

CENSUS OF INDIA, 1951



Volume IV

BOMBAY, SAURASHTRA AND KUTCH

ADMINISTRATION REPORT

By

J. B. BOWMAN

of the Indian Civil Service,

Superintendent of Census Operations

for

Bombay, Saurashtra and Kutch

Section.

BOMBAY

PRINTED AT THE GOVERNMENT CENTRAL PRESS

1953

CONTENTS

		PAGE
CHAPTER	I—SUPERINTENDENCE	1
CHAPTER	II—ENUMERATION	5
CHAPTER	III—TABULATION	17
CHAPTER	IV—CENTRAL TABULATION BRANCH	23
CHAPTER	V—COST OF THE CENSUS	27
APPENDICES		
APPENDIX	I—Census Divisions and Agencies	30
APPENDIX	II—Statement showing the numbers of printed forms supplied to various districts	32
APPENDIX	III—Summary of the Proceedings of the Census Conference held from the 27th December, 1950 to the 29th December, 1950	34
APPENDIX	IV—Statement showing tracts, which were formed in the various districts for the purpose of the compilation of the Census Tables, and their 1951 Census Population...	41
APPENDIX	V—Statement showing the number of sorter-months, compiler-checker-months and supervisor-months actually consumed in each of the five Census Tabulation Offices in Bombay and Saurashtra, the number of these months provided for in the revised budget estimates and the number of these months per lakh of population actually consumed	48
APPENDIX	VI—Statement showing information in regard to persons who were employed in the various Tabulation Offices as Sorters, Supervisors and Compiler-Checkers	49
APPENDIX	VII—Statement showing staff employed in the Central Tabulation Branch of the Office of the Superintendent of Census Operations for Bombay, Saurashtra and Kutch, Bombay	50
APPENDIX	VIII—Statement showing expenditure on the 1951 Census incurred by the Government of India from the Census Budget	51
APPENDIX	IX—Costing Statements	53
APPENDIX	X—Instructions of the Registrar General, India, in the matter of the Costing Statements	55

CHAPTER I

SUPERINTENDENCE

I joined my appointment as Superintendent of Census Operations for Bombay, Saurashtra and Kutch, on 3rd January 1950.

As is customary, no arrangements had been made to locate the Superintendent anywhere and I established myself in a room in the Council Hall, Bombay. It was decided by Government to locate my headquarters in Bombay. The disadvantage of Bombay City is that it is extremely overcrowded, and there is consequently difficulty in obtaining office and residential accommodation. My predecessor's headquarters were located at Satara, and he recommended that Poona should be the headquarters of his successor. (Today, however, it would be positively disadvantageous to locate the Superintendent anywhere except in the headquarters of Government where he can (1) contact the various Secretariat Departments in the initial stages, (2) maintain liaison with the Bureau of Economics and Statistics of the Government of Bombay, (3) keep in touch with the Government Central Press, Bombay, which has considerable Census printing work to do under pressure of other commitments, and (4) establish contact with newspapers on which the Census depends for the publicity that is essential to its success.

Staff

The Superintendent works traditionally with a skeleton staff and, having regard to the fact that the Census in Bombay State is conducted through the agency of the district Collectors and their revenue staff, and of municipalities, as an addition to their normal duties there are advantages in restricting the Superintendent's staff. A large staff seeks to find its justification in the number of references it deals with. The Census Scheme very properly contained a warning that paper breeds paper and emphasised the necessity of keeping written references to the minimum.

What is required of the Census Superintendent is to lay down a programme for the carrying out of the Census according to plan and to see that it is implemented, to frame the enumerator's instructions along the lines laid down, and to tour and "put across" the instructions in every district and to as wide an audience as possible.

The Superintendent of Census has the assistance of a Head Clerk who is drawn from the Mamlatdar's cadre. After interviewing candidates suggested by the Political and Services Department of the Government of Bombay,

SUPERINTENDENCE

I selected Shri V. R. Ranade. The staff which I had, their pays and dates of appointment are shown below :-

Name.	Designation.	Date of appointment.	Salary.	Special pay.	Dearness Allowance.	Compensatory Local Allowance.	House Rent Allowance.
			Rs.	Rs.	Rs.	Rs. as. ps.	Rs. as. ps.
1. Shri V. R. Ranade ...	Head Clerk ...	20th March 1950 ...	280	56	70	50 0 0	25 4 0
2. Shri S. P. Satwalkar ...	Clerk ...	23rd January 1950 ...	55	...	45	7 8 0	15 0 0
3. Shri P. K. Nariani ...	Steno-typist ...	6th May 1950 ...	100	...	45	12 8 0	15 0 0
4. Shri P. R. Oza ...	Accounts Clerk ...	11th October 1950 ...	80	...	45	10 0 0	15 0 0
5. Shri M. B. More ...	Peon ...	23rd January 1950 ...	30	...	35	5 0 0	10 0 0
6. Shri K. S. More ...	Do. ...	17th August 1950 ...	30	...	35	5 0 0	10 0 0
*7. Shri P. V. Sawant ...	Do. ...	13th November 1950 ...	30	...	35	5 0 0	10 0 0

*Discontinued from 1st March 1951.

The difficulties encountered in the early stages in securing accommodation, staff, office stationery, and other necessities form a valuable training in the improvisation which a Census Superintendent has to resort to throughout the Operation, however much he may resent it at the time. A telephone was borrowed from the Government of Bombay, stationery from the Separate Department of the Secretariat, demi-official Government of India note paper from the Accountant General, and a duplicator, when required, from some indulgent Secretariat Department. As the Census is conducted by grafting it on to the normal administrative tree it is as well that the Superintendent should learn early the function of a successful parasite. Shri M. J. Desai, I.C.S., very kindly allowed me to occupy the major portion of his flat as an office during his absence as Commercial Adviser to the High Commissioner for India in London. This solved the problem of office accommodation towards the end of April 1950.

The main lines of the 1951 Census Scheme had already been laid down by the Census Commissioner for India and a copy of the Scheme was among the literature furnished to Superintendents on their joining their appointments. The first two months were spent in studying files relating to the 1941 census and previous census reports, and acquiring a background of census knowledge. A conference of all Superintendents of Census

Operations was held in Delhi from 23rd February to 1st March 1950. This conference was exceptionally valuable. After the conference, Superintendents were able to get on with the actual arrangements for the Census. The Census pads on which the answers to the Census questions, were recorded, were printed centrally at Aligarh. The other arrangements were to be made by Superintendents of Census Operations.

Correspondence

The method of recording correspondence was slightly changed. In the past a single compilation ENMN dealt with all questions relating to the details of the Census. Many subjects were thus dealt with under one code number, and there were only seven such numbers. This time correspondence was dealt with under the following heads :-

- (1) CSI—All matters relating to the Census of Small-Scale Industries.
- (2) CSG—General matters pertaining to the Census.
- (3) CSP—Matters dealing with preliminaries of the Census.
- (4) CEN—Matters concerning enumeration.
- (5) CSA—Matters pertaining to the abstraction and tabulation of the results of the Census.
- (6) CSF—Financial aspects and arrangements of the 1951 Census.
- (7) CSE—Matters pertaining to establishments.

- (8) CSM—Miscellaneous matters such as tour programmes, stationery and dead-stock articles.
- (9) CNP—Matters dealing with publicity.

Touring

Touring has the primary purpose of enabling the Superintendent to see that arrangements for holding the Census are proceeding along the lines and at the pace laid down. No Census Code was issued by me. The utility of such a work is doubtful because nobody reads more than the minimum on the subject of the Census, though a properly indexed code would probably be handy for reference. Instructions in regard to housenumbering and preparation of houselists had already been issued by the State Governments. I also requested the Bombay Government to issue the other preliminary instructions about the settling of location code. The location code utilised in Bombay, Saurashtra and Kutch was that suggested by the Census Commissioner for India. This location code, by the use of Roman numerals for urban areas, enabled rural, non-municipal urban, and municipal urban areas to be distinguished at sight.

Instructions for holding Census

These matters come under the heading of "preliminaries." The main instructions for holding the Census were contained in two circulars—a circular No. CSP-4, dated 12th June 1950, entitled "Preliminary Arrangements for the 1951 Census", and another circular No. CSP-4, dated 4th August 1950, entitled "Arrangements for the 1951 Census". These two circulars, of four pages and ten pages respectively, replaced the Census Codes previously issued. Though brief, the instructions contained all essentials, and included a hand chart for Census enumeration training purposes to supplement the Booklet of Instructions to Enumerators. Other special instructions relating to military, port, and railway areas were also issued later, but the circulars of 12th June 1950 and 4th August 1950 contained all the information that most Charge Superintendents required.

It may be asked—indeed I was asked by a minister of the Government of Bombay—why the appointment of the Census Superintendent was made more than a year in advance of the actual Census, the alternative suggestion being the issue of a Census Code which would give

dates by which the various preparations must be completed. The answer is that without personal visits and constant touring the various preparations tend to lag behind. It is not only a question of the individual Collector; it is a question of the quality of the staff and the tradition of good or bad work in that district. A visit tends to speed things up.

Touring the Gujarat districts must be done by train. In other districts it can be done by car, and travel by car renders the Superintendent more mobile and enables him to cover the ground quicker. Travel to Saurashtra and Kutch from Bombay is made easy by the air service, but within Saurashtra travel is more difficult. I aimed first at a round of all districts at which I met and addressed meetings of Charge Superintendents at conferences presided over by Collectors, gave a summary of the Census Scheme, and instructions in the technique of enumeration. I also aimed at special attention to the big cities where if errors of enumeration occur the Census can be spoilt for large populations. A second round of most districts and a visit to taluka headquarters where possible, with special concentration on those districts where preparations seemed to be coming along more slowly than in others were the next objectives. Additionally on this second round, one got an opportunity to inspect and arrange for the leasing of suitable buildings for Abstraction Offices. Altogether I travelled 17,000 miles in the area under my superintendence during the period up to 1st March 1951, armed with a roll-up black board for instructional purposes.

My predecessor suggested the appointment of six officers of Head Karkun's grade to supplement the labours of the Census Superintendent in instructing enumerators in the concluding stages of the Census preparations. I am not unreservedly in favour of this. It would be useful in seeing that training was uniform and carried out by persons who had specialised in the subject, but it would have to be made clear that the primary responsibility for the success of the Census was on the Collector and his organisation. A few Collectors sent their personal assistants or other officers out to tour every taluka and ensure that everything was ready and training properly imparted just before the Census, and this is probably the best way of dealing with the problem, rather than by attempting to form a separate census training organisation.

Co-operation received

One gratifying feature in 1950-51 was the co-operation received from every Collector. My predecessor spoke of the 1941 reaction to his activities as being far from uniformly favourable. In 1950-51, by contrast, every Collector in Bombay State was very helpful. The Chief Secretary to the Government of Bombay, Shri M. D. Bhat, took a real personal interest in the Census and this made the Superintendent's burden much lighter. Saurashtra, after getting off to a slow start, exceeded expectations, and Kutch was throughout under the watchful eye of Shri Sheth, Collector of Kutch, whose experience and enthusiasm led to the State giving an excellent account of itself at the Census.

Four ministers of the Government of Bombay agreed to give inaugural talks in the series of Census talks in Marathi, Gujarati, Kannada and English put out by All-India Radio, Bombay. The newspapers gave excellent publicity of the right sort to the Census. The Films Division of the Government of India made a short

documentary on the Census called "Figuring it out". I had the pleasure of collaborating with the director, Shri V. R. Sarma, on the script of the film. Publicity is essential to the Census, and the right sort of publicity can do a lot of good. Short articles on the Census were prepared in the regional languages by the Press Information Bureau, Government of India, Bombay, and supplied to the press and Collectors for publication in local newspapers.

In fact in this bright picture the only less rosy features were the slowness of Bombay Municipality to get on with its preparations according to the programme laid down, financial considerations always looming uppermost; and the far from unstinted co-operation given by the Government of India departments in Bombay City. This was in unhappy contrast with the helpful attitude of the Bombay Government to all preparations concerned with the Census. Largely due to this latter feature the Census went off successfully according to plan.

CHAPTER II

ENUMERATION

The taking of the Census is now governed by a permanent Act of the Central Legislature, the Census Act, (Act XXXVII of 1948). Previous censuses were taken after special legislation was passed for the purpose. The Census Act of 1948 provides for the taking of censuses generally. In its organisational aspect the Act provides for the appointment of a Census Commissioner for India and of Superintendents of Census Operations within the several States of the Indian Union. It also makes it obligatory on the part of all local bodies and citizens to assist in taking the Census. The States of Bombay, Saurashtra and Kutch were placed under my superintendence.

Notifications under Census Act

The three governments concerned were moved to issue the requisite notifications under the provisions of the Act. All Collectors, Assistant and Deputy Collectors, Mamlatdars, Mahalkaris, and Head Karkuns were appointed Census Officers for their respective jurisdictions under section 4 (2) of the Act, and the power of appointing Census Officers was also delegated to these officers for their separate areas of jurisdiction. The Government of Bombay issued the requisite notifications in July 1950, and certain supplementary notifications regarding the cities of Ahmedabad, Poona, Surat, Sholapur and Hubli in September 1950. The Governments of Saurashtra and Kutch also issued the requisite notifications for their areas. The Collectors in turn appointed the Presidents or Chief Officers of municipalities as Census Officers for municipal areas in their districts.

The major part of the energies of the Superintendent of Census Operations during the period of a little over a year are directed towards ensuring that the enumeration is successful. Success means that everyone is enumerated and that nobody is enumerated more than once. The area of my jurisdiction was roughly that of my predecessor in 1941, but with this important difference that I did not have to deal with the numerous states and agencies that existed in 1941. Baroda State which formerly did its own excellent census was in 1950-51 already merged in Bombay State, and three new Bombay districts of Baroda, Mehsana, and Amreli had been formed out of its territory.

Organisation of district arrangements

In 1941 my predecessor dealt direct with a large number of Charge Superintendents. This time, however, both because the Census pads were sent from Aligarh to Collectors and not to Charge Superintendents, and because so many territorial and administrative changes had occurred—the map, even during the pre-enumeration year underwent further changes—I thought it safer to correspond with Collectors and leave the further distribution of circulars etc., within their districts to them. In some cases because of extensive territorial changes, the Collectors were not always aware of what their 1941 population was.

Method of enumeration

The Census of India has always been done on the basis of unpaid enumeration. Up to 1941 enumeration was voluntary but the great bulk

of enumerators, at least in Bombay, were either Government servants, or persons euphemistically described as amenable to official control and influence. With the passing of the Census Act of 1948 enumeration ceased to be voluntary—the analogy being with jury service—but in effect the old system continued. [It has its practical advantage in that an unwilling enumerator is a liability and it has always been possible to obtain a sufficient number of enumerators on a voluntary basis. The non-Government secondary school teachers in Bombay City protested against their appointment on the eve of the Census and, rather than see the Census of the City conducted in an atmosphere of crisis and recrimination, service from those non-Government teachers who were not willing to work in Bombay City was not insisted on. Outside the big cities, the village officers, school teachers and employees of District Local Boards and municipalities comprised the backbone of the enumeration army.]

The enumerators are unpaid, but are given out-of-pocket travelling expenses. It would be ingenuous to pretend that Census duty was willingly assumed by all who were appointed. What was surprising was that, having been saddled with the job, the vast majority of enumerators discharged their duties well and conscientiously. There was of course an additional psychological stimulus in that this was the first Census of Independent India.

The Unpaid Census

Whether it will be possible to do the Census enumeration again on an unpaid basis is one asked after every census. In 1951 the Census enumeration was supposed to be done in the enumerators' spare time over a period of 20 days. Concessions were given by Government in the way of late attendance at office, since in places like Bombay City people could be found at home only in the early morning or at night. In actual practice the work cuts into official work, and what happens is that the machinery of certain departments goes slow during the census or may indeed come to a halt. I met a Director of Local Authorities while the Census enumeration was going on who said that he had no work to do because all his clerks were busy on the Census. [If the Census enumeration is to continue on an unpaid basis then it is probably advantageous to spread it over 20 days. An alternative method might be to appoint Government servants or servants of local bodies as

Census Officers, give them leave for a week from their normal duties and pay them a suitable honorarium from which they would have to meet their out-of-pocket expenses. Under such a system each enumerator could census 1,000-1,200 people with ease. There was equality of sacrifice.] The enumerators in Bombay City were given no more favourable treatment than enumerators elsewhere, despite the demand raised by them for payment of a generous honorarium. The success or otherwise of the Census in some way reflects the degree of efficiency of the State administrative machine. Fortunately, Bombay State prides itself on this, and though the attitude may be criticised as parochial it does produce results.

Enumeration Period

There was an important change in 1951 in the period spent on enumeration. The enumeration was spread over 20 days as contrasted with three days in 1941 and a theoretical one-night in preceding censuses—theoretical because in practice enumerators in the era of the one-night census did provisional enumeration for some weeks before the census, and brought their record up to date on the census night by crossing out absentees and adding the names of new arrivals. The one-night census involved the employment of an immense number of enumerators with consequent loss of efficiency. The standard of efficiency tends to vary inversely with the number of enumerators employed. In 1941 the number of enumerators employed was reduced and they had three full days in which to cover their blocks and record the information. In 1951, though the enumeration period was extended from 3 to 20 days, the size of the "block", the area assigned to one enumerator, was not increased. Each enumerator was asked to enumerate about 1,000 persons. Also, following the 1941 Bombay practice, there was as far as possible a checker for each enumerator. The checker was the colleague, not the superior, of the enumerator. He was supposed to follow in the enumerator's footsteps and check his work. In practice I sometimes found the checker and enumerator working in pairs. In the whole area of Bombay, Saurashtra and Kutch there were 38,809 blocks and 71,139 enumerators and checkers.

Census Charges

For administrative purposes the districts were split up into Charges under a Charge Superintendent. The Charge was co-extensive with a

taluka or big municipal area. Each Charge was split up into Circles under a Circle Supervisor, while the lowest unit was the Block, the area under one enumerator. This was essentially the same as in 1941 and was readily understood. Prior to 1951 every municipal area had been formed into a separate charge, but as previous census reports spoke of poor quality enumeration in some municipal areas I suggested to Collectors that municipalities with less than 15,000 population should be formed into Circles, in order that the Mamlatdar in his capacity as Charge Superintendent should be able to exercise effective supervision.

Details in regard to Census Divisions and Agencies are given in Appendix I.

The Census Slip

Prior to 1941 the census information was recorded on general schedules that were subsequently copied on to slips in the Tabulation Offices. In 1941 a departure was made, and the census information was recorded directly on to slips. In recording the information symbols or contractions were used. The slips were subsequently sorted and counted to produce the tables. In 1951, the 1941 system of recording the information directly on slips and using contractions was continued. An enumerator who is intelligent enough to understand and put the census questions is able to employ contractions.

The census slips, which measured 4" x 4½", were contained in pads of 100 slips which were printed centrally at Aligarh and supplied to Collectors. There is an inevitable tendency to over-estimate requirements for fear of running short, though I did not find the tendency to be on the same scale as my predecessor did in 1941. This was perhaps due to the fact that I dealt directly with Collectors who could control and consolidate the demands of their Charge Superintendents. A formula was laid down for estimating requirements and allowances for wastage.

Appendix II shows numbers of enumeration pads and other printed forms, which were supplied and used in various districts.

Location Code

A group of numbers printed or written at the top of every census slip is called the Location Code. It is these numbers that enable us to identify where a particular slip comes from. The Location Code in 1951 consisted of a group

of four or five elements, of which the house-number comprised the last element.

In 1941 three elements were printed on the pads. In 1951 only one element was printed on the pads. This indicated the number of the district. The other digits which comprised the Location Code up to house-number were directed to be written on the slips before the pads were given to enumerators. This was a very necessary precaution. The number of cases where slips had a faulty Location Code written on them was very small, and this was almost entirely due to not leaving the writing of the code to the enumerator. The printing of extra pads of 50 slips without any first digit printing greatly minimised wastage of pads and paper.

Shortage of Pads

Census Officers were advised in the last resort to break pads or prepare handwritten or cyclostyled slips if they ran short. It was distressing to find slips prepared and written on both sides in some areas. This meant additional copying work for the Abstraction Office before the slips could be used, and indicated an unintelligent approach on the part of the Census Officers concerned. Another and potentially more serious mistake occurred when an enumerator with more than one village to enumerate used one pad in which to record the enumeration of different villages. The Abstraction Offices detected this eccentricity early. Strangely enough the enumerators had put the correct Location Code numbers in such cases so that the damage was repairable. Some Mamlatdars, in disregard of instructions, had extra pads printed locally. In most cases the printers did the printing work free, doubtless as a pay-back for all the electoral roll work they had received. The census budget had thus to bear only the cost of paper which it bears anyway. This was perhaps the only case I came across where the Census benefited from election activities. In most cases electoral roll work for which payment was made to Government servants and school teachers "spoiled the market" for the unpaid Census.

Enumerators' Classes

Training is of the essence of a successful census. Only by training can the enumerator acquire the necessary confidence. My equipment for training consisted of a roll-up black board, costing Rs. 7-8-0, and some chalk. In

holding training classes the golden rules are, I think, these :—

(1) The average audience cannot concentrate for more than an hour and a half. Therefore, don't waste time on introductory remarks but get right down to business. It would probably make for less haphazard methods if somebody could work out one or two set lectures covering all the points in the minimum number of simple words.

(2) Refuse to be diverted by hypothetical questions. Ask the questioner to see you at the end of the class.

(3) Enumerate one or two persons selected at random fairly rapidly, and then go over the question explaining the various points involved.

(4) Concentrate on explaining questions 9, 10 and 11, the difficult and crucial "economic questions."

(5) Finally hand the chalk over to one of the audience and get him to do a sample enumeration. This generally succeeds in enlivening the proceedings.

Trial enumeration

The Registrar General suggested that enumerators would have to be instructed on at least three separate occasions if they were to master the technique. As expenditure is limited all enumerators cannot be called to the headquarters of the taluka for the purpose. It is necessary therefore that the Charge Superintendent should first train all the Circle Supervisors and as many enumerators as are near the taluka headquarters, and then leave it to the Circle Supervisors to train their enumerators. Another necessary feature of training insisted on by the Registrar General was the filling up of at least ten sample slips by enumerators on the basis of field practice just before the census, and the showing of these slips to their supervisors. This ensured that no enumerator went on duty without having acquired the necessary training, practice, and confidence.

Sub-Divisional Officers

In the past the Prant Officers (Sub-Divisional Revenue Officers) tended to be short-circuited in the census organisation. This time they were assigned specific duties in holding training classes, and most of them pulled their weight. They were also asked to see that there was proper liaison with municipal authorities in the conduct of the census.

Municipalities

It has been customary in the past to compare the standard of efficiency in municipal areas in census taking unfavourably with that obtaining in other areas. It is probably true that generally speaking municipalities are more difficult to galvanize into activity than other areas; but personally I feel that in 1951 the enumeration in the city municipalities of Bombay, Ahmedabad and Poona reached a very high standard, partly because of the greater intelligence and interest of the city population, and partly because the Census Officers in most cities did a very good job. Poona Municipality did an excellent job, largely due to the enthusiasm of Shri Shinde, the Assistant Municipal Commissioner in charge of the census operation, and Bombay and Ahmedabad also did very satisfactory censuses.

Incentives

The Census Scheme is essentially a simple one. The questionnaire is also capable of mastery in all its details by persons of average intelligence. I have seen a class of enumerators who had the whole thing at their finger tips. Everything depends on enthusiasm and guidance from the Charge Superintendents. When whole districts do good censuses except for individual talukas the only possible explanation is the failure of the individual Charge Superintendent as a Census Officer. I would be in favour in future of asking Government to keep a note on the confidential sheets of Government servants whose Charges fail to do a satisfactory census. A note was ordered by Government to be kept on the confidential sheets of Government servants who did good census work in 1951, and it is a logical extension of this principle to note bad work also. The 1951 Census saw the introduction of an entirely new incentive. Census service distinguished by outstanding zeal and quality was recognised by the award of the President's Census Medal. There were two varieties with identical shape, size, and design. One was of silver and one of bronze. One silver and two bronze medals were awarded on the basis of every estimated lakh of population. The medal was open to all Census workers, official and non-official. The other old "incentive"—the "Letter of Appreciation"—has probably lost much of its utility, though it still serves a purpose. Until enumerators are given adequate cash honoraria, however,

one can only be thankful that the census gets done at all. That it gets done reasonably well speaks volumes for the average enumerator's sense of public duty.

Census programme

In drawing up a programme there is a great temptation to ask that things be done about a month before you expect them to be done. That is alright for most preparations, but as regards training enumerators it is a tendency to be avoided. If enumerators are trained too soon before the census date they will either forget the instructions, lose interest, or lose their booklets of instructions. Another thing to remember is that the administrative machine has so much to handle now-a-days that it is wrong to expect it to treat census as a top priority for months before the census comes off. It is, however, necessary that the heads of departments other than the Revenue Department should inform their officers at district and taluka level of the Government instructions that the staff of all departments should be ready to assume census duty when called upon to do so. This would obviate many last minute difficulties of Charge Superintendents.

Housenumbering

One necessary preliminary to a population census in India is housenumbering. Because houses are generally not laid out in regular streets and numbered for postal purposes it is necessary to put a number on houses for census purposes as the most effective way of securing complete enumeration. In the past housenumbering for this specific temporary purpose was undertaken just before the census. In 1949, however, provincial Governments undertook housenumbering at the instance of the Census Commissioner for India. At the same time, in Bombay State, brief houselists containing information about the name of the head of the household and the total number of persons in each house, adult and children, was collected. The intention was that this housenumbering should be permanent and maintained, and that a uniform system of housenumbering should be adopted for all administrative purposes. The degree of permanence achieved is problematical, depending on the ability of the housenumbering medium to withstand the elements, and the periodical assaults of the householder intent on whitewashing his building.

In Bombay City housenumbering was not done until 1950 and, by the State Government making the services of its rationing staff available to the Municipality, it was possible to do the operation very economically. Incidentally the new numbers were adopted thereafter by the Rationing authorities, thus bringing nearer the ideal of one number for all administrative purposes. By contrast, I have seen small municipalities which undertook metal plate housenumbering in pursuance of these instructions not only assigning a number to every dwelling house with a separate main entrance as desired, but also recording on the plate the "rationing number", the City Survey number, and the old census number, complications which completely destroy the rationale of the scheme. The only other number that might usefully go on such plates is the CTS number.

Metal plate housenumbering

The use of metal plates is expensive, but unless they are employed, or annual renewal of housenumbering is undertaken, permanence is not likely to be achieved. Though the permanence sought may be in the mind of the householder that concept is perhaps too esoteric to be practicable. In some cases 10 per cent of the housenumbering were obliterated between 1949 and early 1951. I suggested that municipalities should recover the small amount necessary to restore the numbers from the householders in lieu of prosecution. It would be wrong to prosecute householders who deface their housenumbering until the fact that obliteration of census numbers is an offence is better known.

The indications are that permanent housenumbering cannot be achieved unless metal plates are used. In some municipal areas, such as Bhavnagar, metal plates put up before the 1941 census were still in good condition. By legislation or by local bye-laws the cost of metal plate housenumbering could probably be passed on to the householder, and there seems no reason why this should not be done, particularly when the machinery of elections and the increasing importance given to sample enquiries depend on the individual household as well as the individual citizen being easily identifiable.

National Register of Citizens

Intimately linked with the whole question of housenumbering is the National Register of Citizens. This consisted of a transcription of the

replies to the more important census questions, arranged in a register prepared for each village and ward of a town. The preparation of this register was in implementation of a recommendation made by a Committee of administrators, economists, and statisticians appointed by the Government of India, which stressed the need for a register of households as a basis for demographic as well as socio-economic enquiries. It was also hoped that preparations of the Register would improve the quality of enumeration, and also be of use in correcting incomplete slips in the Tabulation Offices. The latter objective was realised.

In a sense the National Register was the old general schedule in reverse but with these important differences :—

Firstly, the fair copy was prepared systematically with houses and households arranged serially within the village or ward ; secondly, only the more important questions were copied ; and thirdly, it was intended to be a document of practical utility in the inter-censal period. In Bombay, Saurashtra and Kutch a rough copy was first prepared. It would seem that in a few rare instances the answers to the questions were taken down in the registers first and then copied on to the slips ; otherwise cases would not have arisen where the number of entries in the Register exceeded the number of slips. The more usual occurrence, of course, was for a certain number of entries to be omitted during the course of transcription from the slips to the rough copies of the National Registers and from these to the fair copies. A full count was made of the number of entries in the National Register, and these were compared with the number of census slips. This indicated that omissions to the extent of 0·24 per cent occurred. It is too early to gauge fully its utility, but a document has been compiled that should be of great value in conjunction with a system of maintained housenumbers.

Stationery difficulties

One difficulty concerned the securing of paper for printing the National Register, and the printing. The paper had to be secured from Calcutta, but the delay in its arrival accentuated printing difficulties. A large consignment of paper like this has inevitably to come from Calcutta, but as regards other requirements of stationery and office equipment it would be better if arrangements could be made to secure them from the Government Printing and Sta-

tionery, Bombay. This would prevent damage in transit and save transport charges. Two typewriters ordered suffered damage in the course of transit from Calcutta to Bombay, and a duplicator arrived a year after it was ordered, when the Census enumeration was over. It would be repetitious to list the annoyances that spring from dealing with the Government of India Stationery Office, Calcutta, ranging from failure to reply to urgent references to failure to supply what was indented for. One must record thanks to the organisation of the Director of Government Printing and Stationery, Bombay, which came to the rescue on numerous occasions and whose officers were of great assistance throughout.

Enumeration

The Census enumeration this time was spread over 20 days from 9th to 28th February, with three days from the 1st to 3rd March for checking births and deaths occurring after the enumerator's visit. Enumeration of houseless persons was done on the night of 28th Feb./1st March. A person was to be enumerated at his normal residence provided he was, or was expected to be, there at any time between 9th February and sunrise of 1st March. The object of the Census was a count of everyone alive as at sunrise on 1st March 1951. The effect of the longer enumeration period of 20 days was to increase the chances of a person being enumerated at his home. Enumeration of the travelling public belonged to the era of the one-night census which ended in 1931, and was no longer necessary. Despite this I was frequently asked what arrangements would be made for enumerating travellers this time.

The advantage of a 20 days' enumeration period is that the enumerator has more time to go about the work in his spare time and the supervisor—theoretically—to correct mistakes. The supervisors were spread fairly thin in Bombay by contrast with other States. The area he was responsible for was generally a revenue circle, a fairly large area. Incidentally, not many enumerators in practice did the final round from 1st to 3rd March. In many cases they were busy with the National Registers, but in the result the longer enumeration period of 20 days justified itself.)

Linguistic tension.

The census enumeration went off successfully. There was some linguistic trouble, principally in Belgaum district. The expressed

apprehension was that Marathi and Kannada speaking enumerators would be biased in favour of their respective mother tongues. The focus of the trouble was Belgaum itself where it was alleged the Municipality had not appointed an adequate number of Kannada enumerators. Both the Karnatak and Maharashtra Congress Committees passed resolutions that enumeration should be done by persons having different mother tongues working in pairs in areas where linguistic tension existed. These resolutions were passed almost on the eve of the Census as the trouble manifested itself late. I flew to Belgaum and met the protagonists of Kannada and Marathi, and the dual enumeration principle was implemented in Belgaum City. I revisited Belgaum as the enumeration period was nearing conclusion.

It was also alleged that Kannada was suffering in Nipani and Sholapur by reason of the partiality of enumerators. I visited Nipani while the Census was going on. I found no evidence of wrong recording of mother tongue, nor was the atmosphere in linguistic circles there strained as it undoubtedly was in Belgaum City. A test check at Sholapur made by the Chief Officer of the Municipality in the company of those making the allegation and in localities chosen by the latter revealed no wrong recording of mother tongue.

There was some minor linguistic trouble over Konkani in Karwar district, but this attained no dimensions. I did find wilful distortion in the replies to question 8 (Bilingualism) in Belgaum Municipal area. Here even educated persons who were protagonists of Kannada or Marathi professed not to use any language other than their mother tongue, presumably from fear that acknowledgement of the fact would strengthen the position of the other language. The bilingualism figures in such areas are probably not excessively accurate, but particulars about mother tongue are, I believe, quite reliable everywhere. In so far as the dual enumeration principle secured this it was worth having, even though in an analysis it is based on distrust of the enumerators whose job is seldom a congenial one

Provisional totals

After the enumeration was over the enumerators met on 4th March 1951 at a central place in their circles where provisional totals for blocks and circles were compiled. These figures were in turn totalled for charges and

for districts. The final district figures, showing the total number of persons, and the totals for males and females, were telegraphed by Collectors to the Census Commissioner in Delhi and to myself. At the same time separate totals for displaced persons were compiled. It says much for the speed of the census organisation that provisional totals for the three States of Bombay, Saurashtra and Kutch were published in the Bombay newspapers on the morning of 21st March 1951. The accuracy of these provisional totals can be gauged from the following data :—

State.	Provisional total.	Final figure.	Percentage error.
Bombay ...	35,943,559	35,956,150	0·035
Saurashtra ...	4,136,005	4,137,359	0·032
Kutch ...	567,804	567,606	0·035
<i>Total for the three States :</i>	40,647,368	40,661,115	0·035

Sample Verification of the Census Count

That particular operation involved perhaps merely an exercise in rapid and accurate addition. What of the accuracy of the Census head-count? The answer to that question is fundamental. After the 1951 Census a 1/1000th sample verification of the Census count was held, and the results of the enquiry suggest that the Census head count was accurate within about 0·99 per cent. The indication is that the error was one of under-enumeration, a result that is somewhat surprising when one considers that the population of the State of Bombay has shown an increase of 23·22 per cent over the 1941 census figure. Displaced persons would account for only a small part of this figure. On the basis of the provisional totals it was at first surmised that the Census result erred on the side of over-enumeration, rationing and the longer enumeration period of 20 days with its attendant risk of double-enumeration being regarded as factors. The result of the sample verification and the degree of accuracy in the Census enumeration are discussed in the main report.

Omissions

The type of case most galling to Census pride is when a person noises abroad that he has been omitted when he has actually been counted. A distinguished soldier informed the Chief Secretary to the Government of Bombay that

he and his family had not been counted. Enquiries revealed that the soldier was out of Bombay when the enumerator called. Permission to see the wife of the distinguished soldier was refused by the A.D.C. who, however, supplied the census information, unknown to the distinguished soldier and his family. The Census panders subtly to human pride and when people complain about being omitted it can perhaps be regarded as a backhanded compliment to the Census organisation.

Public response

On the response of the public to a census operation depends its success or otherwise, even though the citizen in India is not saddled with the responsibility of filling up the census form. In the past apathy or hostility frequently marked the census operation. The 1951 Census was notable for the favourable atmosphere in which it was held, particularly in those areas which in the past made a speciality of boycotting it. Most reports indicate that the co-operation received from the public was excellent, and this is gratifying when one considers the apprehension that a census enquiry into personal particulars arouses almost everywhere among some persons, even educated persons who should know better.

REVIEW OF THE QUALITY OF ENUMERATION

A successful census means a head count that is as nearly exact as possible, and the accurate recording of the census information in respect of every person enumerated. The result of the sample census verification carried out shortly after the census suggests that the census head count was accurate within 0.99 per cent. The verification did not concern itself with the accuracy of the replies to the fourteen census questions. The comments in this chapter on the quality of the enumeration are based on the remarks of the Deputy Superintendents in charge of the Tabulation Offices where the slips were sorted and counted. Their opinions have been based on a review of the manner in which the slips were filled up, and the extent of omissions, errors, and incomplete replies in the slips.

The general opinion was that the Census was done satisfactorily. The Deputy Superintendents attempted to grade the districts for whose tabulation they were responsible. Their assessment was based on the percentage of the

Ahmedabad Corporation did two excellent things. It provided cloth badges of different colours at small cost to enumerators, checkers, and circle supervisors, and these attracted the attention of the public. I saw a cheerful crowd assembled at several doors where the census staff were doing enumeration in Ahmedabad City. This may have been in breach of the confidential character of the information, but neighbours generally know as much as the householder about his affairs. The other excellent thing that Ahmedabad did was to give the census staff free passes for the municipal buses, and that cut down costs. When I tried to get the same thing done in Bombay I was told informally that this was the privilege of a municipal father, and the red tape involved in securing the concession would have made it not worthwhile. Besides time was running short and securing an accurate census was at that stage more important than saving some money.

The census pads and the fair copies of the National Register, which were prepared from 4th to 11th March 1951, were packed in boxes by Charge Superintendents and sent to the Tabulation Offices. These offices were situated at Bombay, Baroda, Ahmednagar, Belgaum and Bhavnagar.

population of the district in respect of which the Census data was considered complete and reliable. It was perhaps not a very scientific basis of computation, being based largely on impressions and estimates but, for what it is worth, the districts as graded in order of merit by the Deputy Superintendents are shown below :—

<i>Tabulation Office</i>			
<i>Baroda</i>	<i>Ahmednagar</i>	<i>Belgaum</i>	<i>Bhavnagar</i>
1. Surat	1. Kolaba	1. Sholapur	1. Kutch
2. Panch Mahals	2. Satara North	2. Ratnagiri	2. Sorath
3. Ahmedabad	3. Poona	3. Belgaum	3. Madhya Saurashtra
4. Kaira	4. Nasik	4. Dharwar	4. Gohilwad
5. Baroda	5. Dangs	5. Bijapur	5. Halar
6. Mehsana	6. Ahmednagar	6. Kolhapur	6. Zalawad
7. Amreli	7. East Khandesh	7. Kanara	
8. Broach	8. West Khandesh	8. Satara South	
9. Sabarkantha	9. Thana		
10. Banaskantha			

Some of the Charges in the districts which have been placed fairly low in the list did very well. Mistakes and omissions, to a greater or less degree, were found everywhere, but the Deputy Superintendents are of the opinion that the census cannot be said to be unreliable in any district. The work in Kutch was reported to be distinctly superior to that of any district in Saurashtra.

An omission i.e. a failure to record an answer to a question could be detected immediately. A mistake, if it were an obvious one, such as the recording as a male of someone bearing a female name, and described as a wife, sister or daughter of the head of the household, was also detectable and capable of correction. Where, on the other hand, there was nothing prima facie inconsistent in the replies, it was assumed, rightly or wrongly, that the enumeration had been correctly carried out.

The questions on which comment seems called for are detailed below :—

Question 2 (b) (Religion): Six religions were coded, i.e. on the census slip the enumerator had to write 1 for Hindu, 2 for Muslim, 3 for Christian, 4 for Sikh, 5 for Jain and 6 for Parsi. The instructions were "For others, write the answer as actually returned." While such answers as "Atheist", "Rationalist", etc. were given by persons who obviously understood what was intended, the extinction of Tribal religions from the returns is a feature that calls for comment. Nobody in Bombay State has been recorded as professing a Tribal religion at this Census, while in 1931, there were 200,586 persons in the area that now comprises the States of Bombay, Saurashtra and Kutch who were recorded as professing a Tribal religion. It is a matter of speculation whether the result would have been different if the instructions, which were deliberately kept brief, had been expanded on such lines as "If a person says that he is a Bhil by religion, record Bhil in question 2(b)." As it was, the reasoning in the minds of the enumerators appears to have been "How can I write 'Bhil' ? Bhil is not a religion." Mr. Sedgwick, Superintendent of Census Operations, Bombay, for the 1921 Census, was of opinion that the returns of Tribal religion in Bombay Province were meaningless ; and indeed the steep decline in Tribal religion is exemplified by the fact that Tribal religionists in Baroda State

decreased from 44,890 in 1931 to 2,395 in 1941, despite precautions taken there to ensure that Tribals were not returned against their wishes as Hindus. In 1941 for Bombay Province there was no religious tabulation, but of the 200,586 Tribal religionists found in 1931 in what is now Bombay, Saurashtra and Kutch 44,890 were in Baroda State.

Question 2(c)(Special Groups): This question was framed in such a way that the caste affiliation of persons who did not belong to the Scheduled Castes, Scheduled Tribes or Backward Classes could not be identified, "1" being written in all such cases, while others had their caste recorded in full. In Bijapur, Dharwar, Sholapur and Kolhapur, however, instances occurred of "1" being written for such backward communities as Lamanis and Waddars, indicating that the enumerators, who were mainly school teachers, had not fully understood the question. Several Deputy Superintendents have suggested that the enumerators should also have been furnished with a list of the backward classes. This, however, would have greatly increased the size of the booklet and, unless analysis of the results suggests a far from moderate degree of inaccuracy, I would not propose changing the form of this question.

Identity of names for dissimilar things can cause confusion. In Bombay City quite a number of persons who were recorded on the slips as "Thakurs", (a Scheduled Tribe in Bombay State) were sorted into the non-backward category. These particular Thakurs came from Uttar Pradesh and are quite different from the Thakurs who are a Backward Tribe in Bombay, though the caste name happens to be the same. If inaccuracy is found to have occurred on any scale the remedy would seem to be the rather retrograde one of recording everybody's caste, but not tabulating the results except for the Special Groups.

The census returns of Anglo-Indians seem to have been characterised by inaccuracy. Not all Anglo-Indians were recorded as Anglo-Indians. Some enumerators decided without asking that the persons they were enumerating were not Anglo-Indians. The published figure of Anglo-Indians is therefore an understatement, though there has almost certainly been a decline in the number of Anglo-Indians since the 1941 census because of emigration, principally to the United Kingdom and Australia, in recent years.

Question 4 (Age) : Age reporting is notoriously inexact, for the simple reason that most persons do not know their exact age. Age in such cases is returned as a round number. The indications are that age reporting was slightly but not notably superior to the age reporting in 1941, and there seems to have been very few cases of no age being reported.

Question 5 (Birthplace) : In the case of persons born in Bombay State the slips were generally easily classifiable. Occasionally a region e.g. Gujarat, instead of the name of a district, was returned. In such cases the sorter distributed the slips proportionately according to the number of slips from Gujarat districts with him. A more frequent source of doubt or error was for the name of a town or, worse, a village to be given as a person's birthplace. Since 1949 in Bombay State many new districts have been formed, and the new names were not always known to the persons born in them. The names of towns in such cases provided a clue. More difficult to deal with were cases of persons born outside Bombay State who returned the name of the village, or town, of their birth. Where maps and the postal directory failed to solve the problem, the person's name, language, or even occupation sometimes provided a clue.

Question 6 (Displaced Persons) : There were some cases of omission of information in regard to date of arrival in India, and also some cases in which the name of the village, and not the district, of origin were stated. In Bombay City a few cases of Burma evacuees being confused with displaced persons occurred.

Question 8 (Bilingualism) : In some cases more than one subsidiary language was returned. The first named was taken as indicating the person's preference. Cases also occurred of foreign languages being given, information that was not required. In areas (notably Belgaum) where linguistic tension existed, deliberate suppression of the fact of bilingualism occurred.

Questions 9, 10 and 11 : These crucial "economic questions" were the ones that caused the greatest anxiety before the Census, since the whole change of classification from a religious to an economic basis depended on their being answered correctly. Of these questions, the first part of question 9, the assignment of every person to one of three categories,—self-supporting, non-earning dependant, and earning dependant,—and question 10,

principal means of livelihood, were the questions on the correct recording of which the greatest emphasis was placed. On the whole success was achieved, though the percentage of wrong or incomplete recording was by absolute standards undoubtedly fairly high.

Question 9 (Part 1) : The first part of question 9—the three-fold division of the population into self-supporting, non-earning dependant, and earning dependant persons—was not an innovation. It has appeared in slightly varied form at previous censuses. It was most important that there should be uniformity in interpretation of the definitions not only as between States, but in different parts of the same State. The instructions to enumerators contained a specific warning, based on the experience of previous censuses, against treating only the head of the household as self-supporting, and classifying all females as non-earning dependants. The fact that more than one self-supporting person per household was found in almost all blocks, and that women were not invariably treated as non-earning dependants suggests that this part of the instruction was correctly grasped by the majority of enumerators. Bhavnagar has, however, reported disregard of the specific warning in Saurashtra, and has estimated that the extent of error in Saurashtra may be as high as 5 to 7 per cent of the total population, "and 10 to 15 per cent within each category."

Non-earning dependants were generally correctly classified by enumerators without much difficulty. It seems probable, however, that the line between self-supporting and earning dependant is one that not every enumerator was able to draw with confidence, if only because cases could arise where the line was not clearly apparent. In the case of joint families engaged on the same occupation the share of the income attributable to the individual by the head of the family was the criterion that decided a person's self-supporting or earning dependant status and, since no accounts are kept in such cases, the answer would depend largely on how patriarchal the head of the household felt about the subject. In 1931 it was considered that the number of earning dependants had been understated, a tendency which appears to have been corrected this time. Baroda has estimated the error in the classification of the whole population into these three categories at between 2 and 4 per cent, while Belgaum has

reported that the percentage of corrections made in the Tabulation Office to the first part of question 9 was about 0·5 per cent for all districts taken together.

Question 9 (Part 2) : The second part of question 9 required that self-supporting persons should be assigned to one of three categories—employer, employee, or independent worker. This was an innovation not found in previous censuses. An employer was defined as a person who had “necessarily to employ other people in order to carry on the business from which he secured his livelihood.” A few enumerators, in neglect of this instruction, classified Government servants as employers or even, with unconscious humour, as independent workers. Cases also occurred of earning dependants being classified into these three categories, information which was not required. One Deputy Superintendent (Ahmednagar) estimated that in question 9, first and second parts considered together, there were about 10 per cent wrong entries. Many of the errors of course could be, and were, corrected before sorting. Bhavnagar, however, has reported “hopeless handling” of the second part of the question. “Anything up to 20 per cent of the slips had wrong answers recorded in the second part of question 9.”

Question 10 : The most important single question in the Census was question 10 (Principal Means of Livelihood). The instructions required that in the case of dependants, whether earning or non-earning, the principal means of livelihood of the person on whom dependent was to be shown. Agricultural means of livelihood were coded into a four-fold division that may be loosely described as owner-cultivators, tenant cultivators, agricultural labourers and landlords. This code was clearly grasped by most enumerators. In two talukas of Satara South district (a new district formed out of former State areas) the percentage of owner-cultivators seemed unduly high by comparison with surrounding areas, raising suspicions of inaccuracy, while in some villages of one taluka in Ahmednagar district the entire agricultural population of a village had its principal means of livelihood described as “sheti” (agriculture) without use of the code, necessitating proportional distribution of such slips in the sorting offices.

At this Census about two-thirds of the population dependent on agricultural means of liveli-

hood were returned under class I (owner-cultivation), while in 1931 a majority of the workers in agriculture were returned as agricultural labourers, a bizarre result for a ryotwari province. The question is discussed in the main report.

For other means of livelihood, the instructions contained appropriate warnings against the use of such clichés as “service and labour,” instructions which enumerators occasionally followed to excess by giving even the postal address of the person’s place of business. The more usual occurrence was, however, under-description, making accurate classification difficult. One frequent cause of annoyance, rather than of error, occurred when the enumerator filled up the slip of the head of the household correctly and then wrote “ditto” or “dependent on the head of household” on the slips of his dependants necessitating additional writing work in the Abstraction Offices before the pads were broken. Other variants of this formula were “father’s profession.” Under the heading of inadequate description of means of livelihood come such entries as “labour”, “general labour”, “coolie” “business” “bidi business”, “government service”, “commerce”, “trader”, “service in Local Board”, “railway service”, teacher’s job”, “munim”, “gumasta”, “service in factory”, “service in a mill” and “mill hand.” In the case of some dependent relatives of persons employed in Bombay City, residing in Ratnagiri, Satara North and other districts, such incomplete entries as “service in Bombay”, “dependent of relative working in Bombay” occurred. Bhavnagar has reported that 0·1 per cent of the slips had no answer recorded against question 10.

Even in Bombay City which, generally speaking, had the lowest estimated percentage of inadequate entries (2 per cent) in this question, the failure to describe exactly what a person did and where he did it undoubtedly led to wrong classification of persons as between, for instance, railway workshops and railway transport. This affects the accuracy of the figures of 3·3 (Transport Equipment—production) and 7·4 (Railway transport). A similar difficulty occurred in the case of B. E. S. T. transport services and workshops, and employees of certain departments of the Municipality such as the Water Department of whom a certain number seems to have been returned simply as municipal employees.

It is important to attempt an estimate of the percentage of error in this most important of all the Census questions. The highest estimate is that of Baroda (somewhat less than 10 per cent), a figure which, however, includes incomplete replies such as "ditto" which were corrected before sorting. Excluding these cases, about 5 per cent of the slips were estimated by the Baroda Deputy Superintendent to contain vague answers which had to be classified without correction, but without any assurance of final accuracy. Ahmednagar has estimated the percentage of wrong or incomplete replies to question 10 at 3 or 4 per cent, Belgaum at only 1 per cent, Bhavnagar at 3 or 4 per cent, and Bombay at 2 per cent. On the whole I incline to the view that, considering all the difficulties, the data obtained were satisfactory, and that success was achieved. There appears for instance to have been a decline as compared with 1931 and 1921 in the number of slips that had to be sorted into residual categories such as sub-division 9.0. It would, however, be rash to attempt a close estimate of the probable extent of final error in the tabulation of the replies to this question, occasioned by under-description or inaccurate description of means of livelihood.)

Question 11 (Secondary means of livelihood): This question was linked with question 9 (part 1) and question 10. The principal means of livelihood of an earning dependant was to be recorded in question 10 as that of the self-supporting person on whom he was dependent. Then, in question 11, his own occupation was to be shown. This postulated that, if a person was an earning dependant, there must be an entry against question 11. In the same question, self-supporting persons who had a secondary means of livelihood, were to have that secondary means of livelihood recorded. It was a neat trick of compression, but one which most enumerators found exceedingly

difficult to grasp. I found that an hour and a half of coaching was required before this instruction could be put across to all the members of a class of enumerators of average intelligence. Question 11 was productive of more difficulty and error than either questions 9 and 10.

Instructions were issued as to how such cases of earning dependants should be treated while sorting the slips. For purposes of this review an estimate of the error is attempted, based on the reports of the Deputy Superintendents in charge of the Tabulation Offices.

Baroda has estimated that in city and non-city urban tracts the percentage of enumerators who failed to grasp the method was 3 and 5 per cent respectively. In rural tracts the percentage was estimated to range as high as 15 or 20. Belgaum has placed the percentages roughly at 4 per cent for city and urban areas, and 8 per cent for rural tracts. Bhavnagar states that in 2 or 3 per cent of the slips of earning dependants there was no entry in question 11. This seems a very small percentage, considering the heavy estimate of the error reported for question 9 in Saurashtra. In the upshot the data in regard to secondary means of livelihood, more particularly in the case of earning dependants, will have to be accepted with caution.

Most of the Deputy Superintendents have criticised the order of questions 9, 10 and 11 on the ground that a person's economic status (question 9) had to be recorded before his principal means of livelihood. The reason was that to incorporate additional data on employment (question 9 part 2) the questionnaire had to be re-vamped to conform to the slip, and not the slip to the questionnaire. At future censuses a more logical order of questions can be followed, and the form of the slip can be modified.

CHAPTER III

TABULATION

The tabulation of the results of the 1951 Census was done by hand sorting the slips in Tabulation Offices. Five Tabulation Offices were set up, each in charge of a Deputy Superintendent, to serve the districts specified below :—

Tabulation Office.	Districts served.
1. Bombay ..	Greater Bombay.
2. Baroda ..	1. Banaskantha. 2. Sabarkantha. 3. Mehsana. 4. Ahmedabad. 5. Kaira. 6. Panch Mahals. 7. Baroda. 8. Broach. 9. Surat. 10. Amreli.
3. Ahmednagar ..	1. West Khandesh. 2. East Khandesh. 3. Dangs. 4. Nasik. 5. Ahmednagar. 6. Poona. 7. Satara North. 8. Thana. 9. Kolaba.
4. Belgaum ..	1. Satara South. 2. Kolhapur. 3. Sholapur. 4. Belgaum. 5. Bijapur. 6. Dharwar. 7. Ratnagiri. 8. Kanara.
5. Bhavnagar ..	1. Halar. 2. Madhya Saurashtra. 3. Zalawad. 4. Gohilwad. 5. Sorath. 6. Kutch.

In 1931, the last year in which full tabulation was done, Tabulation Offices were set up at Surat, Ahmednagar and Dharwar to deal with Gujarati, Marathi, and Kannada slips. In addition a separate office at Ahmednagar dealt with the slips of Bombay City, but the arrangement of sorting Bombay slips outside Bombay City was reported to be not a very satisfactory one. In Saurashtra, ten Indian states set up their own offices in 1931. In 1941 tabulation of a limited nature was done at Satara for Bombay Province, and such of the Indian states as did not handle tabulation themselves.

My immediate predecessor considered that a population of 10 million was about the maximum that a Tabulation Office could deal with efficiently. The location of the Tabulation Offices is governed primarily by considerations of availability of suitable accommodation and staff. Quite obviously it is desirable that the sorting of slips for Greater Bombay should be done in Bombay City. Consultation with the Bombay Municipal authorities who carried out the census enumeration is facilitated. Moreover the sorter who knows Bombay can solve such problems as arise when a person's occupation is insufficiently described by giving only the name of the firm by which he is employed, knowledge of the firm's business being assumed by the enumerator. The slips for Bombay City were written in English and in Marathi for villages of the Bombay Suburban district that now fall in Greater Bombay. Elsewhere regional offices had to deal with slips written in Gujarati, Marathi and Kannada, and, for the Abu Road area, in Hindi.

Spacious (but expensive) accommodation was secured for the Gujarat Tabulation Office in the Nazarbag Palace at Baroda. An adequate number of matriculates to work as sorters was forthcoming in Baroda, which solved the problem of staff. For the Marathi Office Poona would probably have been the ideal location but no accommodation could be secured there. The Marathi Office had thus to be set up at Ahmednagar where two private bungalows were hired on reasonable rentals. I was in some doubt about the ability of Ahmednagar to provide an adequate number of suitable sorters, but this office actually surpassed others in the speed of its sorting. The Tabulation Office at Belgaum was able to deal not only with Kannada slips, but also to handle Marathi slips, because sorters knowing both languages can be found in Belgaum. This made possible a distribution of work between three main offices of approximately equal size at Baroda, Ahmednagar, and Belgaum, not too large to be unwieldy, and not too small to be uneconomical.

Bhavnagar is probably the best place in Saurashtra outside the over-crowded capital for a Tabulation Office, and a Tabulation Office was set up there to deal with Saurashtra and Kutch, after an earlier proposal to set up the office at Junagadh had been abandoned because of the anticipated difficulty of getting sorters there. Despite the fact that Bhavnagar is probably the best place in Saurashtra for a Tabulation Office it was the only one of the five offices under my control in which an adequate number of matriculates to work as sorters could not be secured.

The Deputy Superintendents in charge of the Offices at Baroda, Ahmednagar and Belgaum were Mamlatdars on deputation from the Revenue Department. The Deputy Superintendent at Bombay was an Officer on deputation from the Rationing Department. They were all given a special pay of Rs. 100 per month. The Deputy Superintendent at Bhavnagar was an Officer who had had the misfortune to have his services as a probationary Deputy Collector with the Government of Saurashtra terminated due to bad eye sight. The posts of administrative assistants were generally filled by persons on deputation from the Revenue Department, or by retired persons. The Bureau of Economics and Statistics of the Government of Bombay placed members of

their staff on deputation to the Offices at Baroda, Ahmednagar, Belgaum and Bombay to fill the posts of Technical Assistants.

The work falls into three stages—sorting, compilation, and tabulation. The Registrar General issued detailed instructions in regard to the organisation of Tabulation Offices and also issued very complete instructions in regard to sorting, compilation etc., in his Tabulation Plan and Sorting and Compilation Instructions. Before these instructions were finalized they were discussed in the Conference of the State Superintendents, which was held in December, 1950. The minutes of the proceedings of the Conference are contained in Appendix III. These instructions simplified the task of all concerned.

Sorters' Tickets and Compilers' Posting Statements were printed in Bombay and supplied to Tabulation Offices. The preparation of pigeon holes into which the slips are sorted was done locally. The strictest economy was observed. Pigeon holes, sorters' boxes, and twine for tying the bundles of slips are essential. Double sets of wooden pigeon holes were employed at Baroda, Ahmednagar and Bhavnagar. At Belgaum and Bombay single pigeon holes were employed.

Except in Bombay City the sorters sat on a carpet or mat and the double pigeon hole is therefore an economy. They can be set up in rows and, since the wood in the centre serves two sets of pigeon holes, that results in economy. The Deputy Superintendent at Baroda was able to obtain double pigeon holes for Rs. 10 and later Rs. 7 by contacting the saw millers who had supplies of cheap timber from Panch Mahals. Provided wooden pigeon holes can be obtained at reasonable prices they are far superior to brick pigeon holes so far as ease in sorting, maneuverability, and economy in space are concerned. A saw miller in Bhavnagar supplied double sets of pigeon holes for Rs. 11-5-6 where the lowest tender from carpenters and contractors had previously been Rs. 15 for a single set of pigeon holes. Each set of pigeon holes consisted of three rows with five pigeon holes in each row. Each pigeon hole was about 9 inches high, 7 inches wide, and 8 inches deep.

Each sorter required two boxes, one for keeping male slips and the other for keeping female slips. Sometimes it was possible to obtain a certain number of old ballot boxes on loan from Collectors' offices or, to save money, the

boxes in which the slips were sent to Tabulation Offices were used after minor alterations. Otherwise boxes were purchased locally.

String or twine is required for tying the bundles of slips. At a fairly early stage it was discovered that the Civil Supplies Department in most districts had bags of old twine collected from the mouths of unpacked gunny bags, and this they very kindly made available free of charge, resulting in some saving of expense. The average cost of a set of sorter's pigeon holes was Rs. 6-8-4, while sorter's boxes (excluding loaned ballot boxes) cost on an average Re. 1-2-10 each. The bill for string or twine for all five offices was Rs. 687-15-6.

It is important to effect economies not only for the sake of the economies themselves, but because it gives to all concerned at an early stage a sense of the urgency of doing the work efficiently, speedily, and with as little drain on the public exchequer as possible. However, the main item of expenditure is payment to sorters, and it is therefore essential to give them as good working conditions as possible.

Certain items of expenditure such as payment of rent for office accommodation made available by Government are almost outside the Superintendent's control. We were saddled at Baroda with a palace, which would probably have lain vacant but for our occupancy. In Bombay accommodation for Tabulation Office in the newly constructed Secretariat Annex Building was expensive, but we were lucky to get it. In Bhavnagar and Ahmednagar the rents paid were reasonable. In Belgaum, through the courtesy of the Police Department, we obtained barracks which had been hired to the Police by the M. E. S. Department. We had to put in electricity to relieve the gloom at a cost of Rs. 1,370-8-0, an "improvement" which under the terms of our agreement lapsed to the landlord (the M. E. S. Department). To skimp on items like adequate lighting and decent accommodation is false economy. All accommodation, except that at Ahmednagar, was leased to us by Government. The total cost on account of accommodation was Rs. 18,000. Only Rs. 1,511-0-0 of this was for non-Government accommodation.

In the Sorting offices, sorting work was done by teams. Each team dealt with between 300,000 and 500,000 slips, all the slips pertaining to one tract. For facilitating and speeding up the sorting operation, the rural and urban areas

of each district were divided into tracts. A list showing the tracts which were formed for purposes of sorting and compilation in the various Tabulation Offices and their populations according to the 1951 Census is given in Appendix IV. After the slips for each village, town and ward had been sorted and its total population, sex and livelihood class break-up ascertained, all the slips pertaining to a tract were mixed together and then sorted for all the subsequent operations.

There were on an average 11.6 sorters per team in the teams in the area under report. It was estimated by the Registrar General that one sorter working continuously for a year could deal with 100,000 slips. The longer a sorter could work the more speed and skill he would be likely to acquire, always assuming a fair degree of initial aptitude for the work. The period of employment of sorters is, however, regulated by the need for speed in production of the data required for the Census Tables. The Registrar General suggested that one sorter could deal with 25,000 slips from urban areas or 40,000 slips from rural areas.

Urban and rural slips were kept separate throughout the sorting operations. Slips were also separated at an early stage according to means of livelihood, of which there were eight main divisions, and sex. Slips of displaced persons were also treated separately throughout the operations. A novel feature of the tabulation of 1951 was the separation of sample slips on a 10 per cent basis. These slips were used exclusively for extraction of data relating to age, civil condition and literacy in relation to age groups. The sample slips were also kept separate throughout the operation to test the efficacy of sampling as a basis for extraction of other census data.

A necessary departure from previous census practice was introduced by the Registrar General who stipulated that some time should be spent on pilot sorting by supervisors and compiler-checkers working as sorters before the main body of sorters was engaged. The short apprenticeship served by them not only saved money by enabling practical difficulties to be detected early, but gave the supervisors and compiler-checkers the necessary confidence that experience brings. A regional Conference of Superintendents and Deputy Superintendents was also held by the Registrar General at Nagpur shortly before the main work in most offices commenced.

We approached the sorting operation with only the vaguest idea of what outturns could be expected for the various sorters' tickets, and with considerable fear of running out of money before completing the operation. Fear to some extent lent wings and, in the final result, instead of 12 sorter months being required for every 100,000 slips as originally estimated, 2.58 months were clipped off that timing, despite the fact that Bombay and Saurashtra are among the most urbanised areas in India, and urban sorting is more difficult, complicated, and expensive. The average number of sorter-months taken for every 100,000 slips was 9.42 for the five sorting offices, but the timing varied according to the office. The Bombay Office, dealing with an exclusively urban area, having a more complicated livelihood, birthplace, and linguistic pattern, required 12.01 sorter-months for every 100,000 slips. The other Offices at Ahmednagar, Baroda, Belgaum and Bhavnagar required 7.8, 8.8, 10.3 and 11.03 sorter-months respectively.

In the case of supervisor-months also, the actual figures were less than those budgeted for. There was a slight excess in the case of compiler-checker-months. A statement showing the figures of sorters, supervisors and compiler-checker-months estimated to be required and actually consumed in each Tabulation Office has been given in Appendix V. It would have been interesting and might have been of use to future Superintendents if district and tract figures had been kept. However, owing to the rush of work, the anxiety to attain the highest possible speed and to effect the utmost possible economy, data necessary to work out the district and tract figures were not kept separately in the Tabulation Offices and are not now available.

These gratifying economies effected were due, at least in part, to the pilot tabulation undertaken in each office before the main sorting operation commenced. Training of enumerators is essential to a successful census, and training of supervisors and compiler-checkers to a successful treatment of the census slips. Partly due to this, the bogey of whole offices grinding to a halt to rectify a mistake affecting all teams, or to do an operation affecting all slips but not requiring all sorters, never materialised. There was the minimum wastage of sorter time.

Collectors were asked to depute some good clerks with a few years' experience to work in the Tabulation Offices. The intention was that some permanent Government servants should thereby acquire experience of census tabulation, thus avoiding the dissipation of experience that resulted in the past from having only temporary recruits to work in Tabulation Offices. The same consideration lay behind the deputation of persons from the Bureau of Economics and Statistics of the Government of Bombay to work as Technical Assistants. Of more immediate practical use, the clerks deputed from Collectors' offices were expected to have a background of local knowledge that would be useful in solving difficulties that might arise. A few collectorates deputed clerks whose services their parent districts might not have been sorry to lose for a few months, but the majority were good material.

All Deputy Superintendents endorsed their utility. The majority of sorters were young persons and this was their first employment. The permanent Government servants, accustomed to office procedure and having some knowledge of the reasoning behind those administrative actions and orders which the profane regard as mere "red tap" were useful in securing discipline. Sorting is exacting work. It took the average sorter about a week before he could work without fatigue. Moreover, apart from the satisfaction that comes with acquired speed and dexterity, the job has few compensations to the intelligent worker because he is making a piece of a jig saw puzzle and not assembling the finished picture. The need for incentives is obvious.

The pay given to sorters in Bombay State was Rs. 120 per month in Bombay City, and Rs. 100 per month in Baroda, Ahmednagar and Belgaum. In Bhavnagar it was Rs. 81 per month. The pay was a consolidated pay, and the basis was the starting pay given by the State Government to matriculate clerks, except that in Bhavnagar it was Rs. 5 per month more. In the past in Bombay payment was made on a piece work basis, but experience suggested that this was a bad system, inviting output at the expense of accuracy, which could only be secured by a system of fines and deductions.

The average expected output for each sorter's ticket was communicated to sorters. Pays were not cut for lowered outputs, but the services of those who would manifestly never

make successful sorters were dispensed with. This is unkind but necessary. A Tabulation Office cannot carry passengers when there are three applicants to every job. In Bombay aptitude tests (general knowledge, arithmetic and manual dexterity) were given, and this curtailed the cruel process of weeding out proved failures. The system of giving sorters a few days' training without pay was also adopted in some offices, though if we are insisting on hard work it is perhaps desirable to pay from the day of employment. A fair number of sorters left during the operation, either to go back to college, or because they had obtained a permanent job. An undertaking was given by each sorter that he would give a month's notice before leaving, or forfeit up to one month's pay to Government. The undertaking served a useful purpose.

The main incentive was the payment of bonus for outputs in excess of those prescribed as "normal." It is difficult to lay down standard outputs because the outputs will vary according to the nature of the slips dealt with. Rural slips were easier to sort than urban, because the four agricultural classes had already been coded by the enumerator on to the slips. Similarly, the slips of sample and displaced persons could not be sorted with the same speed as general slips, if only because the sorter did not have the same long run at his work, but had to sort in small batches for different tracts.

In applying the bonus system standard outputs were laid down for the sorting of the key sorter's ticket "O", and bonus on a sliding scale was given to sorters who gave outputs in excess of a prescribed normal. Originally it was intended to make deductions from the pay of sorters who gave lesser outputs than the norms prescribed, but instead the small number of sorters who failed to make good was weeded out, the system of pay cuts being regarded as inherently bad. After sorter's ticket "O" it was indicated to sorters what outputs were expected for the various tickets. A sorter dealing with sample or displaced persons' slips could not hope to attain the same speed as a sorter dealing with general slips, while a sorter dealing with the more complicated urban slips was handicapped as compared with a sorter dealing with rural slips. It was therefore decided to regulate the distribution of bonus to sorters on the basis of the office's general performance and the performance of individual

sorters to be determined towards the close of the sorting operation. This reduced accounts complications.

The amount of bonus distributed to sorters, expressed in terms of the total amount spent on payment to sorters for the entire sorting operation, is shown below :—

Name of office.	Sorter's wage bill.	Bonus.	Percentage of col. 3 to col. 2
1	2	3	4
Bombay	Rs. 40,908 12 0	Rs. 2,460 0 0	6.1
Baroda	100,422 9 0	8,267 12 0	8.2
Ahmednagar	88,276 14 0	6,995 9 0	7.9
Belgaum	110,035 7 0	618 14 0	0.6
Bhavnagar	41,734 13 0	1,926 11 0	4.6
Total	281,379 7 0	20,268 14 0	7.2

The method of distributing the bonus varied in different offices. In Ahmednagar the sorters had expressed a desire for equality of distribution, and each sorter in that office got 10 per cent of his pay as bonus. The difference between this figure and the figure in column 4 of the statement is due to the fact that some sorters there were continued for extracting information from the National Registers after the sorting work proper had been completed. In Bombay practically all the sorters got some bonus, but the amount given to each sorter was determined on the basis of points awarded for his performance on the various tickets. In the Baroda and Bhavnagar Offices the method of distribution of bonus was to divide the sorters into 3 roughly equal categories—A, B and C—according to the outputs they had given for all the tickets after ticket "O". The "C" category sorters got no bonus. "A" and "B" category sorters got bonus, the amount received as bonus by the "A" category sorters being approximately double that received by the "B" category sorter. In Belgaum the bonus distributed was on a lesser scale, only the best sorters getting bonus. It was considered that the performance of that Office had fallen below the average of the other Offices at Baroda and Ahmednagar where the sorters had also been given a consolidated pay of Rs. 100.

The bonus system, according to all Deputy Superintendents, except Bhavnagar, was a useful one. Without the incentive of bonus the

natural tendency would have been for sorters to prolong the sorting operation as long as possible. Sorting was hard work. Many of the sorters worked longer hours and on Sundays and holidays to maintain output. The grant of bonus was an earned recompense for the extra effort put in. Many of the sorters were college students, and some combined morning classes after the college re-opened with their sorting duties. In Bombay quite a number of the sorters were women; while in Bhavnagar there were no women sorters. Information in regard to the age, sex and educational qualifications of sorters is given in Appendix VI.

As regards the relative efficiency of male and female sorters, Ahmednagar reported that women are superior to men in speed at sorting and counting, and also in respect of accuracy and industriousness for ticket "O", but that for the remaining tickets performance was equal. Baroda reported that though women were as industrious and accurate as men at sorting and counting their speed was lower, and they were not as good as men at totalling, but tended to make mistakes in figures. Bombay considered that women made more disciplined and obedient sorters, but on analysis found that the impression of superior quiet efficiency of women was not borne out by analysis of output in which men, despite their restless working habits, were found to be superior. On the whole the differences in performance seem to have been small, and most Deputy Superintendents have testified to the hard work, punctuality and conscientiousness of the sorters as a body. Pensioners were found to be too slow to be successful sorters, which is essentially a young person's job, though as supervisors their antiquity and experience are useful provided they are mentally and physically active.

The pay given to sorters was that drawn by matriculate clerks in State Government service, and in Bhavnagar was Rs. 5 more. Despite this, the fact that sorters in Bhavnagar got Rs. 81 per month while sorters in Baroda got Rs. 100 per month caused considerable heart-burning; but in Baroda every sorter was at least a matriculate, while half the Bhavnagar sorters did not possess this qualification. The pays given to sorters, compiler-checkers, and supervisors were consolidated monthly pays, except in the case of State servants on deputation who were given 20 per cent special pay or Rs. 30 per month, whichever was more. The

consolidated monthly pays are shown below :—

Name of office.	Sorters. Compiler-checkers. Supervisors.		
	Rs.	Rs.	Rs.
Bombay ..	120	140	150
Baroda ..	100	120	130
Ahmednagar ..	100	120	130
Belgaum ..	100	120	130
Bhavnagar ..	81	100	120

One Deputy Superintendent has suggested that the difference between the pay of a sorter and a compiler-checker should have been greater, but I find myself unable to endorse this recommendation. Ahmednagar and Baroda have both referred to the necessity of increasing the strength of compiler-checkers. This suggestion I endorse, as also the proposal that one of the compiler-checkers in each team should be a posting clerk, maintaining liaison with the Tabulation Branch. Compiling and tabulation proved to be a bottleneck. The sorting operation was done to schedule, but the subsequent tabulation of the figures and reconciliation of discrepancies, occasioned largely by faulty compiling, caused delays. The compiler-checkers were so busy checking the sorters' work that they could not devote enough time to the other part of their duties. As far as possible compilation and tabulation should follow closely on completion of the sorting operation for the ticket. Otherwise the Tabulation Offices load all the tables simultaneously on the Central Tabulation Branch, and there is no organisation in existence to explain unusual features in the tables.

[The system of pilot tabulation introduced for the first time in 1951 was of immense value. The previous method of rushing through the sorting operation with a large number of temporary sorters engaged on a piece work basis is obviously faulty, and in the long run uneconomical. The longer a sorter works the greater speed and skill he is likely to acquire. Moreover, a man with an expectation of steady employment for 6 or 8 months is likely to work better than one engaged for half that period. However, the need for early production of the Census Tables is one that must be weighed against these considerations. The sorting benefits at present from the services of college students who make good material as temporary sorters during their vacation, but who would not be able to work for 6 months at a stretch. Whatever the policy followed in future as regards sorters it is desirable to increase the strength of compiler-checkers, and have one man in each team engaged on posting, so that production of the Census Tables can keep pace with the progress of the sorting operation.]

CHAPTER IV

CENTRAL TABULATION BRANCH

The five regional Tabulation Offices sorted the slips and compiled the data for the areas for which they were responsible. The checking of their work and the preparation of the tables for final publication was done by the Central Tabulation Branch. This Branch was opened in the office of the Superintendent of Census Operations in Bombay in July 1951. A Statistical Assistant, whose services were lent by the Bureau of Economics and Statistics of the Government of Bombay, and two compilers with experience of work in the Bombay Tabulation Office, were appointed to begin with. The main Central Tabulation work could not get properly under way until the data compiled in the Ahmednagar, Baroda, Belgaum and Bhavnagar Offices became available. Initially, therefore, the nucleus staff of the Central Tabulation Office checked the work done in the Bombay Tabulation Office. It also compiled the results of the Sample Verification of the Census Count, and started to work out population figures for 1941 and earlier censuses. In view of the very extensive territorial changes that had taken place since 1947 this was by no means an easy task.

By the end of September 1951 all Tabulation Offices, except Bhavnagar, had completed the sorting work, but as their compilation and tabulation work was unfinished they had to be continued. It was soon apparent that there would be some saving in money and labour if all the unfinished work of the Tabulation Offices were transferred to Bombay. The Ahmednagar and Belgaum Tabulation Offices were therefore wound up at the end of November 1951, the

Baroda Office on 7th December 1951, and the Bhavnagar Office at the end of December 1951. The Bombay Tabulation Office had already been wound up at the end of October 1951. The Technical Assistants in the Tabulation Offices at Bombay, Ahmednagar and Belgaum (whose services had been loaned by the Bureau of Economics and Statistics of the Government of Bombay) were appointed Statistical Assistants in the Central Tabulation Branch, and suitable members of the staff of all Tabulation Offices except Bhavnagar were taken up as compilers. They brought the necessary papers and records with them to Bombay. The checking of the work done in the Tabulation Offices was thus facilitated.

The Central Tabulation Branch had three main tasks, viz., to compile the District Census Handbooks, to compile the main State Tables and Subsidiary Tables, and to tabulate the results of the Experimental Census of Sample Households, 1952.

Compilation of the District Census Handbooks

Village handbooks were published by the Government of Bombay after the 1941 census, showing the population of every village according to broad community divisions. The Governments of Bombay, Saurashtra and Kutch accepted the proposal of the Registrar General, India, that District Census Handbooks should be published after the 1951 Census which would show the census data in greater detail than in the State Tables which necessarily could not exhibit figures for smaller areas than

CENTRAL TABULATION BRANCH

districts. It was also decided that the Handbooks for Bombay, Saurashtra and Kutch, in addition to exhibiting the population of every village according to livelihood classes, would incorporate the following information for villages :—

- (1) The nearest Post Office, and its distance in miles ;
- (2) The nearest Railway Station, and its distance in miles ;
- (3) The nearest Bazar place, its distance in miles, and Bazar Day ;
- (4) Items of note ;
- (5) Whether the village had a Primary School, Village Panchayat, Co-operative Society, etc.

In the case of districts in Bombay State this information had already been collected by the Executive Editor, Bombay District Gazetteers (Revision) Board, and the information was obtained from his office. In the case of districts in Saurashtra and Kutch it was obtained from Mamlatdars and Mahalkaris.

In the course of checking the Primary Census Abstracts for incorporation in the District Census Handbooks many mistakes were corrected. Names of villages were sometimes misspelt, and population figures attributed to wrong villages. To ensure the most complete accuracy of the Primary Census Abstract figures and correct spelling of village names the typed copies of the Primary Census Abstracts were referred before printing to the Mamlatdars and Mahalkaris for scrutiny and return. The expenditure of time and money on this final scrutiny was well worthwhile. Many mistakes were corrected that would otherwise have remained undetected. The Government of Bombay contributed towards the expense of this operation by paying the cost of the special typists engaged to type the Primary Census Abstracts.

Owing mainly to the time taken in arranging the villages in the Primary Census Abstracts in alphabetical order and the special scrutiny of the village figures the typescript of the first District Census Handbook was not ready for the press until 9th February 1952. Printing was not completed until early in May 1952. A good deal of experimentation with lay-outs was required with this first Handbook as it was to be the model for all the others. Between May 1952

and April 1953 thirty-four District Census Handbooks were printed. Eight presses were engaged on the work. A part of the staff of the Central Tabulation Branch was always kept busy checking the proofs of the Handbooks during this period, and the utmost care was taken to reduce mistakes to a minimum. The Handbooks ran to a total of 11,874 printed pages. The following presses did the printing :—

Name of Press.	Handbooks printed.
Government Press, Bombay.	Kanara, West Khandesh and Sholapur districts.
Government Press, Baroda.	Nasik, Dharwar, Broach and Meh-sana districts.
Government Press, Poona.	Kaira district.
Government Press, Bhavnagar.	Zalawad district.
Municipal Press, Bombay.	Sabarkantha, Ahmedabad, Madhya Saurashtra, Gohilwad, and Halar districts.
Associated Advertisers and Printers, Bombay.	Satara South, Greater Bombay and Kutch districts.
Sadbhakti Printing Press, Bombay.	Thana and Belgaum districts.
Kohinoor Printing Press, Thana.	Kolhapur, Dangs, Amreli, Banas-kantha, Panch Mahals, Surat, Baroda, East Khandesh, Ahmednagar, Poona, Satara North, Kolaba, Ratnagiri, Bijapur and Sorath districts.

One thousand copies of each Handbook were printed in the case of districts in Bombay State, and five hundred copies in the case of Saurashtra and Kutch. The entire cost of printing, including the cost of paper, was borne by the State Governments. The Government presses were more expensive than the private presses. The entire cost of the District Census Handbooks in Bombay, Saurashtra and Kutch, including the cost of paper, was Rs. 1,66,775-6-8. All the Handbooks were priced publications but, in order to make them available to as wide a public as possible the selling price was fixed in the case of districts in Bombay and Kutch

States at Rs. 2-8-0. The Greater Bombay Handbook was priced at Rs. 2-0-0, and the Dangs Handbook at Rs. 1-0-0. In the case of districts in Saurashtra, the selling price was fixed at Rs. 5. The Municipality of Greater Bombay paid half the cost of printing the Greater Bombay Handbook.

Compilation of the main Census Tables

Compilation of the main Census Tables did not present the same difficulties or involve as much labour as the compilation of the Primary Census Abstracts and the District Census Handbooks. No real progress could be made until all the Tabulation Offices had supplied the relevant data for their districts. The Census Tabulation Office at Bhavnagar was closed at the end of December 1951, but the record for that office did not become available until February 1952. After that, the work could be completed for the entire area. The work was not particularly complicated. As always happens small mistakes in compilation in the Tabulation Offices took the Central Tabulation Branch a disproportionately long time to correct.

The compilation of the language tables and the C-Series of tables except C-I presented no difficulties. Nor did the D-Series of tables take much time. The A-I, A-III and E tables, and the C-I table could not be finalized, however, until every Primary Census Abstract had been received back from the Mamlatdars after checking.

Not all Tabulation Offices had completed their B-III tables before they were wound up. The Central Tabulation Branch therefore completed the B-III tables for all districts before compiling the B-III table for the State. All the main tables had been prepared by the end of August 1952.

The Registrar General also required some tables for Displaced Persons to be compiled separately. These tables were not published in the State Reports.

The Central Tabulation Office had the additional task of compiling the Subsidiary Tables. The data required for compiling the various Subsidiary Tables, except Subsidiary Tables 1-3, 2-3, 3-3, 4-1 (part), 4-7, 4-8, and 4-9 were available in the main Census Tables, and compilation of the Subsidiary Tables was taken up immediately after the main Census Tables were ready.

Subsidiary Tables 1-3, 2-3, and 3-3 contained figures of births and deaths for the past five decades. The assembly of the requisite figures was frequently very difficult, and in the case of Saurashtra and Kutch was impossible. Even for Bombay districts complete figures could not be assembled in all cases.

Agricultural holdings and crop statistics were required for Subsidiary Tables 4-1, 4-7, 4-8 and 4-9. These figures had to be obtained from Collectors and the Agricultural Department, and the assembly of complete figures was difficult.

To add to the usual difficulties adjustment of population and other figures because of extensive boundary changes was not always simple.

The Experimental Census of Births and Deaths, 1952

An Experimental Census of Births and Deaths in Sample Households was undertaken in November 1952. The purpose, among other uses, was to determine the true level of births and deaths. It was not entirely successful in this though it did yield very valuable data. The slips began to arrive in Bombay in the last week of November 1952, and a preliminary analysis of the results was done in December 1952. In January 1953 the Registrar General finalized the tables which he required to have compiled. A special staff of Assistant Compilers was appointed in January 1953 to sort the slips and compile the results. The Bureau of Economics and Statistics made available the services of three of its clerks to assist for three weeks. The sorting work did not take long, but the compilation of the main and Subsidiary Tables took until about the end of March 1953 to complete.

Additional Enquiries

The Tabulation Branch had also to collect and compile information on a variety of points that arose during the treatment of the census data. Literacy figures for past censuses were assembled, and the Branch also collected other information that might have been useful for inclusion in the Census report. The Branch read through the proofs of the Tables and Report as they were received from the Press. As a result the Tabulation Branch had to be continued until the end of March 1953. Even by that date the Branch could not be completely wound up. The great bulk of the work however, been completed by then.

Staff of Central Tabulation Branch

The Central Tabulation Branch was under the immediate supervision and control of the Head Clerk to the Superintendent of Census Operations. The size of the staff fluctuated from time to time according to the work it had to do. A fair pace was maintained and care was taken to see that nobody was left idle. The staff of the Branch consisted of Statistical Assistants, Compilers, Assistant Compilers, and typists. The Statistical Assistants were obtained on loan from the Bureau of Economics and Statistics of the Government of Bombay. All except one of them had worked as a Technical Assistant in a Tabulation Office. They were thus familiar with the work done in the Tabulation Offices. In the interval between censuses the Bureau of Economics will have on its staff people who are familiar with the census work and it is hoped that this will be as advantageous to the Bureau as it was advantageous to the Census organisation to have the services of persons with a background of Statistics. The tendency for statistical organisations to work in water-tight compartments is one that is to be deprecated. The advice which was obtained at various times from the Officers of the Bureau of Economics and Statistics of the Bombay Government was of the greatest value and assistance.

Compilers and Assistant Compilers were in most cases selected from the ranks of those who had worked in Tabulation Offices. Very little time had thus to be wasted on training staff. The compilers were also useful in solving difficulties as they knew how the various Tabulation Offices had handled particular classification problems.

One Statistical Assistant was given the time scale of pay of Rs. 120-10-200. The others were given their grade pay plus 20 per cent of their pay as special pay. Compilers and Assistant Compilers were given Rs. 150 and Rs. 140 respectively. Those who were Government

servants on deputation got a special pay of Rs. 30 plus dearness and other allowances admissible under the rules, in addition to their grade pay. Typists on deputation got similar pays. Additional typists recruited were given basic pays of Rs. 55 to 65 p.m. plus the allowances admissible.

A statement showing the staff entertained in the Central Tabulation Branch from time to time is at Appendix VII. The cost on account of the pay and allowances of the staff for the period from July 1951 to March 1953 was Rs. 82,998-6-0. No difficulty was experienced in getting suitable staff.

Calculating Machines

Immediately after the Central Tabulation Branch came into existence the Bureau of Economics kindly made available a Facit Calculating Machine, and the Branch had the use of it until it was wound up. The Branch also used Comptometers hired from Messrs. Felt and Tarrant Co., Bombay, at the rate of Rs. 60 a month per Comptometer. Almost all the persons who worked in the Branch learned to operate both these types of machines. The use of these machines made for greater speed, accuracy and efficiency. The total cost of machines used in the Tabulation Offices was Rs. 5,990, of which Rs. 4,026-8-0 is attributable to the Central Tabulation Branch.

Accommodation

When the Central Tabulation Branch first came into existence it was accommodated in a few rooms in the Bombay Census Tabulation Office. When that office wound up the Branch was moved to the fourth floor of the Mercantile Bank Building in accommodation made available by the Government of Bombay. To this accommodation the Office of the Superintendent of Census Operations was transferred in the last week of October 1952 when Shri M. J. Desai, I.C.S., required his Horizon View flat back.

CHAPTER V

COST OF THE CENSUS

The total expenditure incurred by the Government of India from the Census Budget on the 1951 Census in Bombay, Saurashtra and Kutch was Rs. 13,09,439. The details of this expenditure are given in Appendix VIII. The cost works out to about 6·2 pies per head.

In 1941, there was only partial tabulation and the 1941 figures are not, therefore, comparable. In 1931, the expenditure was Rs. 5,65,339, i.e. about 4·1* pies per head.

Housenumbering in Bombay State

The 1951 figure of expenditure includes the cost of housenumbering in Bombay State that had to be paid for from the Census Budget. At every census prior to 1951, housenumbering was a part of the census operations, and as it was done on a temporary basis, the cost was not very high. In 1951, housenumbering was not a part of the census operations. It had been started in 1949. The idea was to have a permanent maintained system of housenumbering, which could be used for various purposes, including the census. In the State of Bombay, some special staff had to be appointed for housenumbering and, in municipal areas, part of the contingent expenditure incurred by the municipalities had to be paid by the State Government. This expenditure of the Government of Bombay was reimbursed from the Census

*In 1931, the population of Bombay Province, including Sind was 30,346,799, but it included a large number of Indian States, which bore the cost of the census in their areas. The population dealt with by the Census Office was 26,459,699 and the rate of 4·1 pies given has been worked out on the basis of this population.

Budget. The amount paid to the Government of Bombay from the Census Budget for the reimbursement of housenumbering expenditure was Rs. 1,81,927-0-6. In Saurashtra and Kutch, no such contribution was required to be made to the State Governments from the Census Budget. If this unusually large expenditure incurred on housenumbering in Bombay State were to be excluded, the cost of the census would be Rs. 11,27,512, i.e. 5·3 pies per head.

National Register of Citizens and District Census Handbooks

In the course of the 1951 Census a National Register of Citizens was prepared for each State. A District Census Handbook was also compiled for each district. These operations did increase the cost of the Census, although it is difficult to say to what extent. In order to have a rough idea of what these operations cost in each district and state, Costing Statements I, II, III-A and III-B have been prepared and are given in Appendix IX. Instructions in regard to the preparation of the Costing Statements were given by the Registrar General, India, in his letter No. 48/24/52-RG, dated 22nd July 1952, which has been printed as Appendix X to this Report. These statements show that in the States of Bombay, Saurashtra and Kutch the average cost per part of the National Register of Citizens was Rs. 4 annas 5 and that in the case of the District Census Handbooks and the Census Report the cost was Rs. 9,056 per 100 pages of Royal Octavo size and Rs. 14,489 per 100 pages of Demi-Quarto size respectively.

Contribution from local bodies

In 1951, the Government of Bombay framed the Bombay Local Authorities Census Expenses Contribution Rules. These rules stipulated that—

(1) in the case of the three Corporation areas of Greater Bombay, Ahmedabad and Poona in Bombay State, the expenditure incurred on the taking of the 1951 Census should be shared equally by the Municipal Corporations concerned and the Census Budget ;

(2) that in other municipal areas, the entire cost of enumeration should be borne by the municipalities concerned, that they should not be charged for the census pads and forms supplied to them by the Census Office for enumeration, and that they should contribute towards the cost of tabulation at the rate of Rs. 15 per 1,000 population ;

and (3) that the District Local Boards should contribute to the census expenditure at the flat rate of Rs. 250 per taluka or peta in their districts.

The principles adopted were the same as in 1941.

The contributions received were as under :—

	Rs.
(1) The Municipal Corporations of Greater Bombay, Ahmedabad and Poona—	
(a) Contributions towards the cost of tabulation	50,819
(b) Refund of advances given for enumeration expenditure	11,354
(2) Other municipalities in Bombay State ..	72,062
(3) District Local Boards ..	64,380
Total ..	1,98,635

A part of the contribution (about Rs. 10,620) received from the District Local Boards was allowed to be utilized by Collectors to make preliminary payments on account of enumeration expenditure, but as the Accountant General, Bombay, objected to this procedure, the District Local Boards were required to pay their contributions in full and the Collectors were provided from the Census Budget with funds required by them to meet the enumeration expenditure.

Saurashtra and Kutch were new States. Local bodies in these States were in their infancy and their financial position was not always sound. The Governments of these States did not, therefore, agree to frame rules similar to those framed by the Government of Bombay and to recover a part of the cost of the census from the local bodies in their areas. In 1961, however, there should be no objection to requiring the local bodies in Saurashtra and Kutch to contribute in the same manner as local bodies in Bombay.

Net cost

If the contributions recovered from local bodies in Bombay State are set off against the total expenditure on the 1951 Census, the net cost would be Rs. 11,10,804, i.e., 5·2 pies per person. Very rigid measures of economy had to be adopted at every stage to keep the cost down to this level.

In 1931, the net cost was Rs. 4,46,192, i.e. 3·2 pies per person. Looking to the increased scales of pay and allowances given to the staff and the increase in the cost of all articles since 1931, the 1951 figure compares favourably with the 1931 figure.

APPENDICES

APPENDIX I
Census Divisions and Agencies

Name of District.	Number of											Average number of houses per		
	Charges.	Circles.	Blocks.	Charge Superintendents.	Supervis- ors.	Enumerators.	Checkers.	Charge Superin- tendent.	Supervisor.	Enumer- ator.	Supervisor.	Enumer- ator.	Supervisor.	Enumer- ator.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BOMBAY STATE														
Greater Bombay	40	309	2,397	40	309	2,397	2,397	16,094	2,083	268				
Bansikantha	11	59	773	11	59	691	642	14,009	2,612	223				
Sabarkantha	11	70	624	11	70	624	369	12,705	1,996	224				
Mehsana	27	131	1,489	27	131	1,489	751	11,532	2,376	209				
Ahmedabad excluding Ahmedabad Municipality	10	90	909	10	90	970	833	20,601	2,289	212				
(a) Ahmedabad Municipality	11	77	717	11	77	741	741	15,690	2,241	233				
Kaira	25	160	1,577	25	160	1,613	963	13,882	2,169	215				
Panch Mahals	13	90	1,004	13	90	1,002	668	17,269	2,494	224				
Baroda	14	109	1,199	14	109	1,199	605	17,009	2,185	115				
Broach	15	69	703	15	69	703	561	9,655	2,099	206				
Surat excluding Surat Municipality	21	135	1,491	21	135	1,491	1,394	14,118	2,196	198				
(a) Surat Municipality	1	36	239	1	36	240	238	11,623	1,895	147				
Amreli	8	33	319	8	33	319	319	15,135	3,670	380				
Total for Bombay Gujarat Division	167	1,059	11,044	167	1,059	11,082	8,084	15,638	2,466	235				
West Khandesh	15	95	934	15	95	934	934	13,225	2,088	212				
East Khandesh	22	166	1,539	22	168	1,558	1,557	13,236	1,733	187				
Dangs	1	4	40	1	4	40	20	9,664	2,416	240				
Nesik	21	121	1,271	21	122	1,281	1,124	11,876	2,061	196				
Ahmednagar	19	131	1,350	19	130	1,388	1,316	13,873	1,757	189				
Poona excluding Poona Municipality	16	115	1,305	16	115	1,305	1,251	17,375	2,418	213				

(a) Poona Municipality	...	...	13	55	466	13	55	651	503	7,820	1,846	156
Setara North	...	...	14	89	1,084	14	89	1,130	981	15,056	2,368	187
Setara South	...	...	8	86	930	8	96	1,038	987	9,332	1,697	199
Kolhapur	...	...	13	100	1,232	13	100	1,197	882	16,524	2,078	163
Sholapur excluding Sholapur Municipality	...	...	15	106	1,117	15	106	1,117	1,045	15,923	2,253	213
(a) Sholapur Municipality	...	...	5	50	400	5	55	294	293	11,098	1,009	189
Total for Bombay Deccan Northern Division	162	1,118	162	1,155	11,668	162	1,155	11,933	10,893	13,496	1,893	183
Belgaum	...	...	20	142	1,531	20	142	1,531	1,458	14,105	1,986	184
Bijapur	...	...	16	123	1,436	16	134	1,448	1,231	16,596	1,981	183
Dharwar excluding Hubli Municipality	...	...	23	137	1,407	23	147	1,407	1,407	11,783	1,844	192
Hubli Municipality	...	...	1	18	115	1	35	115	115	25,311	1,406	220
Total for Bombay Deccan Southern Division	60	420	60	458	4,489	60	458	4,501	4,211	14,065	1,842	187
Thana	...	...	17	147	1,436	17	159	1,277	1,277	17,265	1,834	230
Kolaba	...	...	18	103	828	18	99	843	602	9,332	1,697	199
Ratnagiri	...	...	20	144	1,604	20	144	1,635	1,532	17,918	1,890	156
Kanara	...	...	15	54	506	15	54	506	506	6,847	1,902	203
Total for Bombay Konkan Division	70	448	70	456	4,374	70	456	4,261	3,917	13,179	2,023	216
Total for Bombay State	499	3,354	499	3,437	33,972	499	3,437	34,174	29,502	14,446	2,097	210
SAURASHTRA STATE												
Halar	...	...	10	62	634	11	63	610	342	9,439	1,337	154
Medhya Saurashtra	...	...	23	120	1,151	23	136	1,179	1,077	8,344	1,420	162
Zalawad	...	...	14	41	424	14	45	424	267	6,756	2,100	222
Gohilwad	...	...	28	100	1,110	28	104	1,110	690	6,855	1,844	172
Sorath	...	...	18	114	1,051	28	114	1,051	1,003	6,784	1,666	181
Total for Saurashtra State	93	437	93	462	4,370	104	462	4,374	2,379	7,425	1,673	176
KUTCH STATE												
Kutch	...	...	18	58	467	18	62	467	243	7,194	2,088	277
Total for Bombay, Saurashtra and Kutch	610	3,849	610	3,961	38,809	621	3,961	39,015	32,124	12,963	2,032	206

APPENDIX II

Statement showing the numbers of printed forms supplied to various districts

Name of District.	Enumeration pads.											Other Forms.						
	Number of enumerator's booklet of instructions						Supplied.						Enumerator's abstract,	Charge summary,	Circle summary,	Letters of authority.	Census handcharts.	
	2	3	4	5	6	7	100 slips.	50 slips.	100 slips.	50 slips.	50 slips.							
1	2	3	4	5	6	7	8	9	10	11								
Greater Bombay
	6,580	42,152	146	30,667	97	8,500	138	672	5,500	8,150								
BOMBAY STATE																		
Banaskantha	1,700	6,541	3,022	6,450	2,763	2,400	24	200	1,500	1,600								
Sabarkantha	1,400	8,266	297	7,624	192	4,000	25	100	1,300	1,400								
Mehsana	2,750	17,013	1,423	15,404	541	4,000	200	1,500	2,600	2,500								
Ahmedabad	3,250	17,980	1,200	16,982	912	4,000	125	646	2,950	2,345								
(a) Ahmedabad Municipality	1,650	8,400	425	8,200	333	1,600	45	175	1,775	1,672								
Kaira	2,725	13,336	7,000	13,500	4,613	1,750	50	250	2,650	3,000								
Panch Mahals	3,971	13,119	.....	12,509	.....	4,920	84	271	1,880	1,582							
Baroda	2,200	13,553	2,600	11,864	1,776	1,300	20	125	2,000	1,735								
Broach	2,300	7,432	900	7,186	654	2,900	60	250	1,905	1,500								
Surat	3,258	16,035	3,707	15,503	2,671	3,565	63	424	3,332	3,099								
(a) Surat Municipality	625	2,187	504	2,134	384	500	5	100	574	550								
Amrci	820	3,285	1,000	3,106	452	1,200	25	100	825	725								
Total for Bombay Gujarat Division	26,649	127,145	22,978	120,262	15,291	32,135	726	4,141	23,291	21,768								
West Khandesh	1,469	10,491	1,100	10,387	1,100	2,000	400	100	2,000	3,000								
East Khandesh	2,808	15,579	1,458	14,411	1,111	3,500	75	363	3,445	3,495								
Dangs	95	465	150	455	140	1,000	4	20	65	8								
Nasik	3,200	15,021	1,200	14,523	1,027	4,900	500	200	3,300	3,200								
Ahmednagar	3,175	13,136	4,000	12,180	3,760	6,000	100	400	3,200	3,200								
Poona	2,700	13,941	2,435	13,911	2,382	500	100	500	2,700	800								
(a) Poona Municipality	2,100	4,847	1,030	4,738	492	1,000	50	200	1,200	1,500								
Satara North	2,350	13,000	150	12,492	59	5,000	100	500	2,500	2,375								
Satara South	3,320	10,226	2,224	9,879	1,126	3,000	35	300	3,200	1,000								
Kolhapur	1,970	13,221	1,065	12,384	850	2,422	30	262	2,104	2,065								
Sholapur	3,400	14,864	4,000	12,043	1,804	5,000	100	500	3,500	3,425								
(a) Sholapur Municipality	920	2,120	1,618	2,057	1,508	1,000	28	120	650	680								
Total for Bombay Deccan Northern Division	27,517	126,911	20,430	119,460	15,359	35,322	1,522	3,465	27,864	24,748								

Belgaum	...	3,875	18,124	1,760	17,421	1,457	3,700	50	300	2,100	5,250
Bijapur	...	3,734	13,992	4,030	12,450	1,765	1,800	50	200	3,740	3,900
Dharwar	...	4,875	20,329	.....	16,879	.....	6,000	150	800	4,250	.....
(a) Hubli Municipality	...	320	1,600	.....	1,365	.....	500	5	50	325	550
Total for Bombay Deccan Southern Division	...	14,074	54,045	5,790	48,115	3,222	12,000	255	1,350	10,415	9,700
Thana	...	2,100	14,288	1,600	14,288	1,600	1,500	50	200	3,300	1,700
Kolaba	...	1,143	10,126	1,506	9,250	1,132	1,976	40	200	850	1,750
Ratnagiri	...	3,400	21,077	.....	18,609	.....	4,000	100	400	3,500	3,500
Kanara	...	1,125	5,072	500	5,052	730	500	25	75	1,000	1,250
Total for Bombay Konkan Division	...	7,768	50,563	3,606	47,199	3,462	7,976	215	875	8,650	8,200
Total for Bombay State	...	89,598	409,816	52,050	365,703	37,431	95,933	2,856	10,503	85,620	72,506
SAURASHTRA STATE											
Halar	...	782	6,743	2,400	6,233	.....	2,576	37	279	983	858
Madhya Saurashtra	...	3,900	10,412	.....	10,186	1,709	3,600	100	460	2,000	2,500
Zalawad	...	1,200	6,840	.....	5,812	.....	500	25	50	950	1,050
Gohilwad	...	2,000	12,140	.....	11,295	.....	4,500	100	800	2,000	2,050
Sorath	...	1,250	10,184	2,111	9,878	1,437	4,200	400	200	2,100	2,240
Total for Saurashtra State	...	9,132	46,324	4,511	43,454	3,146	15,376	662	1,789	8,033	8,698
KUTCH STATE											
Kutch	...	1,250	5,740	2,000	5,512	999	2,000	20	150	1,000	.....
Total for Bombay, Saurashtra and Kutch	...	90,970	452,880	56,561	414,669	41,576	113,309	3,538	12,442	94,653	81,204

APPENDIX III

SUMMARY OF THE PROCEEDINGS OF THE CENSUS CONFERENCE HELD FROM
THE 27TH DECEMBER, 1950 TO THE 29TH DECEMBER, 1950

PRESENT	
CHAIRMAN .. ..	.. Shri R. A. Gopaldaswami, I.C.S., Registrar General, India and ex-officio Census Commissioner.
Assam .. ..	.. Shri R. B. Vaghaiwala, I.C.S.
Bihar .. ..	.. Shri Ranchor Prasad, I.A.S.
Bombay .. ..	.. Mr. J. B. Bowman, I.C.S.
Madhya Pradesh .. ..	.. Shri J. D. Kerawalla, I.A.S.
Madras .. ..	.. Shri J. I. Arputhanathan, B.A., B.L.
Orissa .. ..	.. Maulvi Moinuddin Ahmed, P.C.S.
Punjab .. ..	.. Pt. Lakshmi Chandra Vashishtha, P.C.S. Chaudhri Rattan Singh, P.C.S.
Uttar Pradesh .. ..	.. Shri Rajeshwari Prasad, I.A.S.
West Bengal .. ..	.. Shri Asok Mitra, I.C.S.
Hyderabad .. ..	.. Shri C. K. Murthy.
Madhya Bharat .. ..	.. Shri Ranglal.
Mysore .. ..	.. Shri J. B. Mallaradhya, M.A. Shri Nanjundiah.
Rajasthan .. ..	.. Pt. Yamuna Lall Dashora, B.A., LL.B.
Travancore-Cochin .. ..	.. Dr. U. S. Nair, M.A., Ph.D., F.N.I.
Vindhya Pradesh .. ..	.. Shri N. K. Dube, M.A.
Andamans .. ..	.. Shri S. K. Gupta.

1. At the outset the Chairman made a reference to the death of Sardar Vallabhbhai Patel and Mr. M.W.M. Yeatts. A minute's silence was observed in memory of the departed.

2. The Chairman then reviewed the various items on the Agenda for the Conference and stated that the object of the Conference was to hear the final word from the Superintendents on enumeration and thrash out as completely as possible the problems connected with the further stages of the Census.

3. The first item in the Agenda relating to the review of the progress in enumeration arrangements in the various States was then taken up. Each of the Superintendents described briefly the position in regard to the arrangement in his State in respect of each of the items mentioned in the detailed Agenda for the Conference. The salient features and the Registrar General's conclusions are briefly described below in the following paragraphs.

4. *Recruitment and training of Census staff and Census training.*—A statement showing the strength of the enumeration staff in each of the States is given in the Annexure. The total number of enumerators for all India is approximately six lakhs and the number of Supervisors and Charge Superintendents is about a lakh.

Training has not presented special or unforeseen features. It is however apparently an almost common feature that the census staff is not keen—apathy is widespread. In many States the official staff are even more indifferent than the non-officials. But all Superintendents are hopeful that before the enumeration period starts, training of staff will be completed.

In many States practical training has been given or is intended to be given to the enumeration staff either by sample enumeration or practice enumeration or preparation of National Register of Citizens. It is clear that States which have given practical training in one of these ways are at an advantage—they have located weak spots, found out the difficulties likely to occur and the way to get over them. In those States where this is not contemplated at present the Chairman suggested that Superintendents should arrange to secure that practice enumeration is carried out without fail. The results of the practice enumeration should be reviewed at the last training class, the difficulties that were encountered should be discussed and the correct method of overcoming difficulties agreed upon. This will give confidence to the enumeration staff in their work.

Hyderabad State has a problem owing to the communist trouble. The Chairman stated that the affected areas in the State should be treated as non-synchronous and enumeration should be started immediately and carried out on a programme of village visits fitted in with security arrangements. He promised to address the Government of Hyderabad in the matter.

The house list figures of Mysore State reveal a population total which is much in excess of the expected population of the State; and the question arises whether this might be connected with the "Ghost" phenomenon. As there is rationing not only in urban areas but also in rural areas in the State there is especial need for watchfulness. The Superintendent promised to scrutinise the figures and ensure that over-enumeration is avoided.

In summing up the Chairman hoped that within the next five weeks every Superintendent would locate the weak spots, and bring pressure

to bear (through the Chief Secretary, if necessary), on the District Officer or S. D. O. concerned to take *personal* interest in the training programme. He wished all the Superintendents success in their endeavour.

5. *Recording of father's or husband's name in the slips and the National Register of Citizens.*—It was noted that all the Superintendents have made adequate provision for recording the details in the slips and in the National Register of Citizens.

6. *Publicity for "Means of Livelihood" and "Economic Status".*—All Superintendents have given thought to this question. It was suggested that if the economic questions were put in different order [e. g. 9(1), 10, 11 and 9(2)] it would be easier to get them across. While this is true, it was agreed that nothing should be done at this stage to disturb instructions already issued. It is essential that right up to the last moment, emphasis should be laid on the importance of questions 9(1) and 10 which are crucial. If accurate and complete answers were secured for these, some errors in 11 and 9(2) would not matter much. Publicity in simple language showing what is expected of each citizen in answering 9(1) and 10 would be useful. These two questions should be brought to the forefront.

7. *Safeguards for accuracy of enumeration and correct preparation of National Register of Citizens.*—Discussions indicate that there was no need at the present to apply the safeguards in States other than Punjab and PEPSU. The Superintendent of Madhya Pradesh has brought these safeguards to the notice of the Deputy Commissioners. In Bihar (where the Superintendent apprehends some trouble in border areas) instructions are kept ready and brought to the notice of the State Government for application if the need arises.

8. *"Ghost" Ration Cards and the Census.*—The size of the problem of "Ghost" Ration Cards is small in most States and considerable in some. The method of handling the problem accordingly differs and all States are on the right lines. In concluding the discussion the Chairman agreed that a clear distinction should be made between information relating to named individuals, and information of a Statistical character derived from National Registers; and that no department of Government other than the Census Department should have access to the National Registers for the former purposes; and even Census Officers should refer to them only for purposes of dealing with offences under the Census Act.

9. *Supply of Additional Enumeration Pads.*—There was no general problem. Superintendents who required additional pads were requested to settle the matter individually with the Chairman before they left Delhi.

10. *Provisional totals—arrangements.*—The Chairman noted that all the Superintendents are taking suitable action for getting the Provisional totals for the Census. He made it clear that he was not promoting unhealthy competition for early publication; the Superintendents should make as complete a local check as possible of accuracy of figures before they are published. The provisional figures for districts will be telegraphed to the State Census Superintendent and the Registrar General simultaneously. Each Superintendent should fix the *last date* for the despatch of telegrams for which he is responsible. The last date thus fixed should not, ordinarily, be later than the 22nd March. In the case of Andamans and Travancore-Cochin it was agreed that the district figures need not be telegraphed to the Registrar General. The Superintendent should verify whether the total worked by him tallied with that of the Registrar General and the figure should be passed on to the State Government for publication only after this tallying.

11. *Issue of certificates for meritorious census work.*—There was a long discussion of this subject and each Superintendent explained the past practice. The grant of certificates of different classes was almost a universal feature. These certificates were granted by the Provincial Governments or the State Census Superintendents. In the case of certain former princely States it was the practice in the past to grant medals in recognition of meritorious census work. In the past there has been no All-India recognition of census work.

Most of the Superintendents were of the opinion that an All-India recognition of census work by the grant of a certificate signed by the President will go a long way in creating enthusiasm for census work among the enumeration staff. Madras did not agree and Assam was doubtful. After further discussion the Conference decided that if All-India recognition could take the form of issue of medals it would be very useful. The Conference also recommended that the medal should be accompanied by a certificate containing the facsimile signature of the President. This could be, in addition to the issue of local certificates. Most States have taken decision to continue the practice of previous censuses. The Punjab Superintendent stated that after partition the

issue of Sanads in the Punjab has been discontinued. The Chairman promised that he would address the Punjab Government in the matter.

As regards medals the Chairman stated that he would take the orders of the Government of India on the recommendation made by the Conference and would announce their decision as soon as it is reached.

As regards details the following suggestions were approved :—

(i) A lakh of rupees might be set apart for this purpose (At the rate of Rs. 10 per medal 10,000 medals could be made).

(ii) Whatever number become available should be allotted to States on a population basis (except in the case of Andamans where a special allotment may be made).

(iii) In distributing the quota within each State a method which would promote team spirit in the census staff was desirable. The work turned out by "Circles" should be adjudged (with reference to correctness and completeness of replies especially for the economic questions, and neatness in preparation of National Register of Citizens). Each circle should be given two medals one to the Supervisor of the circle and the other to the best enumerator in that circle. The grant of medals should be published as widely as possible as soon as it is announced. It was also agreed that a certain number of medals may be reserved from the State quota for award to *individuals* for zeal and efficiency in the performance of census duties.

The Chairman also said that he would consider the question of cash awards in the case of those States which have been able to do the National Register of Citizens free of cost.

12. *Progress of printing of National Register forms and arrangements for writing the Register.*—It was noted that suitable arrangements for printing the Register are being made. Some of the Superintendents stated that the paper for the Register and cover have not yet been supplied by the Deputy Controller. The Chairman said that he would look into the matter. In Madhya Pradesh the Register is already being written. In other States it will be written either along with the enumeration or immediately after the enumeration. The Orissa Superintendent stated that the Orissa Government have insisted on the answer to question 13 being written in the National Register of Citizens.

13. Item II in the Agenda relating to the review of sorting and compilation instructions was then taken up.

The Chairman gave the Conference a brief review of the main underlying ideas, salient features and arrangements of the 1951 Census Tabulation Plan, and Sorting and Compilation Instructions (printed papers issued already). Tables of A Series, B Series, C Series, D Series and E Series are the end products of the Tabulation Stage of census operations.

Tabulation Offices are factories which receive the census slips and National Register of Citizens as their raw material. They have to process this raw material and produce the end products as specified in the 1951 Census Tabulation Plan. Sorters, compilers (and tabulation clerks) are the factory workers who will do this processing. The sorters' duties are clearly defined by the Sorter's Tickets. The sorter converts slips into sorter's tickets. Every single operation he has to do for this purpose is clearly described in the instructions which go with each sorter's ticket. It will be found from the instructions that one operation leads on to other and rigid adherence to the prescribed order is essential. The compiler operates with the sorter's tickets and the National Register. His end products are the "Compiler's Posting Statements." In a few cases, he has to prepare intermediate papers called "livelihood group abstracts." Here again the process is rigid and mechanical and laid down clearly in instructions. The Compiler's Posting Statements furnish the figures for "Tracts" which are picked up by Tabulation clerks and posted to produce the "District Tables" of the 1951 Census Tabulation Plan. (This last bit is also purely mechanical. Instructions are being drafted to cover this process also).

14. There are a few details and important innovations, of which the rationale should be understood.

(i) The stage at which slips are thrown together for tracts is **very important**—Thereafter, no census information can be extracted for individual villages/ward wise. Note carefully the *Primary Census Abstract*. That is the type of census information made available village/ward wise. *It does not include break-up by "community"; but does include break-up by livelihood classes.* This is an important innovation, signifying the transfer of emphasis from "social divisions" to "economic structure."

(ii) At the outset, the slips are to be separated into "General" "Sample" and "Displaced Persons." The reasons for separating "Sample" from "General" are well-known and simple. Why do we separate "Displaced persons"?

(a) Age structure and sex-ratio of Displaced Persons may be materially different from that of the population among whom they have settled. As we rely *only on sample slips* for age structure, we cannot take risks.

(b) The separation will help us to get Economic Tables for Displaced Persons separately. This information is very important and cannot be got otherwise.

(iii) Distribution of slips to sorters really begins after *sorter's ticket O and the Primary Census Abstract*. The aim is (a) to give only one livelihood class of one tract to one sorter;

(b) where this is not possible to give only one livelihood class, and more than one Tract;

and (c) where even this is not possible to give more than one livelihood class, of the same category (*i.e.* Agricultural I, II, III, IV or Non-Agricultural V, VI, VII, VIII but not Agricultural and non-Agricultural together—unless absolutely compelled).

15. It is extremely important that all ranks of census officers and staff from Supervisors of Tabulation Offices upward, should be thoroughly conversant with the technique of sorting and compilation. The Tabulation Offices should be visualised and *managed as factories*. This can only be done if those who manage, themselves know the job.

16. Discussion followed:—

(i) The Bombay Superintendent stated that sorter's ticket 6 and the instructions do not provide for cases like Bombay where Form II for question 2 (c) has been adopted and where the list of non-backward classes drawn by the State Government is not complete. The Registrar General stated that this is a case where local modification of the ticket and the instructions are called for. The aim is to secure a division of the slips into four categories of which two will be Scheduled Castes and Scheduled Tribes respectively, as defined by notified orders. The other two will be necessarily provisional divisions into "Other Backward Classes" and "Non-Backward Classes"—not to be used for publication and only to be kept available for the administrative reference and the Backward Classes Commission. The instructions

for securing this fourfold divisions should be related to the enumeration instructions locally issued.

(ii) There was long discussion about the principles on which census tracts are to be delimited.

(a) *Rural Tracts*.—Rural areas of each tehsil or thana should be ordinarily regarded as a single rural tract. (In exceptional cases e.g., Ponnani Taluka of Malabar in Madras State with over 7 lakhs, this may have to be divided into more than one rural tract).

(b) *Cities*.—Every city must be a separate urban tract. Ordinarily "city" means a locality with a population of not less than 100,000. Superintendents will have discretion to include towns with a smaller population, in view of local importance or local legislation defining cities.

(c) *Non-City Urban Tracts*.—Other towns must be grouped. Ordinarily towns (other than cities) located within one Tehsil/Thana will be a natural grouping for forming a Non-City Urban Tract. But, in many cases, such groups may have a smaller population than 50,000. In such cases, the towns of the general administrative sub-division (forming the charge of S. D. O./R. D. O. or S. D. M.) may be grouped together as one Non-City Urban Tract. In exceptional cases, where towns are very few and very small, all the towns of a district may be grouped into one tract.

(iii) Madras raised the question of issuing instructions as in 1941 to the Deputy Superintendents and supervisors to correct obvious omissions on slips. The Chairman stated that the bulk of the checking should be made before the pads and the National Registers are received at the Tabulation Offices. In view of the preparation of the register there is less likelihood of there being omissions. He agreed, however, that there should be a *final check* in the Tabulation Office also, before commencing sorting; and promised to frame and issue definite instructions on what should be done at this check about omissions and obvious mistakes. The instructions of 1941 might call for some revision. Omissions regarding age for instance might be left alone as "age unstated."

(iv) Madhya Pradesh raised the issue regarding sorting for "Means of livelihood." The Chairman explained the distinction between "Bunching" and "Bunch-Coding," the process described in the instructions for

Sorter's ticket 2; and the process of "sorting for divisions and sub-sorting for sub-divisions" which Mr. Kerawalla had in mind. He was satisfied, after considering all the pros and cons, that the process now prescribed is the easier and safer course to follow.

(v) The Chairman mentioned the possibility that instructions for sorter's ticket 2 might require a minor change (in the order of operations). He would look into the suggestion (received from Mr. Gupta) and if it was likely to save time and labour he would accept it and issue a correction slip.

(vi) The question whether sorting for Scheduled Castes, Scheduled Tribes and Backward Classes should be done for individual castes or tribes was raised. The Chairman stated that there will be no sorting for individual castes as this is contrary to the policy of the Government. If individual caste or tribe figures are required for any specific purpose, e.g. the Backward Classes Commission or by the State Governments, this can be taken out after our main sorting is completed or the information could be collected from the National Register of Citizens. (The Governments concerned should be asked about this when the sorting operations are nearing completion. In any case this work should not be undertaken until the successful completion of the prescribed tables is assured).

17. The Conference then agreed that the book "Sorting and Compilation Instructions" might be regarded as final except for a possibility that the instructions for sorter's ticket 2 might require some correction. The Chairman said the Superintendents might proceed with the printing of the tickets, the statements and the instructions. The instructions for sorters should be changed wherever necessary with reference to differences between local instructions and the Model All-India Instructions as regards enumeration e.g. use of contractions, and the point referred to in 16 (i) above.

18. Item III in the Agenda relating to the Organisation of Census Tabulation Offices was then taken up.

(i) The Chairman wanted to finalise the draft Memorandum which had been circulated. But it was found that the Superintendents were not yet ready with the details required.

(ii) The Chairman asked the Superintendents to send him as soon as they got

back, a list of tracts, giving the names and numbers and the order in which they should be arranged and also the approximate population in order to enable him to complete Appendix I of the draft Memorandum. (It was agreed that the list would be treated as provisional, and changes might be made, for good reasons, before sorting operations actually got under way).

(iii) The number of regions into which it is proposed to divide the State for tabulation purposes was considered. The Superintendents indicated the following numbers :-

Assam	..	..	2
Bihar	..	..	4
Bombay	..	..	5
Madhya Pradesh	..	..	2
Madras	..	..	8
Orissa	..	..	3
Punjab	..	..	3
Uttar Pradesh	..	..	10
Vindhya Pradesh	..	..	1
Travancore-Cochin	..	..	1
Hyderabad	..	..	4
Mysore	..	..	2
Rajasthan	..	..	3
Andaman and Nicobar	..	..	1
West Bengal	..	..	3 or 4
Madhya Bharat	..	..	2

54 or 55

Superintendents were requested to furnish as early as possible details required for Appendix II of the draft Memorandum.

(iv) The territorial basis for the operation of sorting and compilation teams was then discussed. It was agreed that the territorial basis should be maintained; that the "sub-district" should be formed by grouping census tracts so as to make up a unit with 3 to 5 lakhs of slips to sort and compile. Tracts of different districts should not be mixed up for this purpose.

(v) It was agreed that a sorting and compilation team should consist of one supervisor, 2 compiler-checkers and not less than ten and not more than sixteen sorters. If, however, it is found, upon actual distribution of slips to sorters, that more than sixteen sorters had to be employed within one team, then an additional pair of compiler-checkers may be added to the team.

(vi) The Chairman explained the functions in view for the Tabulation Branch and the higher staff. It was emphasised that the Technical Assistant should be made entirely

responsible for the accuracy of all the figures produced in the Tabulation Office. It was pointed out by several Superintendents that one Administrative Assistant for ten sorting and compilation teams would be unworkable. A review of available information regarding past practice in many States showed that the appointment of one "Inspector" for every fifty sorters, as very common. The Chairman agreed that the draft Memorandum should be amended so as to permit the appointment of one Administrative Assistant for a group of Sorting Compilation Teams numbering not less than five. Ten teams should be regarded as the outside maximum and not the normal charge.

19. Some administrative difficulties were pointed out as likely to occur in respect of recruitment of retired persons with census experience. Relaxation of rules regarding recruitment through Public Service Commission or the Employment Exchanges would be necessary. The Registrar General pointed out that since Census is a Central subject the local Public Service Commissions need have nothing to do with this matter and recruitment through UPSC is not undertaken for such purely temporary staff appointed for a few months only. He thought it was only proper that Employment Exchanges should be consulted and their candidates considered. Superintendents need not appoint everyone whom they consider but only those who were in all respects suitable.

As regards employment of retired persons with experience he would do anything necessary to facilitate such employment.

Some of the Superintendents pointed out that as they proposed to appoint the District Census Officers as their Deputy Superintendents there may be some delay in the setting up of the offices.

20. The Chairman stated that the tabulation office should be started with the Deputy Superintendents, the Administrative Assistants and Supervisors and Compiler-Checkers. One or two districts for which slips come to the Tabulation Offices earlier should be taken and the whole process of sorting and compilation should be gone through for that district with the supervisors and compiler-checkers working as sorters. This will enable the staff who would later have to get work out of sorters to become fully conversant with the work. It would bring to light difficulties in practical working and suggest the methods of overcoming the difficulties. This is especially important in respect of the process

of "Bunching" and "Bunch-Coding" involved in sorter's ticket 2. The lists of "M/L Sub-Groups" which are necessary for that process can and should be finalised on the basis of results of sorting at this stage. Finally (and most important of all) norm of Daily Outturn for every sorter's ticket (for different categories of sorters) can be worked out on the basis of experience. The employment of untrained sorters in large numbers, in advance of this preparation, would lead to confusion and serious waste of money. For these reasons the Chairman impressed on the Superintendents the extreme importance of devoting at least one fortnight and not more than one month for this process of "Trial-sorting."

21. The Chairman then took up the item relating to *quasi piece-work system of payment to sorters*. He stated that the biggest item of expenditure in tabulation was the remuneration to sorters. Unless Superintendents exercised careful check and control over this expenditure the cost of tabulation will become much more than the sanctioned budget. A strict control is therefore essential.

Each Superintendent then explained the system of payment of remuneration to sorters that was in vogue in the past (1931 or 1941 as the case may be). There were three systems of payment. The first was the piece-work system where the sorter got his remuneration strictly according to performance. The second was the quasi-piece-work system where the sorter got a basic remuneration with an addition which was dependent on his output. The third was the fixed pay system where the sorter was paid a fixed remuneration and he was compelled to complete the work that has been allotted to him by working overtime where necessary, and was dismissed if he failed to do so repeatedly in spite of warnings and fines.

22. The Chairman explained that whatever system was adopted it was essential that daily outturn should be prescribed for every sorter, a daily record of work should be maintained, and a watch kept over the fulfilment of the prescribed daily outturn. It would be necessary to fix different daily outturns for sorters dealing with different categories of slips, as explained in paragraph 4 (iv) of his circular relating to quasi-piece-work payment to sorters. The daily outturn rates should be fixed initially on the basis of the results of the trial sorting (*vide* last paragraph). Once a month, there should be a systematic review of actual outturns against prescribed outturns and the rates should

be refixed, if found necessary by such review. Changes at more frequent intervals than a month should as far as possible be avoided. In order to enable Superintendents to start the Tabulation Offices with some idea of the normal requirements, he undertook to circulate the reports of Dr. Nair and others engaged on pilot tabulation before the end of February.

23. In the light of the foregoing the choice to be made between a Full piece-work system, Quasi-piece-work system and fixed-pay system was then discussed.

It was decided, practically, unanimously, that a Full Piece-Work System was impracticable in present conditions and should be ruled out.

As regards the relative merits of Quasi-Piece-Work System and the Fixed-Pay System, it was (after some initial arguments) generally agreed that the former was preferable inasmuch as it provided a financial incentive to speed and accuracy which the latter did not have while the enforcement of speed and accuracy through disciplinary compulsion was available under both systems.

Notwithstanding this agreement, there was difference of opinion about the choice to be made. This turned on the issue of how the "Basic Pay" and "Bonus" were to be fixed. Should Basic Pay plus Average Bonus be *higher than* or only just equal to pay plus Dearness Allowance locally in force for corresponding clerical grades? The Chairman said that the latter should be accepted as the basis. Approximately half the number of Superintendents were prepared to work on this basis. They would fix the basic pay at about 5 rupees more than the pay (without dearness allowance) of the corresponding clerical grade; and set apart an amount equal to Dearness Allowance minus about 5—for distribution as Bonus; on a review of fulfilment of prescribed outturns, speed and accuracy. They expected no difficulty in getting the necessary number of sorters on these terms. Other Superintendents were of the view that, given the financial basis stated by the Chairman, they would choose the Fixed-Pay System. The reason was their apprehension that suitable sorters in sufficient numbers would not be forthcoming unless the emoluments of the corresponding clerical grade were guaranteed in advance.

The Chairman, in summing up these conclusions restated the case on grounds of economy to adhere to the financial basis indicated by him and his personal view that the quasi-piece-work payment was preferable to fixed-pay system even on that basis. (In respect of Travancore and Cochin it was accepted that there was justification for differentiation from the system outlined above). Nevertheless he did not wish to impose on Superintendents a system which they were convinced would not work in their local conditions. He therefore left it to them to consider the issues involved once again and frame their own definite proposals regarding the number of sorters and the rates of remuneration to be allowed on the basis of the system they finally chose. In working out their requirements they should assume that one sorter working for 12 months will be able to sort one lakh of slips. He also suggested that the Tabulation Offices, on the basis of the set-up of organisation agreed upon at the Conference should be sent to him for sanction. He requested the Superintendents to do this immediately and let him have their proposals as early as possible.

24. The Conference then examined models of brick pigeon holes, wooden pigeon holes and exchanged views on their relative merits. The Superintendents also saw the sorting of slips by Mr. D. R. Gupta of Madhya Bharat.

There was no time for other items in the Agenda and the Conference concluded.

ANNEXURE

State.	Charge Superintendents.	Supervisors.	Enumerators.
Assam	420	3,070	13,000
Bihar	585	7,632	98,000
Bombay	452	2,846	52,539
Madras	450	18,000	1,08,000
Madhya Pradesh	595	7,753	48,688
Orissa	384	4,915	36,715
Punjab	941	4,392	38,093
Uttar Pradesh	1,000	5,000	60,000
West Bengal	2,390	15,000	39,000
Hyderabad	936	5,065	25,127
Madhya Bharat	85	1,958	12,963
Mysore	220	1,898	25,708
Rajasthan	..	4,000*	31,048
Travancore-Cochin	75	2,133	13,000
Vindhya Pradesh	38	1,725	19,886
Andaman and Nicobar Islands	5	13	128
Total	8,486	85,400	6,21,940

*Includes Charge Superintendents.

APPENDIX IV

Statement showing tracts, which were formed in the various districts for the purpose of the compilation of the Census Tables, and their 1951 Census Population

District.	Rural Tracts.		Urban Tracts.	
	Names of Talukas and Petas forming the Tract.	Population.	Names of Talukas and Petas forming the Tract.	Population.
BOMBAY STATE				
Greater Bombay	.....	.....	1. Colaba, Fort, Boribunder, Mandvi, Dongri and Umarkhadi Wards	326,543
			2. Khara Talao, Kumbharwada, Market, Dhobi Talao and Fanaswadi Wards	317,625
			3. Girgaum, Khetwadi, Walkeshwar, Mahalaxmi and Tardeo Wards	358,683
			4. Kamathipura, Mazgaon, Byculla West and Byculla East Wards	336,175
			5. Chorapdeo, Sewri, Lalbaug, Parel and Naigaum Wards	332,733
			6. Matunga, Sion, Love Grove, Lower Parel and Worli Wards	371,563
			7. Parbhadevi, Dadar and Mahim Wards	285,698
			8. Bandra, Parle-Andheri and Juhu Wards	280,621
			9. Ghatkoper and Kurla Wards and Anik, Asalpe, Bapanala, Bhandup, Borla, Brahmanwada, Chakala, Chembur, Chendavi, Devnar, Harivali, Kanjur Kondiwate, Kopri, Madh, Mahul, Mijas, Mambudruk, Mandala, Mankhurd, Marol, Marawali, Mohili, Mulgaon, Nanala, Oshivari, Pariapur, Paspoli, Powai, Shaah, Saki, Tirandai, Trombay, Tungwa, Vadhavali, Varsova, Vikhroli and Vyaravi Villages	229,629
BARODA TABULATION OFFICE				
2. Banaskantha	1. Palanpur, Deesa and Dhanera Talukas	282,448	1. Tharad, Deesa, Palanpur and Abu Road Talukas	56,842
	2. Danta and Abu Road Talukas and Wadgam Peta	149,528		
	3. Tharad, Wav, Deodar and Kankrej Talukas	259,978		

APPENDIX IV—contd.

District.	Rural Tracts,		Urban Tracts.		
	Names of Talukas and Petas forming the Tract.	Population.	Names of Talukas and Petas forming the Tract.	Population.	
3. Sabarkantha	4. Himatnagar and Bhiloda Talukas and Vijaynagar Peta	153,617	2. Idar and Himatnagar Talukas	23,387	
	5. Khetbriama and Idar Talukas	157,514	3. Modasa and Prantij Talukas	25,625	
	6. Modasa and Meghraj Talukas and Malpur Peta	142,841			
	7. Bayad and Prantij Talukas	181,033			
	8. Mehsana Taluka	125,774	4. Mehsana and Radhanpur Talukas and Harij Peta	41,737	
	9. Radhanpur and Santhalpur Talukas and Harij and Sami Petas	144,836	5. Vijapur, Visnagar, Kalol and Kadi Talukas	131,778	
	10. Kalol and Kadi Talukas	223,900	6. Sidhpur, Chanasma, Kheralu and Patan Talukas	149,716	
	11. Visnagar and Vijapur Talukas	222,133			
	12. Patan and Chanasma Talukas	216,061			
	13. Kheralu and Sidhpur Talukas	215,725			
	14. Dholka, Dhandhuka and Ahmedabad City Talukas and Sanand Peta	304,288	7. Ahmedabad City	788,333	
			8. Dholka, Dhandhuka and Ahmedabad City Talukas and Sanand Peta	155,233	
	6. Kaira	15. Daskroi, Dehgam and Virangam Talukas	385,157	9. Virangam and Dehgam Talukas	52,619
		16. Nadiad and Matar Talukas	219,167	10. Nadiad, Kapadwanj, Matar and Michmedabad Talukas	153,630
17. Kapadwanj and Michmedabad Talukas		238,646	11. Balasinor, Anand and Thasra Talukas	157,868	
18. Anand, Balasinor and Thasra Talukas		295,032	12. Cambay, Petlad and Borsad Talukas	144,037	
19. Petlad and Cambay Talukas		219,536			
20. Borsad Taluka		184,510			
21. Godhra, Kalol and Halol Talukas and Jambughoda Peta		310,283	13. Lunawada, Halol, Kalol, Godhra and Santrampur Talukas	77,043	
22. Santrampur, Lunawada and Shehera Talukas		302,928	14. Jhalod, Dohad and Baria Talukas	60,104	
23. Jhalod and Dohad Talukas	186,940				
24. Baria and Limkhecia Talukas	211,134				

8. Baroda	...	25. Savli and Baroda Talukas	...	238,408	15. Savli, Karjan and Padra Talukas	...	23,646
	26. Padra and Karjan Talukas	...	168,140	16. Chhota Udepur, Dabhoi, Sankheda and Waghodia Talukas and Sinor Peta	...	57,165	
	27. Naswadi, Dabhoi and Waghodia Talukas and Sinor Peta	...	227,646	17. Baroda City	...	211,407	
	28. Jabugam, Chhota Udepur and Sankheda Talukas	...	263,334	18. Broach and Nandod Talukas	...	80,149	
9. Broach	...	29. Broach Taluka	...	87,949	19. Ankleshwar and Jambusar Talukas and Amod and Hansot Petas	48,856	
	30. Nandol, Jhagadia and Deshpada Talukas and Valia and Sagbara Petas	...	26,017	20. Chorasi and Kamrej Talukas	...	22,050	
	31. Ankleshwar, Vaigra and Jambusar Talukas and Amod and Hansot Petas	...	228,064	21. Bansda and Navsari Talukas and Gandevi Peta	...	74,171	
10. Surat	...	32. O'pad, Chorasi, Kamrej and Mangrol Talukas and Palsana Peta	329,862	22. Vyara, Mandvi, Songadh and Bardoli Talukas	...	38,712	
	33. Navsari Taluka	...	154,502	23. Bulsar and Dharampur Talukas	...	30,536	
	34. Bansda and Mahuva Talukas and Gandevi Peta	...	197,979	24. Surat City	...	223,182	
	35. Bardoli, Mandvi, Vyara and Songadh Talukas and Valod Peta	...	302,809	25. Amreli, Dhari, Kodinar and Okhamandal Talukas and Damnagar and Ghogho Petas	...	86,436	
	36. Bulsar and Pardi Talukas	...	223,154				
	37. Chikhli and Dharampur Talukas	...	230,885				
11. Amreli	...	38. Amreli, Dhari, Kodinar and Okhamandal Talukas and Damnagar, Ghogho and Kumbha Petas	230,767				
AHMEDNAGAR TABULATION OFFICE							
12. West Khandesh	...	1. Dhulia and Sakri Talukas	...	279,569	1. Dhulia, Sakri, Shirpur and Sindkheda Talukas	...	129,659
	2. Shirpur and Sindkheda Talukas	...	195,707	2. Nandurbar, Nawapur, Shehda and Taloda Talukas	...	65,812	
	3. Nandurbar and Nawapur Talukas	...	202,489				
	4. Shahada, Taloda and Akalkuwa Talukas and Akrami Peta	...	272,788				
13. East Khandesh	...	5. Jalgaon and Bhusawal Talukas and Edlbad Peta	...	195,958	3. Jalgaon, Bhusawal, Yaval and Raver Talukas	...	226,405
	6. Yaval and Raver Talukas	...	169,955	4. Amalner, Parola, Chopda and Erandol Talukas	...	138,571	
	7. Amalner and Parola Talukas	...	152,498	5. Chalisgaon, Jamner and Pachora Talukas and Bhadgaon Peta	...	102,457	
	8. Chopda and Erandol Talukas	...	157,233				
	9. Chalisgaon Taluka and Bhadgaon Peta	...	163,000				
	10. Jamner and Pachora Talukas	...	165,374				

APPENDIX IV—contd.

District.	Rural Tracts.		Urban Tracts.	
	Names of Talukas and Petas forming the Tract.	Population.	Names of Talukas and Petas forming the Tract.	Population.
AHMEDNAGAR TABULATION OFFICE—contd.				
14. Dangs	... 11. Dangs	... 47,282		
15. Nasik	... 12. Nasik, Dindori and Igatpuri Talukas and Peint Peta	... 314,335	6. Nasik and Igatpuri Talukas	... 175,123
	13. Malegaon and Nandgaon Talukas	... 215,344	7. Malegaon, Nandgaon, Baglan and Kalvan Talukas	... 115,481
	14. Baglan and Kalvan Talukas and Sargana Peta	... 213,462	8. Niphad, Simnar, Chandor and Yeola Talukas	... 79,346
	15. Niphad, Simnar, Chandor and Yeola Talukas	... 316,825		
16. Ahmednagar	... 16. Ahmednagar and Parner Talukas	... 206,956	9. Ahmednagar, Shrigonda and Karjat Talukas and Jamkhed Peta	... 135,754
	17. Shrigonda and Karjat Talukas and Jamkhed Peta	... 198,578	10. Shevgaon, Pathardi and Rahuri Talukas	... 34,395
	18. Shevgaon and Pathardi Talukas	... 168,450	11. Sangamner, Kopergaon and Shirrampur Talukas	... 44,683
	19. Nevasa and Rahuri Talukas	... 163,223		
	20. Akola and Sangamner Talukas	... 208,649		
	21. Kopergaon and Shirrampur Talukas	... 250,185		
17. Poona	... 22. Poona City and Haveli Talukas	... 154,688	12. Poona City Corporation	... 480,982
	23. Mulshi, Bhor and Mawal Talukas and Velhe Peta	... 237,859	13. Haveli, Bhor and Mawal Talukas	... 169,579
	24. Junnar and Ambegaon Talukas	... 178,143	14. Junnar, Ambegaon, Khed and Sirur Talukas	... 88,437
	25. Khed and Sirur Talukas	... 202,152	15. Baramati, Indapur, Dhond and Purandhar Talukas	... 95,725
	26. Baramati and Indapur Talukas	... 179,089		
	27. Dhond and Purandhar Talukas	... 164,322		
18. Satara North	... 28. Satara and Karad Talukas	... 290,721	16. Satara and Karad Talukas	... 79,721
	29. Patan and Jaoli Talukas	... 217,777	17. Koregaon, Khaivav, Man, Phaltan and Wai Talukas and Mahabaleshwar Peta	... 80,618
	30. Koregaon, Khaivav, Man, Phaltan and Wai Talukas and Khandala and Mahabaleshwar Petas	... 506,472		

19. Thana	...	31. Thana and Borivali Talukas	...	...	65,806	18. Thana, Borivali and Kalyan Talukas	...	...	377,634
		32. Kalyan, Shahapur and Murbad Talukas	...	...	272,478	19. Dahanu, Umbergaon and Jawhar Talukas	...	...	46,668
		33. Dahanu, Umbergaon and Jawhar Talukas and Mokhada Peta	...	...	304,621	20. Bassein, Bhivandi, Palghar and Wada Talukas	...	...	100,532
		34. Bassein and Bhivandi Talukas	...	...	180,261				
		35. Palghar and Wada Talukas	...	...	170,050				
20. Kolaba	...	36. Alibag and Pen Talukas and Shrivardhan, Murud and Mhasla Petas	...	...	250,680	21. Alibag and Pen Talukas and Shrivardhan, Murud and Mhasla Petas	...	...	52,540
		37. Panvel, Karjat and Khalapur Talukas and Uran and Sudhagad Petas	...	...	257,206	22. Panvel, Karjat, Roha and Mahad Talukas and Uran Peta	...	...	43,488
		38. Roha and Mangaon Talukas	...	...	171,255				
		39. Mahad Taluka and Poladpur Peta	...	...	133,914				

BELGAUM TABULATION OFFICE

21. Satara South	...	1. Miraj Taluka	...	...	153,461	1. Miraj, Tasgaon and Jath Talukas	...	...	190,568
		2. Tasgaon and Jath Talukas	...	...	219,182	2. Khanapur and Walwa Talukas	...	...	96,352
		3. Walwa Taluka and Shirala Peta	...	...	182,611				
		4. Khanapur Taluka	...	...	157,957				
22. Kolhapur	...	5. Hatkanagale and Shirol Talukas	...	...	194,085	3. Kolhapur City	...	...	136,835
		6. Karvir and Kagal Talukas	...	...	221,176	4. Hatkanagale, Shirol and Shahuwadi Talukas and Panhala Peta	...	...	107,703
		7. Gadhinglaj and Bhudargad Talukas and Ajra Peta	...	...	222,452	5. Kagal and Gadhinglaj Talukas and Ajra Peta	...	...	32,919
		8. Radhanagari and Shahuwadi Talukas and Bavada and Panhala Petas	...	...	312,375				
23. Sholapur	...	9. Barsi and North Sholapur Talukas	...	...	193,473	6. Sholapur City	...	...	266,050
		10. Akalkot and South Sholapur Talukas	...	...	208,798	7. Akalkot, Barsi and North Sholapur Talukas	...	...	87,238
		11. Mangalwedha and Pandharpur Talukas	...	...	148,781	8. Malsiras, Mangalwedha, Pandharpur and Sangola Talukas	...	...	83,209
		12. Malsiras and Sangola Talukas	...	...	193,390	9. Karmala, Madha and Mohol Talukas	...	...	33,721
		13. Karmala, Madha and Mohol Talukas	...	...	290,656				

APPENDIX IV—contd.

District.	Rural Tracts.		Urban Tracts.	
	Names of Talukas and Petas forming the Tract.	Population.	Names of Talukas and Petas forming the Tract.	Population.
24. Belgaum	14. Belgaum and Chandgad Talukas	225,001	10. Belgaum, Khanapur, Parasgad and Sampgaon Talukas ...	190,518
	15. Khanapur, Parasgad and Sampgaon Talukas	325,382	11. Hukeri and Chikodi Talukas	123,822
	16. Hukeri and Chikodi Talukas	320,426	12. Athani, Gokak and Ramdurg Talukas and Raibag Peta ...	103,329
	17. Gokak and Ramdurg Talukas	206,768		
	18. Athani Taluka and Raibag Peta	231,662		
	19. Bijapur and Indi Talukas	239,472	13. Bijapur, Bagewadi and Indi Talukas	107,019
	20. Sindgi and Bagewadi Talukas	256,123	14. Badami, Bagalkot, Hungund and Muddebihal Talukas ...	143,232
25. Bijapur	21. Badami, Bagalkot, Hungund and Muddebihal Talukas ...	344,610	15. Jankhandi and Mudhol Talukas	71,203
	22. Jankhandi and Mudhol Talukas and Biggi Peta	214,526		
	23. Dharwar, Hubli, Kalghatgi and Navalgund Talukas ...	238,038	16. Hubli City	129,609
26. Dharwar	24. Gadag and Ron Talukas and Mundargi and Nargund Petas ...	234,684	17. Dharwar, Kalghatgi and Navalgund Talukas	94,982
	25. Hangal, Shiggaon and Shirhatti Talukas and Kundgol Peta ...	233,953	18. Gadag and Ron Talukas and Mundargi and Nargund Petas ...	119,726
	26. Ranehenur Taluka and Byadgi Peta	137,071	19. Hangal, Shiggaon and Shirhatti Talukas and Kundgol Peta ...	83,942
	27. Haveri and Hirekerur Talukas	198,816	20. Haveri, Hirekerur and Ranebenur Talukas and Byadgi Peta	64,545
	28. Chiplun and Khed Talukas	255,639	21. Ratnagiri, Sangameshwar and Rajapur Talukas	52,004
	29. Dapoli, Gubagar and Mandangad Talukas	265,947	22. Sawantwadi and Malvan Talukas and Vengurla and Kudal Petas	83,778
	30. Ratnagiri and Sangameshwar Talukas	274,156	23. Chiplun and Khed Talukas	22,324
	31. Rajapur Taluka and Lanja Peta	206,010		
	32. Deogad and Malvan Talukas	197,881		
	33. Sawantwadi Taluka and Vengurla Peta	162,573		
34. Kamavli and Kudal Petas	191,652			

28. Kanara	...	35. Ankole, Karwar, Haliyal, Mundgod and Yellapur Talukas and Supa Peta	176,180	24. Karwar and Haliyal Talukas	...	40,128
	36. Sirsi, Siddapur, Honavar and Kumta Talukas and Bhatkal Peta	218,040	25. Sirsi, Honavar and Kumta Talukas and Bhatkal Peta	...	83,432	

SAURASHTRA STATE

BHAVNAGAR TABULATION OFFICE

1. Halar	...	1. Jamnagar, Dhrol, and Kalavad Talukas and Jodia and Lalpur Petas	226,845	1. Jamnagar City	...	104,419
2. Madhya Saurashtra	...	2. Khambhaliya and Jam-Jodhpur Talukas and Bhanvad and Kalyanpur Petas	158,479	2. Dhrol, Kalavad, Khambhaliya and Jam-Jodhpur Talukas and Jodia, Lalpur, Bhanvad and Kalyanpur Petas	...	84,729
3. Zalavad	...	3. Rajkot, Jasdan and Babra Talukas and Paddhari and Lodhika Petas	185,552	3. Rajkot City	...	132,069
	4. Morvi and Wankaner Talukas and Malia Peta	...	162,514	4. Jasdan, Babra, Morvi and Wankaner Talukas and Paddhari, Lodhika and Malia Petas	...	91,199
	5. Gondal and Kunkavay Talukas and Kotda-Sangani Peta	...	137,757	5. Gondal and Kunkavay Talukas and Kotda-Sangani Peta	...	65,321
	6. Jetpur and Dhoraji Talukas and Jam-Kandorna Peta	...	150,630	6. Jetpur and Dhoraji Talukas and Jam-Kandorna Peta	...	120,633
	7. Wadhwan, Muli and Chotila Talukas	...	91,266	7. Wadhwan, Muli and Chotila Talukas	...	74,298
	8. Limbdi, Sayla and Lakhtar Talukas	...	125,606	8. Limbdi, Sayla, Lakhtar, Dhrangadhra, Halvad and Dasada Talukas	...	76,379
	9. Dhrangadhra, Halvad and Dasada Talukas	...	128,379			
4. Gohilwad	...	10. Bhavnagar, Botad, Vallabhipur and Gadhadra Talukas	139,668	9. Bhavnagar City	...	137,951
	11. Talaja and Mahuva Talukas	...	159,657	10. Botad, Talaja, Mahuva, Vallabhipur and Gadhadra Talukas	...	70,112
	12. Palitana, Sihor, Lathi and Umrula Talukas	...	213,553	11. Palitana, Sihor, Kumdla, Lathi, Umrula, Rajula, Jafraabad and Liliya Talukas	...	107,386
	13. Kumdla, Rajula, Jafraabad and Liliya Talukas	...	191,803			
5. Sorath	...	14. Junagadh, Visavadar, Bhesan and Mendaria Talukas	147,514	12. Junagadh, Visavadar, Bhesan and Mendaria Talukas	...	79,864
	15. Mangrol, Manavadar, Vanthali and Keshod Talukas	...	182,409	13. Mangrol, Keshod, Vanthali and Manavadar Talukas	...	76,388
	16. Patan, Malia, Una and Talala Talukas	...	210,399	14. Patan, Malia and Una Talukas	...	88,867
	17. Porbandar, Kutiyana and Ranavav Talukas	...	132,167	15. Porbandar, Kutiyana and Ranavav Talukas	...	83,546
	18. Bhuji, Mandvi and Mundra Talukas and Khavda and Banni Petas	...	173,168	16. Bhuji, Mandvi, Mundra, Anjar, Bhachau, Repar and Abdasa Talukas and Adhoi Peta	...	113,754
	19. Anjar, Bhachau and Repar Talukas and Khadir and Adhoi Petas	...	161,866			
	20. Nakhtrana, Abdasa and Lakhpat Talukas	...	118,818			

KUTCH STATE

APPENDIX V

Statement showing the number of sorter-months, compiler-checker-months and supervisor-months actually consumed in each of the five Census Tabulation Offices in Bombay and Saurash ra, the number of these months provided for in the revised budget estimates and the number of these months per lakh of population actually consumed

Census Tabulation Office.	Sorter-months.			Compiler-Checker-months.			Supervisor-months.					
	Provision in the Revised Estimates for 1951-52.	Actual consumption.	Provision per lakh of population.	Provision in the Revised Estimates for 1951-52.	Actual consumption.	Provision per lakh of population.	Provision in the Revised Estimates for 1951-52.	Actual consumption.	Provision per lakh of population.			
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Bombay ...	341	341	12.0	12.0	68	102	2.4	3.6	34	28	1.2	1.0
2. Belgaum ...	1,279	1,104	12.0	10.3	256	268	2.4	2.5	128	142	1.2	1.3
3. Ahmednagar ...	1,327	869	12.0	7.8	265	260	2.4	2.3	133	123	1.2	1.1
4. Baroda ...	1,367	998	12.0	8.8	273	258	2.4	2.3	137	102	1.2	0.89
5. Bhavnagar ...	565	519	12.0	11.0	113	117	2.4	2.5	56	40	1.2	0.85
Total for Bombay, Saurashtra and Kutch ...	4,879	3,831	12.0	9.42	975	1,005	2.4	2.47	488	435	1.2	1.07

APPENDIX VI

**Statement showing information in regard to persons who were employed in the various
Tabulation Offices as Sorters, Supervisors and Compiler-Checkers**

		Bombay.	Belgaum.	Ahmednagar.	Baroda.	Bhavnagar.	Total.
(1) Number of posts which were sanctioned—							
(a) Supervisors	... ..	10	19	23	23	9	84
(b) Compiler-Checkers	... ..	20+4*	38+19*	46+23*	46+23*	18+13*	168+82*
(c) Sorters	... ..	100	266	276	276	126	1,044
(2) Average number of sorters per team	... ..	10	14	10	11	13	11.6
(3) Number of persons who were actually employed at any time during sorting period as**							
(a) Supervisors	... .. M F	12	19	23	21 2	9	84 2
(b) Compiler-Checkers	... .. M F	25 6	34 4	42 4	37 9	18	156 23
(c) Sorters	... .. M F	72 59	235 31	214 23	198 58	119	838 171
(4) Educational qualifications of persons who were employed—							
(a) Non-matric	... .. M F	2	1	3 .....	..... .....	62	68
(b) Matric	... .. M F	65 44	200 30	231 24	182 46	56	734 144
(c) Under-Graduates	... .. M F	16 8	44 3	42 2	42 7	27	171 20
(d) Graduates	... .. M F	26 13	31 2	3 1	32 16	1	93 32
(5) Ages of persons employed—							
(a) Below 18 years	... .. M F	1 .....	..... 2	1 9	..... .....	2	4 11
(b) Between 18 to 21 years	... .. M F	38 29	64 26	161 13	154 60	103	520 128
Between 22 to 24 do.	... .. M F	49 28	138 7	90 5	73 3	28	378 43
Between 25 to 34 do.	... .. M F	16 6	35	13	24 6	10	98 12
Between 35 to 54 do.	... .. M F	4 1	5	7	4	3	23 1
55 years and over	... .. M F	1	1	7	1 .....	..... .....	10
(6) Number of persons who came for employment from districts outside the district where the Tabulation Office was situated	... .. M F	..... .....	41 5	13	20 2	3	77 7
(7) Number of persons who had no previous experience of office work of any sort	... .. M F	68 43	82 8	120 10	139 34	63	412 52
(8) Number of applications which were received for employment as sorters, supervisors and compiler-checkers	... ..	1,192	1,746	550	2,062	650	5,003

* These posts were sanctioned for one and a half month only.

** Only the Bombay office exhibited a high turn-over, because persons tended to get permanent jobs outside, or left to rejoin college.

APPENDIX VII

Statement showing staff employed in the Central Tabulation Branch of the Office of the Superintendent of Census Operations for Bombay, Saurashtra and Kutch, Bombay

Month,	Number of posts of			
	Statistical Assistants,	Com-pilers,	Assistant Compilers,	Typists.
1	2	3	4	5
July 1951	1	2	...	...
August 1951	1	2	...	...
September 1951	1	6	...	...
October 1951	1	5	...	...
November 1951	1	8	...	...
December 1951	4	11	19	...
January 1952	4	17	32	...
February 1952	4	16	29	...
March 1952	4	16	31	7
April 1952	4	16	27	5
May 1952	4	15	24	4
June 1952	4	15	23	4
July 1952	4	15	21	4
August 1952	4	15	20	4
September 1952	4	6	1	1
October 1952	4	6	4	1
November 1952	4	5	3	1
December 1952	4	5	6	1
January 1953	4	5	11	1
February 1953	4	4	11	1
March 1953	3	4	11	1

APPENDIX VIII

Statement showing expenditure on the 1951 Census incurred by the Government of India from the Census Budget

Head of Account	Expenditure incurred during the year					
	1949-50	1950-51	1951-52	1952-53	1953-54 (Estimated)	Total
1	2	3	4	5	6	7
	Rs. as. ps.	Rs. as. ps.	Rs. as. ps.	Rs. as. ps.	Rs. as. ps.	Rs. as. ps.
47—Miscellaneous Departments Central Census						
<i>A—Superintendence—</i>						
A. 1—Pay of Officers ...	3,274 9 0	24,169 14 0	25,898 0 0	13,396 0 0	1,950 0 0	68,688 7 0
A. 2—Pay of Establishment ...	124 0 0	7,545 11 0	3,977 1 0	2,963 0 0	1,050 0 0	15,659 12 0
A. 3—Allowances and Honoraria, etc. ...	583 6 0	17,831 2 0	9,144 15 0	4,568 3 0	2,500 0 0	34,627 10 0
A. 5—Other Charges ...	100 0 0	6,464 6 9	3,304 9 9	876 10 8	2,150 0 0	12,895 11 2
Total, A—Superintendence ...	4,081 15 0	56,011 1 9	42,324 9 9	21,803 13 8	7,650 0 0	1,31,871 8 2
<i>B—Enumeration—</i>						
B. 1—Pay of Establishment ...	.....	26,400 0 0	44 6 0	.....	.....	26,444 6 0
B. 2—Allowances, Honoraria, etc. ...	.....	10,400 0 0	21,261 14 6	5,378 13 6	1,500 0 0	38,540 12 0
B. 4—National Register of Citizens ...	.....	.....	25,960 11 4	5,884 4 3	2,796 3 6	35,641 3 1
B. 5—Other Charges ..	.....	26,087 11 0	1,86,141 10 6	466 6 0	.....	2,12,695 11 6
Total, B—Enumeration ...	.....	62,887 11 0	2,33,408 10 4	11,729 7 9	5,296 3 6	3,13,322 0 7
<i>C—Abstraction and Compilation—</i>						
C. 1—Pay of Officers ...	.....	.....	13,299 4 0	372 0 0	.....	15,671 4 0
C. 2—Pay of Establishment ...	.....	.....	6,11,293 2 2	34,015 11 0	2,200 0 0	6,47,508 13 2
C. 3—Allowances, Honoraria, etc. ..	.....	625 0 0	56,420 11 0	25,462 10 0	1,100 0 0	83,608 5 0
C. 4—Other Charges ...	.....	.....	34,408 7 3	21,720 7 0	1,500 0 0	57,628 14 3
Total, C—Abstraction and Compilation	.....	625 0 0	7,17,421 8 5	81,570 12 0	4,800 0 0	8,04,417 4 5
E—Printing and Stationery ...	.....	10,852 1 0	8,750 1 0	10,226 3 0	30,600 0 0	59,828 5 0
Grand Total ...	4,081 15 0	1,30,375 13 9	10,01,904 13 6	1,25,330 4 5	47,746 3 6	13,09,439 2 2

Notes.—(1) The figures for 1949-50, 1950-51 and 1951-52 are final and have been agreed with those recorded in the offices of the Accountant General, Bombay, and the Comptroller, Saurashtra, Rajkot. The figures for 1952-53 are not final. The figures for 1953-54 are estimated.

(2) In 1950-51, a special staff was appointed for census work in the office of the Revenue Department of the Government of Saurashtra and in the offices of the Collectors in Saurashtra. The cost on account of this staff has been shown under "A-Superintendence", in the above figures. In the books of the Comptroller, Saurashtra, it has been booked under B-Enumeration.

APPENDIX VIII— *contd.*

- (3) In 1951-52, an amount of Rs. 3,259-10-8 was paid to the Government of Saurashtra as the Government of India's share in the cost of the preparation of the National Register of Citizens for Saurashtra. In the accounts of the Comptroller, Saurashtra, Rajkot, this amount has been debited to C-4. In the above figures, it has been shown under the proper head of account, i.e. B-4.
- (4) The figures for 1952-53 and 1953-54 for "A-Superintendence" do not include the cost of the continuance of the office of the Superintendent of Census Operations for Bombay, Saurashtra and Kutch for the period from 1st September 1952 to 30th April 1953, because during this period the office was continued for work connected with the Experimental Census of Births and Deaths in Sample Households, which was taken in selected talukas and petas of Bombay, Saurashtra and Kutch in November 1952, and to examine proposals for the Improvement of Population Data and the cost was debitable to this work. Similarly the figures under C-2 and C-3 for 1952-53 and 1953-54 do not include the cost on account of the appointment of all Assistant Compilers in the Tabulation Branch of the office of the Superintendent from January 1953 to the end of March 1953, as the cost on account of these posts is considered to relate to the Experimental Census and Improvement of Population Data.

APPENDIX IX COSTING STATEMENTS

Costing Statement No. I

	Rs. as. ps.		Rs. as. ps.
A. Expenditure on pay of Superintendents, their office establishment, allowances, honoraria and office contingencies ...	1,31,871 8 2	H. Enumeration charges actually paid by the State Government (Booked expenditure) ...	Nil
C. Expenditure on enumeration other than the scriptory charges for the National Register of Citizens paid from the Census Budget ...	2,78,680 13 6	I. Enumeration charges actually paid by local bodies (Booked expenditure) ...	Nil
D. Scriptorial charges for writing up the National Register of Citizens paid from the Census Budget ...	35,641 3 1	J. Cost of paper used for the National Register of Citizens. (The cost is estimated at the rate of Rs. 20 per ream for paper supplied free by the Controller of Printing and Stationery, Government of India) ...	33,000 0 0
E. Printing charges of enumeration pads (estimated at Rs. 1-2-0 for 1,000 slips supplied centrally) ...	54,243 0 10	K. Cost of census medals (estimated at the rate of Rs. 13-15-6 for each silver medal and Rs. 6-9-6 for each bronze medal) ...	10,711 10 6
F. Other enumeration, printing and stationery charges ...	19,602 2 0	L. Expenditure on Abstraction and Compilation ...	8,04,417 4 5
G. Scriptorial charges of the National Register of Citizens borne by the State Governments : Bombay State ...	32,003 12 11	M. Value of articles purchased for use in offices during the 1951 Census-Booked receipts in respect of articles sold ; plus actual purchase price (less estimated depreciation) of unsold articles ...	1,801 0 0
Saurashtra State ...	3,637 6 2		
Kutch State ...	Nil		
Total ...	35,641 3 1		

Costing Statement No. II

Name of District.	Number of parts of the National Register of Citizens.	Cost of Production.		Average cost per part.		Name of District.	Number of parts of the National Register of Citizens.	Cost of Production.		Average cost per part.	
		1	2	3	4			1	2	3	4
				Rs. as. ps.	Rs. as. ps.					Rs. as. ps.	Rs. as. ps.
BOMBAY, SAURASHTRA AND KUTCH ...	31,565	1,37,267	7 1	4 5 0		Satara North ...	1,206	3,739	11 6	3 1 0	
BOMBAY STATE ...	25,868	1,22,353	5 8	4 11 0		Satara South ...	554	4,806	2 9	8 11 0	
Greater Bombay ...	38	11,988	0 0	315 8 0		Kolhapur ...	998	4,353	6 7	4 6 0	
Banaskantha ...	1,353	3,010	15 3	2 3 0		Sholapur ...	1,007	3,744	15 6	3 11 0	
Sabarkantha ...	1,675	2,628	6 9	1 10 0		Belgaum ...	1,347	6,151	6 3	4 10 0	
Mehsana ...	1,325	5,773	15 0	4 6 0		Bijapur ...	1,307	4,790	13 6	3 11 0	
Ahmedabad ...	813	5,849	10 8	7 3 0		Dharwar ...	1,445	5,368	15 5	3 11 0	
Kaira ...	1,054	5,043	6 0	4 13 0		Thana ...	1,729	6,475	13 0	3 11 0	
Panch Mahals ...	1,975	3,674	15 10	1 14 0		Kolaba ...	1,840	3,770	14 6	2 1 0	
Baroda ...	1,735	3,078	15 9	1 13 0		Ratnagiri ...	1,570	5,824	11 0	3 11 0	
Broach ...	1,203	2,254	1 1	1 14 0		Kanara ...	1,262	2,019	4 4	1 10 0	
Surat ...	2,027	4,785	6 9	2 6 0		SAURASHTRA STATE	4,695	13,987	2 5	3 0 0	
Amreli ...	362	1,012	15 0	2 13 0		Halar ...	670	2,206	9 8	3 5 0	
West Khandesh ...	1,550	3,737	9 6	2 6 0		Madhya Saurashtra ...	1,059	4,448	14 3	4 3 0	
East Khandesh ...	1,521	3,555	14 3	2 6 0		Zalawad ...	709	2,213	2 9	3 1 0	
Dangs ...	310	203	15 0	0 11 0		Gohilwad ...	1,119	1,790	7 7	1 10 0	
Nasik ...	1,722	5,118	4 3	3 0 0		Sorath ...	1,138	3,328	0 2	2 15 0	
Ahmednagar ...	1,364	3,810	11 6	2 13 0		KUTCH STATE ...	1,002	920	15 0	0 15 0	
Poona ...	1,576	5,790	6 9	3 11 0							

APPENDIX IX- contd.

Costing Statement No. III-A

District Census Handbooks (Royal Octavo Size)

District Census Handbook.	Number of pages.	Cost of Production.	Average cost per 100 pages.	District Census Handbook.	Number of pages.	Cost of Production.	Average cost per 100 pages.	
1	2	3	4	1	2	3	4	
BOMBAY STATE				SAURASHTRA STATE				
Rs. as. ps.				Rs. as. ps.				
Greater Bombay	... 170	15,396 5 0	9,056 10 0	Satara South	... 238	21,554 13 0	9,056 10 0	
Banaskantha	... 338	30,611 6 0		Kolhapur	... 305	27,628 13 0		
Sabarkantha	... 390	35,320 15 0		Sholapur	... 308	27,894 8 0		
Mehsana	... 376	34,053 0 0		Belgaum	... 369	35,230 4 0		
Ahmedabad	... 278	25,177 8 0		Bijapur	... 360	32,603 14 0		
Kaira	... 352	31,879 6 0		Dharwar	... 446	40,392 10 0		
Panch Mahals	... 442	40,030 4 0		Thana	... 462	41,841 11 0		
Baroda	... 430	38,943 10 0		Kolaba	... 458	41,479 6 0		
Broach	... 352	31,879 6 0		Ratnagiri	... 404	36,588 13 0		
Surat	... 492	44,558 10 0		Kanara	... 366	33,147 4 0		
Amreli	... 158	14,309 8 0		SAURASHTRA STATE				
West Khandesh	... 386	34,958 10 0		Haler	... 243	22,007 9 0		9,056 10 0
East Khandesh	... 414	37,494 8 0		Madhya Saurashtra	... 331	29,977 8 0		
Dangs	... 92	8,332 1 0		Zalawad	... 358	32,422 10 0		
Nasik	... 430	38,943 10 0		Cohilwad	... 332	30,068 0 0		
Ahmednager	... 368	33,328 6 0	Sorath	... 356	32,241 10 0			
Poona	... 416	37,675 10 0	KUTCH STATE					
Satara North	... 342	30,973 10 0	Kutch	... 292	26,445 6 0	9,056 10 0		

Costing Statement No. III-B

State Census Publications (Demi-Quarto Size)

1951 Census Report for Bombay, Saurashtra and Kutch.	Number of pages.	Cost of Production.	Average cost per 100 pages.
1	2	3	4
		Rs. as. ps.	Rs. as. ps.
Part I	333	50,712 0 0	14,489 0 0
Part II-A	403	58,391 5 0	
Part II-B	454	65,780 11 0	
Administration Report	56	14,489 0 0	

APPENDIX X

**INSTRUCTIONS OF THE REGISTRAR GENERAL, INDIA IN THE MATTER OF
THE PREPARATION OF THE COSTING STATEMENTS**

D. O. letter No. 48/24/52-RG, dated 22nd 1952 from Shri R. A. Gopaldaswami, I.C.S., Registrar General, India, New Delhi to the Superintendent of Census Operations for Bombay, Saurashtra and Kutch, Bombay.

**Subject : Costing Statement for the 1951
Census**

1. I mentioned at our study group that it is necessary to prepare costing statements for the 1951 Census, i.e., statements showing the actual cost of the 1951 Census, and the allocation thereof to the end-products of the census, namely :—

- I. The National Register of Citizens ;
- II-A. The District Census Handbooks ;
- II-B. State Census Reports and other State Census Publications (if any) ;
- and III. The All-India Census Publications.

I have been considering this matter further and I think the method of settlement and allocation of total cost, which is explained below might be adopted.

2. I am limiting the costing process to the stage at which the census Reports are handed over to the Press for printing and publication. The additions required to be made in respect of this last stage (for which responsibility cannot be accepted by the census organisation) can be settled, if necessary, separately after the relevant figures become available.

3. I have used the following symbols to represent the various items of cost required to be taken into account by us :

A = Expenditure on pay of Superintendents, their office Establishments, Allowances, Honoraria and office contingencies. (This is booked expenditure under A—Superintendence for each State Superintendent under the census grant).

B = Expenditure on pay of Registrar General, his establishment, allowances and office contingencies. (Booked expenditure under A in the census grant, less one half of the pay of the Registrar General).

C = Expenditure on Enumeration other than the scriptory charges for the National Register of Citizens paid from the census budget. (This is booked expenditure under B—Enumeration except B-4—National Register of Citizens—and D—Miscellaneous Staff in the census grant).

D = Scriptory charges for writing up the National Register of Citizens paid from the census budget. (This is booked expenditure under B-4—National Register of Citizens in the census budget).

E = Printing charges of Enumeration pads. (This should be assumed to be Rs. 1-2-0 for 1,000 slips supplied centrally).

F = Other Enumeration printing and stationery charges. (Booked expenditure under E in the census budget).

G = Scriptory charges of the National Register of Citizens borne by the State Government. (Booked expenditure).

H = Enumeration charges actually paid by the State Government. (Booked expenditure).

I = Enumeration charges actually paid by local bodies. (Booked expenditure).

J = Cost of paper used for the National Register of Citizens. (The paper was supplied free by the Controller of Printing and Stationery. But the cost of paper should be taken into account for estimating the cost of production of the National Register of Citizens at the rate of Rs. 20 per ream supplied free).

K = Cost of census Medals. (This should be assumed to be Rs. 13-15-6 for each silver medal and Rs. 6-9-6 for each bronze medal).

L = Expenditure on Abstraction and Compilation. (Booked expenditure under C—Abstraction and Compilation in the census grant).

M = Value of articles purchased for use in offices during the 1951 Census. [Booked receipts in respect of articles sold; plus actual purchase price (less estimated depreciation) of unsold articles].

A Statement showing the amounts of items A and C to M should be prepared for each State as **Costing Statement No. I.**

4. Provisional allotment of cost of production

(i) *National Register of Citizens*

(a) A costing statement for the State showing particulars by district should be prepared in the following form:—

Costing Statement No. II

Name of District.	Number of parts of the N. R. C.	Cost of Production.	Average cost per part.
1	2	3	4

(b) The total cost of production for the entire State should be taken to be $\frac{1}{2}A + D + G + J$.

(c) In order to determine the cost of production of National Register of Citizens for each district, items D and G should be first allocated to each district according to actuals. Then $\frac{1}{2}A + J$ should be allocated to the district in the proportion which the population of that district bears to the population of the State.

(ii) *District Census Handbooks and State Census Publications*

(a) The total cost of all the District Census Handbooks issued under the authority of the State Government, as well as of all the State Census Publications issued under the authority of the Central Government should be settled jointly by the formula that it is equal to $\frac{1}{2}A + C + E + F + H + I + K + L - M$.

(b) The cost should then be apportioned among the individual handbooks, reports and other publications separately, according to the proportion which the number of pages of the publication concerned bears to the total number of pages of all the publications.

(Note.—The pages reckoned for this purpose should be the number of printed pages, as received in proof. Where proof print is not received in time, an estimate of the number of printed pages corresponding to the typescript sent for printing may be adopted).

A statement showing the cost thus allocated should be prepared in the form given below

Costing Statement No. III (in two Sections A and B)

Name of Publication.	Number of pages.	Cost of Production.	Average cost per 100 pages.
1	2	3	4

Section A—District Census Handbooks

District Census Handbook of :

----- Dt.

----- Dt.

etc.

Section B—State Census Publications

State Census Report, Part I

Subsidiary Tables

State Census Report, Part II*

Other State Census Publications
(if any)

[* If Part II is published in different sub-parts the cost of production of each sub-part should be given.]

5. Final allotment of cost of production

(i) *All-India Census Publications*—An All-India average will be struck for the cost per 100 pages from the average cost figures provisionally settled for the State Census Publications. This All-India average cost figure will be applied to the All-India Census Publications also and the total cost of production of All-India Census Publications will be provisionally settled.

(ii) The total cost of the All-India Publications thus provisionally settled may turn out to be either larger or smaller than the actual expenditure on the Registrar General and his establishment etc. (item B in para. 3). The deficit, if any, will be distributed among the All-India Publications and all the State Census Publications (but not the District Census Handbooks) so as to $\frac{\text{reduce}}{\text{increase}}$ the cost of production of all of them.

6. I shall be glad if you would arrange to convenience *Statements Nos. I to III* prepared on the basis explained above. The Statements may be got prepared at your convenience and need not be hurried to the prejudice of more urgent work