

Census of India, 1931

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by

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FOREWORD.

When sending this report to the press I wish to acknowledge the fertile criticisms and suggestions of Mr. M. W. M. Yeatts, which have been particularly valuable to me as supplying that firsthand knowledge of a provincial census superintendent in which my own experience is defective. I have suggested that the mechanization of the census would eliminate the provincial sorting and compiling office. He would go even further, and taking the process to its logical conclusion, maintains that the true development of this change would be to eliminate the provincial census superintendent after the enumeration is completed. The report of the latter would then be primarily administrative, and he would not be called on to deal critically with statistics unless he happened to have expert knowledge of some particular subject covered by them. The present series of census reports would then devolve into a series of monographs by experts in the various departments to which they had reference, though designed on a common plan, certain specified subjects, e.g. vital statistics, might suitably be prescribed by the central authority for such treatment in each province. *Mutatis mutandis* the same principle would apply to the Census Commissioner and while the returns of age would be dealt with by the Government Actuary, or of literacy by the Educational Commissioner, those of occupation would be discussed by the Department of Industries and Labour. Figures of area, population, and community lend themselves to little treatment beyond the actual publication of the tables. Questions of fertility and civil condition need to be treated according to social rather than administrative boundaries, and, as Mr. Yeatts points out, one of the great advantages of a mechanical sort would be that it could be carried down to the smallest census unit without materially increasing costs and would thus make possible the combination of figures for areas administratively divorced but socially intimate, such as those comprising Kerala or Kannada, which can alone afford a really satisfactory basis for the study of figures of age, fertility or marital condition. At the same time village and municipal statistics could be extracted with the minimum of expense.

I admit the logical sequence of this devolution as the result of the mechanization of census procedure, and it must be added that it would bring the census of India into greater accord with the practice of other countries. It would also make very definitely for economy, and it is at least arguable that the traditional series of Indian census reports is more of a luxury than an administrative necessity. To say this involves no slight on the excellent team of Census Superintendents which I was fortunate enough to lead. It is rather that, at the risk of appearing to foul my own nest, I think it part of my business to draw attention to the necessity of keeping the census practice of India in its correct relation to the needs of a modern state. I have not however enlarged on this in the report that follows, as I have regarded that as primarily intended to treat of the census as it is, rather than as it might be or may become.

I should like to take this opportunity of once more thanking my office and compiling staff for their assistance, and for the willing way they have worked under pressure and without holidays particularly during the conclusion of the operations. Three names I have already mentioned elsewhere, and it is not possible to name them all, but at least I can here add those of my stenotypist and tour-clerk Mr. G. C. Gupta, of Mr. Sohan Lal Elhance who preceded him in that post, both of whom had the misfortune to have to decipher my crabbed manuscript, of my budget assistant Mr. Chand Kishore, whose knowledge of the subtle paths of Accounts and the horrid pitfalls of Audit was an invaluable relief to me, and of my clerks and compilers Mr. D. P. Das, Mr. M. A. P. Menon, Mr. R. K. Venkatesan, Mr. P. B. Joshi and Mr. N. M. Ananthapadmanabhan Iyer, while Mr. C. S. Kumaraswami Mudaliar drew for me most of the maps and diagrams which illustrate the Report. My chief regret in closing down my office is that so many of them must start again to search for employment in an uncomfortably competitive world.

SIMLA :

The 7th June 1933.

M2CC

J. H. HUTTON.

N. B.—The marginal references are to files in the records of the Census Commissioner's Office or to the administrative volumes of the Provinces indicated by name and refer in that case to the 1931 volume unless specified to the contrary. The Arabic numbers refer to the paragraph, the chapter being given where necessary in Roman numerals, unless pages are specifically indicated.

i.—Legislation.

1. The first step in the whole Census procedure is the passing of an act to provide for the taking of a census (*vide* Act X of 1929). The legislation in this case was completed before the appointment of a Census Commissioner, and although this has not been necessarily or always the case, the legislation is in any case likely (as long as the present census procedure and system are unchanged) to take place so soon after his appointment that he will have little time to examine the provisions to be made for any modification that may seem desirable. The general experience and opinion of Census Superintendents in 1931 found that Act X of 1929 was deficient in the powers it gave for compelling municipalities to take a proper census in accordance with the code, a difficulty experienced also in 1921; in the punishments prescribed for non-compliance with the code, which, though quite adequate for the occasional delinquency of a cantankerous individual, are clearly not adapted to deal with opposition to a census on any organized scale, a danger which arose both in 1921 and 1931; and in the protection given under Section 12 of the Act. The reason why the use of the census schedule as evidence in criminal proceedings is not entirely barred is obviously in order to make its use possible in the case of deliberately false or misleading entries and in order to give control over an enumerator who might falsify as well as the enumerated. It should however be possible to use the schedule for these purposes only. As it is, a number of attempts were made to have the census schedules produced in criminal courts, not only in connection with prosecutions under the Sarda Act, but to rebut the alibi of persons accused of criminal offences. In the latter case the evidence of the census record would be very slender, as the enumerator only calls at each house to verify his preliminary enumeration and does not necessarily see more than one individual there, but there is a danger that the enumerator may claim to have been very thorough, or that the court may attach to the written record an evidential value which it was never intended to possess. In any case it is on all grounds necessary to preserve the confidential nature of the census record. It is difficult enough to get accurate information in any case, and the enumerator is, not a lawyer and can only explain in general terms the fact that returns are confidential, so that any use of them for the prosecution of the enumerated is bound to be regarded as a breach of faith. It is quite clear that a large number of persons who had married their daughters in contravention of the Sarda Act returned them as unmarried, and that the attempts to use the records for prosecutions justified to some extent their fears and false returns. Further the census record is a temporary document destroyed as soon as it is satisfactorily converted from an individual one to that of a nameless unit of the population. It seems therefore improper as well as inexpedient that the criminal law should be able to take advantage of the fact that the effective numbering of units should temporarily involve a knowledge of the names attaching to them. Sections 123 and 124 of the I. P. C. would appear on the face of them to protect the information given to census officers, but this appearance is fallacious as the Legislative Department ultimately decided that the records were to be supplied to the courts that demanded them. Fortunately however the schedules had been destroyed in accordance with the usual procedure while the matter was still under consideration. The next Census Act should be drafted to give proper protection to the information obtained.

Existing periodic Acts.

C. P., 19, 20.
Rajputana Aj.
M. a. 2.
U. P. I., 29.
B. and O., (1921)
I., 21.
Bombay, (1921),
pp. 5—8.

Madras, I, 9.

Several minor points on which the drafting of the Act might be amended were pointed out by Local Governments and by Census Superintendents. A record of them will be found on census file No. 12-General (Census Act of 1929) and on Home Department's file No. F. 122/29-Pub., November 1929 to February 1930.

2. The question of legislation is obviously likely to be affected by constitutional changes. In federal bodies it seems to be usual to have some constitutional provision for the taking of a periodic census. This is at any rate the case in the

Necessity for permanent provision.

United States of America, where the provision in the original federal constitution for a periodic enumeration of the inhabitants in order to determine their representation led to the growth of the permanent census department in that country. Furthermore, a census on a federal basis is likely to need provision for a more effective control over the federal units than exists at present with regard to Indian States. The existing Census Act extends to British India and the Santhal Parganas. The co-operation of the States is a matter of courtesy on their part and no legislative machinery exists, nor is it possible apparently for any to come into existence, unless some general legislative authority come into being. One of the major states at this census completely ignored at least one point on which the Government of India specially desired that information should be collected and in another point of some importance deliberately departed from the principles laid down in the Code. In order to obtain uniformity it is therefore clearly desirable that the various units contributing to the India census should be amenable to central control not only in the details of administration but also in the personnel of their census appointments. The appointment of a single slow or inefficient census superintendent in any major unit may delay the whole of the operations at the centre, and thus cause much undue and unnecessary expense to the Central Government, which must keep its organization waiting and continue to pay for it, since local delay in a single return can make progress impossible. At the same time it is essential that the responsibility for enumeration, and the cost thereof, should rest on the local unit and not on the Central Government. This point is referred to later in connection with finance.

Another point arising in this general connection is the question whether provision for a census should not be by permanent legislation as in many countries, providing for periodic census without the necessity of legislating *ad hoc* at each recurrent period. A permanent legislative provision has the advantage of being less liable to be made the subject of political 'logrolling' or of party tactics. The same point arises in connection with a suggestion that can conveniently be made at this point for a change in the general census policy. The existing method of creating a department for the taking of a census, destroying it and recreating it periodically is prodigal of effort and of experience. Continuity depends entirely on an inadequate written record and a great deal is learned at each census which is then forgotten and relearned again 10 years later. Improvements are therefore very difficult to introduce, and the whole procedure consists of organization and analysis undertaken against time, and it is therefore rash as well as difficult to undertake any change that needs to be prepared in advance. A good case in point is the introduction of a mechanical sort. This proposal was examined in 1921 and postponed for re-examination at the census of 1931. By the time it was possible to come to a very hurried conclusion against it on the score of expense it would have been too late to introduce it in any case on account of the changes in procedure involved, so that a decision in its favour would have had to be postponed again for another decade. The true solution would appear to be to amalgamate the office of Census Commissioner with that of the Director General of Statistics and Commercial Intelligence putting the two under a permanent head whose permanent office would form the standing nucleus of the periodic census department. This would involve some change in the nature of the India census and a departure from its traditional character, but it seems probable from every point of view that the time for such a change has arrived. Apart from the growing inconsistency of an attempt to deal in census reports with any matter other than purely statistical, three considerations point emphatically in the direction of such a change and it will be convenient to examine briefly each of them in turn.

When legislating for the census it might be wise to insert a clause comparable to section 4(2) of the English Census Act (1920) authorising the Census Commissioner to extract, prepare and supply to approved persons any available statistics on payment for the costs of the additional work involved. This would enable the Census Commissioner to choke off a large number of importunate persons, who write for advance figures and who want all sorts of information to be supplied, by requiring the cost in advance. Where the information is readily available the cost will be very small or *nil* and the information can be easily supplied in any case; on the other hand the information asked for is sometime impossible or difficult to supply and may involve much extra work.

SUGGESTED CHANGES:

3. The first and probably the most important is the growing difficulty of enumeration by volunteers. The practice in this respect differs in different provinces, for whereas in some the greater part of the organization, including supervisors and even charge superintendents is largely voluntary, in others the real work, including the preliminary preparation of the schedules, is mostly done by revenue officers and only the actual final checking carried out by unpaid workers. It is quite obvious that a voluntary agency is a most unsatisfactory thing on which to rely, and district officers were generally very definite about the difficulty of obtaining volunteers and of getting them to carry out their work efficiently. A voluntary agency is extremely vulnerable to political propaganda, and broke down entirely in parts of Gujarat. By far the most satisfactory agency for enumeration has proved to be that of the local revenue officer, i.e., of the tahsildar and patwari, wherever there is a local revenue staff as there is in most provinces of India. Under the present system however it is not possible to make use of the revenue staff for final enumeration as it is in the first place not numerous enough for synchronized enumeration, and in the second place the census invariably conflicts in several provinces with heavy revenue work, and so much so that in some cases it is impossible to utilize the revenue staff fully even for merely supervisory services. The question of a change in the date of the census to the autumn has been carefully gone into by all provinces and states at this census, and though it would enable some provinces to utilize their revenue staff to the full and would be preferable for other reasons, in most cases the change would only increase difficulties. The position can however be conveniently met by substituting a *de jure* for a *de facto* census. The census of India is at present *de facto*, that is to say it aims at a return of all persons actually found in India at a given moment. It is however unlikely that it will ever be feasible to make a census of India completely synchronous. The area is too great and too diverse, and it is possible that the development of rapid communications may increase rather than reduce the difficulties. Nor is it apparent that a *de facto* census possesses any inherent virtue which is denied to a *de jure* census. It is therefore suggested that the census should cease to be even nominally *de facto* and that a *de jure* census should be substituted such as that taken by the United States of America, that is to say that instead of recording the actual individuals found during the prescribed hours of enumeration throughout the area censused the census should record the individuals normally located in every dwelling place in that area together with all nomads who have no fixed dwelling. The latter, it is true, will have to be censused synchronously, but this presents small difficulty compared to the synchronous census of all India, and it is submitted that for an area so large and diverse as India a *de jure* census is much more likely to be suitable than a *de facto* census which is really only at its maximum efficiency in smaller countries of much greater social, climatic and geographical solidarity. The substitution of a *de jure* for a *de facto* census would enable the enumeration to be spread (as in the U. S. A.) over a longer period so that the climatic variations of each province could be met and the revenue staff everywhere utilized without interfering with their normal duties. The dangerous dependence on a voluntary organization would be eliminated as well as the anomaly of a *de facto* census which is not truly synchronous. The expense would be less than at present and the difficulties of organization would be less, as the railway and boat enumeration could be largely eliminated and the whole procedure simplified. The census would in effect approximate to the existing preliminary enumeration without the subsequent final one. Difficulties of course present themselves, as they do in the case of the existing synchronized plan, Persons living away from home, nomads and migrants will need to be provided for, but these would appear to offer less serious obstacles than the mere danger of allowing so important an undertaking as a census to depend on the precarious services of unpaid volunteers. There are also countervailing advantages from the purely administrative point of view in having *de jure* instead of *de facto* figures; I quote the following from a letter from the Census Superintendent in Madras :—

"I received recently a wail from the health department that a village shown in the census with 300 people had actually 400 and they sought alteration of the figures. Here arise in a pronounced form the worse effects of a *de facto* census. The census determination was all right; it gave the facts on the night of 26/27 February 1931. About 100 people had apparently been off for the tree-tapping season or other circumstance and were absent on census night It seems clear that from the point of view of village figures the *de jure* total

Suggested Changes.

Assam, 17 (ii).
B. and O. I, 12,
47, 48.
Burma, 16.
Cochin, 18.
Madras, I, 10.
U. P. I.-15, II-2.
Bombay (1921),
pp. 4—9.

File No. 2, Enma.

has it every time in convenience. That is one of the conclusions I wish to draw from this incident. The other is the very general failure to realise that our populations are all rigidly (except in the Agencies, etc.) *de facto* and limit themselves to the facts of a single night in ten years. Eve Collectors seem not immune from this misconception, while among such officers as health inspectors it is rife. it is precisely that our figures profess to give and what the general census scheme limits them to. A really pathetic circumstance that came out of the second case was that the health inspector, apparently in pursuance of a general district practice was extracting birth rates per 1,000 for every village, even for one with admittedly less than 500 inhabitants. The waste of effort and what is worse, the misdirection of effort implied are more than serious."

It is therefore suggested that future censuses should be conducted on the lines of the census of the U. S. A. and in this connection a reference may be made to *Bureau of the Census—U. S. A. Service Monographs No. 53 (Washington, 1929).*

Mechanization.

4. A further argument in favour of such a change is to be found in the growing necessity for a mechanization of the sorting, or at any rate of part of the sorting process. There can be no doubt that given correct classification of the original returns a sort by machinery is far more accurate than a sort by hand. Further while sorting by hand is likely to become—indeed has already proved to become—more expensive from census to census, a sort by machinery is conversely becoming cheaper at successive decades and is now the approved method in all advanced countries. It has the further advantage that the cards once punched can be easily stored and re-sorted by the machines at any time that any additional information is required that may be available from a combination of certain sorts of the cards but which has not been considered important at the time of the census. Thus at some previous censuses of India a sort for occupation by religion has been made. It was not made in 1931 and can therefore never be obtained for that year. Even if the sorting slips had been preserved the expense of conducting such a sort would involve the recreation of the whole sorting staff and would therefore be prohibitive, whereas, if punched cards had been preserved all that would be necessary would be to pass them through the machines, and there would be no need to incur the expense of any additional staff at all, since in the case of modern census machines the very results are recorded in type by the machine itself. An investigation of the comparative costs of sorting and compilation by the present method and by punched cards and machines indicated in 1931 that the latter method would cost three times as much, but this excessive cost was due more to the necessity of classifying the very large number of entries on the present schedule than to any other cause, and it is likely that if certain suggestions made below be accepted this cost of classification could be very much reduced and a mechanized census would then be brought within the scope of practicability. If so it is obvious that it would be far more economical to centralise the sorting and to have it done on a single set of machines at Delhi than to have machines working at various provincial centres and involving either independent mechanicians or the cost of a travelling mechanical staff. A centralized sort would also be in accordance with the recommendation accepted by the Government of India that census should be a central charge except in so far as the actual enumeration and its costs are concerned.

Mechanized procedure.

File No. 3-Misc.
File No. 21-Misc.

No. of Charge.
No. of Circle.
No. of block.
Serial No. of individual.
Sex.
Civil condition.
Age.
Earning or dependant.
Literacy.
Knowledge of English.
Insanity, blindness, deafmuteness or leprosy

5. As to the detailed procedure of a mechanized sort it is not necessary to enter here. Several drafts of a code of procedure for such a sort have been made, and the material for drafting a code can be found in Files Nos. 3 and 21 Misc. of the 1931 census records. It will be enough here to point out that whereas the substitution of a punched card for a written slip offers no serious difficulty at all in the case of the entries on the existing schedule which are tabulated in the margin, the first three of which would be "gang punched" in large numbers of cards at a single operation, the following entries offer serious difficulty on account of the necessity for classification before punching:—Language, Birthplace, Occupation, Industry, Caste and Religion. In the case of caste an accurate return is already unobtainable; it is doubtful if the return serves any statistical or administrative purpose; the return involves a troublesome quantity of irritating propaganda which can be a serious affliction to census officers, and I have elsewhere recommended its abolition at any rate at the sorting and compiling stages. It is submitted that the purposes at present served by the return of caste can be equally well obtained by the return suggested below to cover both caste and religion. The return of religion has already begun to give difficulty on account of persons who belong socially to a community yet do not concur with its orthodox views on religion; and who

therefore wish to appear in different categories for different tables, a position very troublesome from the view of compilation when the whole scheme of classification depends on the return of religion. This difficulty is certain to increase rather than decrease. It is therefore suggested that the return of religion should be abandoned and a return of "community" substituted. This will be just as useful as a general basis of classification and will not involve any question (already resented by a few and on the face of it not a concern of the secular state) of the personal beliefs of individuals censused. It will make it possible for instance for a person to return his community as Muslim though his views on religion are completely un-Islamic without doing violence to his conscience. This particular instance is quoted because it actually arose in 1931. It will also enable each province to frame a list of those communities, including if necessary specific castes, of which a count is required by that province, and the items of such lists can be kept separate or amalgamated for India as may appear desirable. It will make it possible to obtain a return of the exterior castes as such without involving the question of the status of any particular caste. Thus if in any province a distinction were required for Hindus between Brahmans and non-Brahmans only, this could be obtained without a necessary extension to all provinces, or similarly a division into interior and exterior castes. It would then lie with the individual enumerated himself to say whether he belonged to an interior or an exterior caste, and the numbers would be determined by the persons enumerated and not by the arbitrary classification of census authorities or of any other official department. Similarly the occasionally troublesome question of whether a sect is Hindu or Sikh or what sects are Hindu or not would be met by the instruction that the census recognized certain important communities and each individual could return himself as a member of one of those communities or of some other (the latter to be amalgamated in 'Others') as he thought fit without reference to his religious views. A minimum percentage of adherents could be taken as a test by which to determine whether or not a community should be separately tabulated for a province or for India.

In any case what is proposed is that those returns which can easily be coded should be coded directly on to the enumeration schedule by enumerators, leaving the minimum amount of coding to be done in the sorting office. In some degree, and particularly if caste be excluded (a very difficult return for a mechanical sort, since so many items are involved), this principle can be extended to all columns of the schedule, subject to a maximum of numbers 1 to 5, which need not necessarily bear the same code value in each province *provided* the provincial cards are distinctive in colour or design as I suggest that they ought to be. Thus the serial numbers of the charge circle and block can be put down in their respective numbers—two or at most three digits in each case; the serial number of the individual will require at least three columns. I have elsewhere suggested that the instructions for the record of age should instruct the age to be given in years and months only where the actual date of birth is known and should otherwise be returned as age in approximate number of years. Those ages where months are given may need to go to the coder who will determine, say, to which year a person belongs who has given his age as 20 years and 7 months according to the method of grouping adopted, but 999 out of 1,000 returns, or more, will be already coded in years and will be sorted in the first instance by yearly ages, and later sorted into whatever groups are necessary for the compilation of the printed tables by means of the machine again. For male or female the enumerator will enter 1 or 2. If thought necessary a third digit could be used to cover that curious class, fairly frequently met with in India and Indonesia of males who dress in women's clothes and live the lives of women, following all their occupations except child-bearing. For civil condition again the enumerator should enter 1 for unmarried, 2 for married, 3 for widowed. The sequence is obvious and there can be little room for error. For earner or dependant again only 1 and 2 are required. For occupations, whether principal or subsidiary 1 to 5 should be entered for the following:—Rent receiver, Cultivating owner, Cultivating tenant, Agricultural labourer and Jhumiya (cultivator of shifting areas, *jhum*, *tarungya*, *penda*, *podu*, *bewar*, *beora*, *dahia*, *dhaya*, etc.). Any other occupation must be entered in full, but 60 per cent. of the population will be covered by these five entries. Industry should probably form the subject of a separate statistical enquiry conducted on forms issued to factory owners and managers, but if included in the census it would probably have to be entered in full. In the column for birthplace the numbers 1 to 5 should be entered respectively for the following:—

Serial No. of Individual	Serial No. of Block	Serial No. of Circle	Serial No. of Change	Sex	Civil Condition	Age	Script in which literate	English	Birth-place	Mother Tongue	Subsidiary Language	Earner or Depend-ant	Means of livelihood	Subsidiary Occupation	Community
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

born in district or town of enumeration (1), elsewhere in the province (2), in a contiguous province (3), elsewhere in India (4), in Burma (5); any birth-place outside India would have to be written down in full and coded in the sorting office. This direction postulates a higher standard of intelligence and knowledge on the part of enumerators than at present, but even if the present system of enumeration and the *de facto* census be retained there would be no difficulty about the numbers (1) and (2). Similarly for mother tongue and for subsidiary language each province would have a list of five or fewer prevailing languages to be entered by the enumerator by numbers and any other being written—thus in Madras Tamil, Telugu, Malayalam, Kanarese and Hindustani would be represented by numbers 1, 2, 3, 4 and 5, all others being written down in full. Assam on the other hand might use 1, 2 and 3 to represent Assamese, Bengali and Hindustani. The central compilation office would have to sort provinces independently for language but this would offer no difficulty. At the same time it would probably not be difficult to arrange a numerical code for all languages on a geographical system such that in each province the important languages would be represented by contiguous numbers that offered little difficulty in coding. For mere literacy two numbers are enough,

1 and 0, or for script of literacy the numbers corresponding to those used for language. For English 1 and 0 again will do and for infirmities 1 to 4. Community could be dealt with on the same principle as language, using numbers 1 to 5 for Hindu, Muslim, Sikh, Jain and Christian, or for Brahman, non-Brahman, Adi-Hindu, Muslim, Christian, or for Buddhist, Muslim, Christian, Hindu, Tribal as required, all other or doubtful entries being written down in full. It is essential that the coding to be done by enumerators should be limited to the really simple points and to no more than five numbers, instructions for the use of which should of course be entered on the cover of the schedule. *By this means however all schedules could be partially coded and not less than 60 per cent. of entries could be completely coded in the process of enumeration and all that would be necessary would

* I feel that I should make it clear that the opinion of the Superintendent of my office, Mr. A. R. Chitnis, is definitely against codification by enumerators, and it is possible that others with census experience will agree with him. His view is that codification should all be done in the punching office, and that in the case of the simpler coding, which is all that could in any case be done by enumerators, the process is so rapid that little would be gained in time by having it done in enumeration, whereas much might be lost in accuracy. His opinion is based on his experience of coding for the mechanical sort in railway offices. It appears to me however that a few code numbers could be used by enumerators no less accurately than the abbreviations required by the *billets individuels* system, and that the coding in enumeration of say 75 per cent. of many millions of entries would effect a very material saving of time and therefore of money. I admit that it is probable that an extensive use of code numbers in enumeration no less than that of abbreviations in *billets individuels*, postulates enumeration by patwaris or by other village officers or by some more reliable agency than that of the casual volunteer; it probably therefore involves the substitution of the *de jure* for the *de facto* census.

be to punch the cards for the schedules. The coding would thus be reduced to about 40 per cent. of the occupation columns and a very much smaller percentage indeed of those for language, birth-place and community. In designing the card illustrated above I have cut out numbers which would not in any case be used as this will eliminate a certain number of possible errors. This might be carried further and if, say, the maximum number of birth-places when coded was 200, all the digits above 2 could be omitted from the hundreds column. I have shown only one column for community but there is already one spare column and if necessary it would probably be possible to utilize the columns for the serial number of the individual for some other purpose. A puncher would have cost in 1921 about Rs. 15 per month and would punch in a day many more cards than a silk copier could copy in the same time. The Hollerith estimate was 300 cards punched in an hour by one puncher, but that would only be after some practice. I think I should advocate starting the columns with 1 and ending with 0 instead of starting with 0 and ending with 9, as 0 would be much less frequently used than 1 and 2 which might conveniently start each column. The schedules which required coding would be largely completed by the time the punching of the other schedules was completed and thus no time could be wasted. The cost of the cards—at first sight a prohibitive item, would probably be more than compensated for by the absence of any necessity for provincial abstraction and compilation offices with their deputy superintendents, inspectors, compilers and sorters, and the central compiling office equipped with machines would need no greater staff than at present. The cards would have to be sorted as received, but the operation is very rapid and the cards would be retained in the central depot, the tabulated results only being returned to the provincial superintendent for examination and treatment in his tables and reports. Incidentally such a system would reduce the risks of bogus insertions by communalist sorters such as those detected in Bengal in 1931, since collusion between several sorters would be necessary to effect it and could more easily be guarded against than under the system by which each copyist copies all the entries on each schedule given him.

6. It is clear however that the introduction of such a system would need very careful preparation beforehand. It also involves some modification of the existing system, and it is here suggested that by far the best solution would be to follow the example of Europe and America and have a small permanent department with a quinquennial census. At such a census the returns should be much fewer than at the decennial one and it would be possible to ring the changes on various returns, talking more often, or perhaps invariably, the important returns of age, sex and civil (marital) condition, and perhaps community, while asking for the difficult returns of occupation and industry, returns much more expensive on account of the cost of classification, once in ten or even fifteen years, their place being taken at the intervening quinquennium by birth-place, language, literacy or script, or by new items of enquiry, e.g., as to employment (as opposed to unemployment), housing, fertility, staple food or perhaps even wages. Under the present system the schedule is already overloaded though there are many points of much sociological and economic importance on which information would and should be obtained by census methods. It will no doubt appear at first sight that a change involving a permanent census department and a quinquennial (and mechanized) census would inevitably entail a great increase of expense. It is however doubtful if this would be the case. It has already been suggested that the post of census commissioner should be amalgamated with that of Director of Statistics—a permanent post already. It should also be pointed out that in any case the Census Commissioner's post and office normally last for about four years or longer out of each decade, so that its amalgamation with an existing permanent office would not necessarily involve so great an increase of expense in that direction as might appear at first sight. The increase involved by quinquennial censuses would, if the *de jure* census were substituted for the *de facto* (but not otherwise), also be largely counterbalanced by the increase of efficiency resulting from doubled familiarity, from the use of the existing revenue organization instead of one periodically created *ad hoc*, and, ultimately, from the use of machinery for sorting. The use of a greatly reduced schedule would have as its natural corollary the substitution of short statistical reports in slighter form than the present census reports and probably dealing independently with different items of the information obtained. Printing and publication could thus be cheapened and a regular output.

Preparation
necessary.

spread over five years; of the information collected at each quinquennium would have the advantage of making possible a regular budget based on an annual expenditure instead of the financial spasm of empirical expenditure inseparable from the present decennial system, and a smaller and permanent staff would unquestionably be more efficient than one collected for the occasion whose experience is dissolved at the close of operations and must be acquired all over again by costly and preventable error at each of its ephemeral spells. In short I suggest the abolition of the phoenix as the emblem of the census and the substitution of the much more reliable if less inspiring tortoise.

It will be clear that changes such as those proposed cannot well be carried out in the short time provided for the preparation of the census when a census commissioner is appointed *ad hoc*, as at present, with only six months in which to prepare his codes and contracts before the provincial offices come into being. The question is one that needs to be considered at least some three years before the date at which the first census under a new system is to be held. It will be also clear that the changes suggested above are not necessarily interdependent. It would be possible to use machinery without making the census quinquennial or to make it quinquennial without mechanizing it. At the same time it seems likely that the most economical and efficient proceeding would be to combine the two. It is desired to emphasize here that if a census commissioner be appointed only 18 months before the date fixed for the census he will have no time to make any radical innovation.

ii.—Enumeration.

The notes that follow are made on the assumption that there will be no change in procedure, but it will be clear that many of them will be no less applicable to a changed code than to the present. They are given as far as possible in the order in which they arise in the course of census operations.

Census Units.

7. Some economy could probably be effected at the next census by combining Sind and Baluchistan for certain purposes. For enumeration Baluchistan will probably need to have its own agencies and independent control. Owing to the huge areas over which its small population is sprinkled Baluchistan enumeration is *sui generis*; it is costly but inevitably so. On the other hand the sums spent in the abstraction and compilation of the Baluchistan returns have been unconscionably high, the staff has been unduly large, and the process has been inexcusably slow; the post-enumeration stages of its census could conveniently be combined with those of Sind in a single compilation office in Quetta or Karachi or Hyderabad, which should furnish the necessary tables and subsidiary tables to the officer selected to write the report. Compilation and abstraction by Sind offices is notoriously bad, but the presence of a provincial census superintendent might do much to mend that reputation. Similarly the combined administration of Bombay with the Western India States Agency and of the Punjab with the Punjab States Agency and with Delhi might conveniently remain though a brief separate report for each Agency of this kind is probably a *desideratum*. In the case of the Madras States Agency Pudukkottai might be permitted to compile its own report and the two remaining states of Banganapalle and Sandur might be treated together in an appendix to the Madras Report, the figures being kept separate. Many difficulties were caused in the India compilation in 1931 owing to the fact that provinces amalgamated the dependent states with British districts so that it was frequently impossible to disentangle figures for States or for British territory from those of the province as a whole, and all Superintendents of Census Operations should be warned that figures for states and British territory should be so treated that *any* figure is separable at any time down to the smallest item. The need for separate figures is more likely to increase with federation than to diminish and has been much more noticeable in 1931 than it was in 1921. On the other hand collections of states dealt with by a single Agency are not administrative units in the sense that provinces are, and though full figures are required for all states the report should be very brief and enable the report and tables to be combined in a single volume. Care should be taken to have the Punjab States Agency treated as a distinct unit separate from both the British Punjab and from the Punjab states.

Date.

File No. 2, Enmn.

8. This has been partly dealt with above (under Legislation). Late February or early March is undoubtedly the best time taken all round for a synchronous census, but it does not suit Madras or Burma, and late March does not

suit Bengal or Assam (too stormy). The dates of full moon should be obtained from the Meteorological office at Poona directly the Census Commissioner is appointed; it may here be pointed out that this is unnecessary if the census is to be *de jure* and non-synchronous, as the moon will not then matter. It is important to avoid big melas and fairs, and Local Governments and Census States need to be consulted at once, as it took four months to obtain the necessary replies in 1929-30. It is also important to avoid days that are auspicious for marriages and to choose, if possible, a day followed by a holiday (assuming of course that the synchronous census is retained). As the census of Ceylon is usually made to synchronise with that of India the Director of Statistics, Colombo, has to be informed at once of the date fixed, and similar information must be given to the Straits Settlements, etc., and to French and Portuguese India.

9. The Census Commissioner at this census was appointed in October 1929. It should be clearly understood that if the time available before the census is only 18 months it is impossible to make any important departure from pre-existing procedure. An experience of census as a provincial superintendent at the preceding census should probably carry more weight in making the selection than it did on this occasion. It is a consideration of very great importance. Appointments of census superintendents were made in 1930 by the Government of India on the recommendations of the Local Governments concerned. A point to be seriously considered is the probability of communal ramps to swell unduly the census strength of one community at the expense of others. It is of the greatest importance that the Census Superintendent should be regarded as impartial. The mere fact that he belongs to one of the contending communities is liable to place the Census Superintendent in a very delicate position, in spite of the best attested probity, and to make him a target for unjust criticism. This consideration arose in 1931 in the Punjab, while in Madras a special officer (an European) had to be appointed in Ganjam on account of Oriya-Telugu rivalry. In one case at any rate a Local Government recommended an officer who very soon proved to be physically unfit.

Appointments.

It cannot be too strongly emphasized that the physical fitness of the officer to be appointed is of the greatest importance. The duties of a census superintendent are extremely strenuous and are likely to cause a breakdown in any one of poor physique. Sufficient notice should be given to census superintendents designate to enable them to take six months leave before taking charge of their duties, and they should be encouraged to take such leave. The intellectual ability of officers to be selected is perhaps an even more important consideration than their bodily health, since the cost of the census will be largely determined by the speed with which the provincial units complete their work. The amount of work to be got through in different units varies very greatly, but generally speaking it is obvious that the more able the officer the more quickly and cheaply will he finish his work. The difference between closing a single provincial census office in September and in the following March means a difference in expenditure of some Rs. 20,000, apart from the cost that may be indirectly entailed by the delaying of the India Report. "Drive" is also an important consideration in selecting a census superintendent and comparative youth is therefore a recommendation rather than a handicap.

Another point of the greatest importance is that, once appointed, census superintendents should not be changed, interfered with, or taken away for other duties until their work is finished. Interruption is extremely detrimental to census efficiency, and in one province the appointment of a census superintendent who proved physically unfit for the work seriously jeopardized the synchronous character of the census. The Foreign and Political Department has on occasions taken liberties with personnel that would never be taken by a Local Government. During the 1921 operations the census superintendent in the Central India Agency was changed five times. Nothing quite so extravagant as this was perpetrated in 1931, but the Superintendent of Census Operations of the North-West Frontier Province was twice taken away from his legitimate work for administrative ends, and ultimately told to complete his report in Kabul. This proved impossible and a fresh officer had to be found to take his place. In Baluchistan Captain Burnett was first designated, then withdrawn and Khan Bahadur Gul Muhammad Khan appointed. At the time of writing this officer is still engaged on his report in combination with his duties as Vizier of Kalat. In Rajputana and in Central India

C. P. & B., 3, 7, 12.

the Census Department was fortunate in having Mr. Venkatachar and Colonel Cole as Census Superintendents, of whom one was not a permanent member of their cadre and the other not on their cadre at all. It may again be emphasized that changes in administration involve inefficiency and delay and expense, and it is suggested that an effort might be made at the next census to secure that officers deputed to census should be left in their posts till the completion of operations. This should not be interpreted as meaning that officers deputed to census should be those whose services are regarded as valueless in any capacity.

Budgets.

10. In 1931 enumeration was a charge on central revenues. In accordance with previous practice the provincial budgets for the first year were framed by the Local Governments. Without suggesting that the fact that they would not have to find the sums to be expended in any way influenced the budgetting, it may fairly be pointed out that the budgets were very definitely bad, and in some cases the minimum amount of attention was given to them. One major province budgetted for the precise amount actually spent in the corresponding period of the previous decade irrespective of changes in rates of pay, etc., and another major province framed its astonishing budget not even on the actuals but on the estimate framed for the corresponding period of the preceding census and that an estimate which had proved greatly in excess of the actual expenditure incurred, to which apparently no reference had been made at all. Perhaps this estimate was a legacy of 1872.

Probably the most useful way of framing the budget for the initial year would be to make an estimate of the amount involved by any definite changes in pay or the cost of stationery, etc., which were known to have taken place since the previous enumeration and to add or subtract the resulting difference to or from a lump sum arrived at on a population basis. Thus if the total expenditure on enumeration in 1931 worked out at (say) Rs. 4-8-0 per 1,000 of the population enumerated*, to the total thus arrived at a percentage should be added for the probable increase of the population and to the sum thus reached should be added or subtracted the known difference on account of changes in rates of pay, etc., indicated above. The normal increase of the population of India in a fairly prosperous decade seems to be about 10%, but the normal increase of the province or Agency in question would be a safer guide for the percentage to be added. In the case of Madras a pretty accurate estimate of the 1931 population was arrived at by the use of the provincial vital statistics, but no other province had anything like such good vital statistics in 1933. Obviously the same principle can be applied to India as a whole and the approximate cost of the whole census similarly estimated at any rate roughly, if no drastic change in method or procedure is to be made. It must be borne in mind that many enumeration charges cannot be met till the following financial year, e.g., bills for printing, T/A bills, etc., and in some cases may not be finally disposed of till the year after that, whereas only *bona fide* government adjustments, e.g., printing bills against Government Presses, can be written back during the six months following the close of the financial year.

Assam, 17.
B. & O., III, 4.
Madras, III, 4.

**Census
Commissioner's
Office.**

11. At the start of operations the Census Commissioner will find two or three things essential. The first is to have a capable Financial Assistant accustomed to the Government of India Secretariat procedure and the methods of the Finance Department. Statistical knowledge is not required till a later stage. I started by appointing an assistant with statistical knowledge, but his expert knowledge was largely wasted at the earlier stages. I would recommend no appointment of a Superintendent till later, and that the staff should at the start consist of a Financial Assistant, and a tour clerk who is also a steno-typist, to whom should be added a little later a third clerk preferably with a knowledge of enumeration work in one of the major provinces—Madras, the United Provinces or Bengal. The nucleus of the office should be clerks with permanent posts to revert to, as this nucleus is likely to form also the ultimate remainder, and has less motive for unduly prolonging work and less inclination towards scamping it when the final stages are reached.

For the first three months the Census Commissioner's office should not be in the position of an attached office, but should be started as a branch of the main department. This would allow time to make arrangements for an independent

* This was roughly the average for British India for enumeration exclusive of abstraction and subsequent operations.

supply of stationery, furniture, accommodation, etc. It would obviate the necessity for a third clerk at the beginning as bills would be prepared in the main department, and it would give an opportunity for the Census Commissioner's office to learn its work before making an independent start. Much inconvenience was caused in 1931 by the creation of an independent office at the very outset when neither the Census Commissioner nor his office had any experience of Government of India Secretariat procedure and when forms, stamps, stationery and every sort of information had to be cadged or borrowed from permanent departments.

12. The first thing necessary after legislation has been initiated and the date of the census fixed is to arrange for contracts for paper for enumeration purposes (forms, etc.), in the provinces, as the quantities required and the difficulties involved by the necessity for complying with the requirements of the Controller of Stationery make it necessary to make arrangements a very long way ahead.

Initial Steps.

Other steps which he must take are indicated in part in Chapter II of the Enumeration Code. The following may be mentioned below, but the dates of these should NOT be taken as a guide at the next census as many of them issued inconveniently late. The Secretariat is apt to take up the position that the date on which a case was dealt with in 1921 is a good guide to the correct date to deal with it in 1931, and to put the file on one side till then. This pernicious doctrine should be killed at the start.

Obtain a Resolution corresponding to No. F.-45-7-30-Pub. of the 7th June 1930.

Write to Local Governments in accordance with Education Department's letter No. 61 of the 13th July 1920 and Home Department's letter No. F.-45/8/30-Pub. of 1st May 1930.

File No. 44-Enumn.

Arrange for the issue of instructions in accordance with Home Department's Resolution Nos. 254-270 of the 16th August 1910, and Education Department's letter No. 39 of the 22nd April 1920 and E. H. & L.'s, No. 71-L. S. G. of the 19th April 1930. It has already been pointed out that the compulsory powers given over municipalities are not drastic enough.

Obtain resolutions on the lines of Home Department's Nos. F.-45/18/29/Pub., and F.-45/6/30/Pub. of the 9th June 1930.

Obtain Resolutions and authority as in Section 7 on page 9 of the Census Code of 1921 and page 8 of that of 1931.

If the Census of Indians on the High Seas be repeated, the rules should be issued at the earliest possible date so as to enable as many ships as possible to be given schedules. Such rules should not be statutory; there is no means of enforcing them.

Obtain permission for provincial census superintendents to correspond direct with the census officers of States in political relations with the Local Government of Agency or/and with the State Durbars on all matters relating to census.

States, particularly those in Agencies, should be asked through the Political Officers to appoint State Census Officers at the earliest possible date, so that these officers *shall have been appointed* by the time census superintendents are appointed for the Agencies as a whole.

C. I. A., 12, 13.
Raj. A.M., I, 1.

Obtain the earliest possible assent of Government of India to the form of census schedule and of tabulation (including the classification proposed). It is unwise to ask for any alterations that can be avoided. If changes are asked for in the form of *existing* statistics the proposals will be circulated to all departments. This involves incredible delay in obtaining orders; it took more than 7 months in the case of the recent census. It also involves a very large number of troublesome requirements many of which will give much inconvenience to census and do no good to those that ask for them. It is very easy indeed for any one to suggest, for instance, infinite elaborations of the occupational groupings. Their practical value is doubtful as the departments that ask for them ignore Sir Edward Gait's very pertinent and true observation that "the whole (Bertillon) scheme as adapted for India is based on the axiom that a census does not supply data which are suitable for minute classification" (*vide* Volume I, part I, Section 117 of the 1931 Census Report). The best answer is that every elaboration of classification increases the difficulty, the delay and the cost of sorting. This is incontestable. The difficulty could probably be avoided if the position were adopted at the outset that any change in the occupation table would interfere with the comparative value of the figures and that it was

therefore intended to continue the existing scheme of classification. Special requests for some definite change, a need for which has been felt by the department asking for it, are on a different footing, *e.g.*, E. H. and Land's request in 1931 for figures of cultivating owners, but such requests should be justified, as many proposals for alteration merely emanate from the fertile brains of someone who considers the scheme can be improved. Anyone can play at this, but it wastes much time.

Madras I, 2, and
File No. 53-Enmn.
of 1931.

An attempt should be made to obtain special rates from all railways for the carriage of census forms through the Railway Board. This failed in 1931 but should be tried again and, failing success, provinces with a sea-board should be told to arrange for distribution by boat wherever possible instead of by rail. The quantity of paper and forms required to be distributed and redistributed is vast, and refusal of special rates is difficult to understand as the railways depend on census figures for the knowledge of the distribution and density of population which is essential to them for various reasons.

Paper and Printing.

13. The Controller of Stationery's rules will in many cases be found inconvenient, and it was several times found necessary in 1931 to act in anticipation of his sanction. He may want paper to be bought at inconvenient places, and in 1930 he wished the paper for Bombay to be contracted for in Bengal and, as railway freight across India made this obviously prohibitive, he proposed that it should be shipped to Bombay by sea. There is no time for manoeuvres of this kind. Everything in the Census Department as at present constituted has to be carried out against time, and it is in the end cheaper to buy in the nearest market than in a distant if, at first sight, less expensive one. Delay involves great expense in the end, and every month saved in the operations is so much financial saving to Government, while at the enumeration stage a delay in the supply of paper and forms may entirely defeat the synchronization of the census. These are platitudes, but the rules framed by the Department of Stationery and Printing are probably intended for a routine supply, and not designed primarily to meet the suddenness and the haste with which census arrangements must be made *and executed* on a large scale and on a single occasion during a ten year period.

Madras, I, 2.
C. P., 11.
Raj. A.M., I.
U. P., 25.

The same applies to printing. Forms, etc., for use in the provinces must be printed there and not at Government of India presses. In the case of Bengal and Assam the Alipur Jail press is recommended, otherwise private presses will be found quicker and cheaper. Government of India presses are quite inadequate to producing the great number of forms required in the time available. Moreover they will not print in vernacular type, and (which is *very* important) they will not distribute direct to district census officers. As for Local Governments' presses, they are far more expensive than private ones and (except Madras) generally less efficient. If the Government of India has to pay for printing, private presses will be found much cheaper than those of local governments. A reference should be made to the 1931 correspondence with the Controller of Printing and Stationery and every effort made to come to an understanding with him at the start. It is very emphatically recommended that paper should be ordered before the Provincial Superintendents are appointed so that a large instalment shall be found waiting for them. Even if enumeration is entirely financed from provincial funds this arrangement should be made, as the Provincial Superintendents want quantities as soon as they are appointed and are in great difficulties if they cannot get it at once. *This involves very early arrangements on the part of the Census Commissioner.*

Powers.

14. The powers delegated to the Census Commissioner in 1931 were very decidedly more restricted than those given at previous censuses, particularly in the matter of appointments and scales of pay. This was probably the inevitable result of the general division of financial sanctions into *voted* and *non-voted*, with Assembly control over voted budgets. At the same time the necessity for a certain amount of decentralization entailed the delegation of certain similar powers to Local Governments. The manner in which the powers were delegated led to the result that in some respects the Census Commissioner was unable to exercise powers in respect to provincial offices that Local Governments could exercise, so that when the Census Superintendents themselves reverted to other employment before the complete closure of their offices, the Census Commissioner had no power to sanction, *e.g.*, honoraria for which the Census Superintendent could have obtained sanction direct from his own Local Government had he still continued in office. It was also found convenient in a number of

cases to extend the powers given to the Census Commissioner in the first instance, as otherwise repeated references to the Government of India were required on very trivial matters. It will save trouble in the end if the powers with which Census Commissioner is invested are a little wider at the outset. For the whole subject of Census Commissioner's powers generally see file No. 6-Accts., which will show the subsequent additions made to the original powers of sanction. The rules for audit give a good deal of trouble. Thus the Census Superintendent of Bengal paid a sweeper a small allowance for sweeping out his office in addition to his other work, which was the cheapest method possible. This allowance was paid as a contingent charge, but after passing it for six months audit objected and the matter had to go to the Government of India for sanction. This is only one instance of many similar cases.

15. Excessive inconvenience was caused in 1931 by the failure in 1921, to associate subsequent corrections made with the original circulars issued. The resulting position was that circulars were issued on the lines of those in 1921 and subsequent amendments were found necessary which had already been made in 1921 but of which no knowledge was obtained when the circular first issued in 1931. To remedy this difficulty a collection (File No. 13-Misc.), was made this time of circulars issued and distributed according to subject instead of date, so that in issuing any circular on the basis of a 1931 circular corrections found necessary subsequently can be ascertained before the original circular is issued. Some of them are worth examination, and the provincial administrative reports will be found exceedingly useful. I advise the careful perusal of them as soon as duties are assumed.

Circulars.

File No. 13-Misc.

16. Notes with regard to important points in the census schedule, which will have to be decided before it is published, and which is one of the first forms it is necessary to draft, are indicated below :

Schedule.

17. Columns 4 and 8:—I urge the substitution of a return of *community* instead of that of caste and religion. This in effect abolishes the return of caste. The returns of caste, if obtained, have no statistical value and the attempts of innumerable castes to use the census for purposes for which it was not intended are excessively troublesome. This change would save a vast deal of perfectly futile correspondence (*vide* paragraph 182 of the Report and the file of caste-representations in 1931). As for religion, that is no longer entirely coterminous with the communal unit to which a person belongs. There are individuals who may be Muslim or Hindu by association but agnostic by belief and such cross division is likely to increase rather than decrease. A return of community in preference to religion will evade a number of difficulties and I have already given some arguments for it above. The distinction of Arya and Brahma as separate subheads of Hindu may also be abandoned entirely; it serves no useful purpose and complicates sorting; they should be amalgamated for all purposes with the main head of Hindu, unless they return themselves as non-Hindu.

Community.

File No. 1-Enmn.
File No. 5-Enmn.

18. I suggest substituting for the sex symbols used in 1931 an open triangle for male and a simple circle for female. These may be treated in one of two ways. Either they should be left blank for unmarried, have a tick put on them for married, and a cross for widowed [*vide* Madras Administrative Report, II, 13] or be treated as in 1931, substituting a tick for a dot as being 'quicker, clearer and safer'. The reason why I chose to keep the blank symbol for 'married' was that as the married greatly predominate fewer modifications were involved by this course, but I admit the strength of the considerations urged by the Census Superintendent for Madras in section 13 of Chapter II of his Administrative Report in a passage which might well be incorporated into the next census code, if slip-copying be anywhere retained. The experience of the Census Superintendent of Bihar and Orissa (*vide* the Bihar and Orissa Census Report, Chapter VI, 2, and his Administrative Report II, 10) was exceptional and I disagree emphatically with his view that the 1931 system is inferior to that of previous censuses. The change was suggested originally by Mr. Sedgwick in Bombay in the 1921 report and there is no question about the saving in time as well as in slips.

Sex.

19. Column 7.—Age was returned in 1931 as age in years to nearest birthday. Previously age last birthday was asked for. The change was made at the instance of the 1921 Actuary, Mr. H. W. Meikle. The age returns were

Age.

much improved by accepting his recommendations. The 1931, the Actuary, Mr. L. S. Vaidyanathan wishes to have a reversion to the previous return of "age last birthday". Frankly it appears to me absurd to ask for a return in this form in a country like India in which the vast majority have no idea when their birthday is. Only 8 persons in every 100 in 1931 could read and write in the vernacular. Those that know the date of their birth can hardly be as many as 8 per 1,000. The return really received is the approximate age in years. The 1931 actuary considers that the age received is really the age to the last birthday rather than that to the nearest birthday, a view which is open to dispute, though I entirely agree that it makes not the least difference to the returns whether age last, next or nearest birthday is asked for. In either case the method he would apply to obtain smoothed age groups is not the method selected by the 1921 actuary. He has dealt with it in the Annexure to Chapter IV of the 1931 Report. The 1921 actuary, however, has written expressing strong views in favour of the method he adopted himself. Probably the question should be decided in consultation with the actuary who is to examine and report on the returns. This is a point therefore which it would be as well to get decided at once. It is, however, unlikely that an immediate decision on such a point will be possible and on this as well as on general grounds I should recommend that the instructions on the schedule should take this form:—*Age—Here state age in years and months; if precise date of birth unknown, state approximate age in years only.* The result would suit whatever system of grouping is adopted. The reason why the examination was not made in 1931 by the Actuary to the Government of India was that he would not guarantee that the work would not take him so long that it could not be ready for publication with the report, or indeed for a considerable time thereafter. He also required to be given expensive clerical assistance from this office, an unsatisfactory arrangement in my opinion, as I should have had no control over the work done. In consequence the Government of India agreed to pay a sum of Rs. 5,000 down provided the report and life-tables were completed in six months time so that they could be bound with my report. I think it was probably no more costly in the end and a great deal more satisfactory. The correspondence with both actuaries as to the best method of grouping the age returns and the formula for the return will be found in File No. 28-Genl. Two of Mr. Meikle's letters are printed as an appendix to this report.

File No. 28-Genl.

Earner or
Dependant.

Assam, 7.
C. P., (b).
U. P. I, 31.

20. Although this column was a great deal simpler than that for "occupation on which dependent" of previous decades, it seems to have given a good deal of trouble, and the Census Superintendent for one province not only insisted on interpreting "earner" in the sense of "worker" in 1921, which was not intended, but has repeated a recommendation of his definition for his successor at next census in case the same return is called for again. A boy of 10 years is not ordinarily an earner in the sense used by other provinces in 1931. The India code was I admit reprehensible in the matter of the instance taken, which slipped in from the 1921 code, but it should be easy to mend this next time.

Occupation.

Assam, 7.
Bihar and Orissa,
I, 27.
Central Provinces
and Berar, 42 (b).
Madras, I, 4.

21. Columns 9, 10, 11 and 12 are concerned with occupation. In columns 9, 10 and 11, I recommend retaining the 1931 the form, but should add a proviso that domestic service should not be admitted as a return unless actual earnings in money, or kind were received in recompense, and another proviso that where the principal occupation was agricultural a non-agricultural subsidiary occupation should be returned by preference, and vice versa. The term *means of livelihood* should probably be substituted for *occupation*, at any rate in vernacular forms. The definition of industry, if it is to be reserved for organized labour, is a matter of serious difficulty. The return was made but not compiled in 1931. On the whole I am inclined to recommend collecting the necessary statistics on a separate form (as in 1911 and in 1921) but *not simultaneously* with the population census, if that be synchronous.

Language.

22. I should retain both mother tongue and subsidiary language (columns 14 and 15). The latter return gives little trouble and is of great interest. The opinions of superintendents who have recommended its abandonment appear to me parochial. One change in instructions should be made. It should be permissible to return either Urdu or Hindi for the spoken language *in the schedule*; such a instruction will save innumerable protests. Both must still be classified as Hindustani

for abstraction purposes, since it is not possible to draw any definite line between the two *as spoken languages*. The return of script is a different matter.

23. In the column for literacy I would suggest altering the enquiry to read "script in which literate", and instruct the enumerator to ask for the script (other than English) in which the enumerated would normally write his private correspondence; if none, to enter 'illiterate'. These instructions would enable a correct return of all persons using the Urdu script, and obviate the complaint of many Muslims in 1931 that their national language did not appear in the census returns. Literacy.

24. My recommendation to omit infirmities from the census was not accepted as it was opposed by the D. G., I. M. S. Both the United Kingdom and the United States of America have long abandoned the attempt to record infirmities at the population census, and the figures obtained for India have little absolute value, though a relative value may perhaps be claimed from census to census. If they are retained I should be inclined to advocate a reversion in the case of deafmuteness to the old definition of deafmute from birth but to put it last on the list. It was claimed that the qualification from birth was improperly applied to the other infirmities, but it is clear that its omission has led to the entry of dotards as deafmute. The professor of Ophthalmic Surgery in Calcutta Medical College has urged a standard definition of blindness as follows:— Infirmities.

A person who cannot count fingers close to the eye should be counted as blind, a person who cannot count fingers over a distance of one arm's length (3 ft.) from the eyes should be counted as partially blind.

I consider that any attempt to introduce this distinction should be strenuously resisted. It is bad enough to have to record the blind and the introduction of an attempt to record the partially blind will merely destroy what value our present figures have. As for the definition of blind, there must be some at any rate who could more easily count fingers held at a slight distance than close to the eye, and Colonel Russell's criticism is that if a man can see any fingers at all he is not blind, whether he can count them or not. He deprecates the introduction of such a definition. Assam, 17, (iii).

25. The codes have also to be drafted and I should very strongly recommend that the schedule, the enumeration code, and as far as possible the compilation code, should be drafted in time to allow drafts to be sent for criticism to provincial superintendents as soon as they are appointed. This might make it possible to print off a single English version which would serve for all provinces. Great inconvenience will be experienced if the Railway and Cantonment codes are issued later than the main code. There is no need for this provided the departments concerned are approached as soon as possible for their concurrence. If the codes are not issued with the rest it will be found that census charge circles and blocks have to be remade differently, very troublesome to Superintendents of Census Operations. In drawing up the Cantonment Code it has to be remembered that military units and officers are liable to be moved about at short notice without any regard at all for the convenience of enumeration. Consequently it is advisable to keep the methods followed in the census of the purely military population as simple as possible and to avoid the use of block lists, charge lists, etc., which have to be transferred from one unit to another if transfers occur during census operations. The Cantonment Code as framed in 1931 seems to have generally been regarded as a decided improvement on previous codes, though one province dissented from this view. Attention is drawn to the possibility of double enumeration of Railway passengers, an easy means of enhancing communal numbers if communal feeling were strong as it was in the Punjab in 1931. A reference should be made to the Punjab Administration Report for that census. Codes.
Rajputana-Ajmer-Merwara, I.

In drawing up the codes the following points are worth attention with particular reference to the administrative reports quoted against each:—

Changes in the schedules.—Where communal feelings are likely to run high, involving attempts to insist by threats on persons returning themselves under other terms than they would use if left to themselves, it may be advisable to prohibit, without the authority of the charge superintendent, any alteration at the final enumeration of returns of community or religion made at the preliminary enumeration. Such orders were found necessary in the Punjab in 1931. Central India Agency, 24.
Rajputana-Ajmer-Merwara, I 4.
Central Provinces, Punjab, 18.
Punjab (1921), 17.

File No. 44-Enmn. *Government Servants and the Census*.—Chapter V, Section 12 of Part I of the 1931 Code. It is most inadvisable to agree to any Local Government's granting any general exemption for census work to any class of Government servant. The code needs amendment in that respect. [Madras; I, 3].

District Census Offices.—See Bihar and Orissa Administrative Report I, 10.

Charge Register Abstract.—See Imperial Census Code (1931) V, 9 and Bihar and Orissa Administrative Report I, 18(2).

Household Schedules.—Central Provinces and Berar 44, Bihar and Orissa I, 41, Madras I, 3.

Census Contingent Charges.—Assam, 17

Slip copying accommodation and furniture.—Assam, 19.

Order of Sorting.—Assam, 32.

Other points in which the code might be amended are suggested in the Bihar and Orissa, Administrative Report I, 41, 43.

Baroda, 69.
Bihar and Orissa,
I, 13.
Madras, I, 8.

Whether the voluntary enumerator system be retained or abolished, I am inclined to think that a system of small prizes for enumeration work would be of a value great out of all proportion to the cost involved, and would do much to stimulate the great amount of unpaid effort which will be needed to obtain a census of India under any system. The printed sanads are no longer valued as they used to be, as they have proved to bring no material advantage in the way of employment.

Census Conference. 26. When Census Superintendents have had a short time to examine the drafts, at any rate of the enumeration code, I would strongly recommend calling a census conference of all superintendents at Delhi. This was a 1931 innovation, and proved very useful, but it would have been of very much greater value had it been called at a much earlier stage in the operations, giving superintendents time to see and criticize the draft codes. Incidentally it might have made it possible to frame a combined code, the English version of which would have suited the needs of all provinces, making it possible to print one English version of the code only instead of a code in English as well as in vernacular for each province. The saving in time and expense would probably more than counterbalance the cost of the conference in this respect alone.

Rajputana-Ajmer-
Merwara, I, 1.

iii.—Abstraction.

Slip copying. 27. The method since 1901 has been to have the schedules copied out on to slips as described in Chapters I and II of the Census Code, Part II—Tabulation and Compilation. A sample slip is there depicted. The alterations to the sex signs described in Section 3 of the Code (Part II) should be a tick and a cross instead of a dot which is more difficult to make clearly and quickly. Instead of two circles a triangle and a circle would be better.

I should recommend that wherever possible the *billets individuels* system be introduced. It is fully described in the Baroda Administrative Report, and Mr. S. V. Mukerjee made a great success of his innovation in that State. It requires, however, better enumerators than are available in many parts of British India, and it also requires very careful training of enumerators, a matter indeed upon which the whole census depends, in any case. Wherever suitable enumerators are available this *billets individuels* system should be used in preference to schedules and slip-copying as it saves at least a month, perhaps even two or three, in time and a great deal in money. One Census Superintendent (B. and O.) was opposed to it, but both the Madras and C. P. Superintendents considered that it could be generally introduced in their provinces with success. If the synchronous census be abandoned, as I have already suggested, it would probably be possible to employ this system wherever there are local village officers of intelligence—e.g. throughout most of Madras, and thus effect a great economy. If the census were mechanized, a card, to be punched later, on the lines of the one illustrated at page 6, could conceivably be substituted for the *billet* but I should strongly recommend retaining the schedule in that case. In fact the schedule and a punched card is to be preferred to the *billet* on many grounds. The period occupied by slip copying varies considerably. Ajmer and Rajputana with a population of over 11 million had finished in 1931 by May 2nd; Madras, Bengal, and the United Provinces had finished by the middle of that month; Bihar and Orissa, and Burma by the end of it. Assam and

Baroda, 59—62.
Bihar and Orissa,
II, 2, 3.
Central Provinces,
76, 86.
Travancore, 56—59.
United Provinces
II, 3.

the Central Provinces finished sometime in June but Bombay not till late in June and Hyderabad did not finish until sometime in July. The difference in timing started in slip-copying tends to become progressively increased as operations proceed and is an important factor in delaying the India compilation. If a *de jure* census be substituted for a *de facto* and the village official, patwaris, etc., who undertake the enumeration carefully trained, it should be possible, by the use of *billets individuels*, to eliminate this stage to a considerable extent next census and at subsequent censuses entirely. The total cost of slip-copying in 1931 was approximately Rs. 78,400 for the United Provinces, 16,300 for the Central Provinces, and Rs. 69,600 for Burma. If the census be mechanized the *billet* system will be unsuitable, and the schedule should be retained as suggested above, the enumerators entering code numbers where possible. Punching and coding will then take the place of slip-copying.

All superintendents should be warned in plenty of time that if combustible buildings are used for slip-copying and sorting proper precautions should be taken either to prevent fire or for the keeping of schedules not in use, and of all duplicates in some reasonably fireproof building. It is probably advisable to insure against fire to the extent of the possible cost of repeating the preliminary enumeration, if terms can be obtained which are not prohibitive.

Assam, 19.
Baroda, 16 (e).

28. Short of mechanization the present system of sorting the slips, which is fully described in the code, does not offer much room for improvement, but if the *billet individuel* is adopted instead of the slip it might be advisable when sorting by religion (or community) to wash each slip with a splash of water-colour, or of coloured ink according to the community of the individual represented in order to make the slips as readily identifiable by community as they are under the present system. A modification, however, will be needed in the case of any tables to be sorted by age. It would have been advisable in 1931, and it would be advisable in 1941, to have the usual sort made for the individual age returns of 100,000 of each sex; for the remainder, sorting into groups is much more economical. The question of the grouping to be adopted for age has been examined exhaustively by the actuary in the annexure to Chapter IV of the report. The question will have to be decided whether these groups should be the same as those adopted for 1931 or should be formed on the '2-6' method recommended by the 1931 actuary. The 1931 method is described in the actuary's report on the 1921 census published by the Government of India in 1926; in the special note, which will be found in the file of circulars (it was one of the first issued); and in Section 7 of Chapter IV of part II of the 1931 Code. It should, however, be pointed out that this paragraph needs one definite amendment. The calculations should not be made to convert "sorters' groups" to "compilers' groups" but should be delayed until the final compilation sheet is to be made up. This will very greatly reduce the number of calculations to be made. The sorters' ticket should therefore not contain the form shown on page 45 but should be designed on the 1921 sorters' ticket, and the form on page 45 should be used for the compilation form only. In deciding as to the method of grouping to be adopted it will be well to take into consideration Mr. Meikle's views as well as those of Mr. Vaidyanathan. The views of the latter will be found as indicated above. Mr. Meikle's views are embodied in the letters printed at the end of this report. It is worth considering whether the varying advantages of the two methods advocated may not depend on the nature of the decade experienced. It will be noticed from Mr. Vaidyanathan's analysis that the ternary-septenary grouping advocated by Mr. Meikle would have been the most suitable in 1891 when conditions during the past 10 years had been similar to those of the decade 1921-31, whereas the 2-6 method was best in the intervening decades when the years were unprosperous and the age constitution of the population was different. Perhaps the most important point for the census, however, is that the method of transforming the sorters' groups to the compilers' groups should be essentially simple, and provided the statistical results of the two methods do not show a very marked preference for one or the other, the choice should be determined by ease of transmutation. As Mr. Vaidyanathan's Table XXI does not show very clearly the method by which the original groups are transferred to quinquennial groups of 1.5, 5-10, etc., a table is here inserted (for comparison with that on page 45 of part II of the 1931 census code) which will give the results required by Mr. Vaidyanathan. In either case odd numbers remaining on division should be relegated to the lower age group,

Sorting.

File No. 13-Misc.

as no allowance is made for mortality in this arithmetical adjustment. Which method of grouping should be adopted is a matter for determination when the next code is framed.

Compilation form for Table of age.

Sorter's age group.	Number of Persons.			Formula.	Compiler's age group.	Number of Persons.		
	Unmd.	M.	W.			Unmd.	M.	W.
0	A	=	0	..	..
1	B	=	1	..	..
2	C	=	2	..	..
3	D	=	3	..	..
4	E	=	4	..	..
5	F	=	5-9	..	..
6	F+G+3/5 H	=	10-14	..	..
7-11	2/5 H+3/5 I	=	15-19	..	..
12-16	2/5 I+3/5 J	=	20-24	..	..
17-21	2/5 J+3/5 K	=	25-29	..	..
22-26	2/5 K+3/5 L	=	30-34	..	..
27-31	2/5 L+3/5 M	=	35-39	..	..
32-36	2/5 M+3/5 N	=	40-44	..	..
37-41	2/5 N+3/5 O	=	45-49	..	..
42-46	2/5 O+3/5 P	=	50-54	..	..
47-51	2/5 P+3/5 Q	=	55-59	..	..
52-56	2/5 Q+3/5 R	=	60-64	..	..
57-61	2/5 R+3/5 S	=	65-69	..	..
62-66	2/5 S+3/5 T	=	70 and over	..	..
67-71	2/5 T+U	=		..	..
72 and over	U	=		..	..
Total			Total ..	..	..

The question of the sort for age has to be carefully considered with reference to Civil Condition and to any other table (*e.g.*, Literacy) in which classification by age is adopted. A reference to paragraph 92 of the Report will indicate the disturbance caused in the figures of civil condition by the application of the actuary's method of age grouping, a disturbance which was unfortunately not foreseen when the method was adopted. In the correspondence with Mr. Meikle appended to this report a method of treating the age groups to get accurate figures for civil condition is suggested by him. In my opinion it would be enough to apply his method to the age groups from 4 to 23 years, the remaining groups being accurate enough for all sociological purposes even under the biased grouping used in 1931. Instead of Mr. Meikle's mathematical formula, however, it would be possible to obtain a sufficiently accurate result by sorting *ab initio* into the following groups:—0 or A, 1 or B, 2 or C, 3 or D, 4-6 or E, 7 and 8 or F, 9-11 or G, 12 and 13 or H, 14-16 or I, 17 and 18 or J, 19-21 or K, 22 and 23 or L, 24-26 or M, 27-33 or N and thereafter in alternate ternary and septenary groups as in the scheme on page 45 of part II of the 1931 census code. For purposes of age, the numbers in F, G and H and in J, K and L can be combined to form septenary groups equivalent to F and H respectively in the scheme referred to. For the purposes of civil condition on the other hand they would be combined as follows to form compilers groups:—

Age group—

$$3-4 = \frac{1}{2} D + \frac{1}{6} E$$

$$4-5 = \frac{1}{3} E$$

$$5-10 = \frac{1}{2} E + F + \frac{1}{2} G$$

$$10-15 = \frac{1}{2} G + H + \frac{1}{2} I$$

$$15-20 = \frac{1}{2} I + J + \frac{1}{2} K$$

$$20-25 = \frac{1}{2} K + L + \frac{1}{2} M$$

$$25-30 = \frac{1}{2} M + \frac{1}{2} N$$

and thereafter as in the scheme of 1931. This method gives very much better results in the case of civil condition than the rougher one followed in 1931, and it

is probable that it is more accurate than direct sorting for civil condition into quinquennial groups. For the sake of comparison the method has been applied to the Gwalior figures given in paragraph 92 of the census report (Chapter VI) and the results arrived at are compared below with those obtained by the original method of sorting into quinquennial groups which are weighted by the preferential digit bias, and undoubtedly very inaccurate, and with those obtained by the 1931 method which are unduly weighted by the halving of the septenary groups, as there explained. In comparing these figures it should be understood that the old *pre-1931* method has not been followed precisely as the original sort was not into groups of those aged 0-1, 1-2, etc., but into groups of those aged 0-6 months, 6 months to 18 months, 18 months to 2½ years, etc., and allowance had to be made for this—

Age group.	Method of grouping.	Total figures of age group.	Total number of males married or widowed.	Ratio of married, etc., per 1,000.	Total number of females married or widowed.	Ratio of married, etc., per 1,000 of 1931 age group.
3—4	of 1931 ..	100,749	796	8	1,767	18
	of 1921 ..	98,617	785	8	1,619	15
	here suggested.	100,749	796	8	1,767	18
4—5	of 1931 ..	98,699	988	10	2,275	23
	of 1921 ..	100,577	930	9	2,050	21
	here suggested.	98,699	988	10	2,275	23
5—10	of 1931 ..	427,808	16,918	38	45,331	101
	of 1921 ..	468,568	9,748	22	27,297	61
	here suggested.	461,031	10,257	23	28,428	63
10—15	of 1931 ..	430,180	41,563	97	92,723	216
	of 1921 ..	390,623	41,004	95	100,872	234
	here suggested.	416,954	48,223	112	109,626	255

It is therefore recommended that if the 1931 method of grouping be retained at next census it should be dealt with as indicated above for the purpose of determining the numbers of married and widowed in each age group, the unmarried being determined by the subtraction of the married and widowed thus obtained from the total of the age group *computed by the 1931 method*. Obviously it is necessary that the total age group should tally throughout, and it is *only in the case of civil condition* that the above method is more accurate than that of 1931. From this point of view any formula which would serve equally well for both age and civil condition is much to be preferred. For the sake of comparison I give the results of the same Gwalior figures as they would appear treated by the method of grouping suggested by Mr. Vaidyanathan :—

Age group.	Total figures.	Number of males married or widowed.	Ratio.	Number of females married or widowed.	Ratio.
3	102,798	603	6	1,258	12
4	94,436	967	10	1,780	19
5—9	458,961	10,500	23	29,384	64
10—14	430,448	47,041	109	103,155	240

A similar modification of this method could perhaps be used for civil condition on the following plan. For Mr. Vaidyanathan's age groups the following may be substituted :—

$$3=D, 4=E, 5=F, 6=G, 7+8=H, 9+10+11=I, 12+13=J, 14+15+16=K.$$

Then for the sort for civil condition we may take—

Age group—

$$3=D$$

$$4=E$$

$$5-9=F+G+H+1/3 I.$$

$$10-14=2/3 I+J+1/3 K.$$

The result works out as follows :—

Age group.	Number of males married or widowed.	Ratio calculated on groups accord- ing to Mr. Vaidyana- than's figures.	Number of females married or widowed.	Ratio per 1,000 of Mr. Vaidyanathan's age group.
3	603	6	1,258	12
4	967	10	1,780	19
5—9	8,973	20	24,878	54
10—14	41,312	96	97,874	227

It is to be noted that the ratios have throughout been calculated on the total age group not on the age group of the sex concerned. This has been done to save trouble as the ratios are merely used as a standard of comparison. It is assumed that whatever system of grouping is adopted the age group will be determined purely from the point of view of age and will be kept constant for other tables as the total of the numbers at that age.

It will be seen that the variation between the figures for civil condition according to Mr. Vaidyanathan's method of grouping in its original form and in the proposed adjustment do not vary very greatly, and if it can be held that this variation is immaterial and that the figures in the original grouping are accurate enough to be taken as they are, for they are nearer than the modified figures are to figures obtained by Mr. Meikle's method, then this is a strong argument for the adoption of Mr. Vaidyanathan's grouping. On general grounds, however, I should prefer Mr. Meikle's method. The grouping may have to be carried out by unskilled and rather stupid persons. The division of each sorted age group into two halves leaves less room for confusion and error than when the division is into 2/5 and 3/5 which may too easily be interchanged and give rise to errors which will never be discovered. Perhaps the greatest disadvantage in adopting Mr. Vaidyanathan's method is that it means another break in continuity weakening the comparative values of successive censuses. Some change there had to be, for the Indian age groups were clearly absurd as they stood, but if changes are made without finality, continuity and comparative value will be lost and on that ground alone I should recommend adhering to the 1931 method of age grouping, while obtaining the numbers of married and widowed at each age by some such method as has been here suggested. An actuary's advice would be worth having, provided the method he proposes is not only simple but reasonably foolproof.

Compilation.

29. The compilation of the India Tables must wait on those of the provinces, and their irregular and dilatory submission often prevents the final completion of tables which wait the returns of a single unit some times for months. I recommend that next time the compilation of subsidiary tables should be taken up simultaneously with that of India Tables. It would be found greatly to facilitate the writing of the report, and it is convenient to start this early as the census commissioner has little but routine work while tabulation is proceeding. On this occasion I had to work out my own proportional figures with a mechanical calculator in order to form my conclusions and get on with the report, and they needed checking (and a good deal of correction) afterwards.

It is important that census superintendents should pay attention to the form taken by the India Tables. They did not all do this in 1931, and I had omitted to warn them to do so. The result was that I had great difficulty in separating some of the figures for provinces and states and in getting correct figures for the previous populations of cities, towns and cantonments. It is important that the census should provide self-governing urban units with the exact figure of the population with which each self-governing unit deals. It is also necessary for certain purposes to have inclusive figures of large urban areas which may contain more than one municipality. These two aspects have to be kept in mind in framing definitions of 'City' and 'Town.' Failure, however, to keep these two aspects of urban figures separate in some provinces made it very difficult to correlate the figures of self-governing units shown in Table IV to the figures of migration, literacy, occupation, etc., as tabulated for cities. Similarly some provinces failed to distinguish in all cases between the figures of British territory and those of states, a distinction which is required for all the India Tables. Again some difficulty was caused in states by the confusing of groups 159 and 160 of

the occupation scheme. I would recommend the introduction of another group at that point and of calling 159 *Servants of the State* (i.e., of the Imperial, British India or Provincial Government) while splitting up No. 160 into *Servants of Indian States* and *Servants of Foreign States*. All Indian States should then be instructed to return their own servants in the second of the three groups. If they require a separate count of their own servants they can subdivide it for state purposes. As it was in 1931, some returned them in 159 and others in 160 and the correct figures could not thereafter be obtained for the India Tables.

I would suggest that India Table IV should be reduced next census, though not of course the corresponding table in the provincial volumes. It would probably be enough in the case of India to tabulate individually the towns of classes I and II at most for that table, retaining the individual tabulation of class III in Table V. Several of the subsidiary tables in the report volume could also be omitted without any serious loss, and it is worth considering how far it is necessary (where they are not required to illustrate the text) to reproduce tables, e.g., of vital statistics from other reports.

The actuary's report was perhaps unusually long at this census. It should not be necessary to print so long an actuarial report next time.

30. The following notes are recorded with reference to compilation of Imperial Tables as they may be found useful when drafting the code.

Notes on
Tables.

Table I.—The necessity of obtaining correct areas from the Survey Department at the earliest possible date has already been mentioned. It is to be noted that the number of towns has to correspond with the numbers given in Table IV, and cantonments and civil lines, etc., which are treated for that table, as separate towns on account of their possession of individual self-governing bodies must also be treated as separate units for this table. The areas of British administration in different states which appear in the appended statements should be verified through the Foreign and Political Department at the earliest opportunity.

Table II.—Great care has to be taken in the case of all units affected by transfers of areas since the previous census. When compiling one is liable to find that the adjusted populations of various units for previous decades when taken collectively do not add up to the corresponding unadjusted totals. Much trouble is given to the central compiling staff which could easily be avoided if provincial offices would take care that their figures were correct. The discrepancies in the totals are not always apparent till India total is struck. It would be well if definite instructions were given that the provincial figures should be verified before the preliminary totals were submitted to the central compiling office.

Table III.—This table should not be compiled till after the compilation of Table IV has been approved, any alteration in Table IV naturally affecting the compilation of Table III. Much trouble was caused in 1931 by provinces having ignored the instructions to keep municipalities and cantonments separate; having amalgamated them for Table III they had to be separated for Table IV, and then Table III had to be changed, as also Table V.

Table IV.—It would be well to compile this table before Tables I, III, or V are taken up. It should also be pointed out that much inconsistency has occurred in the past in the treatment of the totals of classes for the past decades. Obviously if the totals under classes are adjusted for past decades to fit the towns that appear below them, these totals can have no meaning whatever, since they represent no population total that ever existed or that now exists; consequently the totals of classes for past decades should be retained unaltered, so that they represent the numbers of persons living in the towns of that particular class at that particular time. Owing to the fact that some of the towns will have changed to another class either by increase or decrease since that time, the total will not correspond to the totals appearing below it in the same column; it will however have some meaning, which it will certainly not have if it is adjusted, and it would be better to omit the total altogether than to adjust it. Special instructions should perhaps be issued to Aden, whose urban and rural (if any) figures have given much trouble at the last two censuses, owing to the absence of clear distinctions between different urban and cantonment units particularly in regard to their decennial variation. The statement appended to Table IV should be scrutinized by the Army Department.

Table VI.—Much trouble was caused in the India compilation of this table by the fact that provinces had ignored the form in which the India table was to be

compiled. They were all told, but they did not all obey the instructions. Consequently they were unable to give the necessary information for this table, which under the instructions of the Government of India was to be compiled in much more detail for all India than for the Provinces, since it was considered that the details, omitted in the abbreviated form prescribed for provincial reports, were necessary in the India Tables. If the 1931 form of the table be retained, it is recommended that after columns 2, 3 and 4, as they appear in 1931, corresponding columns should be inserted for Provinces, and another for states after columns 47—49. This will provide figures for intermigration between provinces and states and a check for the table the absence of which gave trouble in 1931.

In connection with this table it may also be pointed out that the provinces failed to supply one another with proper migration figures, consequently their figures of inter-provincial migration differ from and are less complete than those available for the India Tables.

Table IX.—Here again the provinces failed to keep in mind the requirements of the India Tables. Separate details for States and British districts were required for both parts of this table and also a detailed record of dual infirmities, making it possible for those with multiple infirmities to be distinguished from the numbers recorded with single infirmities. This also should have been sufficiently clear from the instructions which were not always regarded.

Table X.—Here again separate details are required for states and for agencies as distinct from British territory. Suggestions have already been made as to the classification of groups 159 and 160. Group 192 also gave considerable trouble because the provinces failed to pay attention to the instructions given. Possibly they did not always approve of those instructions, but that was no reason for ignoring them. The result was that it was not possible to get complete figures of inmates of jails distinguished according to whether they were suffering sentences of rigorous or simple imprisonment.

In printing this table in the India Tables in 1931 complete details were given by sex for all groups. It would be worth considering the reduction of the size of this table in part II only (Part I is not excessive) by giving complete details by sex for orders only and reducing the columns under groups to persons instead of showing males and females.

Table XI.—Here again some provinces made the inclusion of their figures in the India Tables impossible by not following instructions. The heading of subclass 12 in the sorters' ticket for this table might be modified by the exclusion of the words 'Inmates of jails and asylums'.

Table XIII.—Trouble was given in this table by failure to follow instructions as to the treatment of those returned as illiterate for purposes of this table. For the sake of continuity it is probable that the percentage of literacy will again be calculated on population aged 5 and over, and though the total population may be shown in this table that part of it which is aged under 5 should appear as illiterate and the figures for literacy should not contain any persons whose age was under 5.

Separate details for Aryas and Brahmos should probably be omitted. It is doubtful if they serve any purpose, and I suggest that even if tabulation by religion is retained Hindus should be tabulated without sub-totals. Separate figures for Indian Christians on the other hand are frequently asked for, and are unavailable under the existing code unless special instructions are issued. This was overlooked in 1931 with the result that accurate figures for Indian Christians are absent. Provincial offices should be forcibly reminded (if tabulation by religion is retained) that separate details are required for India tables of the religions included by them under the head 'Others'. In some provinces religions which are important for India purposes may be almost entirely negligible, but when compiling India tables details of these (to them negligible items) are required, and several of them ignored this possibility.

Table XV.—Classification should be checked clearly before compiling and provinces might be warned not to make returns of people whose language is shown as "Swiss" or "Belgian"; both these were used in 1931 as synonyms for a Teutonic language, but they are not justified by the conventional linguistic nomenclature, and it is only the provinces that can make certain whether persons returned as speaking these languages are really speakers of German, French or Italian in the one case, or of Flemish or French in the other.

The treatment of Hindustani is a point that needs special consideration. The same applies to Punjabi and Western Punjabi or Lahnda. In 1931 speakers of Hindustani were classified for the India Table as speakers of Eastern, Middle or Western Hindi according to the area from which the return came, the area being determined by the Linguistic Survey. The same system was applied as far as possible to Punjabi and Lahnda. In the one case all the returns, even those of Bihari, appear either as Hindi or Urdu and in the other case most of them appear as Punjabi and the other return of Jatki is in itself ambiguous.

Table XVI.—Here again care has to be taken that the provinces give full details by British territory and by States of minor religions and religions not returned, which they are inclined to amalgamate for their own purposes.

Table XVII.—This table will not appear if my recommendation to omit the return of caste, at any rate for compilation purposes, be accepted. In any case the returns cannot be regarded as accurate and they will become less accurate from census to census.

Table XVIII.—If this table which from certain points of view is of some importance be retained (as I am inclined to recommend that it should be retained for tribes only, omitting castes) it would probably be enough to give the variation from 1931 only. The previous figures in so far as they are obtainable have been recorded in 1931, but they are seriously defective, whereas the 1931 figure ought to make a correct starting point. In the provincial tables it will probably be possible and advantageous to go further back, but not for the Imperial Tables.

Table XIX.—Most provinces in 1931 omitted to keep the separate total for Armenians for purposes of the India Tables.

31. In the matter of accuracy from the point of view of supplying the necessary data for the India Tables the Burma Tables stood first in 1931 with Madras second. Among the provinces the Punjab Tables came last, and among the States Hyderabad and Jammu and Kashmir were rivals for that place. I consider that the cheapest method of compiling the India Tables, and by cheapest I mean quickest, as long as the present system is in vogue would be to have half a dozen extra men in the Assistant Grade who really knew what they were going to do and how to do it. To give them experience I should engage these men and depute them each to a different province when the provinces were at the sorting stage. As soon as the India compilation started in earnest they would be brought to headquarters and each one given an assistant who would be quite a cheap compiler of matriculation standard merely for purposes of a human addiator. The betwixt and between class, neither one thing nor the other, are too expensive for addiators and not good enough for real compilers, they need too much supervision and assistance. For the Head compiler, if one was still found necessary, or if not at any rate for one or two of the compiler assistants it would probably be advisable to have men with permanent posts to which they would ultimately revert.

Compilation suggestions.

One more point is of great importance with regard to the India compilation, and that is that all provinces and states should give totals and sub-totals for all their tables. The Bombay tables were possibly the completest in this respect, and finding complete totals for the provinces, for British districts and for states all separable and readily available makes a great difference to the rate at which the India Tables can be compiled. The necessity of striking sub-totals from provincial tables for the purposes of the India tables, as had to be done with several of the provincial tables; e.g., Bihar and Orissa, was most inconvenient and caused much delay. Similarly in the case of the states the India summary of Table VII was held up from June to September, because Jammu and Kashmir State could not supply details of religions included as 'Others', which should have been available from the first.

is.—Finance.

32. Several points of the general financial position have already been alluded to, but one will bear repetition and that is that it cannot be stated too emphatically that enumeration should be a provincial charge. The question really arose in an acute form in 1931 for the first time. In 1921 census was not made a central charge until after the enumeration stage was over, and even then neither provincial governments, nor audit officers nor district officers at once appreciated in full the implications of the change; the result was that all sorts of census expenditure which could have been debited to the central government was in point of

Enumeration a provincial charge.

fact debited to provincial governments as usual. These charges included the travelling allowance of all Local Government officers and all the minor stationery used on census work in districts. In 1931 however the idea of certain debits being made to central funds was unfortunately familiar, and few failed to seize the golden opportunity, so that in addition to census travelling at the expense of the Central Government and the debit to the Central Government of various minor items of stamps and stationery on a scale which may have been insignificant locally but soon mounted up when the whole of India and Burma were concerned, the central expenditure was further affected by the inevitable slackening of control by officers whose own budgets were not concerned at all. It would be impossible to sidetrack the district officer and his staff for census purposes or to carry out a census without their co-operation, but although the services of the district census officers were given free by local governments the position was very different from that in which the district magistrate was directly responsible for district census expenditure to his own local government. Further, even where the district officer did his best to follow the rather belated instructions that all census touring was to be combined with other work and therefore not charged to the Central Government, audit officers discovered themselves most inconveniently assiduous in detecting census work combined with other activities and in insisting on debiting to the Central Government a share sometimes unfairly large of the touring expenses affected. In this connection reference should be made to the following-census Administrative Reports for 1931—Assam, 17 (i), Bihar and Orissa, III 4, Central Provinces and Berar, 4, Madras, I, 2, and III, 3 and 4. The conclusion is inescapable that enumeration should be an entirely provincial charge. The same arguments do not apply to the abstraction stages where the control is concentrated in a few offices under the direct administration of the census superintendents, though they might apply in a very modified degree to slip-copying if carried out, as in the Punjab, at tahsil headquarters. If the census were mechanized then the best arrangement would probably be for the province to pay the costs of the census down to the completion of card-punching, when the punched cards would be sent to the central sorting office for the extraction of totals; that is to say that the equivalent of the enumeration stage down to and including slip-copying would be a provincial charge, and on this score it might be better in any case to include the slip-copying stage with enumeration.

Cost.

33. A method of computing the cost of census operations on the present lines has been indicated above (paragraph 11). Whatever method be followed it would be useful as a guide to local governments in making their estimate for the first stage which has to be done before the census superintendents are appointed. Estimates for the later stages are made by the superintendents. A statement showing in as much detail as possible the cost of the 1931 census in British India is appended. Some attention is required to travelling allowance rules for Census Superintendents who have to do a great deal of touring at the enumeration stage. In this connection a scheme was prepared by Mr. Tennant who had some experience himself of the touring done by a gazetted officer during the enumeration stage of the census, and it would be as well to apply the same or a similar scheme next time, as the ordinary rules are by no means always the fairest or the most economical when much touring ought to be done by road which can (but should not) be done by rail.

Madras. III. 4.

The cost of the 1931 census works out at Rs. 48,000,000 as far as can be determined at the time of going to press, that is to say at Rs. 12 per 1,000 persons enumerated and tabulated. This is to be compared with Rs. 14 per 1,000, the cost of the 1921 census, when the two are reduced to the same basis as far as possible. Really however the cost of the 1931 census was considerably less than that of 1921 when all travelling allowances and much stationery at the enumeration stage were debited to provincial administrations and not to the Government of India at all. Also on that occasion the overhead charges for printing were not debited to census and their inclusion in costing since 1921 has made the debit for printing to the census grant more than double in 1931 what it was in 1921, though the real difference in cost cannot have been anything like so great. Had the debits on account of enumeration costs and printing been made on the same principles as in 1921, the census of 1931 would have shown a very pronounced reduction in the cost per mille of population censused. A detailed statement of expenditure and receipts is appended to this report. Reference may also be made to the introduction to the general report where the question of cost is briefly discussed. In estimating

the cost the populations of the seven states which take their own census independently have been excluded from the calculations and also all population not actually enumerated in 1931.

v.—Miscellaneous.

34. It will be found very useful to have a map made out at the start showing the geographical census units and to have a number of copies printed in blue on drawing paper. If ordinary paper is used it is difficult to make any alteration in the ink drawing. Printing in blue makes it very simple to insert or omit any feature of the maps at will, as the blue matter will not show in reproduction. It will be found convenient to have this blue map printed by the Survey of India, but for the making of blocks, whether for printing maps in black or for diagrams and graphs, the Calcutta Chromotype Co., of 52-53 Bowbazar, Calcutta, will be found much quicker and cheaper. For elaborate coloured maps, such as the three coloured maps in the 1931 report, the Survey of India is better as they are able to use their own existing plates to form the basis of the map.

Maps.

35. No superintendent should be allowed to waste money on addiator typewriters. Both at this census and at last census they have been tried in one province or another and have proved comparatively useless as the totals to be added are more horizontal than vertical. Calculating machines are a necessity and a Dalton addiator will be useful as well as a "Britannic" or "Muldivo" calculator, but it should not be combined with a typewriter. A cylindrical "Fuller's Calculating Slide Rule" is invaluable for working out ratios and proportions and for rapid division and saves a great deal of time and labour at the later stages of the census, while I consider that the Rs. 18 spent on a little Otis-King calculator, which enabled me to work out ratios roughly when examining the figures before the subsidiary tables were ready, saved Government considerably more than Rs. 1,800. Both these patterns are obtainable from the Mathematical Instrument Officer, and the ones used this time have been put away for next census: the Otis-King may need to have the figures renewed; when in use it is enough to clean them from time to time with petrol.

Calculating machines.

36. There are a number of minor errors in some of the lists and schemes issued in 1931. No 1931 list or scheme should be reissued without reference to the file by subjects and the correction slips issued, while in some cases, *e.g.*, language, mistakes have not been corrected and the scheme needs checking by the actual tables in part II. The same applies to the occupational list, and to some extent to the occupational key. The figures of area given in the 1931 Report and Tables are already out of date at the time of writing, and the latest authoritative figures of area should be obtained from the Survey of India for all provinces and states down to the figures of individual districts and states before the compilation stage of the census is reached and circulated at once, as subsequent alterations are exceedingly difficult to carry out, a change in the area of one province alone, when possible changes in contiguous areas are unknown, invalidating the India figures.

Erroneous lists.

37. Considerable expense and trouble were saved in printing in 1931 by changes in the format of the tables. The omission of vertical rules saves the press much trouble and in consequence makes for speed as well as economy. Vertical rules are obviously unnecessary except where the totals are so high that the columns tend to become contiguous. In such cases vertical rules may be needed, but it is necessary to insert them from the start, as once the long horizontal leads are inserted vertical rules cannot be inserted without breaking up and resetting the page. For this reason they were not inserted in the 1931 occupation table, where it is obvious that rules separating India totals, British India and States would have made part I of the occupation table much easier to follow.

Printing.

There were other minor points in which printing could have been made much easier had the difficulties been realized beforehand. Thus in the case of maps inset in the text it would have been a great advantage to have adhered to a single size for all inset maps. The use of a uniform base of $5 \frac{3}{5}$ inches in length for all text maps would have given maps exactly fitting the width of the print and would have avoided the difficulty of setting narrow margins of type without any loss of appearance. Some of the maps inset in the text of the 1931 report are too

small and some unnecessarily large. By using maps of the size suggested, many of the difficulties of overrunning in the press could be avoided. The same principle could advantageously be applied to many of the graphs and diagrams.

Another point arises in the matter of marginal captions. The use of these in 1931 made the matter too wide to go on a normal eight page machine, and so delayed printing in that way; besides making the type more difficult to set up.

Shoulder notes in which the marginal caption is given inside the text instead of in the margin are said by the press to give less trouble on the whole than marginal captions, though I had avoided them because I thought they would be more troublesome. Easiest of all for the press to deal with would be bold type at the beginning of the paragraph—as in the Baroda report for instance, and it would probably be found worth while to adopt this method at another census.

In any case a preliminary consultation with the Manager of the press would be found of great value, and if blocks other than line blocks are to be used his assistance is essential, as he can advise on the screen to be used by the block-makers in reproducing. The block-maker normally prints on art paper, but for printing on paper of various textures different screens should be used and the block-maker instructed accordingly. Neglect of this precaution spoiled some of the 1931 blocks.

Records.

38. The census records have for the most part been sealed up and entrusted to the care of the Imperial Record Keeper in Delhi. There they are to remain in boxes until the next census commissioner assumes office. A few files to which references were likely to be needed have been made over to the Home Department and can be obtained from them. On previous occasions the census records have been unscrupulously looted during the intercensal period, which accounts for the incompleteness of printed census volumes of past decades. For this reason I have tried to put the 1931 records beyond the reach of interference. The file that contains the sorted series of circulars by subjects also contains a complete file index and the draft of a note on census administration drawn up by the superintendent of my office, which is worth perusal as supplementary to this report.

File No. 1S, IX.

**A new use
for Census
Reports.**

39. One of the census superintendents has suggested that the Provincial Census Report including the Administrative Report should be a prescribed subject for the departmental examinations for Indian Civil Service and Police probationers. The suggestion seems a sound one and might be brought to the notice of the Public Services Commission in case they can make similar use of the idea in connection with the India Report. At least it might increase sales. There has also been voiced from time to time a demand for an abridged edition of the census Report in octavo form, for which it is likely that there would be a ready sale if the price were moderate.

APPENDIX.

- I. Correspondence as to *billets individuels* in the Central Provinces.
- II. Correspondence with Mr. Meikle on methods of grouping for age and civil condition.
- III. Staff entertained by the Census Commissioner in Delhi and Simla.
- IV. Tabulated record of progress in Compilation.
- V. Dates of the closing of various offices and of the publication of their reports.
- VI. Tabulated Statement of Cost of Census.
- VII. Statement of recoveries and receipts.

APPENDIX I.

Copy of a letter from the Census Superintendent, Central Provinces and Berar, to the Census Commissioner for India, No. 1600, dated the 17th September 1931:

I am sending for your information a copy of a paragraph in the rough draft of the first part of my Administrative Report. As the matter is one regarding which you may have received different opinions from other provinces, I thought it would be interesting at this stage to know what your own views are. I asked for a book of *Billets Individuels* from Baroda which I have now received and personally I see no reason why the system should not at the next Census be worked successfully in this province with the resultant saving of time and money. It appears to me that the only extra sorting necessitated is the separation of slips by religion and as I suggested to you at Bastar, it would be possible to identify the separate religions after the first sorting by drawing a distinguishing line over each kind in water colour paint.

The enumerators were all honorary workers and generally non-officials. What actually happened in the rural area was that in almost every case the patwaris themselves wrote up the preliminary record for all the blocks in their circles and the enumerators went round and checked it on the night of the census. This system produced records which were in many places almost perfect, except when there was some difficulty in understanding instructions, and such being the case I would strongly advise the adoption in Central Provinces at the next census of the system of *Billets Individuels* which entirely eliminates slip-copying and is explained in the chapter on that subject.

In towns where the Land Records Staff was not available for Census work results were incomparably inferior to those in rural areas, and I would therefore recommend that in 1941 paid supervisors should be appointed for a period of three months. They would be able to prepare a complete preliminary record, which would be checked by honorary enumerators on the night of the Census as is now generally done in rural areas. Charge Superintendents could be drawn as heretofore from Municipal officials or Government servants. If this system is adopted it should be possible to use *Billets Individuels* in towns also, thus saving a large sum on slip-copying which would more than balance the expenditure on paid supervisors.

APPENDIX II.

Extract from a letter from Mr. Meikle (late Actuary to the Govt. of India), to the Census Commissioner for India, dated the 15th December 1932.

With regard to the defect to which you refer when the system is applied to Civil Condition I would suggest a sub-division of each septenary group at those portions of the table where the incidence in the numbers from age to age varies at a rapid rate, such as in the 7-13 group where the married and the unmarried are being dealt with separately. Instead of combining the figures for seven ages in a single group it should be divided into three parts, viz., 7 and 8, 9, 10 and 11 and 12 and 13. All the old ternary groups would of course, remain unaltered, as well as the septenary groups at the older ages. I presume there will possibly be two, or at the most three septenary groups which would require sub-division in the way here suggested. It will generally be found that in the septenary group 7-13 the largest shortage is at age 13, and the largest excess at age 12—the one being about equal to the other. The next largest shortage is at 11, then at 9. The second largest excess is at 10, thereby indicating the soundness of combining the numbers at 12 and 13 in one group, those at 9 and 11 with those at 10 for the middle group, and 7 combined with 8 for the remaining group. Similar results are seen in the higher septenary groups. This method of grouping gives more trustworthy results, or rather less misleading results, than if we relied more on the numbers in individual age groups. In order to arrive at the numbers in each quinary group it becomes necessary to divide the new ternary groups 9-11 into those under exact age 10 and those over that age. This can be done with considerable accuracy by the use of the following formula:—

If groups 7 and 8, i.e., those over $6\frac{1}{2}$ and under $8\frac{1}{2}$ be represented by a
 those over $11\frac{1}{2}$ and under $13\frac{1}{2}$ be represented by b
 those over $8\frac{1}{2}$ and under 10 be represented by c
 those over 10 and under $11\frac{1}{2}$ be represented by d .

we know a , b and $(c+d)$ and require to find c and d . Then $c = (c+d) \left\{ \frac{.65a + .35b}{a+b} + .01 \right\}$
 d will of course be equal to the balance of the group $(c+d)$ and should be calculated for the purpose of a check by the formula $d = (c+d) \left\{ \frac{.35a + .65b}{a+b} - .01 \right\}$. I am certain you will find this worthy of adoption for the next Census.

Extract from a letter from Mr. Meikle, to the Census Commissioner for India, dated the 21st March 1933.

Mr. Vaidyanathan tells me he is recommending the 4th-place method of quinary grouping of ages for adoption in future. I agree that *provided* the preliminary grouping *must* be quinary then the 4th place method gives a better balance of error than any other form of quinary grouping (see the last 6 lines on page 30 of my report)—also that from data grouped in that way it is possible—though not easy—to redistribute it into the ordinary form of quinary grouping with the quinquennial ages in the 1st place. This is shown in Table XV on page 33 of my report. That, however, is not the way to consider the problem. In my mind the problem is the determining of a form of preliminary grouping not necessarily of 5 ages in each group—which will enable non-experts to redistribute the data, with ease and reasonable accuracy into the ordinary form of quinary grouping and in a form suitable for dealing with some of the problems connected with Civil Condition, and also which will enable the expert, afterwards, to arrive at an accurate redistribution according to individual ages. I shall be very surprised if Mr. Vaidyanathan's report will prove that for either of these purposes there is any method so good as that suggested in my note of 17th October 1929, amended as stated in my recent letter to you and in two long letters to him. As septenary groups have been found to be inconveniently large let some or even all of them be replaced by two groups of 2 ages and one of 3. The groups would then be as follows:—

- 0
- 1
- 2
- 3
- 4, 5 and 6
- 7 and 8
- 9, 10 and 11 (nearest ages in every case).
- 12 and 13
- 14, 15 and 16 and so on in twos and threes

alternately right on to group 69, 70 and 71 inclusive. These ternary groups can afterwards be split up and regrouped in the way suggested in my last letter to you. I hope you won't mind my expressing to you my strongly held opinion on the matter.

Extract from a letter from Mr. Meikle, to the Census Commissioner for India, dated the 29th April 1933.

I have looked over the copy of my letter of 21st March to you and am satisfied of its soundness. Data grouped in twos and threes as therein suggested could, if required for any peculiar reason, be afterwards shown in quinary groups of the 4th place form merely by taking these smaller groups in pairs in such a way that quinquennial ages come in the 4th place—such as 27 and 28+29, 30 and 31 and so on for all other pairs—but for the purpose of getting the data in the final 1st place form no method will prove so easy to work and so accurate as the dividing of each of the ternary groups into two parts—such as over 28½ and under 30 as one portion and over 30 as the balance of that ternary group. Redistribution in the ordinary 1st place form can then be done as suggested by me.

APPENDIX III.

Staff entertained by the Census Commissioner in Delhi and Simla.

Serial No.	Name of post.	Duration.	Pay. Rs.	Remarks.
1	Statistical Assistant	16-10-29	325	Amalgamated on 1st May 1930.
2	Superintendent	1-5-30 to 7-6-33	400—475	
3	Budget Assistant and Cashier	10-8-31 to 7-6-33	175—185	
4	Stenographer and Camp Assistant	11-3-30 to 7-6-33	150—175	
5	1st Head Compiler	12-1-31 to 15-5-33	120—128	
6	2nd Head Compiler	15-9-31 to 7-6-33	100—108	

APPENDIX III—*contd.**Staff entertained by the Census Commissioner in Delhi and Simla—contd.*

Serial No.	Name of post.	Duration.	Pay. Rs.
7	Clerk	4-11-29 to 9-8-31	105—125
8	Clerk	11-4-30 to 21-9-32	60—83
9	Clerk	8-12-30 to 7-6-33	75—83
10	Clerk	26-2-31 to 31-10-32	75—79
11	Clerk	7-3-31 to 14-9-31	60—75
12	Compiler	27-10-31 to 25-3-33	75—79
13	Compiler	28-10-31 to 7-6-33	75—79
14	Compiler	9-10-31 to 31-10-32	55—75
15	Compiler	9-10-31 to 31-10-32	55—75
16	Compiler	9-10-31 to 31-10-32	55—75
17	Compiler	13-10-31 to 31-10-32	55—75
18	Compiler	16-9-31 to 19-1-32 and 14-3-32 to 7-6-33	50—75
19	Compiler	9-10-31 to 30-11-31 and 12-4-32 to 7-6-33	75
20	Compiler	8-7-32 to 31-10-32	75
21	Compiler	1-8-32 to 5-11-32	50
22	Compiler	27-7-31 to 7-6-33	50—54
23	Compiler	27-7-31 to 30-4-33	35—39
24	Compiler	1-2-33 to 15-4-33	75
25	Typist	25-9-31 to 31-5-33	50—75
26	Draftsman	7-11-31 to 31-7-32	50
27	Draftsman	29-1-32 to 1-5-33	75—79

APPENDIX III—*contd.**Staff entertained by the Census Commissioner in Delhi and Simla—contd.*

Serial No.	Name of post.	Duration.	Pay. Rs.
<i>Inferior Servants.</i>			
1	Duftry	11-4-30 to 7-6-33	16—21
2	Jamadar	29-10-29 to 7-6-33	25—27
3	Peon	7-12-29 to 31-5-33	14
4	Peon	7-4-30 to 7-6-33	14
5	Peon	17-10-31 to 7-6-33	14
6	Peon :	9-5-32 to 31-10-32	14

APPENDIX IV.

**Statement marking the progress made by the various Provinces and States
in the Compilation of Imperial and Provincial Tables in 1931-32.**

Statement marking the progress made by the various Provinces and States

Province, State or Agency.	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1. Ajmer-Merwara ..	20-5-31	20-5-31	20-5-31	30-5-31	8-6-31	22-9-31	21-6-31	17-8-31	30-5-31	14-9-31	17-8-31
2. Baroda State ..	22-4-31	22-4-31	22-4-31	22-4-31	22-4-31	10-8-31	22-7-31	3-9-31	12-8-31	16-9-31	9-10-31
3. Cochin State ..	3-8-31	3-8-31	3-8-31	3-8-31	3-8-31	3-8-31	18-8-31	19-10-31	26-8-31	24-10-31	24-10-31
4. North-West Frontier Province.	31-8-31	10-8-31	31-8-31	10-8-31	31-8-31	7-9-31	21-9-31	31-8-31	31-8-31	20-11-31	24-11-31
5. Andamans and Nicobars.	14-8-31	14-8-31	14-8-31	*	*	14-8-31	14-8-31	1-10-31	14-8-31	18-10-31	*
6. Rajputana Agency	20-5-31	20-5-31	20-5-31	30-5-31	8-6-31	3-8-31	17-7-31	18-9-31	30-5-31	5-10-31	3-8-31
7. Gwalior State ..	20-7-31	20-7-31	20-7-31	23-7-31	23-7-31	15-10-31	14-8-31	10-11-31	23-9-31	22-1-32	22-1-32
8. Mysore State ..	21-8-31	21-8-31	21-8-31	21-8-31	21-8-31	23-10-31	28-9-31	23-12-31	7-9-31	30-1-32	29-1-32
9. Travancore State	26-8-31	26-8-31	26-8-31	26-8-31	26-8-31	10-11-31	10-11-31	2-2-32	7-9-31	17-2-32	29-2-32
10. Sikkim State ..	22-1-32	22-1-32	14-12-31	*	*	4-1-32	30-1-32	22-2-32	10-12-31	26-3-32	4-3-32
11. Baluchistan ..	8-8-31	8-8-31	8-8-31	8-8-31	8-8-31	21-12-31	10-2-32	4-2-32	10-8-31	28-3-32	28-3-32
12. Bengal ..	22-1-32	22-1-32	14-12-31	16-3-32	26-1-32	4-1-32	30-1-32	22-2-32	3-9-31	7-3-32	4-3-32
13. Delhi ..	6-9-31	28-9-31	10-9-31	10-9-31	10-9-31	10-9-31	16-9-31	10-11-31	8-9-31	27-4-32	29-1-32
14. United Provinces of Agra and Oudh.	22-8-31	22-8-31	10-9-31	10-9-31	14-9-31	12-11-31	30-10-31	21-12-31	4-9-31	7-5-32	4-1-32
15. Punjab ..	2-10-31	2-10-31	2-10-31	2-10-31	2-10-31	3-11-31	10-11-31	23-2-32	16-9-31	30-5-32	9-5-32
16. Central Provinces and Berar.	31-8-31	31-8-31	31-8-31	16-11-31	6-11-31	19-12-31	23-1-32	11-3-32	22-12-31	1-6-32	29-4-32
17. Coorg ..	14-1-32	14-1-32	14-1-32	14-1-32	14-1-32	14-1-32	2-2-32	7-3-32	14-1-32	9-4-32	*
18. Madras ..	8-1-32	22-1-32	22-1-32	16-5-32	27-4-32	8-3-32	2-3-32	28-3-32	17-11-31	9-4-32	**
19. Assam ..	14-9-31	31-8-31	14-9-31	7-9-31	7-9-31	15-2-32	12-9-31	24-11-31	24-11-31	29-4-32	2-5-32
20. Jammu and Kashmir State.	8-10-31	8-10-31	8-10-31	8-10-31	8-10-31	10-11-31	5-2-32	5-2-32	21-10-31	13-6-32	12-10-31
21. Central India Agency.	19-12-31	18-9-31	8-9-31	7-9-31	3-2-32	10-11-31	19-10-31	25-1-32	21-9-31	12-2-32	29-2-32
22. Bihar and Orissa ..	19-10-31	19-10-31	22-2-32	26-10-31	19-10-31	30-1-32	21-7-32	22-2-32	21-1-32	27-5-32	22-1-32
23. Hyderabad State ..	18-9-31	31-8-31	28-12-31	18-9-31	1-10-31	2-2-32	18-4-32	17-6-32	12-10-31	29-8-32	3-8-32
24. Western India States Agency.	24-3-32	14-4-32	30-1-32	14-3-32	24-3-32	14-1-32	27-4-32	18-5-32	29-12-31	6-7-32	13-9-32
25. Bombay ..	30-1-32	11-4-32	30-1-32	19-4-32	8-4-32	14-1-32	28-4-32	18-5-32	29-12-31	8-8-32	12-9-32
26. Burma ..	11-2-32	6-2-32	13-2-32	29-2-32	29-2-32	24-2-32	24-2-32	21-5-32	23-2-32	6-9-32	5-11-32

*Not Compiled.

The date of the receipt of the first table submitted to
The date of the receipt of the last table submitted to

DIX IV.

in the Compilation of Imperial and Provincial Tables in 1931-32.

									Provincial Tables.	
XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	I	II
8-6-31	14-6-31	17-8-31	15-7-31	15-6-31	17-8-31	24-8-31	16-6-31	21-6-31	27-6-31	17-8-31
29-6-31	31-7-31	28-8-31	14-8-31	22-4-31	4-9-31	20-8-31	30-7-31	29-10-31	22-4-31	16-9-31
26-8-31	3-8-31	14-10-31	3-8-31	14-7-31	12-10-31	12-10-31	22-8-31	26-8-31	8-8-31	2-7-31
31-8-31	12-9-31	31-8-31	3-12-31	22-8-31	22-9-31	3-12-31	31-8-31	31-8-31	31-8-31	10-9-31
*	31-8-31	31-8-31	31-8-31	27-7-31	31-8-31	5-12-31	31-8-31	14-8-31	*	*
8-6-31	20-7-31	17-8-31	25-7-31	30-6-31	18-12-31	3-11-31	25-7-31	21-6-31	26-6-31	21-11-31
15-10-31	26-8-31	10-11-31	15-10-31	22-1-32	4-11-31	4-11-31	17-8-31	15-8-31	23-7-31	14-10-31
27-11-31	8-10-31	26-11-31	30-10-31	3-8-31	26-11-31	23-12-31	8-10-31	2-1-32	4-1-32	22-12-31
7-9-31	2-1-32	2-2-32	2-1-32	17-7-31	2-2-32	2-2-32	26-8-31	1-10-31	2-10-31	10-2-32
*	2-2-32	11-3-32	26-3-32	30-1-32	26-3-32	18-3-32	14-12-31	25-1-32	*	*
15-8-31	25-1-32	7-3-32	10-2-32	11-8-31	15-2-32	22-2-32	17-8-31	17-8-31	17-8-31	10-2-32
27-8-31	2-2-32	11-3-32	6-2-32	30-1-32	26-3-32	18-3-32	14-12-31	25-1-32	12-4-32	26-3-32
28-9-31	16-9-31	12-11-31	12-2-32	9-9-31	15-10-31	15-10-31	8-9-31	16-9-31	*	*
22-8-31	12-12-31	9-1-32	15-10-31	14-7-31	10-11-31	21-12-31	12-10-31	2-11-31	24-8-31	6-2-32
28-9-31	13-11-31	12-11-31	11-2-32	9-9-31	19-2-32	19-5-32	9-9-31	8-11-31	8-4-32	24-3-32
10-11-31	23-1-32	29-2-32	8-4-32	13-1-32	10-3-32	1-6-32	3-9-31	9-1-32	5-12-31	17-3-32
*	2-2-32	7-3-32	19-3-32	14-1-32	7-3-32	7-6-32	14-1-32	*	2-2-32	2-2-32
20-10-31	2-3-32	13-4-32	1-6-32	8-1-32	11-4-32	25-5-32	8-1-32	*	20-5-32	9-6-32
28-12-31	28-12-31	24-11-31	21-5-32	31-8-31	6-5-32	13-6-32	23-9-31	13-6-32	13-6-32	13-6-32
13-10-31	25-1-32	26-1-32	6-5-32	25-1-32	25-1-32	9-1-32	10-11-31	21-3-32	21-3-32	26-3-32
*	29-10-31	25-1-32	26-11-31	6-5-31	25-1-32	3-2-32	7-9-31	15-12-31	4-5-32	17-6-32
14-12-31	10-3-32	5-3-32	29-1-32	26-10-31	22-2-32	1-7-32	23-1-32	26-1-32	2-2-32	21-3-32
31-8-31	18-4-32	29-6-32	27-5-32	6-8-31	14-5-32	28-9-31	23-9-31	4-3-32	8-10-31	29-7-32
7-12-31	14-5-32	8-5-32	29-12-31	29-12-31	20-4-32	6-8-32	29-12-31	4-4-32	10-10-32	10-10-32
7-12-31	25-5-32	4-3-32	29-12-31	18-8-31	20-4-32	6-6-32	29-12-31	24-3-32	21-6-3	27-10-32
19-1-32	21-5-32	21-5-32	16-7-32	23-2-32	26-7-32	10-8-32	26-2-32	*	15-11-32	1-8-32

the Census Commissioner for India is shown in heavy type.
the Census Commissioner for India is shown in heavy italics.

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APPENDIX V.

Statement showing the final date of closing Provincial Census offices and date of publication of their main Report.

<i>Office.</i>	<i>Date of closing.</i>	<i>Month of publication of Report.</i>
Andaman and Nicobar Islands	1st April 1932	November 1932.
Assam	19th July 1932	September 1932.
Baluchistan	30th November 1932	Not yet published.
Bengal	28th February 1933	April 1933.
Bihar and Orissa	December 1932	January 1933.
Bombay	31st October 1932	Not yet published on 1st June 1933.
Burma	30th March 1933	May 1933.
Central India Agency	15th November 1932	May 1933.
Central Provinces and Berar	28th February 1933	February 1933.
Madras	30th June 1932	February 1933.
North-West Frontier Province	15th January 1933	Not yet published.
Punjab	31st March 1933	April 1933.
Rajputana and Ajmer-Merwara	31st August 1932	August 1932.
United Provinces	31st December 1932	March 1933.
Baroda State	4th August 1932	June 1932.
Cochin State	11th February 1933	March 1933.
Gwalior State	No intimation received	Not yet published on 1st June 1933.
Hyderabad State	Do.	Do.
Jammu and Kashmir State	27th January 1933	Do.
Mysore State	31st December 1932	December 1932.
Travancore State	12th April 1933	February 1933.

APPENDIX VI.

Statement showing the expenditure on Census Operations distributed under the heads prescribed by the Census Commissioner in India.

Statement showing the expenditure on Census Operation distributed under

Name of sub-head, item, etc.	India.						Total.	1929-30.
	Total.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
Total ..	48,75,772	21,288	12,70,286	28,65,777	6,53,476	64,995	2,72,791	21,288
Total ..	7,52,806	16,245	2,61,407	2,69,662	1,91,092	14,800	1,85,128	16,245
Non-voted ..	41,22,966	4,943	10,08,829	25,96,115	4,62,384	50,895	1,87,663	4,943
Voted ..	7,45,091	16,245	2,59,633	2,63,721	1,91,092	14,800	1,85,128	16,245
A.—Superintendence ..	7,20,327	4,943	2,44,756	2,80,420	1,55,383	34,825	1,07,476	4,943
Non-voted ..	6,56,606	14,051	2,18,020	2,37,251	1,77,084	10,200	1,17,148	14,051
Voted ..	2,23,491		68,977	98,686	40,398	15,430		
Pay of Officers ..								
Non-voted ..								
Voted ..								
Special pay of officers on deputation ..								
Non-voted ..								
Voted ..								
A-2.—Pay of Establishments—Voted ..	2,91,184	2,073	77,931	1,20,752	80,683	9,745	59,323	2,073
Pay of men deputed to Census duty ..								
Special pay of men on deputation for Census ..								
Pay of men without substantive appointments ..								
A-3.—Allowances, Honoraria, etc. ..	72,069	2,024	37,724	19,204	9,237	3,900	15,710	2,024
Non-voted ..	68,717	783	35,682	17,655	8,867	4,750	17,941	783
Voted ..								
Travelling and other Allowances ..								
Officers ..								
Establishments ..								
A-4.—Contingencies—Voted ..	1,38,935	2,087	62,186	43,327	24,435	4,900	29,712	2,087
Office Rent ..								
Purchase and repair of furniture ..								
Stationery ..								
Postage and telegram charges ..								
Freight ..								
Miscellaneous ..								
Telephone charges ..								
Rewards ..								
Hot and cold weather charges ..								
Purchase of books and maps ..								
Liveries and warm clothing ..								
Purchase and repair of tents ..								
Camel gear ..								
Other contingencies ..								
A-5.—Grants-in-aid, contributions, etc.—Non-voted ..	16,396	270	3,889	7,266	4,771	200	2,270	270
B.—Enumeration ..	1,774		1,774					
Non-voted ..	1,774		1,774					
Voted ..	4,78,545		2,49,400	2,26,268	2,377			
B-1.—Pay of Establishments—Voted ..	38,790		32,930	5,860				
District Office ..								
Remuneration of Census Staff ..								
B-2.—Allowances, Honoraria, etc. ..	1,774		1,774					
Non-voted ..	1,774		1,774					
Voted ..	3,31,866		1,24,153	2,04,856	2,637			
Travelling allowance ..								
Honoraria and other allowances ..								
B-3.—Contingencies—Voted ..	1,08,059		92,317	15,652	190			
Stationery ..								
Postage and telegram charges ..								
House numbering charges ..								
Freight ..								
Miscellaneous, including rewards to outsiders ..								
C.—Abstraction and Compilation ..	5,941		87,218	19,84,204	74,422	4,270	3,800	
Non-voted ..	5,941			5,941				
Voted ..	21,50,114		87,218	19,84,204	74,422	4,270	3,800	
C-1.—Pay of officers ..	5,633			5,633				
Non-voted ..	5,633			5,633				
Voted ..	194,388		335	92,848	1,205			
C-2.—Pay of Establishments—Voted ..	14,94,877		5,406	14,38,906	48,695	1,870	1,500	
Correspondence and accounts establishments ..								
Pay of men deputed on Census duty ..								
Special pay of men on deputation for Census ..								
Pay of men without substantive appointments ..								
Mensal establishments ..								
Working Staff including Superintendence ..								
Officials ..								
Non-officials ..								
C-3.—Allowances, Honoraria, etc. ..	308			308				
Non-voted ..	308			308				
Voted ..	66,318		1,963	61,113	1,642	1,600	1,500	
Travelling Allowance ..								
Honoraria and other allowances ..								
C-4.—Contingencies—Voted ..	4,94,531		79,514	3,91,337	22,880	800	800	
Office Rent ..								
Purchase and repair of furniture ..								
Stationery and paper ..								
Postage and telegram charges ..								
Freight ..								
Miscellaneous ..								
Petty construction ..								
Hot and cold weather charges ..								
Liveries ..								
Rewards ..								
D.—Miscellaneous Staff—Voted ..	70,312		31,460	28,380	3,992	7,000	15,551	
Officers ..								
Establishments ..								
Other allowances ..								
E.—Printing and other stationery charges—Voted ..	7,11,368		3,95,995	31,363	2,28,910	4,600	10,336	
Enumeration ..								
Printing at Government Presses ..								
Printing at Private Presses ..								
Other charges ..								
Abstraction and Compilation ..								
Printing at Government Presses ..								
Printing at Private Presses ..								
Other charges ..								
F.—Deduct—Expenditure recovered from Provincial Governments. ..	-8,200			-5,000	-3,200			

Statement showing the expenditure on Census Operation distributed under

Name of sub-head, item, etc.	Bengal.				Bihar and Orissa.			
	Total.	1930-31.	1931-32.	1932-33.	Total.	1930-31.	1931-32.	1932-33.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Total	5,44,399	1,58,125	3,22,511	63,763	4,70,572	1,13,455	3,19,204	37,913
Total	52,712	20,189	20,882	11,691	59,854	20,572	23,388	15,918
Non-voted	4,91,687	1,37,936	3,01,629	52,072	4,10,718	92,883	2,95,838	21,997
Voted	52,712	20,189	20,882	11,691	59,854	20,572	23,388	15,918
A.—Superintendence	44,859	8,050	24,378	12,131	36,719	12,748	19,389	4,584
A.1.—Pay of officers	46,503	16,900	18,605	11,098	53,530	17,180	21,270	15,080
Pay of Officers	9,598		5,527	4,071	13,526	2,916	10,610	
Special pay of officers on deputation for Census.								
A.2.—Pay of Establishments—Voted	26,452	4,795	14,634	7,023	13,600	3,749	6,158	3,693
Pay of men deputed to Census duty								
Special pay of men on deputation for Census								
Pay of men without substantive appointments	26,452	4,795	14,634	7,023	13,600	3,749	6,158	3,693
A.3.—Allowances, Honoraria, etc.—Non-voted	5,226	3,339	1,877	210	4,716	2,834	1,496	366
Travelling and other Allowances	1,266	458	602	206	1,526	1,179	184	163
Officers	6,492	3,797	2,279	416	6,242	4,013	1,680	549
Establishments	5,668	3,339	2,119	210	5,030	3,148	1,496	386
A.4.—Contingencies—Voted	824	458	160	206	1,212	865	184	163
Office Rent	7,543	2,797	3,915	831	8,087	4,902	2,437	728
Purchase and repair of furniture	150		150			201	240	
Stationery	706	193	399	114		338	426	
Postage and telegram charges	1,217	569	641	7		785	71	
Freight	1,296	628	620	50		615	417	
Miscellaneous	434	57	320	57		1,688	243	
Telephone charges	1,266	291	777	198				
Rewards	641	516		125				
Hot and cold weather charges	68		68			22	99	
Purchase of books and maps	507	76	396	35		2	154	
Liveries and warm clothing	181	58	113	10			16	
Purchase and repair of tents								
Camel gear								
Other contingencies	1,077	411	431	235		1,301	771	
A.5.—Grants-in-aid, contributions, etc.—Non-voted	983		600	383	1,608	558	600	450
B.—Enumeration	71,582	65,815	5,870	377	24,037	21,657	2,380	
B.1.—Pay of Establishments—Voted	1,466	1,466			190	190		
District office	1,466	1,466						
Remuneration of Census Staff								
B.2.—Allowances, Honoraria, etc.—Non-voted	34,312	30,109	3,826	377	20,508	18,336	2,172	
Travelling allowance	34,312	30,109	3,826	377				
Honoraria and other allowances								
B.3.—Contingencies—Voted	35,784	34,240	1,644		3,339	3,131	208	
Stationery	20,448	20,314	134		123	123		
Postage and telegram charges	3,755	3,127	628		475	475		
House numbering charges					114	114		
Freight	2,221	2,129	92		1,253	1,179	74	
Miscellaneous, including rewards to outsiders	9,360	8,670	690		1,374	1,240	134	
C.—Abstraction and Compilation—Voted	2,87,985	19,558	2,67,540	539	2,79,108	3,401	2,72,502	3,208
C.1.—Pay of officers—Voted	21,780		21,260	520	20,784		20,461	323
C.2.—Pay of Establishments—Voted	2,31,183	211	2,30,961	11	2,42,495		2,39,889	2,606
Correspondence and accounts establishments	16,257	211	16,035	11	97,241		94,649	2,592
Pay of men deputed on Census duty	9,901	169	9,732					
Special pay of men on deputation for Census	1,898	42	1,856					
Pay of men without substantive appointments	1,499		1,499					
Menial establishments	2,959		2,948	11				
Working Staff including Superintendence—	2,14,926		2,14,926					
Officials	276		276					
Non-officials	2,14,650		2,14,650					
Remuneration of sorters and slip copying charges					1,45,254		1,45,240	14
C.3.—Allowances, Honoraria, etc.—Voted	823		823		2,591		2,391	200
Travelling Allowance	823		823					
Honoraria and other allowances								
C.4.—Contingencies—Voted	34,149	18,645	14,496	8	13,236	3,401	9,761	74
Office Rent	1,671		1,671		2,309		2,309	
Purchase and repair of furniture	6,207	1,879	4,328		296		296	
Stationery and paper	19,368	15,729	3,639		708		708	
Postage and telegram charges	258	15	243		378		378	
Freight	2,594	850	1,744		2,645	1,688	1,057	
Miscellaneous including telephone charges	2,837	882	1,947	8	6,523	1,813	4,636	74
Petty construction	960	290	670		60		60	
Hot and cold weather charges	240		240		233		233	
Liveries	14		14		84		84	
Rewards								
Pay of men on daily wages								
D.—Miscellaneous Staff—Voted	24,581	22,245	2,316					
Officers	5,914	4,193	1,721					
Establishments	14,494	14,494						
Other allowances	4,153	3,558	595					
E.—Printing and other stationary charges—Voted	62,770	22,020	1,725	39,025	70,856	55,079	1,597	14,210
Enumeration	20,082	20,082				31,981		
Printing at Government Presses	20,082	20,082				12,358		
Printing at Private Presses						605		
Other charges						19,018		
Abstraction and Compilation	42,688	1,338	1,725	39,025		23,098	1,597	
Printing at Government presses	37,791	1,938	1,544	34,309		10,762	1,493	
Printing at Private Presses							74	
Other charges	4,897		181	4,716		12,336		

VI—contd.

the heads prescribed by the Census Commissioner for India—contd.

Bombay.				Burma.				Central India Agency.				Central Provinces and Berar.			
Total.	1930-31.	1931-32.	1932-33.	Total.	1930-31.	1931-32.	1932-33.*	Total.	1930-31.	1931-32.	1932-33.	Total.	1930-31.	1931-32.	1932-33.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
5,65,588	1,48,646	3,24,418	92,524	3,85,740	83,228	2,20,299	82,213	1,24,161	47,041	48,355	28,765	2,80,575	69,316	1,66,396	44,863
10,172			10,172	83,112	25,007	28,604	31,501	59,844	20,724	20,823	18,297	57,684	20,075	21,849	15,760
5,55,416	1,48,646	3,24,418	82,352*	3,02,628	58,221	1,92,695	50,712	64,317	28,317	27,532	10,488	2,22,891	49,241	1,44,547	29,103
10,172			10,172	83,112	25,007	28,604	31,501	59,844	20,724	20,823	18,297	57,684	20,075	21,849	15,760
69,038	30,157	29,080	9,851	51,525	11,873	21,084	18,818	27,748	11,769	10,019	5,960	30,968	16,321	7,912	6,735
9,700			9,700	67,594	21,329	21,829	24,436	54,427	17,200	19,355	17,372	51,340	16,618	19,462	15,260
41,204	16,905	19,892	4,407	14,527	1,861	7,021	5,825					6,458	6,458		
								46,077	15,000	15,365	15,712				
								8,350	-2,200	3,990	2,160				
14,219	4,803	5,382	4,034	20,783	3,824	8,654	8,305	19,600	6,359	8,274	4,967	14,209	4,111	4,836	5,262
6,716	2,991	1,800	1,925	9,355	1,765	3,655	3,935	5,749	2,636	1,644	1,469				
								3,072	867	1,182	1,023				
7,503	1,812	3,582	2,109	11,428	2,059	4,999	4,370	10,779	2,856	5,448	2,475				
222			222	13,768	3,123	4,175	6,465	3,842	3,524	318		4,724	2,937	1,787	
7,645	5,454	1,841	350	4,085	1,164	1,569	1,352	2,405	1,610	195	600	3,091	2,490	442	159
7,887	5,454	1,841	572	17,853	4,292	5,744	7,817	6,247	5,134	513	600				
5,953	4,198	1,495	290	16,781	3,525	5,575	7,661	3,842	3,524	318					
1,914	1,256	346	312	1,092	767	169	156	2,405	1,610	195	600				
5,970	2,995	1,915	1,060	12,130	4,829	3,770	3,531	5,743	3,800	1,550	393	7,210	3,262	2,634	1,314
2,002	646	806	550	4,063		1,995	2,068								
779	678	56	45	492	492			732	550	182					
217	9	208		688	487	125	96	1,326	1,018	272	36				
1,860	1,160	550	150	1,358	958	400		1,395	988	407					
496	288	90	118	64	46	4	14	225	140	50	35				
445	162	107	176	2,599	2,050	223	326	531	379	106	46				
1	1			619	169	225	225	300		200	100				
5		5						593	251	208	134				
87	13	53	21	469	293	38	138	389	222	125	42				
68	38	30		411	185	186	40	252	252						
10		10													
250			250	1,387	169	574	624								
				1,750	550	600	600	1,675		1,150	425	1,620	520	600	500
1,05,991	57,229	48,366	396	21,919	19,229	2,678	12	255	5	250		6,213	5,285	978	
11,954	8,044	3,910		2,260	2,260										
				2,260	2,260										
11,954	8,044	3,910													
55,916	17,981	37,728	207	13,836	11,489	2,335	12	250		250		4,620	3,954	666	
55,916	17,981	37,728	207	13,836	11,489	2,335	12								
88,121	31,204	6,728	189	5,823	5,480	343		5	5			1,593	1,281	312	
1,361	1,361			50	50			5	5						
2,610	2,368	244		2,468	2,308	160									
2,863	2,301	562													
2,016	1,546	470		662	662										
29,271	23,630	5,452	189	2,643	2,460	183									
2,58,168	5,796	2,40,058	12,804	1,93,335	8,035	1,66,413	18,887	22,209	5,455	14,573	2,181	1,17,982	2,092	1,18,570	2,320
11,861		11,499	362									8,860		8,860	
81,748	20	70,942	10,786	16,726	214	16,512		13,804	179	11,776	1,849	93,742		91,622	2,120
81,748	20	70,942	10,786	16,726	214	16,512		10,879	179	10,190	510				
7,081		5,461	1,620	14,010	136	13,874									
				2,716	78	2,638		1,744		1,744					
72,008	20	69,168	8,822					7,669	179	6,980	510				
2,859		2,315	344					1,466		1,466					
								2,925		1,586	1,339				
								2,925		1,586	1,339				
790	175	435	180	345		345		200			200	2,868		2,773	95
790	175	435	180	345		345									
								200			200				
1,63,759	5,601	1,57,182	976	1,76,264	7,821	1,49,566	18,887	8,205	5,276	2,787	132	12,512	2,092	10,315	105
3,104		3,104				3,750		57		57					
6,303	3,078	3,062	163		1,815	345		2,846	1,964	982					
1,524	12	1,502	10		258	530		2,709	2,306	403					
1,083	80	853	150			154		285		285					
5,488	1,660	3,780	48		2	528		511	436	64	11				
7,870	747	6,908	125		5,602	1,44,249		1,348	625	702	121				
					144										
337	8	329						349	45	304					
29	16	13													
570		570													
1,37,451		1,36,971	480												
2,321	1,875	446										15,868		15,868	
2,321	1,875	446													
1,19,908	53,589	6,518	59,801	35,849	19,279	3,570	18,000	14,105	9,088	2,690	2,327	52,340	25,598	6,699	20,048
53,589	53,589			12,562	12,562			8,568	7,898	670					
20,685				5,404*	5,404			42	42						
357	357			550	550			4,089	3,419	670					
32,547	32,547			6,608	6,608			4,437	4,437						
66,319		6,518	59,801	23,287	6,717	3,570	18,000	5,537	1,190	2,020	2,327				
61,276		4,327	56,949	15,540	2,248	2,493	10,799	249	170	79					
				2,071			2,071	2,746	1,014	1,732					
5,043		2,191	2,852	5,676	4,489	1,077	130	2,542	6	209	2,327				

* Includes some of the charges to be incurred in 1933-34.

Statement showing the expenditure on Census Operation distributed under

Name of sub-head, item, etc.	Coorg, Sikkim (and Bhutan) and Hyderabad.				Madras.			
	Total	1930-31.	1931-32.	1932-33.	Total	1930-31.	1931-32.	1932-33.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Total	4,874	1,805	1,764	1,805	6,25,388	1,49,733	4,48,417	27,188
Total	4,874	1,805	1,764	1,805	56,258	26,159	24,660	5,484
A.—Superintendence					5,69,135	1,23,624	4,23,757	21,754
A-1.—Pay of officers					18,308	7,883	7,970	2,453
Pay of officers					45,302	20,169	20,466	5,267
Special pay of officers on deputation for Census.						16,969	16,956	
A-2.—Pay of Establishments—Voted								
Pay of men deputed to Census duty					13,095	4,781	6,177	2,137
Special pay of men on deputation for Census						2,207	2,616	
Pay of men without substantive appointments						889	1,098	
A-3.—Allowances, Honoraria, etc.								
Travelling and other Allowances					8,868	5,990	2,878	
Officers					511	295	216	
Establishments					9,379	6,285	3,094	
A-4.—Contingencies—Voted					8,868	5,990	2,878	
Office Rent					511	295	216	
Purchase and repair of furniture					4,700	2,807	1,577	316
Stationery						249		
Postage and telegram charges						228	47	
Freight						521	21	
Miscellaneous						950	651	
Telephone charges						167	233	
Rewards						343	335	
Hot and cold weather charges						187	256	
Purchase of books and maps								
Liveries and warm clothing								
Purchase and repair of tents								
Camel gear								
Other contingencies						114		
A-5.—Grants-in-aid, contributions, etc.—Non-voted					1,483		1,316	167
B.—Enumeration								
B-1.—Pay of Establishments—Voted					1,51,203	15,077	1,34,223	1,903
District Office					5,537	4,446	1,091	
Remuneration of Census staff					4,395	3,458	937	
B-2.—Allowances, Honoraria, etc.					1,40,581	7,041	1,31,638	1,902
Travelling Allowance						7,041	1,31,638	
Honoraria and other allowances								
B-3.—Contingencies—Voted					5,085	3,590	1,494	1
Stationery					432	337	95	
Postage and telegram charges					1,042	897	145	
House numbering charges					1,924	1,065	859	
Freight					230	172	58	
Miscellaneous, including rewards to outsiders					1,457	1,119	337	1
C.—Abstraction and Compilation								
C-1.—Pay of officers					2,82,382	21,798	2,56,146	4,488
C-2.—Pay of Establishments—Voted					3,026		3,026	
Correspondence and-accounts establishments					2,43,366	612	2,38,652	4,102
Pay of men deputed on Census duty								
Special pay of men on deputation for Census								
Pay of men without substantive appointments								
Menial establishments								
Working Staff including Superintendence						612	2,38,652	
Officials						612	44,803	
Non-officials							1,93,749	
Remuneration of sorters and slip copying charges								
C-3.—Allowances, Honoraria, etc.					3,997	1,443	2,369	185
Travelling Allowance						1,443	2,369	
Honoraria and other allowances								
C-4.—Contingencies—Voted					31,993	19,743	12,099	151
Office Rent						175	6,345	
Purchase and repair of furniture						17,394	1,692	
Stationery and paper							173	
Postage and telegram charges						150	568	
Freight						958	1,321	
Miscellaneous						430	1,950	
Petty construction						646		
Hot and cold weather charges							50	
Liveries								
Rewards								
D.—Miscellaneous Staff—Voted					8,474	1,805*	1,764†	405‡
Officers								
Establishments						6,035	494	
Other allowances								
E.—Printing and other stationery charges—Voted					1,400			
Enumeration								
Printing at Government Presses						56,917	6,181	
Printing at Private Presses						17,868	5,656	
Other charges						13,907		
Abstraction and Compilation						25,142	525	
Printing at Government presses						15,914	18,743	
Printing at Private Presses						2,192	17,035	
Other charges								
F.—Deduct—Expenditure recovered from Provincial Governments.						13,722	1,708	

* Rs. 746 for Hyderabad and balance for Coorg.

† Rs. 1,608 for Sikkim and balance for Coorg.

‡ Rs. 5 for Sikkim and balance for Coorg.

§ For Coorg.