detailed Head.	Urban.				Rural.			
		Classes							
		I to III.	IV and V.	VI to IX.	X to XVIII.	I to III.	IV and V.	VI to IX.	X to XVIII.
Compulsory	1. Food ..	67·8	61·5	47·5	40·6	72·1	65·3	53·6	(49·4)
	2. Clothing ..	16·9	16·9	15·0	13·2	13·1	12·1	12·1	(11·9)
	3. Rental ..	2·6	3·1	4·3	4·7	1·2	1·8	3·2	(2·0)
	4. Ceremonies, charity, etc. ..	4·6	4·8	8·6	11·8	3·6	5·1	9·4	(12·9)
	5. Other ..	3·3	5·3	9·6	9·9	5·3	7·3	6·9	(3·5)
	Total Compulsory ..	95·2	91·6	85·0	80·2	95·3	91·6	85·2	(79·7)
Voluntary	6. Education ..	1·4	1·9	3·8	2·5	0·5	0·7	0·8	(7·9)
	7. Doctor's fees, etc. . .	0·4	0·6	1·7	1·6	0·1	0·7	1·0	(1·5)
	8. Other ..	3·0	5·9	9·5	15·7	4·1	7·0	13·0	(10·9)
	Total Voluntary ..	4·8	8·4	15·0	19·8	4·7	8·4	14·8	(20·3)
Number of families examined ..		319	524	145	45	175	151	30	*2

* Number of families not sufficient to produce satisfactory results.

Konkan.

Main head.	Detailed head.	Urban and Rural combined (5 Rural, 1 Urban and 1 mixed books).			
		I to III.	IV and V.	VI to IX.	X to XVIII.
Compulsory	1. Food	65.9	58.9	47.5	39.7
	2. Clothing	10.8	9.8	8.4	7.2
	3. Rental	1.1	3.6	3.0	3.5
	4. Ceremonies, charity, etc.	6.9	5.9	8.7	5.4
	5. Other	3.5	6.2	9.0	10.5
	Total Compulsory	88.2	84.4	76.6	66.3
Voluntary	6. Education	0.6	2.0	3.2	2.8
	7. Doctor's fees, etc.	1.7	1.7	1.6	1.9
	8. Other	9.5	11.9	18.6	29.0
	Total Voluntary	11.8	15.6	23.4	33.7
Number of families examined		462	169	68	28

Deccan.

Main head.	Detailed Head.	Urban.				Rural.			
		I to III.	IV and V.	VI to IX.	X to XVIII.	I to III.	IV and V.	VI to IX.	X to XVIII.
Compulsory	1. Food ..	60.8	53.2	45.9	37.3	67.6	58.5	52.2	36.2
	2. Clothing ..	15.5	14.1	11.6	9.5	17.5	14.7	15.6	8.8
	3. Rental ..	6.5	5.6	6.3	6.9	1.5	4.7	2.7	5.7
	4. Ceremonies, charity, etc. ..	2.9	4.7	8.1	8.6	4.2	7.1	9.1	10.3
	5. Other ..	5.0	6.7	8.1	10.4	4.4	4.9	6.4	3.8
	Total Compulsory ..	90.7	84.3	80.0	72.7	95.2	89.9	86.0	64.8
Voluntary	6. Education ..	0.8	1.9	4.1	2.5	0.5	0.4	1.2	6.8
	7. Doctor's fees, etc. .	0.4	0.7	1.3	1.5	0.1	0.3	0.5	4.1
	8. Other ..	8.1	13.1	14.6	23.3	4.2	9.4	12.3	24.3
	Total Voluntary ..	9.3	15.7	20.0	27.3	4.8	10.1	14.0	35.2
	Number of families ..	222	265	132	46	326	174	37	7

Karnatak.

Main head.	Detailed Head.	Urban.				Rural.			
		I to III.	IV and V.	VI to IX.	X to XVIII.	I to III.	IV and V.	VI to IX.	X to XVIII.
Compulsory	1. Food ..	60·5	54·7	44·7	35·6	63·2	55·3	39·9	(31·8)
	2. Clothing ..	18·3	16·0	14·9	12·4	16·9	15·5	14·0	(9·4)
	3. Rental ..	3·1	3·5	3·6	3·6	1·1	0·9	2·6	(3·3)
	4. Ceremonies, charity etc. ..	5·7	7·2	9·3	13·2	6·8	7·4	7·3	(3·7)
	5. Other ..	6·6	8·4	9·8	13·8	4·3	6·3	13·0	(30·5)
	Total Compulsory ..	94·2	89·8	82·3	78·6	92·3	85·4	76·8	(78·7)
Voluntary	6. Education ..	0·8	2·2	3·3	2·4	0·4	0·4	4·8	(1·0)
	7. Doctor's fees, etc. ...	0·3	1·0	1·8	2·8	0·3	0·4	0·9	(1·4)
	8. Other ..	4·7	7·0	12·6	16·2	7·0	13·8	17·5	(18·9)
	Total Voluntary ..	5·8	10·2	17·7	21·4	7·7	14·6	23·2	(21·3)
Number of families examined ..		352	412	156	75	180	119	23	* 4

* Number too small to produce reliable results.

Sind.

Main head.	Detailed Head.	Urban.				Rural.			
		I to III.	IV and V.	VI to IX.	X to XVIII.	I to III.	IV and V.	VI to IX.	X to XVIII.
Compulsory	1. Food ..	70·0	65·6	56·4	38·9	69·0	60·0	53·4	34·1
	2. Clothing ..	12·0	13·5	13·8	14·1	10·9	13·5	12·7	13·4
	3. Rental ..	6·3	4·4	7·4	1·5	3·5	3·2	4·0	4·4
	4. Ceremonies, charity, etc. ..	4·7	5·1	3·9	13·4	5·1	6·5	7·7	11·6
	5. Other ..	2·6	3·2	5·2	9·5	3·8	6·0	6·6	9·3
	Total Compulsory ..	95·6	91·8	86·7	77·4	92·3	89·2	84·4	72·8
Voluntary	6. Education ..	0·9	2·0	1·8	5·3	0·7	1·3	2·1	3·4
	7. Doctor's fees, etc. ...	0·7	1·1	1·8	1·8	1·2	1·1	1·2	2·0
	8. Other ..	2·8	5·1	9·7	15·5	5·8	8·4	12·3	21·8
	Total Voluntary ..	4·4	8·2	13·3	22·6	7·7	10·8	15·6	27·2
Number of families examined ..		107	305	231	81	175	242	91	35

FAMILY BUDGETS—TABLE V.

Classification of Families by the Number of Persons in each.

Number of Persons in Family.				Gujarat.	Konkan.	Deccan.	Karnatak.	Sind.
1	..	..	..	103	28	44	68	46
2	..	..	..	190	67	123	146	130
3	..	..	..	202	99	205	193	168
4	..	..	..	236	128	214	194	160
5	..	..	..	199	111	208	169	171
6	..	..	..	181	91	166	150	140
7	..	..	..	114	75	113	108	139
8	..	..	..	66	38	71	95	80
9	..	..	..	37	27	54	58	67
10	..	..	..	25	22	31	40	42
11	..	..	..	14	9	21	33	27
12	..	..	..	3	16	17	18	26
13	..	..	..	5	4	12	13	14
14	..	..	..	6	5	4	6	15
15	..	..	..	1	2	9	7	8
16	..	..	..	..	1	4	1	7
17	..	..	..	..	2	5	..	5
18	..	..	..	2	..	3	5	7
19	..	..	..	..	..	2	1	1
20 and over	..	..	..	3	3	3	15	14
Total number of Families examined				1,387	728	1,309	1,320	1,267

FAMILY BUDGETS—SUPPLEMENT TO TABLE V.

Details of Families containing 20 Persons and over.

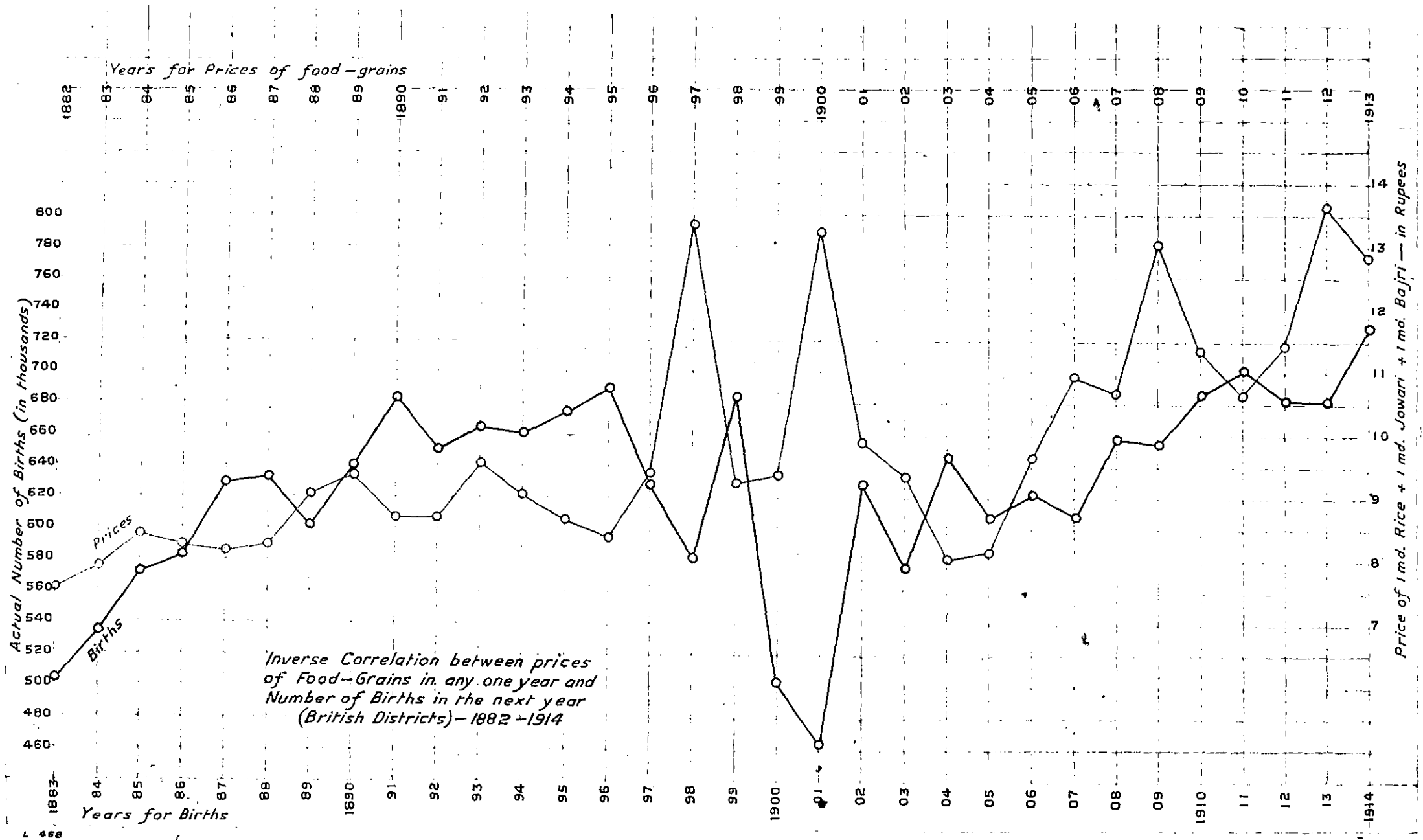
Natural Division.		One family with the following number of Persons.														
Gujarat	..	21	21	24	..	..	..	..	..	..	..	..	..	..	..	..
Konkan	..	20	20	44	..	..	..	..	..	..	..	..	..	..	..	..
Deccan	..	21	23	25	..	..	..	..	..	..	..	..	..	..	..	..
Karnatak	..	20	20	21	21	21	21	22	24	27	27	29	30	30	31	..
Sind	..	20	21	21	23	23	24	25	26	27	29	37	37	38	40	..

APPENDIX X.

INVERSE CORRELATION BETWEEN PRICES AND BIRTHS OVER A WIDE AREA.

Reference is invited to paragraphs 39 to 45 on pages 12 and 13 of Chapter I. It was there explained that the regional unit chosen for the study of the relation between prices and births, namely the Natural Division, was too small; and the results were therefore obscure. It was also evident that the period of ten years is too short a period for the study in question. I therefore obtained from Dr. Mann the annual prices of staple food-grains from 1882. The grains included are Rice, Jowari and Bajri. The figures given were stated in terms of the price of one maund of each of these grains. These were therefore simply summed, and the resulting figure is the price of 1 md. Rice + 1 md. Jowari + 1 md. Bajri. This figure was then plotted as the red curve on the diagram opposite, and against that curve was plotted in black the curve of the actual number of births in each year *following* the year for prices. Thus the prices for 1882 are plotted on the same vertical as the births for 1883, and so on. The results clearly show a definite inverse correlation.

The Coefficient of Correlation was then taken out, the variables being the percentage changes of each set of values from year to year. The result was a low inverse correlation. But my impression is that the Coefficient is not a very good test in a case like this, especially with so short a series as 32 pairs. The diagram is therefore given, and anyone who wishes to follow the matter up ought to get similar series—if possible for a longer term of years—for several different regions of the Indian continent. Nothing can be said to be proved from a single case. But there are *a priori* grounds for thinking that a definite inverse correlation will always be found to exist, and that the more backward tracts would yield more exact results than such an advanced tract as the Bombay Presidency.



APPENDIX Y.

ATTEMPTED RECONSTRUCTION OF THE POPULATION OF THE AHMEDNAGAR DISTRICT AFTER
ELIMINATING THE FACTOR OF FAMINE.

1. The populations of the various Talukas of the Ahmednagar District show such large variations owing in the main to famine emigration, that the current figures obviously afford no indication of the permanent progress or retardation of the District. And as the District is one, of recurring droughts, and presents serious administrative problems, it was thought worth while to try to secure an approximation to the figures by Talukas, as they would have stood, had the monsoons during the decennium, and especially those of 1918 to 1920, been normally favourable and evenly distributed. The calculations which follow, being elaborate, and from their nature not reducible to any generally applicable mathematical formula, no attempt has been made to apply the same methods to other Deccan Districts. The coefficients in Table B, and the redistribution percentages in Table C were kindly checked and corrected by Mr. C. W. A. Turner, I. C. S., who was Collector of the District during the rains of 1921, when the ideas underlying this Appendix occurred to me. Mr. Turner's local knowledge of the region is considerable, and his opinions reliable. Table E was also entirely constructed by him.

2. The first step was to exclude from the population of each Taluka the figures of immigrants (*i.e.*, in the Census sense of persons enumerated *in the Taluka*, but not born *in the District*).

3. The next problem was to distribute per Talukas the figures of emigrants. These figures are received from other Presidencies and States, and represent the figures of persons enumerated in those areas, but returning as birthplace the Ahmednagar District. There is also a residue, in whose case birthplace is returned as the Bombay Presidency, but District unknown; and some of these must obviously belong to Ahmednagar.

4. For the allocation of emigrants to the different Talukas Index Numbers had to be devised. Tables A and B show how these Index Numbers were arrived at. Briefly the method was to find the percentage distribution of the enumerated population by Talukas, weight each percentage separately for four different factors likely to affect emigration, take the mean of the weighted numbers, and reduce again to percentages.

5. In Table A the percentage distribution is calculated. Clearly it would have been incorrect to take the 1921 figures, which are modified by emigration—the very factor which it is desired to eliminate. So the 1911 figures were taken, and corrected by adding or subtracting the difference between recorded births and deaths during the decade. In the absence of epidemics in the decennium it would have been sufficient to use the 1911 figures as they stood as a base for calculating the percentages; but in view of unequal Influenza incidence the above method was adopted.

6. Table B shows how from the percentages so arrived at the Index Numbers were obtained. The four factors for which corrections had to be applied were these—

Railway facilities.—The presence of a Railway line traversing the Taluka being likely to induce emigration to some extent. Only slight weight was given to this factor, because country people are accustomed to travel fairly long distances by road to reach the railway.

Habits of the people.—The castes inhabiting some Talukas being less inclined to move than those inhabiting others. Very little weight was given to this.

Seasons.—This is the most important factor. The whole course of the seasons during the decennium had to be allowed for, increasing importance being given to each succeeding year, and of course by far the most importance to the season 1920-21, since it is presumed that in all but a few cases famine emigrants return, and therefore the permanent loss through migration owing to the season, even in 1918-19, would be small. Under the term season is included the effects of irrigation facilities.

Facilities for obtaining work on the spot.—In this case considerable weight had to be taken from Nagar, which as containing the Headquarters town and a large Cantonment is able to provide casual labour, and from Kopargaon, where the canal irrigation provides labour in the Census season, and lesser weight had to be allowed for other facilities, of which the most important are famine relief works.

In fixing the coefficients for all the four factors I had to rely largely, and in the case of the last two factors entirely, on Mr. Turner.

7. For each of these four factors correction coefficients were assigned in the case of each Taluka. By taking the product of any correction coefficient and the original percentage, and (mainly for convenience) shifting the decimal point one place back, partial Index Numbers were obtained. These are shown in columns (c), (e), etc. The ultimate crude Index Numbers are simply the arithmetic mean of the partial Index Numbers; and these, reduced to percentages in column (m), give corrected or weighted percentages for each Taluka, which we will call "Index Numbers".

8. The Index Numbers are, however, only applicable in their absolute form to the case of persons enumerated in non-adjacent Districts or States, in which the figures of immigrants from the Nagar District might be taken as allocable to the various Talukas according to a constant ratio. In the case of adjacent regions the facility of intercourse, and the regular habit of Indian mothers returning to their father's house for their first confinement, necessitated the assignment of special and often very heavy weights to particular Talukas. Generally speaking, the actually adjacent Taluka or Talukas were given arbitrary weights, based on extent of external boundary and the Index Numbers, and the balance of the *centum* was distributed among the other Talukas more or less according to the relative size of their Index Numbers, but modified to some extent by distance from the region concerned. Table C shows the actual redistribution of emigrants.

9. In the case of the residue of persons enumerated outside the Presidency, and returned as born in this Presidency, without District assigned, the following method was adopted. The population of the Nagar District is approximately one-thirty-seventh of the population of the whole Presidency. But as emigration from the District has evidently been higher than anywhere else, one-thirtieth of the persons referred to were assigned. These were distributed per Talukas according to the Index Numbers. To the objection that most of the emigrants would be from the external Talukas it must be remembered—both that weight has already been given to that factor, and that enumerators in adjacent regions would more often record the District correctly than enumerators in distant regions, so that the bulk of cases of persons recorded as born in Bombay Presidency without specification would be from *distant* parts, even of the Mogalai; and with distance the factor of externality or internality of the Taluka loses its value.

10. Column (g) of Table F gives the corrected figure, of Natural Population. Natural Population is simply Recorded Population *minus* Immigrants *plus* Emigrants, and is a mere abstraction, especially so long as we take the test of birthplace and not of normal residence for determining Immigrants and Emigrants. The Natural Population of Ahmednagar would always (in the month of March) be higher than the Actual Population, since there would always be, even in the best year, a good many persons absent for labour. From Table XI of the 1911 Census we can deduce a ratio for N. P. to A. P. The figures were N. P. 969,430; A. P. 945,305. The N. P. this time is 826,050; and on the ratio of 969:945 we get for A. P. (theoretical) 804,100. The difference is 21,950; which we can call 22,000. We cannot distribute this according to the Index Numbers, as they do not seem to be applicable, and also because Kopargaoon is likely (alone of all the Talukas) to have normally a higher Actual than Natural Population. The difference in favour of Immigrants or Emigrants, as arrived at above, is—

	Excess of	
	Immigrants.	Emigrants.
Akola	11,075
Karjat	9,394
Jamkhed	1,280
Kopargaoon	13,964	....
Nagar	4,636
Nevasa	11,169
Parner	14,311
Rahuri	12,769
Sangamner	15,561
Shevgaon	8,711
Pathardi	7,777
Shrigonda	11,774

We ought therefore to allot 2,500 to Kopargaoon as theoretical excess of Actual over Natural Population, and making the excess of Natural over Actual in the remainder of the District 24,500, distribute it according to the proportionate value of the figures just given. This being done we get the final result in Table G.

11. The results of the enquiry have disappointed me considerably, and I do not imagine that any reader will feel particularly convinced of the correctness of either the population figures in column (e) or the percentage changes in column (f) of the last Table. Where does the error lie? It lies in the fact that there is an unaccounted for deficiency of 136,590 persons! This can be seen from the following figures :—

Population actually recorded, 1911	∴	945,305
Deduct excess of Deaths over Births in decade	∴	6,796
		<hr/> 938,509

		Foreign-born.	Emigrants.
1911	..	69,070	93,195
1921	..	57,934	152,426
Difference	..	- 11,136	+ 59,231
			11,136
			70,367
Brought down from above	..	..	938,509
Deduct adverse migration balance	..	..	70,367
Theoretical Population, 1921	..	..	868,142
Actual recorded population, 1921	..	..	731,552
Unaccounted for difference	..	..	-136,590

12. How are we to account for this unexplained and very high figure ? There are four possibilities :—(1) Deaths were less completely recorded than births in the Decade ; (2) The Census enumeration in 1921 was incomplete ; (3) Emigrants to other parts of India failed to record their birthplace as Ahmednagar ; (4) We should have taken far more than one-thirtieth of the Bombay Unspecified. Of these No. (4) can be ruled out, as the figure obtained by enlarging the fraction above one-thirtieth would be trivial. No. (2) I am very unwilling to admit. I have, I think, afforded satisfactory proof in Chapter I of this Report that enumeration of actual numbers was not proportionately more incomplete than in 1911. The very slight fall in the population in face of the tremendous Influenza mortality really puts the argument out of Court ; and although this remark applies to the Presidency as a whole, there is no reason for thinking that omissions in this District would have been on a higher scale than elsewhere. No. (3) is a possible line of explanation, since Enumerators may have been lazy about asking birthplace, and may have put down the District of enumeration, where they were working, out of sheer slackness. But would they do so more than in 1911 ? Of all the explanations No. (1) is the most attractive. But if this is the right explanation, then the deficiency in recorded deaths is very large ; and the Influenza mortality must have been even more appalling than the registered figures show. I may mention in passing that I circularised every Mamledar in the Presidency to ask whether any direct evidence had come to light of deaths from Influenza known to have been omitted ; but no evidence was forthcoming except on a very minute scale.

13. Another fact that may be pointed out is that, in view of the large percentage reductions which still remain in the case of certain Talukas in column (f) of Table G, it is possible that the correction coefficients for Seasons in column (h) of Table B were not sufficiently widely spaced, thus restoring too few Emigrants to the worst affected Talukas and too few to the least affected.

14. But we could never get over the solid disappearance of 136,590 persons. And for that reason I was tempted to suppress this Appendix. But in the end it was decided to publish it in the hope that even if the ultimate figures are considered unreliable, there may be points in the detailed method of working which are interesting in themselves. It would also be very interesting, if a recount is taken in the first fully normal year, to see how far the figures actually obtained approximate to the figures arrived at in column (e) of Table G.

Table A.—Percentages of population of Talukas to total population of the Nagar District, after adjusting for excess of births over deaths or deaths over births for the calendar year 1911 to 1920 inclusive.

Talukas.	Population, 1911.	Excess of deaths over births, 1911 to 1920.	Excess of births over deaths, 1911 to 1920.	Corrected population (a)–(b1) or (a) + (b2).	Percentage of population (c) of each Taluka to total popu- lation (c) of District.
	(a)	(b1)	(b2)	(c)	(d)
Akola	75,949	837	..	75,112	8
Karjat	45,127	676	..	44,451	5
Jamkhed	57,315	..	1,832	59,147	6
Kopargaoon	91,490	3,351	..	88,139	9
Nagar	129,109	8,056	..	121,053	13
Nevasa	84,464	..	123	84,587	9
Parner	82,342	..	2,906	85,248	9
Rahuri	78,516	..	1,610	80,126	9
Sangamner	95,451	..	3,572	99,023	11
Shevgaon	75,676	104	..	75,572	8
Pathardi	64,139	3,432	..	60,707	6
Shrigonda	65,727	383	..	65,344	7
District Total ..	945,305	16,839	10,043	938,509	100

Table B.—Percentages in (d) of Table A corrected by weighting for various factors, and converted into Index Numbers for Proportional redistribution of emigrants by Talukas.

Taluka.	Percentages from (d) of Table A.	Correction coefficient for Railway facilities.	$\frac{(a) \times (b)}{10}$	Correction coefficient for habits of the people.	$\frac{(a) \times (d)}{10}$	Correction coefficient for seasons.	$\frac{(a) \times (f)}{10}$	Correction coefficient for facilities for finding work within the Taluka.	$\frac{(a) \times (h)}{10}$	Ultimate Crude Index Numbers (c)+(e)+(g)+(k)	Crude Index numbers (l) reduced to percentage Index Numbers.
			(c)		(e)		(g)		(k)		(m)
Akola ..	8	$\frac{1}{2}$	·4	$\frac{2}{3}$	·6	$\frac{2}{3}$	·6	2	1·6	·500	4
Karjat ..	5	$\frac{2}{3}$	·4	1	·5	3	1·5	5	2·5	1·225	6
Jamkhed ..	6	$\frac{1}{2}$	·3	1	·6	2	1·2	5	3·0	1·275	6
Kopergaon ..	9	$1\frac{1}{2}$	1·3	1	·9	1	·9	1	0·9	1·000	5
Nagar ..	13	$1\frac{1}{2}$	1·9	$1\frac{1}{2}$	1·9	3	3·9	1	1·3	2·250	11
Nevasa ..	9	$\frac{1}{2}$	·7	1	·9	3	2·7	3	2·7	1·750	9
Parner ..	9	$\frac{1}{2}$	·7	$\frac{2}{3}$	·7	3	2·7	3	2·7	1·700	8
Rahuri ..	9	$1\frac{1}{2}$	1·3	1	·9	2	1·8	5	4·5	2·125	11
Sangamner ..	11	$\frac{1}{2}$	·9	1	1·1	3	3·3	5	5·5	2·700	14
Shevgaon ..	8	$\frac{1}{2}$	·6	1	·8	4	3·2	3	2·4	1·750	9
Pathardi ..	6	$\frac{1}{2}$	·3	1	·6	4	2·4	5	3·0	1·575	8
Shrigonda ..	7	$1\frac{1}{2}$	1·0	1	·7	3	2·1	5	3·5	1·825	9

Table C.—Percentage formulas for redistributing among the Talukas the figures of persons enumerated in other parts of India but returning birthplaces assignable to this District.

Taluka.	General Index Numbers.	Enumerated in the following places outside the district.					
		The Nizam's Dominions.	Sholapur District.	Poona District.	Nasik District.	Thana District.	All other places in India including one-thirtieth of those born in Bombay Presidency without district assigned.
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
Akola	4	2	2	8	20	47	According to the Index numbers in (a).
Karjat	6	10	30	8	5	3	
Jamkhed	6	23	15	3	3	1	
Kopergaon	5	13	5	5	18	6	
Nagar	11	8	12	10	8	10	
Nevasa	9	11	3	5	5	4	
Parner	8	3	4	20	6	7	
Rahuri	11	3	6	8	8	7	
Sangamner	14	3	4	9	15	8	
Shevgaon	9	10	4	5	4	3	
Pathardi	8	10	3	4	3	1	
Shrigonda	9	4	12	15	5	3	
	100	100	100	100	100	100	

Table D.—Actual numbers of emigrants recorded from the various foreign Provinces, showing how distributed per Talukas.

Taluka.	Index Numbers.	Enumerated in the following places outside the district.						Total Emigrants.
		The Nizam's dominions.	Sholapur District.	Poona District.	Nasik District.	Thana District.	All other places in India including one-thirtieth of those born in Bombay Presidency without district assigned.	
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
Akola	4	142	125	3,339	3,170	3,024	2,026	13,626
Karjat	6	710	1,874	3,339	793	250	4,388	11,354
Jamkhed	6	1,634	937	1,252	476	83	4,388	8,770
Kopergaon	5	924	312	2,087	2,853	501	3,657	10,334
Nagar	11	568	750	2,087	1,268	835	8,046	13,554
Nevasa	9	782	187	4,173	793	334	6,583	12,852
Parner	8	213	250	8,346	951	585	5,851	16,196
Rahuri	11	213	374	3,339	1,268	585	8,046	13,825
Sangamner	14	213	250	3,755	2,377	668	10,240	17,503
Shevgaon	9	711	250	2,087	634	250	6,583	10,515
Patwardi	8	711	187	1,660	476	83	5,851	8,977
Shrigonda	9	284	750	4,260	793	250	6,583	14,920
		7,105	6,246	41,733	15,852	8,348	73,142	152,426

Table E.—Showing figures transferred from one Taluka to another to allow for inter-Taluka migration within the district.

From	To										
	Akola.	Karjat.	Jamkhed.	Kopergaon.	Nagar.	Nevasa.	Parner.	Rahuri.	Sangamner.	Shevgaon.	Patwardi.
Akola											
Karjat											
Jamkhed										65	
Kopergaon						35					
Nagar						115				15	
Nevasa				25						175	
Parner	150					35					
Rahuri	50			50		70	60				
Sangamner	200			100			755				
Shevgaon						55					
Patwardi						15	45			540	
Shrigonda											
Total adjustment for each Taluka (plus)	400			175		325	860			795	
										2,525	

Table F.—Corrected Natural Population of Talukas.

Taluka.	Actual-Recorded population, 1921.	Immigrants to be deducted.	Net (a)–(b)	Emigrants to be added.	Net (c)+(d)	Numbers to be added or subtracted for inter-Taluka migration.	Net corrected natural population to the nearest fifty (e)±(f).
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Akola	68,608	2,551	66,057	13,626	79,683	– 400	80,100
Karjat	26,907	1,960	24,947	11,354	36,301	..	36,300
Jamkhed	43,148	7,490	35,658	8,770	44,428	– 65	44,350
Kopergaon	100,635	24,298	76,337	10,334	86,671	– 146	86,800
Nagar	114,873	8,918	105,955	13,554	119,509	– 130	119,400
Nevasa	51,228	1,684	49,544	12,852	62,396	+ 125	62,500
Parner	67,464	1,885	65,579	16,196	81,775	+ 675	82,450
Rahuri	66,243	1,056	65,187	13,825	79,012	– 230	78,800
Sangamner	71,830	1,942	69,888	17,503	87,391	– 1,055	86,350
Shevgaon	41,164	1,804	39,360	10,515	49,875	+ 740	50,600
Pathardi	32,372	1,200	31,172	8,977	40,149	– 600	39,550
Shringonda	47,080	3,146	43,934	14,920	58,854	..	58,850
Total	731,552	57,934	673,618	152,426	826,044	....	826,050

Table G.—Corrected Actual Population of Talukas 1921.

Taluka.	Population recorded 1921.	Percentage increase or decrease on the 1911 population.	Corrected Natural population from (g) in Table F.	Add or deduct for adjustment of difference between Natural and Actual Population.	Net corrected Actual population, 1921.	Corrected percentage increase or decrease on 1911 population.
	(a)	(b)	(c)	(d)	(e)	(f)
Akola	68,608	– 9.7	80,100	– 2,450	77,650	+ 5
Karjat	26,907	– 40.4	36,300	– 2,205	34,095	– 24
Jamkhed	43,148	– 24.7	44,350	– 245	44,105	– 23
Kopergaon	100,635	+ 9.9	86,800	+ 2,500	89,300	– 2
Nagar	114,873	– 11.0	119,400	– 980	118,420	– 8
Nevasa	51,228	– 39.3	62,500	– 2,450	60,050	– 29
Parner	67,464	– 18.1	82,450	– 3,185	79,265	– 4
Rahuri	66,243	– 15.6	78,800	– 2,940	75,860	– 3
Sangamner	71,830	– 24.7	86,350	– 3,675	82,675	– 13
Shevgaon	41,164	– 45.6	50,600	– 1,960	48,640	– 36
Pathardi	32,372	– 49.5	39,550	– 1,715	37,835	– 41
Shringonda	47,080	– 28.4	58,850	– 2,695	53,150	– 19

MISCELLANEOUS SUBSIDIARY TABLES.

The following are a few Subsidiary Tables, prescribed by the Census Commissioner, but excluded from the Chapters for various reasons.

Subsidiary Table No. 143.—Variation in Natural Population for British Districts and Natural Divisions.

District and Natural Division.	Population in 1921.				Population in 1911.				Variation per cent. (1911-1921) in Natural Population. Increase (+) Decrease (-)
	Actual population.	Immigrants.	Emigrants.	Natural population.	Actual population.	Immigrants.	Emigrants.	Natural population.	
1	2	3	4	5	6	7	8	9	10
BOMBAY PRESIDENCY ..	26,701,148	1,082,313	593,769	26,212,704	27,084,317	1,021,281	600,708	26,663,753	- 2
Bombay City ..	1,175,914	988,262	73,024	260,676	979,445	787,864	67,681	259,262	+ 1
Gujarat ..	2,958,849	338,159	301,319	2,922,009	2,803,074	332,394	321,756	2,792,436	+ 5
Ahmedabad ..	800,911	200,800	99,512	789,614	827,800	183,740	114,651	758,720	+ 4
Broach ..	307,745	38,130	28,092	297,707	306,717	42,348	26,376	290,745	+ 2
Kaira ..	710,982	58,008	83,882	735,056	691,744	74,015	90,100	707,820	+ 4
Panch Mahals ..	374,860	35,096	29,156	368,020	322,695	40,734	30,988	312,940	+18
Surat ..	674,351	65,877	122,238	730,712	654,109	54,068	122,152	722,193	+ 1
Konkan ..	3,031,669	115,583	474,925	3,391,011	3,110,661	152,887	367,868	3,325,642	+ 2
Kanara ..	401,727	19,703	19,152	401,176	430,548	30,283	16,402	416,667	- 4
Kolaba ..	562,942	32,120	66,746	597,568	594,166	31,629	63,867	625,904	- 5
Ratnagiri ..	1,154,244	16,582	309,323	1,446,985	1,203,638	23,688	298,469	1,478,410	- 2
Thana inclusive of the Bombay Suburban District ..	912,756	72,261	104,787	945,282	882,309	112,771	35,114	804,152	+17
Deccan ..	6,059,114	1,331,125	609,168	6,337,157	6,387,064	298,566	463,893	6,552,391	- 3
Ahmednagar ..	731,552	56,238	179,468	854,782	945,305	69,070	93,195	969,430	-12
Khandesh East ..	1,035,837	71,024	72,225	1,077,038	1,034,886	75,972	34,413	993,327	+ 8
*Khandesh West ..	641,847	57,407	24,344	668,784	580,723	51,134	38,740	568,320	+ 7
Nasik ..	832,570	66,056	84,434	850,954	905,030	65,683	63,983	903,280	- 6
Poona ..	1,009,033	162,126	172,517	1,010,424	1,071,512	124,455	153,300	1,100,357	- 7
Satara ..	1,026,259	37,673	101,900	1,180,486	1,081,278	41,380	176,120	1,216,018	- 3
Sholapur ..	742,010	109,130	112,809	745,089	768,330	87,056	120,376	801,650	- 7
Karnatak ..	2,786,796	267,032	239,668	2,749,332	2,832,798	183,966	191,364	2,840,198	- 3
Belgaum ..	932,996	82,799	92,680	962,880	943,820	82,980	100,154	960,994	+ 2
Bijapur ..	796,876	62,817	73,265	807,324	802,973	65,226	65,520	863,267	- 6
Dharwar ..	1,036,924	121,419	63,623	999,128	1,026,005	83,658	73,588	1,015,085	- 3
Sind ..	3,279,377	296,219	42,715	3,025,873	3,513,435	314,310	29,436	3,328,561	- 6
Hyderabad ..	573,450	67,479	41,974	547,945	612,639	96,636	44,894	985,402	- 6
†Navabshah ..	418,660	52,509	16,585	382,736	448,478				
Karachi ..	542,065	149,318	24,566	417,313	521,721	116,401	23,404	428,724	- 3
Larkana ..	597,960	33,908	22,100	586,151	660,879	40,818	21,702	641,763	- 9
Sukkar ..	510,292	31,327	27,731	506,696	573,913	41,636	27,614	569,981	-10
‡Thar and Parkar ..	396,331	51,836	24,148	368,643	433,398	76,990	15,454	395,235	- 7
Upper Sind Frontier ..	240,619	35,335	11,105	216,389	263,007	55,381	12,920	217,546	- 1

* Does not include Mewas Estates.

† Does not include Sinjhoru Taluka but includes Digri Taluka.

‡ Includes Sinjhoru Taluka but does not include Digri Taluka.

Subsidiary Table No. 144—Immigration (actual figures) for

District and Natural Division where enumerated.	Born in								
	District (or Natural Division).			Contiguous District in Province.			Other parts of Province.		
	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.
1	2	3	4	5	6	7	8	9	10
Bombay City	188	105	83	58	37	21	706	454	252
Gujarat	2,821	1,376	1,245	61	37	34	98	52	46
Ahmedabad	690	307	323	89	45	44	21	12	9
Broach	270	140	130	9	4	5	13	7	6
Kaira	652	359	293	15	4	11	18	8	10
Panch Mahals	339	177	162	19	8	11	4	2	2
Surat	608	302	306	10	5	5	24	14	10
Konkan	2,763	1,332	1,431	71	39	32	17	10	7
Kanara	392	192	190	8	5	3	3	2	1
Kolaba	531	262	269	21	11	10	7	4	3
Ratnagiri	1,138	518	620	11	4	7	3	2	1
Thana (including Bombay Suburban District)	688	347	341	37	21	16	23	14	9
Deccan	5,728	2,903	2,825	63	29	34	52	27	25
Ahmednagar	675	344	331	23	10	13	5	3	2
Khandesh East	1,005	509	496	14	7	7	17	10	7
Khandesh West	584	297	287	12	5	7	29	14	15
Nasik	767	389	378	27	12	15	13	7	6
Poona	847	426	421	94	47	47	29	17	12
Satara	989	498	491	25	8	17	10	4	6
Sholapur	633	332	301	24	11	13	21	10	11
Karnatak	2,584	1,329	1,255	90	38	52	22	10	12
Belgaum	870	451	419	62	25	37	15	7	8
Bijapur	734	378	356	21	9	12	11	5	6
Dharwar	916	470	446	59	28	31	8	5	3
Sind	2,983	1,650	1,333	60	35	25	49	30	19
Hyderabad	506	280	226	31	19	12	17	10	7
Karachi	393	214	179	43	25	18	45	29	16
Larkana	564	310	254	12	8	4	2	1	1
Navabshah	366	203	163	29	17	12	8	5	3
Sukkur	479	261	218	11	7	4	3	2	1
Thar and Parkar	344	190	154	16	10	6	8	5	3
Upper Sind Frontier	205	113	92	9	5	4	1	1	

British Districts and Natural Divisions.

(000's omitted).

Contiguous parts of other provinces, etc.			Non-contiguous parts of other provinces, etc.			Outside India.		
Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.
11	12	13	14	15	16	17	18	19
..	..	..	204	160	44	20	16	4
87	40	47	91	51	40	2	1	1
30	16	14	60	35	25	1	1	..
13	5	8	3	2	1	..	..	..
18	6	12	8	3	5	..	..	..
3	1	2	10	5	5	..	..	..
17	7	10	14	8	6	1	1	..
4	2	2	23	15	8	1	1	..
4	2	2	5	3	2	..	..	..
..	..	..	4	3	1	..	..	..
..	..	..	3	2	1	..	..	..
..	..	..	12	8	4	..	..	..
121	55	66	86	52	34	9	7	2
4	3	1	24	9	15	1	1	..
15	7	8	25	13	12	..	..	..
..	..	..	17	9	8	..	..	..
10	5	5	13	9	4	3	3	..
..	..	..	34	23	11	5	4	1
..	..	..	2	1	1	..	..	..
60	28	32	4	2	2	..	..	..
76	35	41	14	9	5	1	1	..
..	..	..	5	3	2	1	1	..
29	13	16	2	1	1	..	..	..
46	21	25	8	5	3	..	..	..
57	33	24	123	84	39	7	5	2
..	..	..	18	12	6	1	1	..
4	2	2	54	40	14	3	2	1
..	..	..	20	12	8	..	..	..
..	..	..	16	9	7	..	..	..
2	1	1	14	10	4	1	1	..
..	..	..	28	16	12	..	..	..
..	..	..	25	15	10	1	1	..

Subsidiary Table No. 145.—Emigration (Actual figures) for British Districts and Natural Divisions.

District and Natural Divisions of Birth.	ENUMERATED IN (000's OMITTED)														
	District (or Natural Division).			Contiguous District in Province.			Other parts of Province.			Other contiguous Provinces.			Other non-contiguous Provinces.		
	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1															
Bombay ..	188	105	88	8	2	1	30	15	15	..	..	..	40	20	30
Gujarat ..	2,621	1,378	1,245	82	83	49	85	58	27	96	36	60	38	22	16
Ahmedabad ..	600	367	323	36	12	24	38	23	15	14	4	10	12	7	5
Broach ..	270	140	130	6	2	4	10	6	4	9	3	6	4	2	2
Kaira ..	652	359	293	38	18	20	9	6	3	30	10	20	8	4	4
Panch Mahals ..	339	177	162	14	5	9	2	1	1	11	5	6	2	1	1
Surat ..	608	302	306	21	11	10	57	39	18	32	18	19	13	8	5
Konkan ..	2,768	1,332	1,431	349	218	131	111	63	48	6	4	2	9	8	2
Kanara ..	382	192	190	6	3	3	6	4	2	6	4	2	1	1	..
Kolaba ..	531	262	269	62	37	25	4	2	2	..	..	..	1	1	..
Ratnagiri ..	1,138	518	620	25	9	16	278	182	96	..	..	..	6	4	2
Thana ..	688	347	341	73	39	34	31	19	12	..	..	..	1	..	1
Deccan ..	5,728	2,903	2,825	89	42	47	367	208	159	81	35	46	73	42	32
Ahmednagar ..	675	344	331	72	36	36	75	42	33	7	3	4	26	14	12
Khandesh East ..	1,005	509	496	23	9	14	8	5	3	39	19	20	2	1	1
Khandesh West ..	584	297	287	12	6	6	2	1	1	7	4	3	3	2	1
Nasik ..	767	389	378	40	19	21	36	20	16	1	1	..	6	4	2
Poona ..	847	426	421	47	23	24	110	62	48	..	..	..	10	9	7
Satara ..	989	498	491	59	27	32	124	75	49	..	..	..	9	6	2
Sholapur ..	633	331	302	41	18	23	35	17	18	26	7	19	11	6	5
Karnatak ..	2,584	1,329	1,255	107	44	63	30	15	15	24	11	13	5	3	2
Belgaum ..	870	451	419	77	31	46	15	8	7	..	..	..	2	1	1
Bijapur ..	734	373	356	46	21	25	18	8	10	7	2	..	3	2	1
Dharwar ..	916	470	446	39	17	22	8	4	4	17	9	8	1	1	..
Sind ..	2,983	1,650	1,333	9	5	4	13	8	5	3	2	1	17	12	5
Hyderabad ..	508	230	226	23	14	9	9	6	3	..	..	..	10	7	3
Karachi ..	393	214	179	16	9	7	5	3	2	..	..	..	4	3	1
Larkana ..	564	310	254	18	11	7	4	3	1	..	..	..	..	..	..
Navabshah ..	366	203	163	15	10	5	1	1	..	..	..	..	1	1	..
Sukkur ..	479	261	218	10	6	4	12	8	4	2	1	1	3	2	1
Thar and Parkar ..	344	190	154	21	12	9	2	1	1	..	..	..	..	..	..
Upper Sind Frontier ..	205	113	92	7	4	3	4	2	2	..	..	..	..	..	..

Subsidiary Table No. 146.—Number of deaths of each sex at different ages.

Age.	1911		1912		1913		1914		1915		1916	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
	2	3	4	5	6	7	8	9	10	11	12	13
1												
0—1 ..	62,957	53,970	80,366	69,421	69,038	59,991	76,589	65,481	67,440	57,569	75,328	65,304
1—5 ..	46,218	45,221	73,179	74,130	54,876	55,029	61,335	60,897	43,397	43,119	60,892	61,138
5—10 ..	16,926	17,990	20,764	20,067	14,505	14,667	15,150	15,447	13,009	13,653	19,685	20,589
10—15 ..	13,117	14,109	11,897	11,497	8,117	8,033	8,200	8,159	8,497	8,895	12,715	13,171
15—20 ..	11,086	12,501	11,378	12,915	8,108	9,145	8,490	10,089	8,185	9,738	10,916	12,563
20—30 ..	28,339	29,964	27,803	31,904	20,932	23,084	22,803	25,407	21,809	24,600	28,865	31,898
30—40 ..	27,234	23,647	28,385	25,663	20,664	18,242	23,282	20,801	22,089	20,246	29,111	26,408
40—50 ..	25,241	18,122	27,660	19,927	20,141	14,206	22,854	15,891	21,072	15,568	28,039	20,576
50—60 ..	22,712	17,402	26,065	20,210	19,841	14,840	22,076	16,499	21,426	16,411	26,653	20,721
60 and over ..	33,226	34,730	43,767	46,212	33,323	34,667	38,209	39,845	36,258	38,124	43,341	44,672

Age.	1917		1918		1919		1920		Total 1911—1920		Average Number of female deaths per 1,000 male deaths.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
	14	15	16	17	18	19	20	21	22	23	
1											
0—1 ..	79,984	71,649	94,553	83,124	58,950	51,398	59,236	49,440	724,441	627,347	866
1—5 ..	67,029	67,589	1,20,692	119,743	58,368	58,973	47,123	46,061	633,100	631,900	908
5—10 ..	27,036	28,751	56,187	62,212	21,823	21,185	16,997	16,800	222,082	231,861	1,042
10—15 ..	19,484	20,739	42,066	48,589	12,123	11,051	9,949	9,711	146,165	153,954	1,052
15—20 ..	15,835	17,360	43,233	53,587	11,460	12,063	9,349	10,211	136,550	160,170	1,156
20—30 ..	39,094	42,751	142,360	173,897	35,646	34,950	29,391	30,521	396,541	448,976	1,182
30—40 ..	38,324	35,419	124,980	129,070	34,222	28,442	29,990	26,118	378,281	354,656	938
40—50 ..	24,931	27,536	85,156	71,585	29,490	19,427	26,473	18,407	321,957	241,265	749
50—60 ..	32,521	26,281	61,936	52,559	27,379	19,187	24,902	17,641	285,511	221,761	777
60 and over ..	51,911	54,382	76,300	82,236	46,167	44,946	41,628	41,348	444,130	461,162	1,038

Subsidiary Table No. 147.—Number of Females per 1,000 Males at different age-periods, by Selected Religions, 1891—1921, for British Districts.

Note.—The figures prior to 1921 include and the 1921 figures exclude Aden

Age.	All Religions.				Hindu				Musalman.			
	1921	1911	1901	1891	1921	1911	1901	1891	1921	1911	1901	1891
0—1	986	999	974	1,002	996	1,011	1,002	1,012	948	962	898	957
1—2	1,036	1,041	1,035	1,064	1,049	1,046	1,049	1,069	990	1,010	979	1,042
2—3	1,046	1,043	1,037	1,070	1,063	1,055	1,044	1,078	1,003	1,001	1,010	1,034
3—4	1,082	1,052	1,034	1,066	1,106	1,078	1,076	1,085	994	962	901	996
4—5	1,011	994	989	987	1,040	1,009	1,025	1,003	924	947	881	929
Total 0—5	1,031	1,024	1,013	1,033	1,047	1,038	1,039	1,046	964	970	929	981
5—10	939	935	957	919	966	962	970	938	844	848	905	845
10—15	795	790	810	773	817	816	828	794	693	694	731	690
15—20	867	881	892	894	901	911	920	923	759	779	801	795
20—25	1,003	1,008	1,038	1,032	1,049	1,046	1,098	1,067	903	937	893	974
25—30	871	891	913	911	892	910	939	928	819	851	862	890
Total 0—30	918	925	933	931	943	949	957	951	835	851	858	870
30—40	823	872	891	877	855	902	917	902	740	791	820	805
40—50	876	892	930	896	913	923	962	915	782	801	839	845
50—60	903	920	953	936	939	958	980	963	784	797	870	848
60 and over	1,052	1,091	1,167	1,167	1,094	1,138	1,227	1,225	911	945	944	996
Total 30 and over	884	912	943	928	914	946	974	954	779	814	854	850
Total all ages (Actual Population)	903	920	937	930	932	948	963	952	813	838	857	863
Ditto (Natural Popula- tion)	..	945	950	944	..	..	..	..	..	..	..	..

Subsidiary Table No. 148.—Proportion of children under 10 and of persons over 50 and those aged 15—40; also of married females aged 15—40 per 100 females of all ages; British Districts.

Religion.	Proportion of Children of both sexes under 10.								Proportions of persons over 50 per 100 persons aged 15-40.								Number of married females aged 15-40 per 100 females of all ages.			
	Per 100 persons aged 15-40				per 100 married females 15-40				1921		1911		1901		1891					
	1921	1911	1901	1891	1921	1911	1901	1891	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males	1921	1911	1901	1891
All Religions	67	65	63	72	174	159	162	171	26	28	25	27	23	26	25	28	33	35	33	35
Hindu ..	68	..	..	..	173	..	..	..	26	29	..	..	..	..	..	..	33	..	..	..
Musalman	66	..	..	..	181	..	..	..	25	26	..	..	..	..	..	..	34	..	..	..
Zoroastrian ..	38	..	..	..	146	..	..	..	37	35	..	..	..	..	..	..	24	..	..	..

Subsidiary Table No. 149.—Proportion of the sexes by Civil condition at certain ages for Religions and Natural Divisions of British Districts.

Natural Division and Religion.	NUMBER OF FEMALES PER 1,000 MALES.														
	All ages			0—10			10—15			15—40			40 and over.		
	Un-married.	Married.	Widowed.	Un-married.	Married.	Widowed.	Un-married.	Married.	Widowed.	Un-married.	Married.	Widowed.	Un-married.	Married.	Widowed.
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
All Religions—															
Presidency	646	987	2,384	923	3,179	2,987	476	2,904	3,151	157	1,100	2,595	370	405	1,950
British Districts	625	968	2,437	915	3,075	3,398	441	3,183	3,477	154	1,073	2,916	300	472	2,639
States and Agencies	702	1,040	2,253	941	2,237	2,314	567	2,340	2,398	165	1,181	1,782	312	556	2,491
Bombay City	420	480	2,422	914	2,150	2,674	475	2,423	4,031	142	539	1,913	258	250	2,811
Gujarat	605	99	1,895	908	2,158	1,484	523	1,713	1,309	188	1,084	1,129	309	587	2,228
Konkan	455	1,099	3,956	445	4,231	4,171	510	7,284	8,474	173	133	3,890	379	477	3,050
Deccan	64	129	2,825	923	5,198	5,007	323	3,336	4,010	125	1,104	2,551	380	468	2,160
Karnatak	641	1,013	2,454	904	7,291	4,228	423	4,511	3,320	163	1,078	2,141	1,130	422	2,581
Sind	566	944	1,610	861	1,961	2,215	522	2,582	4,285	152	1,159	1,496	254	523	1,714
Hindu—															
Bombay City	411	488	2,583	939	2,329	3,069	432	2,635	4,707	97	521	2,143	201	232	3,138
Gujarat	664	991	1,814	903	2,172	1,442	487	1,710	1,322	176	1,068	1,525	317	594	2,215
Konkan	688	1,112	3,996	900	3,879	4,356	485	7,500	9,250	169	1,318	3,858	384	473	3,076
Deccan	640	1,036	2,853	916	5,276	5,212	297	3,332	4,539	112	1,101	2,601	356	470	2,915
Karnatak	638	1,014	1,668	896	7,442	4,323	396	4,457	3,343	175	1,010	2,186	1,223	422	2,547
Sind	571	915	1,750	918	3,210	131	518	3,088	118	46	1,071	401	243	435	394
Mussalman—															
British Districts of Presidency Proper	583	952	1,722	880	2,338	1,954	551	2,924	1,827	162	1,175	1,267	271	502	2,035
Sind	565	991	1,279	845	1,730	1,275	522	255	1,189	170	1,256	951	255	531	1,702
Jain—															
Gujarat	600	939	2,590	948	856	800	701	2,337	13,250	102	1,191	2,822	111	487	2,618
Karnatak	509	1,455	1,287	843	12,121	4,000	317	2,889	2,857	33	1,023	1,807	281	386	2,359
Christian—															
Gujarat	618	970	1,608	745	2,360	2,070	570	1,105	875	419	974	822	322	515	2,341
Konkan	761	973	3,165	1,000	692	700	857	8,327	1,200	317	1,320	3,265	565	470	3,185
Deccan	624	929	3,600	871	2,745	4,200	783	3,550	3,500	264	123	3,259	912	459	3,785
Zoroastrian—															
British Districts of the Presidency	770	941	2,946	949	2,000	500	874	1,291	714	668	1,304	2,763	542	622	1,021

Subsidiary Table No. 150.—Literacy by Religion, sex and locality among persons aged 5 and over, in British Districts and Natural Divisions, 1921.

District and Natural Division.	NUMBER PER MILLE WHO ARE LITERATE.									
	Hindu.		Jain.		Musalman.		Christian.		Zoroastrian.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11
TOTAL FOR THE PROVINCE.	149	21	574	127	114	15	430	281	851	731
TOTAL FOR THE BRITISH DISTRICTS ..	157	22	597	139	99	45	468	287	851	730
Bombay City ..	250	89	761	253	245	75	609	472	872	767
Gujarat ..	222	37	820	300	336	37	344	189	947	756
Ahmedabad ..	217	46	823	289	292	33	604	504	879	862
Broach ..	284	36	795	342	396	24	374	254	755	334
Kaira ..	213	32	773	262	238	20	272	102	918	820
Panch Mahals ..	109	14	798	289	354	28	322	261	833	820
Surat ..	291	44	845	352	456	85	582	452	888	671
Konkan ..	112	14	613	124	195	26	232	109	792	630
Bombay Suburban ..	189	64	788	36	279	82	367	236	887	834
Thana ..	86	14	676	12	230	35	126	40	717	475
Kanara ..	185	72	234	18	246	49	173	43	556	750
Kolaba ..	97	13	738	106	198	20	403	248	734	532
Ratnagiri ..	104	8	278	16	155	13	169	58	818	500
Deccan ..	97	10	597	68	183	17	518	370	835	755
Ahmednagar ..	103	10	673	87	209	23	257	160	837	670
Khandesh East ..	144	7	631	72	139	8	417	261	708	712
Khandesh West ..	92	7	665	44	214	27	460	413	866	574
Nasik ..	107	10	672	70	214	20	761	544	807	807
Poona ..	133	25	710	101	263	36	701	586	825	733
Satara ..	85	9	368	14	191	15	434	460	918	891
Sholapur ..	97	8	565	84	129	10	589	519	988	803
Karnatak ..	152	12	259	41	135	65	459	317	825	778
Belgaum ..	112	11	193	15	144	25	366	210	793	839
Bijapur ..	137	8	588	49	111	13	378	354	842	455
Dharwar ..	202	17	411	50	146	14	565	423	837	678
Sind ..	253	48	646	242	202	6	737	628	820	748
Hyderabad ..	228	100	610	30	31	6	951	860	774	833
Karachi ..	344	78	801	326	56	11	701	603	842	753
Larkana ..	303	28	..	..	20	4	846	778	1,000	..
Navabshah ..	287	169	1,000	..	31	6	1,000	1,000	667	..
Sukkur ..	304	27	857	333	29	5	789	810	621	600
Thar and Parkar ..	100	19	153	35	38	7	508	167	1,000	1,000
Upper Sind Frontier ..	322	25	..	..	18	1	875	571	..	..
All Cities (including Bombay)*	278	85	742	294	218	49	591	462	812	792

* N.B.—This Table is prepared for persons aged 5 and over except for the last unit, in which the ratios are taken on the whole population (all ages).