

Census of India, 1911

VOLUME IX

BURMA

Part III.—Administrative Volume

BY

C. MORGAN WEBB, M.A., I.C.S.

FELLOW OF THE ROYAL STATISTICAL SOCIETY SUPERINTENDENT, CENSUS OPERATIONS



RANGOON

OFFICE OF THE SUPERINTENDENT, GOVERNMENT PRINTING, BURMA
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INTRODUCTION.

This most inadequate description of the census operations for the past two years is written primarily for the benefit of the Census Superintendent of 1921. It has been most hurriedly compiled in the intervals of writing the General Census Report. Considerations of health, which have made it necessary for me to take leave at an early date, have frustrated my original intentions of a much more detailed description of the operations now approaching conclusion. In an administrative report of this nature, there is a strong temptation to dwell on those items of the operations which have been most successful, and to pass by those whose success has been more questionable. There is perhaps a still stronger tendency to ascribe the success of the former to the foresight and energy of the officer writing the report, and to attribute the failure of the latter to the shortcomings of others. I have endeavoured to fight against both temptations, though a hurried reading of the proofs indicates that I have not achieved much success in this direction. Any undue intrusion of the personal equation into this administrative report must be discounted by the fact, that no success could have been achieved but for the willing co-operation of numerous officers and the receipt of a vast amount of unacknowledged assistance. The object of the volume will have been achieved if it affords the same assistance to my successor that I have received from the Administrative Volume written by Mr. Lowis on the census operations in 1901.

C. MORGAN WEBB.

RANGOON, 10th April 1912.

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ADMINISTRATIVE VOLUME

ON THE

CENSUS OF BURMA, 1911.

CHAPTER I.

Preliminary Operations and Enumeration.

MATTERS CONSIDERED PRIOR TO FORMAL COMMENCEMENT OF CENSUS OPERATIONS.

- I. Census Conference.—The operations leading to the census of 1911 may be said to have commenced with the visit of Mr. Gait, C.I.E., Census Commissioner for India, to Burma in the beginning of February 1910. It is true that preliminary enquiries concerning the nature and scope of the census to be taken in the remote portions of the province had been instituted in 1909, but these were limited to a few specific questions, and did not form the basis of continuous and systematic preparations. As soon as the date of Mr. Gait's visit was fixed, a Census Conference was arranged to discuss the questions that still remained unsettled, and to arrange for the initial steps towards the final enumeration to be instituted. The Conference was held on the 2nd February 1910, its members being Mr. Gait, Census Commissioner for India, Mr. Lowis, Provincial Superintendent of Census Operations in Burma in 1901, Mr. Rice, Chief Secretary, Mr. Lewisohn Secretary, Mr. Stirling, Superintendent-designate of the Southern Shan States and myself. It will be more convenient to defer to their appropriate paragraphs a detailed account of the matters discussed at the Conference, but a brief summary of its decisions is herewith given:—
 - (i) That of the areas of Manglün and Kokang omitted from the Census of 1901, East Manglün should be omitted in 1911, but an estimate should be made of the population of West Manglün and Kokang.

(ii) That enquiries should be made concerning the unadministered territory to the north of Myitkyina and the Upper Chindwin Districts, to determine whether any estimate or enumeration might be feasible.

(iii) That, of the areas estimated in 1901, a non-synchronous Census should be taken in the Kachin Districts of North Hsenwi, the Pakôkku Hill-Tracts and the Karenni Subdivision (except the Bre Tract).

(iv) That the Northern and Southern Shan States were not ripe for a synchronous Census, and must be enumerated non-synchronously.

(v) That enquiries be made with respect to the various areas enumerated non-synchronously in 1901, with a view to effecting a synchronous enumeration wherever possible.

(vi) That detailed Provincial Census Tables should not be printed as part of the Imperial Series of Census Volumes.

(vii) That it was not necessary in Burma to record details of the vernacular languages which literate persons could read and write.

(viii) That it was not necessary to make a record of religious sects (except for Christians).

- (ix) That preliminary instructions concerning the preparation of the General Village register should be issued at an early date.
- Preliminary Instructions.—Although the appointment of Superintendent of Census Operations did not commence till the 1st April 1911, it was

necessary to arrange for the issue of preliminary instructions to District Officers before that date arrived. A form of General Village Register was drawn up, and the methods of initiating the district census operations by the creation of census divisions and the recruitment of a census staff were embodied in a letter issued as No. 1063-IV—12, dated the 22nd March 1910, from the Secretary to the Government of Burma. A sufficient number of copies of this letter have not been obtained for preservation in original for the information of the Census Superintendent of 1921, and it is therefore herewith printed:—

* * * * *

operations in connection with the Census which is to be held on the night of the 10th March 1911. Although the date may appear to be far distant, it is of the utmost importance that the initial measures should be taken in hand at once. In particular the preparation of the General Village Register which is the basis of all subsequent operations should now be commenced, so that it may be completed

prior to the 15th June 1910.

"2. Each district will be divided for Census purposes into Charges, Circles and Blocks under the control of Charge Superintendents, Supervisors and Enumerators respectively. The General Village Register (see Form Appendix A) will contain a complete list of all the villages, hamlets and temporary camping places for the district together with the number of houses in each residential unit and the names of persons qualified to act as Supervisors and Enumerators. The most suitable method of preparation will probably be to require the Township Officer to compile the register for his Township and then to have the registers for each Township checked, and, if necessary, translated in the District Office. The registers should be received from the Township Officer by the 1st June 1910 at the latest.

"3. The Block.—The smallest Census unit is the Block containing from 30 to 50 houses in charge of an Enumerator. The size of a Block depends on the number of houses of which the enumerator can effect the final enumeration between 7 p.m. and midnight. The maximum number of houses, situated fairly close together, which can be formed into a block is about 50, but ordinarily the number of houses in a block should not exceed 40. On the other hand, a block should seldom contain less than 30 houses, except in the case of small outlying hamlets or

temporary camping places.

"4. An important departure is to be made from the practice previously followed in Burma, by adopting the principle that the Census Block shall, wherever possible, coincide with the village-tract or the headman's jurisdiction, as defined in section 4 (8) of the Burma Village Act. The principle must not be carried beyond the limits of convenience. If the number of houses should be too great, or the village-tract should include a number of scattered hamlets, rendering the task of enumeration too much for one man to accomplish, there should be no hesitation in splitting up the village-tract into the requisite number of blocks. In effecting this subdivision care must be taken that separate village-tracts are kept quite distinct. No two portions of separate village-tracts should be included in one block. In case of a scarcity of enumerators, it is allowable for one enumerator to carry out the numbering for two adjacent portions of separate village-tracts, provided that they are numbered as distinct Blocks, and a separate enumeration book issued for each. The general rule to be followed is that if it is possible for one enumerator to effect the final enumeration between 7 p.m. and midnight throughout the whole village-tract, the village-tract itself should be adopted as the Census Block.

tract, the village-tract itself should be adopted as the Census Block.

"5. The Circle.—The next Census unit is the Circle which should contain about 10 to 15 blocks, or about 500 to 600 houses, under a supervisor, who is responsible for the work of all the enumerators in his Circle. It is of importance to obtain a high class of intelligence for the persons selected as supervisors, as they will have much to do in the way of instructing enumerators. The size of a Census Circle is determined by the number of villages, the preliminary enumeration of which can be checked by the supervisor during the first ten days of March. In forming Census Circles care must be taken to make them coincide as far as possible with the jurisdictions of the persons chosen to act as supervisors. Thus, if a Revenue Surveyor is the supervisor, his survey charge should form the Census Circle. If a Revenue Circle is found to be too large to form a Census

Circle it can be subdivided into two or more Census Circles with the appropriate

number of supervisors.

"6. The Charge.-The Charge is the third and largest Census Unit. As a general rule, a Charge should contain about 10,000 houses, but so much depends on the density of population that this figure must be taken as affording a rough guide only. Usually a Township will be made into a Charge, but it may be necessary to form a Township into two or more Charges. No Charge should contain portions of two Townships.

"7. In districts where a full Land Records Staff has been entertained it is proposed to use this staff as far as possible. Thus in most districts the ordinary

allotment of duties will be-

Enumerator.—Village headman. Ten-house-gaungs. Other qualified persons.

Supervisor.—Circle Thugyi, Revenue Surveyor, Taiksaye, Myothugyi.

Charge Superintendent.-Inspector of Land Records.

The Township Officer will not be the Charge Superintendent unless the Land Records Staff proves unable to supply the number of Charge Superintendents required. He will exercise general executive supervision over the operations in

subordination to the Subdivisional Officer and the Deputy Commissioner.

"8. I am now to ask you to collect the information needed for the formation of these Census divisions. Appendix A to this letter contains the form of General Village Register in which the particulars required should be tabulated. The Township Officer should be instructed to take up its preparation at once. The more obvious difficulties will be explained by the foot-notes. In order to make the entries in column 5, a house may be generally taken as being the separate residence of a family. When servants' quarters are in separate blocks, each block should be treated as a separate house. In the case of coolie lines each tenement will be counted separately. These suggestions are not exhaustive, and many cases will probably arise to which they cannot be applied. Such cases must be considered and decided on their merits, the primary criterion being that a house is the residence of a family, and if that fails, the test must be that a house is an

enclosed building having a separate entrance from the common way.

'9. Column 6 must be filled in tentatively from a consideration of the entries in column 5 and the numbers of enumerators available. The final settlement of blocks will be made later, after the Charge Superintendents and Supervisors have been appointed. The distribution of Charges and Circles should be shewn on a Census map for the district, prepared on a scale of two miles to an inch. Census Circles should be shewn with a green marginal band and Census charges with a red marginal band. The serial number of the Circle should be shewn in small but distinct black figures placed on the map at about the centre of the Circle, and the serial number of the Charge by means of large red figures at about the centre of the Charge. The District Census maps used for the Census of 1901 will be found in the District Record Room, in accordance with the instructions of Census Circular 29 of 1901, dated the 29th April 1901, printed on page XIX of the Administrative Volume on the Census of 1901. If found suitable they may be accepted but care must be taken to see that they conform to the present instructions.

"10. General Village Register (Appendix A) will be printed in separate leaves, each of which will be ruled for 40 entries. The number of leaves you will require will depend on the total number of entries to be made for your district in column 4. The Superintendent, Government Printing, has been instructed to send you 100 copies of the form and if more are required you will be able to obtain them by indent to that officer. The leaves should be bound up into a District Volume or into a series of Township Volumes, whichever is found more convenient. It should be retained in the District Office until Census operations are finally completed.

"11. These instructions apply generally with a few obvious exceptions to areas over which the Census will be taken both synchronously and non-synchronously. A separate communication will be made to Deputy Commissioners of all districts in which a synchronous census was not taken in 1901 for the complete district, with a view to eliminating non-synchronous, estimated and omitted areas wherever possible.

"12. The preliminary operations for taking the Census in urban areas will be considered subsequently. The present instructions are intended to apply to rural areas only. Every effort should be made to get in the General Village Registers

from the Township Officers by the 1st June and to have it complete in all particulars by the 15th June."

* * * * *

A complete treatment of the points raised by these initial instructions would involve a consideration of matters best deferred till they can be tested in the light of subsequent experience. The areas to be selected as the units for census operations, and the classes of officers to be employed are of paramount importance, and although they must be determined at the earliest possible period, they are questions of too comprehensive a nature to be discussed as merely preliminary incidents. At present the general effect of the instructions and their method of issue, rather than their contents, are to be considered. Such matters are by no means trivial. It is impossible to over-estimate the influence exercised by the first official intimation of an administrative function of the magnitude of a census. It falls as a set of first impressions on minds fresh and eager for information concerning new and interesting duties. It outweighs in the potency of its effects any subsequent instructions that are issued. Its influence can be felt not only during the actual course of the enumeration but also during the processes of abstraction and compilation, to the ultimate completion of the operations. As an abstraction and compliation, to the untilitate completion of the operations. As an illustration, a consideration of the words "and, if necessary, translated" in paragraph 2, will suffice. When these four words were inserted in the draft, it was not appreciated that a primary object of the preparation of the General Village Register was to give to the Circle Supervisor a tabulated record (called the Circle Register) of all the details of his census jurisdiction. As the large majority of officers selected as Circle Supervisors were unacquainted with English, it was of vital importance that the record should be prepared and maintained in Prepared vital importance that the record should be prepared and maintained in Burmese. Unfortunately the words suggesting that translation might be necessary were taken in many districts in a much more categorical sense. In the course of inspection it was found that the original General Village Register prepared in Burmese had frequently been laboriously translated into English in the district office. The Circle Lists and Circle Registers were then prepared in English, and finally re-translated back into Burmese for the use of Circle Supervisors who did not know English. This large amount of unnecessary labour might have been prevented, if instead of suggesting that a translation might be needed, the necessity of both preparing and maintaining all the local census lists and registers in the vernacular had been emphasised.

Another and far more serious point of criticism of the preliminary issue was the omission to have the instructions, and the forms of the General Village Register, printed in Burmese. A very large proportion of the Township Officers in the province are unacquainted with English. In all such cases it was found necessary to have the instructions, and the headings and footnotes of the General Village Register, translated in District offices. It is easy to explain the omission. At the time of issue, the Census Superintendent had not assumed formal charge of his duties, and was busily engaged in other directions. There was no staff to effect the translation. The authorised translation of technical census terms had not been settled, and it was inconvenient to publish any vernacular instructions until a standard terminology had been fixed. Finally, it was hoped to issue a translation as soon as census operations formally commenced. Unfortunately these hopes were not realised. The first of April came, and each day presented its full tale of work in the creation of an office, in estimating and indenting for numerous requirements, and in framing the Census Code and the Census Manual. Superintendent had not then discovered that his work was to be a ceaseless race against time, that a task once commenced must be completed in its entirety before being laid aside, and that once an opportunity was allowed to slip by, it could not be recalled. Consequently translations of the preliminary instructions and the forms of the General Village Register were never issued. The omission caused great delay in many district offices, the time taken for translation before transmission to Township Officers nullifying the advantage of the early issue. Moreover the local translations varied greatly in completeness and accuracy. Even when carefully and conscientiously performed, technical census terms were often incorrectly applied, while in some instances the translations were misleading or incomplete.

I have dealt at some length on the defects in the method of issue of the initial census instructions because mistakes at that early stage of the preparations were so easy to make and so difficult to rectify. It seemed so necessary to get

the work started early that there was a great temptation to undue haste. Had the important effect that the preparation of the General Village Register would have on the subsequent course of the operations been realised, Burmese translations of the instructions and the General Village Register would have been issued simultaneously with the initial letter. Such a course would have much more than compensated for the slight delay that would have ensued, and would have considerably facilitated the work of preparation in district and township offices.

3. Census Chronology.—Having discussed a few of the preliminary matters which needed treatment before the formal commencement of census operations on the 1st of April 1910, it is necessary to avoid any attempt to consider matters in purely chronological order for the rest of this volume. Though chronology is discarded as the basis of a description of the operations, the impression that it is a merely secondary factor that can be ignored with impunity must be avoided. It has already been suggested that the work of a Census Superintendent is a continuous race against time. He must arrange that all the districts within his jurisdiction shall advance step by step with military precision towards the final day of the enumeration. He must supervise the recruitment of a staff of considerable dimensions, each member of which must be trained to perform an elaborate scheme of duties on fixed appointed dates. And finally, he must superintend the supply and distribution of large stores of material, each item of which must arrive in the hands of the appropriate officer at the precise moment of requirement.

The dates of the performance of the principal operations have been settled by the experience of previous enumerations in India. They are prescribed in the Imperial Code of Census Procedure and form the basis on which the Superintendent works out his schemes of training and supply. It was found extremely useful to construct a formal calendar of all the relevant dates. Originally this was intended solely for the use of the Superintendent himself, but one or two Deputy Commissioners, who saw it, expressed the opinion that it would be of great value to district officers in the course of the operations, and it was therefore decided to publish it for general reference. A first and tentative census calendar was incorporated into the preface of the Census Code, and published with the first three chapters of the Code early in April. This was followed by a supplementary calendar, expanding and completing the one first published, and issued as the fourteenth and final chapter of the Code in September. The two calendars have been reproduced as Subsidiary Tables IVA and IVB of this chapter. Specialised calendars for the use of Charge Superintendents and Circle Supervisors were compiled, and included in the respective instructions to these two classes of officers which formed Chapters I and II of the Census Manual. These have been reproduced below in paragraph 29. All classes of officers concerned testified to the extreme utility of the publication of these various calendars. They gave a graduated view of the operations as a whole, and of the duties of each class of census officers; the rexhibited the relative importance and the time to be devoted to each of the series of census functions, and they supplied the connecting links between the initial preparations and the final enumeration. The most vital criticism to be made as to their use, is that some officers found in the calendars an easy alternative to the perusal of the entire census literature published. They found supplied to their hand a peptonised summary of their responsibilities, and contented themselves with this diet of concentrated essence; but this abuse of a valuable provision in a few cases did not outweigh its undoubled utility to the great majority of officers who applied it to its legitimate functions only. At headquarters, the calendar was a continual check and guide. Each item suggested a series of questions relative to the appointment and training of the officers who were to carry it out, to the issue of instructions concerning their method of performing it, and to the supply of the material with which it was to be effected. The confidence of the district staff would have been broken if they had been precluded from keeping to the calendar by any lapse in the performance of the functions of the central department. No such lapse was brought to my notice. Throughout the whole course of the operations, not one complaint that any item in the calendar was delayed owing to any such cause, was received. The preparations moved forward steadily and continuously towards the enumeration. In two instances only, due entirely to special and local causes, the times arranged for the preparation and report of provisional totals were disregarded, but these were the only serious deviations from the prescribed calendar. These special cases and causes will be treated subsequently in their appropriate paragraphs. Generally, I consider

that the calendars issued played a most important part in synchronising the various stages of the census preparations, and in surmounting chronological difficulties.

4. Conflict of Jurisdictions.—Before considering the different classes of census divisions and the grades of officers to perform the various functions pertaining to the census enumeration, it is necessary to consider an anomaly which is to the best of my belief peculiar to Burma. The Land Revenue Records of the Province are maintained by means of one set of territorial units, while its revenue and general administration is conducted according to a different and unconnected series of territorial units. The Land Records Department is pre-eminently the source from which the mediant grades of census officers must be recruited. Its operations extend over the cultivated area of the regularly administered portion of the province. Its members are specially selected for their skill in arithmetic, they are subsequently trained in the use of statistics, and their daily duties give them constant practice in the treatment of masses of figures. But they live, and move and have their being, in a world composed of kwins, of surveyors' charges, and Land Records Inspectorates, departmental jurisdictions which have no necessary connection with administrative units of the Village-tract and the Township. The primary unit of the Land Revenue Department is the kwin, an area nominally determined by natural features and adopted primarily for purposes of survey. Frequently it is an arbitrary area ignoring alike natural and administrative boundaries. Yet it is the basis on which the maps, the revenue records, and geographical and agricultural statistics of the province are based. From a Land Records departmental point of view, the Village-tract is an unnecessary and arbitrary area, extending irrelevantly and irregularly across kwin boundaries, and necessitating complicated subdivisions and combinations of the departmental kwin totals.

This point may be illustrated by a personal experience. Towards the end of 1908 I was engaged in the formation of a new township in a delta district. Several instances of a township boundary cutting through a village-tract, and causing the anomaly of the jurisdiction of a village headman being in two separate townships having been reported, it was determined that further instances should not be introduced in the new township. The boundaries were most carefully prepared to that effect by the District Superintendent of Land Records, and the notification forming the township was stringently checked to ensure that by no possibility should a village-tract be cut in two by the township boundary. Yet a few months subsequently, when the revenue assessment was made, the Akunwun (the head revenue assistant in the district office) reported that in preparing the assessment rolls, the Land Records Department had departed from the notified boundary, and had separated eight village-tracts, each into two portions in two separate townships. The official notification following village-tract boundaries had been ignored, and the departmental kwin and surveyors' charge boundaries substituted, by the junior officers of the department. This experience serves to illustrate how in such an important matter as the determination of a township boundary, where the liability to error was anticipated, and precautions were taken against its committal, the system of dual units, one for administrative and one for record purposes, leads to confusion.

Township.	Land Records Inspectorate
Insein {	1
msem)	3
Taikkyi	2
Talkkyi	4
Tantabin	1
Tantabin	4
(5
Twante}	6
(. 7
Kungyangôn	7 8
Kyauktan	9
Thôngwa	10
Kayan	11

Nor is the discrepancy between administrative and Land Records units confined to the kwin and the village-tract. Originally it was intended that the jurisdiction of the Land Records Inspectors should coincide with, or be in harmony with, the township boundaries. But recent changes in township boundaries have been so frequent that in many instances this harmony no longer exists. The same district (Hanthawaddy) from which the preceding illustration was taken will again serve. Allotting serial numbers to the eleven Land Records Inspectorates in the district, the marginal statement show the extent of the divergence. In three cases the jurisdictions coincide. The remaining seven Inspectorates are distributed over the remaining five townships in a most bewildering manner. One Land Records Inspector exercises jurisdiction in three townships and three townships are each

served by a set of three Inspectors. Such a conflict of territorial jurisdictions,

is, I believe, exceptional. Still it is a significant fact that it was in this exceptional district, and in the very subdivision of this district which has afforded an illustration of the resulting confusion, that a grave error in reporting the census provisional totals occurred. The exact connection between the conflicting jurisdictions and the error will be considered subsequently. At present it is introduced to indicate the relevancy of the matter here introduced to the conduct of the census operations.

5. Village Unit.—But the existence of overlapping territorial jurisdictions is far more relevant than to point a moral with respect to an error to which they may have contributed. It is a determining factor in the much debated question whether the primary census unit should be the village-tract or the hamlet, the revenue village or the residential village, the technical or the natural village, the village headman's jurisdiction or the separate collection of houses. One of the most insistent notes of the report of Mr. Lowis in 1901 was his hostility to the adoption of the revenue village as a census unit. The present departure from his suggestions is so marked that a full consideration of the circumstances pointing to the two contrary solutions of the problem is needed. The following quotations from the report of 1901 give the case against the Village Tract :-

"Looking back at the matter in the light of two years' experience of Census arrangements, I am inclined to think it would have been better to apply the term (Village) not to the area artificially called into existence by legislation, but to the village known as such in the ordinary acceptation of the term, i.e., the hamlet, or collection of houses called by a separate name. This was practically the interpretation put upon it in 1891. The main objection to the treatment of the administrative as opposed to the use of the natural or structural unit as a village for the purpose of the census, was that at times doubt arose as to which of the two was referred to in the Code and Circulars." (Paragraph 3, Administrative Volume.)

"I am very strongly of opinion that at the next Census, the expression 'Village' should, if difficulties are to be avoided, be the natural and not the administrative village."

(Paragraph 3, Administrative Volume).
"The following few lines will indicate where in the light of the past two years' working,

I think matters might be improved at the next Census."

(a) "First and foremost the 'Village' for Census purposes should be natural not the artificial village; the collection of houses, not the group of hamlets in charge of the village headman" (Paragraph 36, Administrative Volume.)

"At the next Census, I would advise that the artificial village area be ignored and the hamlet taken as the initial unit." (Paragraph 10, Report, Part I.)

It is certain that in 1901 the objections to the adoption of the village-tract as the primary census unit were many and grave. At that time it had not yet received a distinctive official name, and it was alternatively referred to under the terms "village" and, "village headman's jurisdiction." The latter term was too cumbersome for use on every occasion, while the former was open to numerous conflicting interpretations. Moreover, the boundaries of village-tracts were both vague and uncertain. Their demarcation had not been effectually performed, and such maps and records as existed were extremely defective. Amalgamations and subdivisions of village charges were frequently effected by local officers with reference to the exigencies of the moment, and without consideration for the claims of a continuous policy. Over a large portion of the province, the village headman was a harassed, worried, unremunerated official, with a strong tendency to degenerate into the village drudge. And finally, as a culminating disadvantage, the enumeration was supervised by a class of officers to whom the village-tract was a secondary and irrelevant area, and who could not be brought to realise its importance as an administrative unit.

In the ten years that have elapsed since Mr. Lowis recorded his opinions, great progress has been made in raising the administrative status of the village-tract. It has received an official designation, removing the many possibilities of confusion with other units, which formed the main objection against its adoption put forward by Mr. Lowis. Schemes of village jurisdictions for each district are now mapped and recorded, and any amalgamations, subdivisions or other changes in area, must be submitted to superior authorities for approval. The village-tract is therefore becoming a fixed, stable and definite unit to a degree not hitherto realised. A marked approach has also been made towards the ideal of having a paid headman in every village-tract. The abolition of the taikthugyi in Lower Burma has not been effected quite so completely as the following quotation from the Provincial Series of the Imperial Gazetteer would indicate:-

"In Lower Burma, the ywathugyi or village headman, in charge of a single village or of a group of villages small enough to be efficiently administered by a single village official, has, so far as the collection of revenue is concerned, taken the place of the taikthugyi, or circle headman, whose jurisdiction embraced a much larger area."

At the time of writing the transformation has been completed in two minor districts (Mergui and Northern Arakan) only, and it will be some years before it is thoroughly effected. Each year, however, marked progress is being made in the required direction. With the increase in the number of paid village headmen the administrative importance of the village-tract has improved. From being an unnamed, indefinite and fluctuating area, it has become a definite and important administrative factor, with a special designation of its own, free from many of the objections which operated against its adoption for census purposes in 1891. So great a change has been effected, that at an informal discussion with Mr. Gait in February 1910, Mr. Lowis was of the opinion that existing conditions were such that he would be inclined to favour the adoption of the village-tract as a census unit.

- 6. Inadequacy of existing Village Records.—The fact that great progress has been made must not be taken to suggest that the records of village administration maintained in district offices are correct, or adequate, or up to date, or that enumeration by village-tracts has been a simple and automatic operation. No greater contrast can be imagined than that between the systematic accuracy and completeness of the records of the purely departmental survey units, on the one hand, and the inaccuracy, the confusion, and the inadequacy of the records of the real administrative units on the other. There are supplied to every district in profusion, beautifully printed and compact index maps shewing the position and serial order of such merely departmental areas as the kwin, the surveyors' charge and the Land Records Inspectorate. But there are no corresponding maps shewing actual administrative areas, such as village-tracts, police-station jurisdictions and townships. The departments requiring them have not the ability to prepare and to maintain them, while the department possessing the requisite ability has not the necessary interest in their maintenance. Attempts to check the General Village Census Register by means of the records actually in use for administrative purposes had to be abandoned early in the course of census inspection, as existing records proved to be too fragmentary and defective to be accepted as a reliable basis of comparison. Column 3 of the General Village Census Register, intended to contain the administrative number of each village-tract frequently had to be left blank, and even when filled in, breaches in the continuity of the numbers rendered the entries of but little utility. It would be anticipating matters to describe in detail the almost endless complexities encountered in compiling the Village The contradictions between the General Village Register and Census Tables. the Circle Lists, and between both and the official scheme of village jurisdictions, some village-tracts apparently being left high and dry without any population whatever, and others appearing under a bewildering variety of names which changed from record to record in an arbitrary and incoherent manner appeared at first to defy any possibility of reconciliation. There was not a district in the province which supplied a complete, consistent, and continuously numbered list of villagetracts, free from the necessity of alteration and amendment during the operations.
- 7. Village Census Tables.—The inadequacy of the existing village records suggested that the material collected during the census operations shloud be utilised to provide authentic lists of village-tracts for each district. In 1901, following the adoption of the residential hamlet as the census unit, the Village Census Tables were printed, and village populations shown, by residential hamlets. Enquiries from district officers elicited the fact that the mass of detail so given was not generally appreciated. It was shown that a large number of the hamlets entered were merely descriptive names of census blocks, the hamlets having no existence in actual fact. Many were either camps, landing places, temporary collections of huts, or portions of larger residential units, to which special names were given for census purposes. It was further considered that lists of hamlets had little or no administrative value, the administrative unit being the village-tract, and even the few officers who advocated the retention of the list of hamlets considered it imperative that the should be grouped under their respective villagetracts and an extra column added to give the village-tract. In the course of the census operations, a test of the utility of the lists of 1901 was afforded, by an attempt to calculate the population transferred from one township to another by administrative changes in township boundaries between 1901 and 1911. Deputy Commissioners were requested to indicate the residential units in the village lists

of 1901 in all cases where such changes of township boundaries had been effected. In a few instances only was it possible to comply with the requests. Wherever the transfers had been of a substantial nature, reports were received that it was impossible to identify the hamlets and population transferred, by means of the village census lists of 1901. This practical test confirmed the opinions of the majority of the officers consulted, that the lists of 1901 were too unwieldy and too detailed for constant reference, and that they gave a mass of unrequired information, while omitting to give much needed information with respect to the actual village areas used for purposes of administration.

It was therefore decided that the village lists for 1911 should be transformed

in the following particulars:-

 they should be prepared for village-tracts, and not for residential hamlets,

(ii) they should be prepared in district volumes, and not in two bulky provincial volumes,

(iii) they should be published as an integral part of the B Volumes of the District Gazetteer.

By these changes it is hoped that not only is the expense of printing and publication reduced, but that the tables will be of greater value, and that the joint issue with the B Volume of the Gazetteer will enhance the value of the latter as a work of every-day reference for the district officer.

8. Census Divisions.—The threefold series of census divisions, the block, the circle and the charge, the respective units for the functions of enumeration, supervision and superintendence, have been firmly established by the experience of previous enumerations. But the application of these census divisions to actual administrative areas affords considerable scope for diversity. At the census of 1901, the block was associated with the hamlet or residential village, every separate collection of houses, however small, being treated as a separate block. At the current census, in pursuance of the policy of treating the village-tract as the basis unit for showing the distribution of population, the block was either the village-tract, or such portion of the village-tract as proved convenient for the purposes of enumeration. In the remote and specially administered portions of the province, the hamlet and the village-tract generally coincide, population being too scattered, and administration not being sufficiently specialised, to permit the amalgamation of several hamlets under one headman.

In the preliminary instructions, the Revenue Circle was suggested as a convenient administrative unit for adoption as the Census Circle. But with the abolition of taikthugyi, or Circle Headman, in Lower Burma, the Revenue Circle is rapidly losing its significance. Over a large portion of the province, the Revenue Surveyor's Charge was adopted as the unit for census supervision. It was found to be most suitable both on account of its size and the population it contained, and also because it comprised the jurisdiction of a skilled officer in the person of the Revenue Surveyor, suitable for the performance of the functions of Census Supervisor. But it had one great drawback. The Revenue Surveyor's Charge, being formed of a certain number of survey units or kwins, has boundaries which do not necessarily coincide with those of other administrative divisions. The number of single village-tracts falling into two separate surveyor's charges is considerable. In adopting the surveyor's charge as a Census Circle, it was necessary to arrange that such divided village-tracts should be treated as a whole and should not be shown in the Circle Lists as two separate entities. Both in the Census Code (Chapter II, Article 6), and in the Census Manual [Chapter II, Article 3(d)], it was laid down that village-tracts should not be permitted to fall into two Census Circles. In the course of inspection, many infractions of this rule were detected and rectified. But it was not till the preparation of the lists of village-tracts after the census was over, that it was discovered how generally the rule had been disregarded. Revenue Surveyors adhered strictly to their personal jurisdictions in the great majority of cases. Even when the Circle Lists had been prepared according to the regulation, and Census Circles had been made up to avoid divided village-tracts, there were one or two cases where they were subsequently re-adjusted by neighbouring Revenue Surveyors so that each might remain in his own jurisdiction. With this exception, Revenue Surveyors' charges proved most suitable for Census Circles. Where such charges were not in existence, the Revenue Circle, the Police-Station jurisdiction, the Forest Range, or other suitable

administrative area was selected. The selection primarily depended on the

class of officer available to undertake the duties of Supervisor.

The Census Charge was based on the township. Where a township was considered to be too large for a single Charge Superintendent to manage, it was divided into two or more charges. Large forest areas were generally made into special charges under forest officers as superintendents. Where a portion only of a township was under the administration of the Land Records Department, such portion was made into a charge under the Land Records Inspector, the remainder being a separate charge usually under the Township Officer. Separate charges were necessarily made if any portion of a township were

treated non-synchronously.

The principal difficulties in the formation of charges was the want of correspondence between the Departmental Land Records jurisdictions and the township areas, already mentioned in paragraph 4. There is no system for automatically changing the boundaries of the Land Records Inspectorates, simultaneously and in harmony with, changes in township boundaries, and consequently the two classes of territorial units have tended to diverge from any initial correspondence with each other. Several errors of this nature were detected in the course of Inspection. Despite the explicit instruction that " No charge should contain portions of two townships," census charges had been formed running into two townships by following the jurisdictions of the Land Records Department instead of township boundaries. Another difficulty was the treatment of forest areas. Reserved forests are formed without reference to township boundaries, and being out of the ordinary course of administration, it was a matter of difficulty to reduce forest charges to township areas. The forest officer, who was generally Charge Superintendent of a forest area, could not be brought to see the importance of cutting up his charge, a complete and undivided administrative entity, into apparently irrelevant subsidiary charges following township boundaries.

Detailed statements of the total number of charges, circles and blocks into which the area of the 41 districts and territories of the province was divided is

Class of census.		Number of			
		Charges.	Circles.	Blocks.	
Non-synchronous .		454 42 4	5,258 493 71	64,069 19,81 8 834	
All Classes (1911) .		500	5,822	84,721	
1901 .		390	6,068	63,958	

given in Subsidiary Tables IA and IB of this chapter. The marginal statement gives the numbers in a form convenient for reference. There were 500 charges as against 390 in 1901, but despite a somewhat larger census area the number of circles diminished from 6,068 The number of to 5,822. blocks increased from 63,958

to 84,721, but this was largely due to the system adopted in 1911 of treating every residential village in the Non-synchronous and Estimated Tracts as a separate block, irrespective of the question whether it had a separate enumerator. As will be subsequently seen, the formation of the smaller census units of circles and blocks in the non-synchronous and estimated areas was largely nominal. No special scheme was prepared in advance beyond taking existing administrative units and dividing them among the number of census officers available. The census circle and census block have therefore but a vague meaning in such special areas, as compared with the clear and definite meaning attached to these terms in the area of synchronous enumeration.

A second marginal statement is given shewing the average number of houses and the average population enumerated in each of the three classes of census divi-

1.1	Number of houses per			Population per		
Class of census.	Charge,	Circle,	Block,	Charge.	Circle.	Block.
Synchronous Non-synchronous Estimate	4,726 7,485 2,960	408 638 167	33 16 14	23,097 37,388 14,751	1,994 3,185 831	163 79 71
All Classes	4,943	425	29	24,231	2,081	143

sions. The average size of the census block, within synchronous which worked out to 33 houses, with a population of 163 persons, was well within the limits mentioned in the instruc-

tions, viz., 50 houses if fairly close together, but ordinarily not to exceed 40 houses.

Still confining consideration to the synchronous area, the number of circles was 5,258, giving an average of slightly over 12 blocks and 408 houses per circle. The instructions suggested 10 to 15 blocks and 500 to 600 houses for each circle, and the resultant figures show that in the main they were closely followed. In Hanthawaddy, Bassein, Myaungmya, Salween, Bhamo, Ruby Mines and Yamèthin Districts, the circles were too large, and could have been reduced with great advantage. The instructions suggested that a charge should contain about 10,000 houses, but local officers, using their discretion, subdivided townships wherever possible, giving one portion to the Township Officer and one portion to the Land Records Inspector or Police or Forest Officer, according to circumstances. This effected a reduction in the average size of a charge to 4,726 houses, a much needed reduction in a province so sparsely populated as Burma. It is the area to be covered, rather than the population or houses within the limits of a charge which determines the work of the Charge Superintendent, and subdivision was not carried a bit too far for efficient superintendence.

 Census Officers.—Corresponding with the threefold series of census divisions, the block, the circle and the charge, were three classes of census

officers, the Enumerator, the Circle Supervisor and the Charge Superintendent. A fourth class, the District Census Officer, was necessary to assume control in the 41 districts and territories in the province. Subsidiary Tables I-A and I-B, give in detail the numbers of officers appointed

	Number of				
Class of census.	Charge Superintendents.	Circle Supervisors.	Enumerators.		
Synchronous Non-synchronous Estimated	452 40 4	5,258 435 71	64,069 976 28		
All Classes	496	5,764	65,083		

and their distribution. Altogether 496 Charge Superintendents, 5,764 Circle Supervisors and 65,083 Enumerators were appointed. Wherever the Land Records jurisdiction extended, Land Records Inspectors were appointed Charge Superintendents. In a few districts they superintended the whole of the operations in rural areas. In other districts, large townships were divided into two charges, the Township Officer superintending one, and the Land Records Inspector superintending the other. In areas beyond the jurisdiction of the Land Records Department, Charge Superintendents were either Township Officers, Forest Rangers, Inspectors or Sub-Inspectors of Police. In the specially Administered Territories, Assistant Superintendents were usually the Charge Superintendents of their own jurisdictions.

In the areas under Supplementary Survey, Circle Supervisors were invariably Revenue Surveyors, Taikthugyis (Headmen of Circles) or Taiksayes, (Circle Clerks), the general rule being that each officer was Circle Supervisor of his normal administrative jurisdiction. Beyond the limits of Supplementary Survey, Myothugyis (headmen of groups of villages) police and forest officers, and other executive officers of various ranks, and village headmen of superior literary attainments, were called into service. For enumerators, the village headmen and any literate persons who volunteered for service were appointed. Clerks, and persons of the trading and teaching classes, proved the most satisfactory among the non-official enumerators. The modification of the triple grading of officers into Charge Superintendents, Circle Supervisors and Enumerators, rendered necessary by the different conditions obtaining in the areas under special census treatment will be subsequently explained.

10. District Census Officers.—It was unfortunate that when the sanction of the Settlement Commissioner and Director of Land Records was obtained for the utilisation of the Land Records Staff as Census Charge Superintendents and Circle Supervisors, the question of the appointment of the Superintendent of Land Records as District Census Officer was not raised. In several districts, where the whole of the operations were under the superintendence and supervision of the officials of the Land Records Department, and where the Deputy Commissioner was unable to perform the functions of District Census Officer himself, the Superintendent of Land Records was naturally marked out for selection. He is the immediate administrative superior of the secondary grades of Census Officers, he dictates their ordinary duties and their movements, and he controls the customary channels of communication between them and the district office.

Moreover, he is the primary district authority on questions of maps, and areas, and boundaries, matters of vital importance in census operations. Several Deputy Commissioners appointed Superintendents of Land Records as District Census Officers, but on hearing this, the Settlement Commissioner and Director of Land Records protested, and the appointments had to be cancelled. The effect of this veto was to add considerably to the difficulties of the conduct of operations by Deputy Commissioners. In few districts was there any other official with the qualifications and opportunities for the post, and the Deputy Commissioner had in most instances to remain in nominal control as District Census Officer. In some cases, this meant that the actual control devolved on an unqualified subordinate. It seems to be essential that where the secondary grades of census officers are recruited from the Land Records Department, the Superintendent of Land Records should be the District Census Officer. Several Deputy Commissioners expressed the opinion that most of the advantages of utilising the services of the Land Records Staff were wasted by the difficulties of communication and control, due to the inability to place the whole district operations into the hands of the Superintendent of Land Records. It will be necessary in 1920 to raise the question and have the matter settled prior to the issue of the preliminary instructions. The selection of Charge Superintendents and Circle Supervisors may depend on the controlling officer appointed. If the Superintendent of Land Records is not appointed District Census Officer, then the balance of advantage appears to suggest that the Township Officer, and not the Land Records Inspector, should be the Charge Superintendent.

II. Areas requiring Special Treatment.—There are many areas in the province, in which for various reasons a full synchronous census could not be taken. There are some regions politically and geographically within the limits of Burma, but over which no administration whatever has been attempted. There are others in which the degree of administrative control is of the most shadowy description. There are still other areas where the proportion of literates is so small, that sufficient enumerators cannot be obtained locally to enable a census to be taken, without recourse to paid assistance from without the area. There is another class of areas, in which there is such a sparsity of population, and the number of controlling and supervising officers is so few, compared with the magnitude of the area over which the population is distributed, that considerations of time and space preclude the possibility of synchronous treatment. It is necessary in all such cases to devise special methods of enumeration, approximating as near as possible to a synchronous enumeration as conditions will permit. Where even this modified form of enumeration is not possible, an estimate, based on an actual count of the inhabitants of a number of selected villages, supplemented by an actual count of the number of houses in the total area so estimated, is effected. There still remain areas, in which even this elementary procedure is impossible, and which must perforce be omitted from the operations. The following statement gives for 34 areas the method of treatment adopted at the enumerations of 1901 and 1911.

Special Census Tracts.

Serial No.	District or Territory.	Nature of area specially treated.	Treatment in 1901,	Treatment in 1911,
3 4 5 6 7	Upper Chindwin Myitkyina Northern Arakan Pakôkku Hill Tracts Northern Shan States	Unadministered Territory Unadministered Territory Unadministered Territory Unadministered Territory Unadministered Territory East Manglun West Manglun Kokang	Omitted Omitted Omitted Omitted Omitted Omitted Omitted	Omitted. Omitted. Omitted. Estimated. Omitted. Estimated. Estimated.
8	Upper Chindwin	Kampti State (remote from river)	Estimated	Synchronous.
9	Myitkyina	Kachin Hill Tracts east of Irrawaddy.	Estimated	Non-synchronous.
	(Karenni State (Brè Tract)	Estimated	Estimated.
11 }	Southern Shan States	Karenni State (except Brè Tract).	Estimated	Non-synchronous.
12	Pakôkku Hill Tracts	Administered Territory	Estimated	Non-synchronous.
13	Northern Shan States	Kachin District of North Hsenwi.	Estimated	Non-synchronous.
14	Bhamo	49 Kachin villages	Estimated	Non-synchronous.

Special	Census	Tracts-conc	luded.
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Serial No.	District or Territory.			Nature of area specially treated.	Treatment in 1901.	Treatments in 1911.
15	Northern Shan	States		All (except 5, 6, 7 and 13	Non-synchronous	Non-synchronous.
16	Southern Shan	States		All (except 10 and 11 above)	Non-synchronous	Non-synchronous.
17	Chin Hills			All	Non-synchronous	Non-synchronous.
13	Northern Arak	an		All except 3 above	Non-synchronous	Non-synchronous.
10	Akyab	***		Minbya Chin Hills	Non-synchronous	Non-synchronous.
20	Kyaukpyu			Poko Chin Hills	Non-synchronous	Non-synchronous.
21	And the second s			Part of Ananbaw Circle	Non-synchronous	Synchronous.
222.45			(Several Revenue Circles	Non-synchronous	Non-synchronous.
22 }	Amherst	••	1	Pattama and Dutiya Kayin Circles.	Non-synchronous	Synchronous.
24	Thatôn	660		Hlaingbwè	Non-synchronous	Synchronous.
257			(Kyauktwin Circle	Non-synchronous	Non-synchronous.
265	Tavoy	**X	- 1	Kamaung Thwe Circle	Non-synchronous	Synchronous.
27	Mergui	Mai	`	Maliwun and Bôkpyin Townships, Pawut Circle and the Salons.	Non-synchronous	Non-synchronous
28	Bhamo	•••	•••	About two-fifths of the district.	Non-synchronous	Non-synchronous.
29}	Myitkyina		{	Certain villages in the Myitkyina Township.	Non-synchronous	Synchronous,
30)	8. 8		(Kachin Hill Tracts	Non-synchronous	Non-synchronous,
31	Katha		`	Kachin Hills	Non-synchronous	Non-synchronous.
32 }			(Ngadaung and Kodaung	Non-synchronous	Non-synchronous,
33 }	Ruby Mines		1	Rest of Momeik State	Non-synchronous	Synchronous.
34	Upper Chindw	in		Kampti State (near the river).	Non-synchronous	Synchronous.

In 1901, these were seven areas entirely omitted from the census operations. In 1911, these were reduced to four, an estimate having been effected in West Manglün and Kokang, and in the unadministered territory of the Pakôkku Hill Tracts. Of the four areas still omitted, three are entirely unadministered, and there is practically no effective administration in the remaining area, East Manglün. In 1901 there were seven estimated areas. A synchronous census has now been effected in one of these, Kampti State, in the Upper Chindwin District; and a non-synchronous census in five of the remaining areas. The Brè Tract of Karenni in the Southern Shan States was the only area in this group in which an advance

in the class of census was not possible. Of the twenty areas treated non-synchronously in 1901, thirteen were necessarily enumerated in a similar manner in 1911, only seven being transformed into synchronous areas. The marginal statement indicates the nature of the advance made in these thirty-four areas specially treated in 1901. Eight have now passed beyond the necessity for special treat-

Class of area.	1911.	1901.
Synchronous	8	
Non-synchronous	18	20
Estimated	4	7
Omitted	4	7

ment and a moderate advance in the more backward areas to a higher stage of enumeration has been effected.

In all the non-synchronous areas, with the exception of the Chin Hills and the administered portion of the Pakôkku Hill Tracts, the census effected was equivalent to the ordinary census minus the final check on the 10th March. In the Chin Hills there were two enumerations, the preliminary enumeration occupying the period from July to October 1910, and the final enumeration taking place between December 1910 and February 1911. In the administered portion of the Pakôkku Hill Tracts, it was found impossible to work on the ordinary enumeration schedule and a modified census omitting the ages, literacy, infirmities and occupations of the population, was effected. The nature of the estimate conducted in the estimated areas has already been suggested. Each known village was visited, and a return made of the number of houses and the race or tribe of the inhabitants. An actual count of the inhabitants by sexes was performed in as many villages as possible, and from the average population per house in these villages, the probable population of the remaining villages was calculated. No great degree of accuracy can be claimed for the results, but they afford some indication of the nature and extent of the population of these backward areas, and pave the way for a more accurate enumeration in future.

12. Census Officers in Special Census Areas.—The principal reason determining the formation of Special Census Areas requiring separate treatment was the dearth of suitable officers for effecting the census enumeration. In the

synchronous areas, there were generally sufficient officials to undertake the duties of Circle Supervisor and sufficient volunteers to perform the duties of Enumerator. But in the Special Census Areas, Enumerators were not available to any degree of adequacy. The method adopted was practically to combine the functions of Supervisor and Enumerator. The class of officers who would in normal areas, have been appointed Circle Supervisors, were expected to perform the duties of Enumerator over an area corresponding to a Census Circle, supplemented wherever necessary by paid assistance. Not being limited to the preparation of the record for one particular date, they were able to travel from village to village enumerating as they went, and then putting aside the records obtained. In this manner, it was possible to enumerate large areas with a comparatively small staff. The distinction between Circle Supervisors and Enumerators in such areas is largely nominal, being largely the distinction between officials, and paid outsiders, rather than indicating any differences in the functions performed.

 Date of Census Operations.—The date fixed for the final enumeration was Friday, the 10th March 1911, which corresponds to the Burmese date of the 11th Increase of Tabaung 1272. In some respects, the date was most unsuitable. The full moon of Tabaung is the occasion of large pagoda festivals in the Rangoon, Minbu, Thatôn and Bhamo Districts especially, and on a smaller scale in most of the districts of the province. The 11th day of the moon is so near to full moon, that large numbers of persons are away from their homes either on their way to the festivals, or actually in attendance, by that date. Moreover the 10th March synchronised with the most busy period of the rice-milling industry in the large towns of the province. An earlier date would have been more suitable in both respects. Nor do I think Friday is a suitable day for the final enumeration in Burma. Indeed, the date proved to be for several reasons about the most unfortunate date that could have been selected. The Census Superintendent is of course to blame for not having anticipated and represented the difficulties. He was consulted immediately prior to the commencement of the operations, but the time permitted for decision was not sufficient to permit of n a thorough enquiry into the question. Nor, even if time had been adequate, would it have been possible to anticipate the culminating disadvantages of the date, subsequently described in paragraph 42. Anticipating the conclusions therein deduced, if the census takes place during the Burmese month of Tabaung it should not be later than the 8th or 9th, and it should not be later in the week than Tuesday or Wednesday. The light of the moon on these dates up to midnight would be adequate for the proper conduct of the operations. Moreover, the earlier in the year it is taken the better for the enumeration in rice-milling centres. With each day in the latter end of February and in March the stress of work grows greater, and it was with the greatest difficulty that the managers of the rice mills in Rangoon could be pursuaded to maintain their interest in the operations up to the date of the final enumeration.

INITIAL OPERATIONS.

 Formal commencement of Census Operations, 1st April 1910.— The previous discussion has been concerned with questions which demanded consideration before the actual commencement of census operations. determination of the areas demanding special treatment, the classes of officers to be appointed, and the general instructions for the initiation of operations in each district, cannot be postponed till the date of the formal appointment of the Census Superintendent. The matters which demanded his immediate attention on assuming charge of his duties on the 1st April 1910 were :-

(i) the drafting of a code to expand the preliminary instructions issued and to give to District Officers a clear and comprehensive review of

the nature and scope of the duties to be performed;
(ii) the drafting of a Manual of Instructions for each grade of Census Officers rigidly excluding all redundant matter which might tend to confusion, and confining the instructions to the actual duties to be performed;

(iii) the translation of the instructions into Burmese;

(iv) the provision of material for the various stages of the operations, and the supply of material to each grade of officer at the time when it was needed;

(v) the issue of circulars on special matters connected with the census, which could not conveniently be incorporated into the Census Code. Guidance in the performance of these tasks was provided by the Administrative Volume of the Report on the Census for 1901, Appendix B of which comprised the Census Code for that year. An Imperial Code of Census Procedure was also issued by the Census Commissioner for India, which provided a general scheme of instructions, to be supplemented locally according to the circumstances of each province.

15. Code of Census Procedure, Part I.—The Code of Census Procedure for the province was divided into two parts, the first dealing with the process of

"Enumeration," or the collection of the particulars concerning its inhabitants, the second dealing with the processes of "Tabulation and Compilation," or the reduction of the material collected into a form suitable for publication. The second part being concerned with a subsequent stage of the operations will be subsequently considered. The Chapters of Part I of the Code were issued as they were printed. The first issue, comprising the Preface, with a preliminary census calendar, and Chapters I and II of the Code, was distributed on the 15th May. The remaining Chapters were issued on the dates indicated in the marginal statement, the whole being completed and distributed

Chapter.	Contents.	Date of issue.
	Preface	1
11	Definitions	15-5-10.
	Census Divisions and Agency Census Divisions in Towns	,
III		25-5-10.
v	House numbering or House Lists Distribution or Enumeration forms	} 7-7-10.
		3
VII	Special Arrangements) - 2
VII	Census of Rice Mills, Oil Fields and Refineries, Plantations, Mines and Factories.	\$ 19-7-10.
VIII	Census of Ports	} 11-8-10.
IX	Census of Inland steamers	} 11-8-10.
X	Census of Railways)
	Census of Cantonment and of troops on the march.	18-8-10.
XII	Preliminary Enumeration)
XIII	The Final Enumeration, or the	{15-9-10.
XIV"	Supplementary Calendar)

by the 15th September 1910. This distribution by instalments rendered it possible to place in the hands of the District Officers full particulars of each stage of the operations in advance of the date prescribed for its performance. As a number of copies of the Code have been set aside for the use of the Superintendent of 1921, it has not been deemed necessary to reprint the Code as an Appendix to this volume.

- 16. Manual of Instructions.—Simultaneously with the preparation of the Census Code, a "Manual of Instructions" for the use of Charge Superintendents and Circle Supervisors was taken in hand. The function of the Manual was essentially different from that of the Code. The Code was intended to be more in the nature of a work of reference for the use of superior and controlling officers. The Manual was rather a guide for the instruction of the mediant and lower grades of census officers, avoiding for each class of officer any information, which might be necessary for the higher branches of the staff, but which would be superfluous for the particular class concerned. Apart from the Introduction and Appendices it was divided into three Chapters as follows:—
 - I. Instructions to Charge Superintendents.
 - II. Instructions to Circle Supervisors.
 - III. Instructions to Enumerators.

The third chapter was taken bodily from the Instructions prescribed by the Government of India to be printed on the cover of the enumeration book of schedules. Chapter II was an expansion of these instructions, informing the Circle Supervisor of the materials with which he would be provided for the performance of his duties, of the dates on which they should be performed, and entering into somewhat minute details as to the methods of their performance. Chapter I contained similar particulars for the information of Charge Superintendents, naturally written on broader lines, as necessitated by the more vague and indeterminate functions of the Charge Superintendent as compared with those of the Circle Supervisor.

17. Population Units requiring Special Treatment.—In addition to the areas requiring special treatment owing to the impossibility of effecting a

synchronous census within their limits, there were other areas requiring special treatment owing to their abnormal distribution of population. The general census instructions were necessarily based on the distribution of population in rural communities, as the overwhelming majority of the inhabitants of the province dwell in rural areas. In applying the general instructions to urban areas many modifications were necessary. Chapter III of the Census Code was written to indicate the modifications of the general instructions to be observed in their application to towns. Special instructions were also necessary in the case of large industrial units such as rice mills, oil fields, mines and factories; for ports and inland steamers; for railway stations and travellers by boat, road and rail; for police-stations, jails, asylums, hospitals and reformatories; and for cantonments and troops. Chapters VI, VII, VIII, IX, X and XI of the Census Code were devoted to the special arrangements to be made for obtaining an accurate record of the population to be found living in special circumstances. In some cases, in addition to the framing of special instructions, special forms had to be devised. Such were the Census Register of Railway Premises and the Railway Circle Summary; also the enumeration passes and boat tickets to safeguard travellers from being enumerated twice over, and the "Notice to Masters of sea-going vessels." Special arrangements were also necessary for the distribution of forms to the Railway Company and to Steamer Companies, as it was found to be more satisfactory to distribute them direct than through district agency. It is not intended to give detailed descriptions of the measures taken to effect the census in such special circumstances. Such descriptions would be but mere repetitions of the somewhat voluminous instructions issued, and reference must be made to the Census Code itself for information as to the methods of coping with the various problems presented by the travelling population, and by the aggregation of population in abnormal circumstances.

18. Translations.—Reference has already been made to the difficulties and delay, caused by the omission to supply translations of the vital portions of the preliminary instructions issued before Census operations generally commenced, and of the forms of the General Village Register. This omission was never repaired owing to the pressure of other duties, but efforts were made to complete the translation of the "Manual of Instructions" at the earliest possible date. Following the suggestion of Mr. Lowis contained in paragraph 15 of the Administrative Volume of the Census of 1901, a few officers were requested to suggest the most suitable Burmese equivalents for the most important items of census terminology. As a result of these enquiries the translations of the following terms were changed as follows:—

P. V.L.	Burmes	e term.
English term.	1901.	1911.
Census Charge }	၀၁ ရင်း ကောက်နတ်။	သန်းခေါင်စာရင်းနယ်။ နယ်။
Census Circle }	စာရ ်း ကောက်ထို က် နယ်။	သန်းခေါင်စာရင်းတိုက်။ တိုက်။
Census Block }	စာရ ်းကောက်အကွ က်။	သန်းခေါင်းစာရင်းဆကွက်။ အကွက်။
Charge Superintendent Supervisor	စာရင်းကောက်နယ်အတြီး အမှူး ။ ကြီးကြပ်သူ။	န္င္အထိစာရင်းအုပ်။ ထိုက်စာရင်းကြား။
Enumerator	ောရင်းထောက်သူ။	အကွက်စာရေး။
House Numbering	အို နိန်ပါတ်ထည့် ထပ်ခြင်း။	အာပ်နှံပါတ်ထိုးခြင်း။
House List	3380398:1	ရွာသူထြီးပိုင်နက်ရှိအမိစ်စာရင်း၊
Block List	အကွက်စာရှင်း။	အကွက်ရှိအိစ်စာရင်း။
Circle List	Not used in 1901.	နယ်ရှိထို က်စာ ရင်း။
Circle Register		တိုက်ရှိ အကွက်စ ာရင်း။
Preliminary Enumeration	အစစ်းစာရှင်းကောက်။	ပဋမစၥရင်း။
Final Enumeration	အပြီးသတ်စာရင်းတောက်။	အပြီးသတ်စာရင်း။
Schedule	စာရင်း။	စာရင်းပုံစံ။
Household Schedule	යපිරි කො රිකා: හා ඉරිස	အပ်သောင်သားစာရင်းပုံစံ။
Specimen Schedule	ပုံစံစသျှင်း။	ပုံစံပြစာရင်း။
Enumeration Book	လူစာရင်းကောက်စာအုပ်။	အ ကွ က်ရှိ ထူစာရင်းစာဆု ပ်။
Village-tract	Not used in 1901.	ရွာသူထြီးပိုင်နက်။

Owing to this necessity of determining an authorised vernacular terminology, work on translation was somewhat delayed. As soon as the terms were fixed, the translation was taken in hand. The instructions in the Imperial Census Code suggested that the translation should not be too literal, and that the utmost care should be taken to secure a clear and unambiguous translation in colloquial language of the instructions for the use of the subordinate grades of census officers Mr. J. A. Stewart, I.C.S., kindly volunteered to undertake the translation of the "Instructions to Enumerators" and the headings of the columns of the Enumeration Schedule. The work was admirably performed, and in the course of inspection the clearness of the vernacular instructions was continually being mentioned The translation of the Instructions to Charge Superintendents and Circle Supervisors was performed by the Government Translator, though the Census Superintendent himself revised the work, and effected a few modifications in the directions of simplicity and condensation. A few complaints were received, in which it was suggested that errors of translation had occurred; but in all such cases, on investigation, it was found that the Burmese translation gave the spirit of the instructions even closer than the original English. The freedom of the translation tended occasionally to suggest that the instructions in English and Burmese were not identical. In each case that arose, the officer bringing the discrepancy to notice was requested to supply the vernacular translation to be substituted for the portion whose correctness was questioned; but in all such cases, the alternatives suggested were stilted, literary terms which did not convey the meaning intended, as well as the original translation effected. It was not necessary throughout the operations to supplement or modify the instructions owing to defects of translation.

The translation of the "Manual of Instructions" was effected so expeditiously that the Burmese and English editions were issued simultaneously on the 15th August, in time for the commencement of the duties of Charge Superintend-

ents and Circle Supervisors in September.

The Shan translation of the schedules and of the "Instructions to Enumerators" was based on the translation of Dr. Cushing prepared for Mr. Lowis in 1901. Mr. G. C. B. Sterling, C.I.E., Superintendent, Southern Shan States, kindly supervised the corrections necessary owing to slight changes in the instructions for 1911, and subsequently corrected the proofs of the Shan schedules and enumeration book covers.

19. Initial operations in districts.—Before discussing the questions of the provision and supply of census materials, it is necessary to indicate the exact method of the initiation of census operations in each district. It will be necessary to discuss these in some detail, because in the course of inspection, it was found that the instructions in the preliminary letter, prior to the initiation of regular operations, and in the earlier chapters of the code, were not sufficiently precise to ensure that the intended course of procedure was fully carried out. The three main preliminary operations to be performed in each district were the preparation of the General Village Register, and the preparation of the Circle Lists and Circle Registers. Their respective utilities were as follows:—

(i) The General Village Register.—This was to form a comprehensive survey of every residential unit in the district, with tentative proposals for the formation of enumeration blocks and lists of the persons qualified to act as Supervisors

of enumeration blocks, and lists of the persons qualified to act as Supervisors

and Enumerators.

(ii) The Circle List.—This was to form a comprehensive list of every Circle and Block contained in each charge with their respective census officers, together with the Village-Tracts and residential units, and number of houses comprised in each census unit. Supplementary Columns were also provided for maintaining a record of the progress of each operation up to the conclusion of the preliminary census record. It was to be prepared Charge by Charge as the official register of the work to be superintended by each Charge Superintendent.

(iii) The Circle Register.—This was to form for the Circle Supervisor the official record of the work to be supervised just as the Circle List, provided a similar

record of the work to be supervised, just as the Circle List provided a similar record of the Charge for the Charge Superintendent.

The first criticism to be applied is with respect to the terminology used. Obviously the only logical terms to have applied to these three important documents were :-

(i) The General Village Register. (ii) The Charge Register. (iii) The Circle Register.

They were so similar in structure and function that the use of the separate terms "List" and "Register" was both unnecessary and confusing. The term "Circle List" was doubly at fault. It performed for the Charge exactly the same

function which the Circle Register performed for the Circle; it was a comprehensive register of the census units comprised within the Charge; and it was the official record of the work and duties of the Charge Superintendent. Both by analogy and by association, the Circle List should have been termed the Charge Register.

A second criticism is to the effect that the instructions and code did not specify, with sufficient detail, which officers were to be responsible for the preparation of these registers. The intention was that the General Village Register should be prepared by Township Officers, and that the Circle Lists and Circle Registers should be prepared in the District office from the materials supplied by the General Village Register. Unfortunately the latter portion of this intention was nowhere specifically stated. The intention can be deduced from the final paragraph of the preliminary letter of instruction, or from Article 7 of Chapter II of the Census Code. In the mind of the Superintendent, the actual formation of Census Charges and Circles was so essentially a matter of control to be performed by the District Census Officer, that the insertion of specific instructions to that effect never occurred to him. In the majority of districts the formation of Charges and Circles and the preparation of the Circle Lists and Circle Registers were performed in the district office. But in a few districts, the General Village Register was returned to Township Officers with elaborately framed and lengthily translated instructions as to how charges and circles should be formed. The amount of time given to the framing and translating of the instructions would have sufficed to have completed the work in the district office, and it would have been performed much more efficiently and much more expeditiously than in township offices.

Mention has already been made of the unnecessary work of translating the General Village Register, due to an unguarded expression in the preliminary letter of instructions. Generally, the amount of time wasted owing to a lack of comprehension of the intention of the initial stages of the operations was very great. The following suggestions are made with a view to avoiding this at the following census:-

(i) the salient parts of the initial letter of instructions should be translated into Burmese;

(ii) the initial issue of the General Village Register should be in Burmese

as well as in English;

(iii) it should be distinctly stated that the General Village Register should be prepared by Township Officers, but, that the formation of charges and circles, and the preparation of the Circle List (Charge Register)

and Circle Register should be performed in the District Office;
(iv) the Circle List should be re-named the Charge Register;
(v) it should be stated that as the General Village Register is intended to form the basis of the Registers to be used by Charge Superintendents and Circle Supervisors, translation into English is not generally necessary.

20. General Village Register, Circle List and Circle Register.— Specimens of the actual forms used for the General Village Register, the Circle List and the Circle Register have been bound and preserved for the use of the Census Superintendent of 1921. As these Registers formed the basis of the enumeration operations it is convenient to reproduce them for purposes of reference. The following are the forms of the Registers.

GENERAL VILLAGE REGISTER.

ract.	-tract. sters. sters. Hamlets, Cutch-boil- Cutch-boil- Sishing and	ential mlets, p-boil- and	each	locks.	Person	ns quali	fied to	act as	Numl	per of C	ensus	
/illage-t	getract	lage-tra	n Resida 1 Hau 15, Cutch Fishing	houses in Village	ber of B	Enum	erators.	Super	visors.			
Serial No. of Village-tract.	Name of Village-tract.	Number of Village-tract in Revenue Registers,	Names of main Resider Village, with Ham Landing places, Cutch-ling Camps, Fishing Roadside Camps.	Number of ho Residential Hamlet,	Proposed number of Blocks	Name.	Profession.	Name.	Profession.	Charge.	Circle.	Block.
1	2	3	4	. 5	6	7	8	9	10	.11	12	13
	1											

CIRCLE LIST.

Township or Town....... Charge No........ Name of Charge Supdt.

	ge-tract Village	ť	Village, places		Block.	00.	j.	House-	Pro	elimina Dat	ry Rec	ord.	
ervisor	f Villa	age-tra	dentia	Block.	ouses it	ımerat	letion sring.	ing of y Supe	ent.		Testi	ing by	
Name of Sup	Serial No. o in the Ge Register.	Name of Vill	Name of Resi Hamlet, La	Serial No. of	Number of h	Name of Ent	Date of comp House-numb	Date of test numbering b	Соттепсет	Completion.	Supervisor.	Charge Superin- tendent.	Remarks.
2	3	4	5	6	7	8	9	to	11	12	13	14	15
	1039.6	Serial No in the Register.	Serial No in the Register.	Serial No. of Villagin the General Register. Name of Village-trace Name of Residential Hamlet, Landing and Camps.	Serial No. of Villagin the General Register. Name of Village-trae Name of Village-trae and Camps.	Name of Supervisor. Serial No. of Villagin, the General Register. Name of Village-trace Name of Residential Hamlet, Landing and Camps. Serial No. of Block. Number of houses in	Name of Supervisor. Serial No. of Villagin the General Register. Name of Village-trad Hamlet, Landing and Camps. Serial No. of Block. Number of houses in Name of Enumerato	Name of Supervisor. Serial No. of Villagin the General Register. Name of Village-trad Name of Residential Hamlet, Landing and Camps. Serial No. of Block. Number of houses in Number of completion of House-numbering.	Name of Supervisor. Serial No. of Villagin the General Register. Name of Village-trad Hamlet, Landing and Camps. Serial No. of Block. Number of houses in Number of completion of House of Camps. Date of completion of House in House of Camps.	Name of Supervisor. Serial No. of Villagin the General Register. Name of Village-trad Hamlet, Landing and Camps. Serial No. of Block. Number of houses in Number of completion of House-numbering. Date of completion of Houseing.	Name of Supervisor. Serial No. of Villagin the General Register. Name of Village-trad Hamlet, Landing and Camps. Serial No. of Block. Number of houses in Number of completion of House-numbering. Date of completion of numerator of houses in Commencement. Commencement.	Name of Supervisor. Serial No. of Villagin the General Register. Name of Village-trae and Camps. Serial No. of Block. Number of houses in Number of completion of House-numbering. Date of completion of numbering by Supervisor.	Name of Supervisor. Serial No. of Villagin the General Register. Name of Village-trae and Camps. Serial No. of Block. Number of houses in Number of completion of House-numbering. Date of completion of numbering by Supervisor. Completion. Supervisor. Supervisor. Supervisor. Charge Supernier Ganglein.

CIRCLE REGISTER.

Supervisor's Name.....

Charge No...... Name of Charge Superintendent Circle No......

ť	Villago aces,		a Block	2	Houmb	use- ering-	Prelin	ninary R	ecordi	s issued	
age-tra	dential	Block.	ouses i	Enumerator.	Dat	e of		Date of		r.	
Name of Village-tract.	Name of Residential Village, Hamlet, Landing places, and Camps.	Serial No. of Block.	Number of Houses in Block.	Name of Enu	Commence- ment.	Completion.	Commence- ment.	Completion.	Testing.	Number of Schedules issued to Enumerator.	Remarks.
1	2	3	. 4	5	6	7	8	9	10	11	12

It will be seen that Columns 2, 3, 4, 5, 7 and 8 of the Circle List were obtained direct from the appropriate columns of the General Village Register, and that Columns 1, 2, 3, 4 and 5 of the Circle Register were obtained direct from the Circle List. The Circle List (or as it should be termed the Charge Register) was prepared immediately after the scheme of Charges and Circles had been prepared in the District Office from the material provided by the General Village Register. The periods allotted for the preparation of these registers were:—

(i) General Village Register—1st April to 15th June.

(ii) Circle List-15th June to 31st July.

(iii) Circle Register-1st to 30th September.

21. Census Maps.—Simultaneously with the preparation of the Circle Lists a District Census Map on the scale of two miles to the inch was prepared shewing the distribution of Charges and Circles. Charges were marked on the map by a red marginal border and Circles by a green marginal border. After serial numbers had been given to the Charges and Circles formed, they were marked on the map. Extracts of the map for each Charge and Circle were then made, to be given with the Circle list or the Circle Register to the Charge Superintendent or the Circle Supervisor as an additional guide to the area over which superintendence or supervision was to be exercised. It was hoped that the previous Census maps used in the Census of 1901 would have been available, as special instructions had been issued at that time to ensure their preservation. In many districts the instructions had miscarried, the maps were not to be found and the great assistance they would have afforded in the formation of census units was wanting. In consequence of the non-observance of the instructions for the preservation of the Census-maps of 1901, the maps prepared for the current census have been collected at headquarters and special arrangements are being made for their storage till they will be required in 1920.

PRINTING, DISTRIBUTION AND PRESERVATION OF FORMS.

22. Supply of paper for Census Forms.—Although the Government Press was able to supply from its ordinary stock sufficient paper for such forms as the General Village Register, the Circle List and the Circle Register, it was necessary to go beyond the limits of the province to meet the requirements for the supply of forms to be used in the actual process of enumeration. Paragraph 13 of the Administrative Volume of the Report for 1901 was most instructive as to the possibilities of error and delay in this respect. The experience then gained suggested that the first abstracts obtained from the General Village Registers were both too late and too unreliable to form the basis of the calculation as to the amount of paper required. It was therefore decided to base the first indent for paper on the numbers of houses and census blocks in 1901, with the necessary allowances for the probable increase in the interval, and the necessary margin for emergencies. The marginal statement gives the assumed basis on which the estimate for the requirements was founded, and compares it with the actual numbers of houses and blocks for which subsequently provision had actually to be made. It

-		Number of houses.	Number of Census blocks.
Basis of Estimate Actual figures	::	2,680,000 2,471,597	100,000

was estimated that 54 schedules would be required for every 100 houses, 232 house and block lists and 116 enumeration bookcovers for every 100 blocks. To supply these requirements, 600 reams of Double Royal Badami paper and 85 reams of Double Royal Brown Cartridge

paper were indented for on the fourth day after operations had commenced, the 4th April 1910. In consequence of this early and sufficient indent, there was no anxiety throughout the whole period of the enumeration concerning the supply of paper. The paper arrived in two consignments at the end of May and the beginning of June, and was available for printing by the time the translations of the

schedules and the enumeration bookcover, had been completed.

Form.	Language.	Date on which sent to press.
Circle List	. English	16-5-1910
Circle List	. Burmese	17-5-1910
Circle Register	English	18-6-1910
Circle Register	Burmese	18-6-1910
Schedule	. English	2-7-1910
Schedule	100	2-7-1010
Schedule		29-7-1910
House List	. Burmese	2-7-1910
House List	. English	19-7-1010
Block List	The Control of the Co	2-7-1910
Block List	English	19-7-1910
Cover		19-7-1910
Cover		19-7-1910
Cover	CI -	29-7-1910

23. Printing and Supply of Forms.

—The form of the General Village Register was printed and distributed prior to the commencement of regular operations. The marginal statement gives the dates on which the more important of the remaining forms were sent to press to be struck off. The Circle Lists were distributed during the latter half of June. The numbers distributed were roughly estimated on the basis of the numbers of circles in each district in 1901. In order to obtain a working basis to deter-

mine the number of the remaining forms to be printed, and to estimate the requirements, of each district, an abstract of the Circle Lists in the following form was prescribed:—

Abstract of Circle Lists.

- 1			1	Number	r of		Avera	ge Numb	er of	
Serial No.	Name of Town- ship.	Village-tracts.	Houses.	Blocks.	Circles.	Charges.	Houses per Block.	Houses per Circle,	Houses per Charge,	Remarks.
I	2	3	4	5	6	7	8	9	10	н
Whole	District.									

District Officers were required to complete their Circle Lists and send the Abstract to the Census Superintendent by the 12th August. It was necessary to distribute the Circle Registers early in July before these abstracts had arrived, and the distribution followed the same lines as for the Circle Lists. The supply of the remaining forms to district offices was effected in three distributions, termed respectively the preliminary, the main and the final distributions.

24. Preliminary Distribution.—Immediately on receipt of the Circle Abstracts a preliminary distribution of the following supplies was effected :-

(i) Manual of Instructions.

(ii) Appointment Orders.
(iii) Specimen Enumeration Books.
(iv) Training Schedules.
(v) House Lists.

This was accompanied by the following Census Circular (Number 10, dated the 15th August 1910) in which the instructions in the Code and Manual were supplemented with respect to the objects and intentions of the preliminary distribution.

Office of the Superintendent, Census Operations, Burma.

CENSUS CIRCULAR NO. 10 OF 1910.

Dated Rangoon, the 15th August 1910.

The following figures from the Abstract of the Circle Lists of your district have been taken as the basis of the supply of Census requirements :-

Village-tracts,	Houses.	Blocks-	Circles.	Charges
I.	2	3	4	5

2. For the purposes of the preliminary operations and the training of thh various grades of Census Officers, the Superintendent, Government Printing, has been instructed to supply you with the following:-

34	Number	of Forms.
Forms, etc.	English.	Burmese
1	2	3
Manual of Instructions		
Appointment Orders		
Specimen Enumeration Books		
Training Schedules		
House Lists		

It is essential that you should check the number received immediately on arrival as any deficiency in the supply may cause serious delay in the preparations now being made. An acknowledgment of the forms received should be made direct to the Superintendent, Government Printing; and any discrepancy with the number in the above list should be pointed out to the same officer.

3. Manual of Instructions.—Ten English copies have already been supplied to you. A copy should be given to every Charge Superintendent and the Circle Supervisor, and to all officials not directly appointed as Census Officers whose

services are being utilised for supervision or assistance.

4. Appointment Orders.—The Declaration of appointment should be filled in and signed before issue. The Certificate should be left blank until the Census Operations are complete. It should then be granted by the Charge Superintendent to all Census Officers who in his opinion have performed their duties satisfactorily.

5. The Specimen Enumeration Book will contain three General Schedules. A copy should be given to every Charge Superintendent and Circle Supervisor. They should be instructed not to make any entries in it at present. Subsequent

orders will issue as to the manner in which it is to be used.

6. Training Schedules .- The supply is sufficient for each Charge Superintendent to have ten schedules and each Circle Supervisor to have five schedules. These should be used in accordance with Article 40 of Chapter II of the Manual of Instructions. To prevent waste, each Circle Supervisor and Enumerator should make the first few attempts on blank paper, and only when a certain facility has been attained should a test entry be made on a schedule.

7. House Lists .- These should be distributed at the rate of-

One to each village of 50 houses or less,

Two to each village of between 50 and 100 houses, Three to each village of between 100 and 150 houses,

and so on. They are being supplied to Deputy Commissioners at the rate of five per 100 houses. They should be distributed at the rate of four per 100 houses to Charge Superintendents, who should distribute to Circle Supervisors at the rate of three per 100 houses. Circle Supervisors will be able to supply to Enumerators direct on the correct scale. The remainders after this preliminary distribution will form a reserve in case of abnormal or unforeseen circumstances.

8. Distribution.—The above books and forms, with the Circle Register and Circle Map, should be distributed through the Charge Superintendents as early as possible in the month of September. There will be considerable economy

both in time and expense if a concurrent distribution can be effected.

9. Enumeration Forms .- The distribution of forms to be actually used in enumeration will be effected on the figures given in paragraph 1 of this letter. The Revised Abstract (see Article 9, Chapter IV of the Code) will enable any errors or omissions to be rectified, and any extra Census Units created on account of the existence of Mines, Factories, Troops, Vessels, or other special circumstances, to be incorporated. It should, however, be noted that the Provincial Superintendent will supply Enumeration Forms direct to—

(i) The Irrawaddy Flotilla and River Transport Companies,

(ii) The Railway Authorities; and consequently extra blocks formed by their vessels or premises should be excluded from the Revised Abstract to be forwarded on the 27th November.

25. Main Distribution.-It is necessary to disregard any attempt at chronological sequence in the description of so many branches of work proceeding concurrently. Confining the narrative to the distribution of forms only, the main distribution was effected on the 15th September. It was concerned principally with the distribution of enumeration requirements;

(i) Enumeration Book Covers.(ii) Block Lists.(iii) General Schedules.

In order to ensure the greatest economy in the utilisation of these supplies a special chapter of the Census Code (Chapter V) had been written, describing the basis on which the numbers for distribution were calculated, the amount of the reserve, and the method of distributing the reserve stock among the various grades of officers. It was estimated that one schedule containing 20 entries would be sufficient for three houses, allowing an average of 5.66 entries for each house. District Census Officers were supplied at the rate of 55 schedules per 100 houses. There was therefore a reserve supply of 21 67 schedules (55-33 33) per 100 houses. The reserve, calculated in another manner, was approximately 65 per cent. of the total estimated requirements. Less ample reserves were allowed in the case of block lists and enumeration book covers, these being more easy to estimate and less liable to wastage. The following extract from Circular 12, dated the 15th September 1910, will illustrate the method of distribution.

The Superintendent, Government Printing, is being instructed to commence the main distribution of Enumeration Forms. In accordance with the figures supplied in your Circle Abstract the supply for the District will be as follows:-

Form.	English.	Burmese.	
Covers			
Block Lists			
General Schedules			

Upon receipt they should be carefully checked, acknowledged, and stored until receipt of the Corrected Returns of Houses, which you should receive from your Charge Superintendents on the 25th November (Code, Article 9, Chapter IV, and Manual, Article 7, Chapter I).

As soon as the Corrected Returns have been received, the above forms should be distributed on this corrected basis according to the principles laid down in Chapter IV of the Code, Articles 10 and 11 of Chapter I, and 18 to 24 of Chapter II of the Manual.

26. Final Distribution.—Simultaneously with the issue of the main distribution of forms, instructions were issued as to the method of preparation of the estimates for the final distribution. These were included in Circular 12 of

the 15th September as follows:-

There will be a final distribution of forms to districts on receipt of the Revised Circle Abstracts to be forwarded by you on the 27th November. This distribution will include-(i) Additional supplies of Covers, Block Lists and General Schedules as suggested

by the Revised Abstracts. (ii) Household Schedules.

(iii) Forms for Circle and Charge Summaries.
 (iv) Enumeration Passes, Boat Tickets, etc.
 (v) Forms required in Special Vernaculars.

District Census Officers are therefore requested, when forwarding the Revised Abstracts on the 27th November, to state clearly-

(a) The estimated number of additional English Schedules, Covers and Block Lists that will be required;

(b) the estimated number of Schedules and Covers and Block Lists required in each Special Vernacular;

(c) the number of Household Schedules required;

(d) the estimated number of Boat Tickets and Enumeration Passes required.

It is hoped that there will be no necessity on the part of District Census Officers to telegraph for any of their requirements. The reserves allowed, in the distribution about to be effected, are ample to meet unforeseen contingencies that are not of exceptional magnitude. Should there be any urgency with respect to the supplementary supply, the best method of obtaining it at the earliest possible moment will be to forward the Revised Abstract a few days before the prescribed date. The distribution will be effected as far as possible in the order of receipt.

The final distribution was actually effected on the 23rd December 1910. Circular No. 17 of that date indicates the nature and scope of the distribution.

The Superintendent, Government Printing, has been instructed to supply you with Census Forms as detailed in the following statement:—

			Number of Forms,		
Form, etc.				English.	Burmese
Block Lists	2 444	2445			
Covers	***	7, *** ?	(***)		
General Schedules	•••	***			
Household Schedules		2441			
Enumeration Passes		14.00	38		
Boat Tickets		(222)	· ········		
Circle Summaries	***	R###R			
Notifications concerni	ng cerei	monies			
Notice to Masters of S	Sea•goin	g Vessels			

The supply has been based on the figures of your Revised Abstract and the accompanying notes. It is not anticipated that any further supplies will be necessary, but a reserve will be kept in hand ready for any emergency. Application for any supplementary requirements should be made direct to the Census Office, Rangoon, and not to the Superintendent, Government Printing.

2. The distribution of Enumeration Forms and the formation of Enumeration Books should now be taken in hand. Full instructions both in English and

Burmese have been issued.

27. Number of Forms supplied.—Subsidiary Table II gives details of the numbers of enumeration book covers, block and house lists, general schedules,

District.	Number of Schedules issued.		
District	Actual.	Per 100 houses,	
Rangoon	54,300	110	
Minbu	39,620	71	
Myitkyina	13,470	78	
Kyauksė	23,690	85	
Northern Shan States	127,050	151	
Southern Shan States	142,020	77	

household schedules and boat and travellers tickets supplied to each district. In addition, special issues were made to the Traffic Manager of the Burma Railways Company, and to the Managers of the Irrawaddy Flotilla and the Burma River Transport Steamer Companies, for the enumeration of persons dwelling or travelling on railways and inland steamers respectively. In 23 districts the issue of general schedules ranged from 50 to 60 per

the ordinary schedule was not used. In the remaining six districts the general schedules issued exceeded 70 per 100 houses. In the Northern and Southern Shan States and in the Myitkyina District, it was impossible to obtain the preliminary Circle Abstracts, and supplies had to be made with generous margins to meet all possible contingencies, arising from the absence of any such guidance and from the inclusion of little known regions into the census area for the first time. Minbu required a large supply for the Shwe-zet-daw Pagoda Festival, and Rangoon is a special area in which the number of schedules required was difficult to estimate beforehand. The excessive distribution to Kyauksè was due to an over estimate in the number of houses in the first Circle Abstract received.

Altogether 1,627,450 schedules were issued, which gave 66 schedules for every hundred houses. The basis assumed at the beginning of the operations was

Form.	Number issued.	
Enumeration book	118,810	
House and Block	194,441	
General Schedules.	1,627,450	
Household Sche- dules.	12,115	
Boat Tickets	51,740	
Enumeration Passes	153,900	

one schedule for three houses; or 33 per hunded houses. The actual supply was exactly twice the amount of the numbers required on this assumption. The reserve therefore supplied was equivalent to the actual estimated consumption. The number of schedules issued would have sufficed to enumerate the population if only 7 or 8 entries had been made on each, whereas allowing for three vacant lines between separate households on each schedule, 17 entries could have been made. It was intended to institute a count of the actual number of schedules used and returned to the central office for compilation; but unfortunately,

pressure of work prevented this from being effected. It is possible that the smoothness of the working of the enumeration was due to the generous reserve supplied; and it is to be regretted that the amount of wastage was not accurately ascertained.

28. Preservation of Census Circulars, Publications and Forms.—In the Administrative Volume of the Census Report for 1901, copies of the circulars and instructions issued, and a selection of the forms used, were inserted as Appendix A of the Volume. A reprint of the Code of Census Procedure formed Appendix B, and the Census Abstraction Office Code formed Appendix C of the Volume. The corresponding circulars, instructions and forms for the Census of 1911 are far too bulky to be so included. Complete sets of the actual circulars issued, the codes and manuals published, and the notices, slips, forms, schedules, registers and other statements, have been preserved. Lists of all such papers are given in subsidiary Tables V(a), V(b) and V (c) appended to this chapter. Subsidiary Tables V-A and V-B give the contents of two volumes in which all the loose papers have been bound. Grave inconvenience and delay were caused by the absence of any copies of the actual forms used in the operations of 1901. Whatever attempts at preservation were made, the closest search failed to reveal them. Nor were there any copies of the volumes of the Census Report of 1901 set aside for the use of the Superintendent of 1911. Both the Statistical and the Administrative Volumes for 1901 were out of print when operations commenced in 1910. The whole of the work of the operations from 1910 to 1912 have had to be performed with the aid of copies borrowed from the Secretariat Library. To prevent this cause of inconvenience from arising in 1920, copies of the two bound volumes containing the forms mentioned in Subsidiary Tables V-A and V-B, and separate copies of each of the volumes mentioned in Subsidiary Table V-C, are being placed in the Secretariat Record Room for the special use of the Census Superintendent on 1921. At the time of writing the actual arrangements for their custody have not been completed. When made, a copy of the arrangements will probably be printed as an appendix to this volume.

After consultation with Mr. Gait, Census Commissioner for India, it was decided that the reports received from Deputy Commissioners as to the conduct of Census Operations in each district should not be printed. They have been bound in original in one volume and preserved with the other records mentioned in Subsidiary

Tables V (a) (b) and (c).

DISTRICT OPERATIONS UP TO COMPLETION OF HOUSE NUMBERING.

29. District Operations.—It is now necessary to depart from headquarters and observe the effect of the issue of the preliminary instructions, the Code and the Manual, in the districts of the province. In the intervals to be spared from performing the duties already described, the Census Superintendent made tours of inspection, visiting during the course of the operations all the districts and territories of the province except the Salween District, the Chin Hills and the Pakôkku Hill Tracts. He was therefore enabled to perceive the manner in which his intentions were being put into operation. The misunderstandings mentioned in paragraph 19 above, occurred in the early stages of the operations and were not detected until too late for correction. With this exception, it was found that instructions were very closely followed, and in a few cases only was it necessary to

supplement the initial instructions with further directions. Circular No. 8 of 1910, correcting an impression that the preliminary census operations in towns were not to be commenced till August, afforded the only instance in which a special circular was necessary. Generally, the instructions were complete, and arrived in ample time for their purport to be grasped before the duties were performed, while the calendars provided enabled a forecast to the mode of the time available for each operation, and ensured continuity between successive stages. Mention has already been made in paragraphs 19, 20 and 21 of the initial preparations of the General Village Register, the Circle List and the Circle Register, and the Census Maps. These provided a classified scheme of duties for every census officer within each district. Subsequent operations may be best indicated by the calendars provided in the Manual of Instructions. They afford a birds-eye view of the duties performed by the two classes of census officers, Charge Superintendents and Circle Supervisors.

DUTIES OF CHARGE SUPERINTENDENTS,

Period.	Duty.				
	The state of the second				
f)	Assisting in the formation of Blocks and Circles.				
July	Assisting in the selection of Supervisors and Enumerators.				
Ų	Assisting in Preparation Circle List.				
August {	Revision of the arrangement of Blocks and Circles with the help of Census Map and Circle List. Enquiry into qualifications of persons selected as Supervisors and Enumerators. Study of Instructions, including Instructions to Supervisors and Enumerators.				
September	Supply of Census requisites to Supervisors.				
L	Personal instruction to Supervisors.				
November:	Training of Supervisors in House-numbering and Preparation of House Lists. Testing and Inspection of House Lists and House-numbering.				
Í	Correction of Circle List.				
15th to 25th November.	Preparation of Final Abstract of Circle List from materials supplied by the Supervisor (copy of columns 1 to 5 of Circle Register). Despatch of Abstract to Deputy Commissioner.				
r	Continuation of testing of House Lists and House-numbering.				
December 1910 to	Receipt of Enumeration Forms from Deputy Commissioner.				
	Supply of Enumeration Forms to Circle Supervisors.				
	Test and Experimental Enumerations.				
ast to 20th Feb	Instructions to Supervisors concerning Preliminary and Final Enumerations. Superintendence of Preliminary Enumeration (Rural Areas).				
15th Feb. to 5th Mar.	Superintendence of Preliminary Enumeration (Towns).				
20th Feb. to 10th Mar.	2/. 5				
10th March	Final Enumeration.				
11th March	Receipt of Enumeration Books Circle Register Circle Summary from each Supervisor in his Charge				
	Check of Circle Summaries.				
	Preparation of Charge Summary.				
	Despatch of Charge and Circle Summaries to the Deputy Commissioner. Check of entries made in Final Enumeration.				
	Rectification of errors.				
	Despatch of Enumeration Books to Deputy Commissioner.				

DUTIES OF CIRCLE SUPERVISORS.

Period.	Duty.							
September {	Check of boundaries of Circle with the neighbouring Supervisors with the help of Circle Register and Map. Study of Instructions to Supervisors and Enumerators.							
r	Instruction of Enumerators in House-numbering.							
ist October to 15th	Commencement of House-numbering in each village.							
November.	Supervision and testing of House-numbering.							
Ł	Preparation of House Lists,							
í	Rearrangement of Blocks if necessary.							
	Entry of columns 3 to 7 of Circle Register in ink.							
15th to 22nd Nov- ember.	Despatch of copy of columns 1 to 5 of Circle Register to Charge Superintendent. Despatch of note on number of Household Schedules required to Charge Superintendent.							
22nd November to December.	Continuation of testing of House Lists and House-numbering. Receipt of Enumeration Forms from Charge Superintendent.							
i	Preparation of Enumeration Books.							
December 1910 to	Supply of Enumeration Books to Enumerators.							
January 1911.	Test and Experimental Enumerations.							
1st to 20th February	Instruction to Enumerators concerning Preliminary and Fina Enumeration. Supervising Preliminary Enumeration (Rural Areas).							
15th February to 4th	Supervising Preliminary Enumeration (Towns).							
	Testing Preliminary Enumeration.							
March.	Final Enumeration.							
ſ	Correction of Circle Register up to date.							
	Receipt of Enumeration Books from Enumerators.							
	Check Household and Loose Schedules.							
	Check entries made in Final Enumeration.							
11th March	Preparation of Enumerators' Abstract.							
	Preparation of Circle Summary, Enumeration Books Circle Register Circle Summary Assisting Charge Superintendent in preparation of Charge Summary							

District operations may be said to have been grouped into three main stages as follows :-

- (i) The preliminary operations of the general survey of the residential units of each district, the division into census charges, circles and blocks, the appointment of the Superintendents, supervisors and enumerators to such areas, and their instruction in their duties.

 (ii) House-numbering and the preparation of house lists.

(iii) Enumeration, including the preparation of enumeration books and block lists and the experimental, preliminary and final enumerations.

The working of the first of these stages, effected through the agency of the General Village Register, the Circle List and the Circle Register has already been considered. It was completed by the end of September 1910.

30. House Numbering and House Lists .- On the 1st October, district census operations entered into a second stage. Every house, and every building used as a dwelling, was numbered serially for each village tract in rural areas, and for each ward or quarter in a town. The number given was actually painted on each house with lime, paint, tar or charcoal mixed with oil. The first and last numbers of each census block were indicated by special symbols, the first number of a block being inserted in a triangle and the last number in a circle. Full and detailed instructions as to house-numbering were given in the Code and Manual, and it is not necessary to repeat them. Six weeks were allowed for this work, which was to be completed by the 15th November. Simultaneously with house numbering, House Lists in the following form were being prepared:—

House List.

Township Town	•	Village-tract Ward				
Number of Charge	Number of Circle	Numbers of Blocks	{:::::			

,		Houses.	Fami	lies in each House.		
Residential village, Hamlet, Quarter or Street.	Serial No. Description:— dwelling house, monastery, shop lodging-house, field-hut, etc.		Serial No.	Name of the head member of each family.	Remarks	
1	2	3	4	5	6	

Each House List was continuous for the village-tract in rural communities and for each ward or quarter in towns. Provision was made for the entry of houses subsequently built or originally omitted by means of sub-numbers, such as 34A, 34B, etc. The completion of house-numbering and the preparation of the house-lists was made the occasion for a revised estimate of the number of houses and blocks in each district. On the 27th November a Revised Abstract of the Circle Lists, correcting the figures originally sent on the 12th August in the original Abstracts of Circle Lists, was forwarded to the Census Superintendent and formed the basis of the final distribution of census forms.

ENUMERATION.

31. Formation of Enumeration Books.—On the receipt of the revised abstracts based on the house lists, the requisite number of enumeration book covers, blocklists and enumeration schedules, were distributed from the stock already at hand in district head quarters. The book cover was a long sheet of brown cartridge paper, 41 inches by $8\frac{1}{3}$ inches, which when folded in two was able to enclose the block list and the general schedule which each measured 20 inches by $8\frac{1}{3}$ inches.

It contained :-

- (i) Spaces for descriptive particulars of the District, Township, Village-Tract or Town, Charge, Block and Circle.
- (ii) Space for a record of enumeration procedure, with dates and signatures of the responsible officers.

(iii) The instructions to enumerators printed in full.

- (iv) Specimen schedules containing 52 illustrative entries.
- (v) Space for the enumerators' abstract and signatures of verification.

The block-list was the same form as the house-list described in paragraph 30 above. The enumeration schedule contained spaces for ten entries on each page and sixteen columns for each entry as follows :-

Column.	Description.										
1	House number.										
2 3 4 5 6 7 8 9	Serial number of person.										
3	Name.										
4	Religion.										
5	Male or Female.										
6	Married, Unmarried or Widowed.										
7	Age.										
8	Caste, Tribe or Race.										
9	Principal occupation or means of subsistence of Actual Workers.										
10	Subsidiary occupation or means of subsistence of Actual Workers										
11	Means of subsistence of Dependents on Actual Workers.										
12	Birth District.										
13	Language ordinarily used.										
14	Literate or illiterate.										
14 15 16	Knows, or does not know, English.										
16	Insane, totally blind, leper or deaf-mute from birth.										

The Circle Supervisor received a certain number of covers, block-lists and schedules, and with these he formed one enumeration book for each block by placing one block-list and the requisite number of schedules within the folded cover, and then sewing them to gether with cotton. The instructions for calculating the number of enumeration schedules for each block were to the effect that two schedules were to be allowed for every five houses. This gave eight lines for each house, and, allowing for one vacant line between each, it provided sufficient space for the entry of seven members of each household, a figure which is well above the average for any but the most exceptional areas.

The Enumeration Book as then completed was handed to the enumerator

who had to enter in the presence of the supervisor :-

"(a) The descriptive particulars of book
(b) The names of responsible officers
(c) The date of receipt of book
(d) The heading
(e) Particulars of all the houses in his block."

On the Block List.

The entries in the block-list were an exact copy of those entries in the house list relating to the particular block for which the enumeration book was prepared.

32. Petty stationery.—The following circular issued as Census Circular No. 15 of 1910 will indicate the change effected in ceasing to distribute petty stationery and the reasons dictating the change :-

The question of a general distribution of petty stationery for the purpose of effecting the Census enumeration has recently been the subject of enquiry from several District Officers. In 1901 such a distribution was made, but Burma was the only province in India in which this course was deemed necessary.

There are several objections to supplying stationery for Census purposes the principal being that the expense of distribution is much greater than the actual cost of the materials supplied, and that the wastage is generally greater than the quantity put to effective use. Moreover, it is highly questionable whether any supply is necessary except in a few special instances. The experience of India suggests that it is not, and it would be difficult to find a village in Burma where adequate materials were not obtainable.

It has therefore been decided that there shall be no distribution of petty stationery for the forthcoming Census. If there are any special areas in any district where it will be necessary to supply writing materials, a small sum will be sanctioned for their purchase and supply locally. It is not anticipated that such cases will be numerous. Should any expenditure in this respect be necessary in any district an intimation of the amount required should be sent to the Provincial Superintendent for sanction by the 1st January 1911. No expenditure should be incurred without such sanction.

33. Experimental Enumeration.—In paragraph 24 above the distribution of Specimen Enumeration books on the 15th August 1910 was mentioned. It was also stated in the circular therein quoted that subsequent orders would issue as to the manner in which these books were to be used. In addition to familiarising Charge Superintendents and Circle Supervisors with their appearance and contents, and enabling the latter to appreciate the instructions for their formation, it was resolved to ulitise them for effecting an experimental enumeration. The following circular (No. 14 of 1910) issued on the 10th October will explain the nature and scope of the experiment.:—

"An attempt is being made to carry out an experimental enumeration by means of the Specimen Enumeration Books issued with Circular No. 10 of 1910. Each Circle Supervisor has been supplied with one copy, which will suffice for the enumeration of about fifty individuals or ten households. It is requested that each book should be filled by experimental household entries in accordance with the following rules. When completed they should be sent to the Census Superintendent, Rangoon, to arrive by the 1st January 1911. A special staff will then go through the records received, classify the errorsnoticed, and a special circular (in

English and Burmese) will issue pointing out the principal mistakes to be avoided.

2. "The following rules will be printed in Burmese, and a sufficient number for supply to each Charge Superintendent and Circle Supervisor will either

accompany or immediately follow this circular :-

Rules for Experimental Enumeration.

1 The Specimen Enumeration Books will be used for the experimental enumeration.

2. Nothing is to be written on the Cover or the Block List.

3. The three schedules inside each book will contain room for about ten households. Circle Supervisors should arrange for one Enumerator to record one household, then another Enumerator to record another household; and so on, until all the schedules in the book are finished.

4. If there are less than ten blocks in a circle, one household for each

Enumerator will be sufficient, even though the book is not filled.

5. If there are more than ten blocks in a circle some of the Enumerators will not be able to make a record.

6. One line should be left blank between each household.

7. This experimental enumeration should be completed and the Specimen Books sent to the Deputy Commissioner by the 15th December.

* * * * *

On receipt of the records of the experimental enumeration they were immediately examined. About fifty errors common to nearly all the districts were detected, classified, published in English and Burmese with the necessary corrections, and issued on the 28th January with Circular No. 4 of 1901, just prior to the commencement of the preliminary enumeration. Reference must be made to the circular for details as to the exact nature of the errors, but of the fifty included in the list of corrections eleven were general errors not confined to any particular columns, and thirteen were errors in the record of occupations in Columns 9, 10 and 11 of the Schedule. The issue was just in the time to be distributed, and in the hands of Charge Superintendents and Circle Supervisors during the preliminary enumeration.

34. Census Holidays.—In order to enable Government officers to perform their duties with respect to the preparation and checking of the preliminary enumeration, and also to complete the duties connected with the final enumeration and the preparation of provisional totals, the following notification was issued by the Local Government:—

NOTIFICATION.

Dated Rangoon, the 19th January 1911.

No. 23.—For the purpose of enabling Government servants and others to assist as far as possible in taking the Census on the 10th March 1911, and of facilitating the

preliminary census operations, the Lieutenant-Governor directs that, on the 21st and 22nd February 1911, and on the 10th and 11th March 1911, all public offices and, so far as may be practicable, all Government schools in Burma (except in the Rangoon Town District) shall be closed. With the exception of urgent work no public business unconnected with the Census will be transacted during the periods above mentioned. The Lieutenant-Governor further directs that, in the Rangoon Town District, all public offices and so far as may be practicable, all Government schools, shall be closed from the 24th to the 28th February 1911 (both days inclusive) and on the 10th and 11th March 1911.

- 35. Preliminary Enumeration.—The actual record of the population was divided into two operations, the preliminary and the final enumeration. The former was a leisurely record of the population of the province effected during the month of February 1912. The latter was the thorough check and test and correction of the preliminary record, to bring it up to an exact representation of the population as it existed on the date of the Census Proper, the 10th March 1911. The nature of the preliminary record can be best gathered from the instructions issued to the enumerators who actually performed the operation. They are as follows:-
- 1. Beginning from the Ist February 1911 in Rural Areas you will visit every house in your block in which a separate number has been affixed, in the order in which the houses are entered in your Block List, and fill up the columns in the schedule for all persons who ordinarily live in or take their meals from the house. Even if they are temporarily absent such persons should be entered, if they will be back by the 10th March. Visitors should

not be entered if they will have left before that date.

2. You must carefully study the instructions given above for filling in the columns of the schedule and also the specimen schedule on the cover of this book which contains a number of entries illustrating the rules. You should consult your Supervisor whenever you

are in doubt as to the proper entry.
3. If directed to do so by your Supervisor, you will make a rough draft on plain paper,

and you will not copy it in your book until it has been passed by him.

4. If the entry for any person in any of the columns of the schedule be the same as that for the person entered on the line above, you must repeat the entry. You must not write the word "ditto" or make dots.

5. You must have completed all the entries in your block by the 20th February 1911 in 4th March 1911 in Rural Areas Towns

By the 1st February everything was ready for the preliminary enumeration. There had been no delay in the supply of forms and instructions, and as far as could be ascertained, the work proceeded according to the prescribed calendar. Special dates were fixed for the commencement of the preliminary enumeration in factories, in military areas, on railways, and in jails, hospitals, reformatories and asylums. In non-synchronous areas, where there was no final enumeration the preliminary (and only) enumeration had in the majority of cases commenced long before the 1st February.

36. Interval between the preliminary and final records.—The preliminary record was due for completion on the 20th February in rural areas and on the 4th March in towns. The interval between the completion and the final enumeration on the 10th March was occupied by superior officers and Charge Superintendents and Circle Supervisors in the following duties :-

(i) checking the entries to see if every building used as a dwelling place had been entered,

(ii) testing entries for households, taken haphasard, to see if any individuals had been omitted,

(iii) instructing Enumerators as to their duties with respect to the final enumeration,

(iv) examining the enumeration books to see if there were enough blank schedules for all probable entries at the final enumeration,

(v) distributing Household Schedules to heads of all households for which enumeration on such schedules had been permitted,

(vi) distributing the notices issued requesting the abstention on the date of the census from any festivals or ceremonies which could be conveniently held any alternative day.

The following printed form of notice in English and Burmese had been prepared in advance and supplied for distribution:-

"NOTICE."

"To the Pagoda and Monastery Elders, Village Elders and all Heads of Households of , District."

"As the evening of the 10th March next (the 11th waxing of the month of Tabaung) from 7 P.M., till midnight has been fixed for the Final Enumeration of the Census, it is requested that no pwes, festivals or ceremonies of the following nature shall be fixed for that date and time :-

(i) Ear-boring.

(ii) Initiation of priesthood.(iii) Marriage.

(iv) Pagoda Festival.

(v) Special offerings of Nats.

The somewhat generous interval of 18 days in rural areas (from the 20th February to the 10th March) between the completion of the preliminary enumeration and the date of the final enumeration did not prove to be more than was necessary for the effective performance of the duties to be performed. Constant checking and testing and instructions were necessary right up to the day on which the final enumeration was effected.

37. Final Enumeration.—The final enumeration was effected between dusk and midnight on the evening of the 10th March. The instructions for the final enumeration had been carefully explained by the Circle Supervisors in the interval elapsing since the completion of the preliminary enumeration. The intructions themselves given below afford the best description of the record as it was actually carried out. They were as follows:-

B .- The Second Round (Final Enumeration).

6. On the evening of the 10th March, at the time of lighting lamps, you will take this book as already filled in and again visit every house in your block in order. Before you start on your round, you must see that you are yourself enumerated in the house where you are

- 7. You must summon the chief member of each family and read over to him one by one the names of the members of his household entered in the schedule, asking him, as you read each name, whether the person is present in the house or not. You must also ask him each name, whether the persons have come or any child has been born. You must particularly whether any fresh persons have come or any child has been born. You must strike out the entries for persons who are not present, and fill up the form for any person now in the house who was not there when the first visit was made, such as guests, infants newly-born, and others. You are to consider as present all persons living in or taking their meals from the house, even though any of them may be out fishing or watching in the fields or the like.
- 8. The fresh entries mentioned in the last rule must be made on the blank pages at the end of your book. In each case you will enter the number of the house to which the fresh entries relate, writing under it the word "continued."
- 9. You must make no alteration whatever in any entry against the name of any person unless you have to strike out the entries altogether, because he or she is no longer present. When you strike out a person, you must draw a line completely through all the entries following that person's name, and not merely through column 3.

 10. Whilst going on the second round, you must visit every house marked "empty" in

your book, to see whether any person is then living there.

11. You must also go to the dharmsalas, serais, encampments and landing-places, where travellers rest for the night, and enter all particulars in the schedules for the way-farers, boatmen, pilgrims, and others you may find there, and strike out the entries already made against persons who are not then present. You should ascertain from the village watchman whether any members of a wandering tribe have come to your block. If so, you must go and enumerate them in the manner prescribed above.

If any householder in your block has been given a separate schedule, you must collect it on the morning of the 11th March and, after seeing that columns have been duly filled in according to the rules, you must stitch it into your book, next to the last schedule filled

up by you.

ENUMERATION. 33

Charge Superintendents and Circle Supervisors covered as much as possible of their census jurisdictions during daylight on the 10th March, as well as during the few hours devoted to the final enumeration, and from all reports received the work was excellently done. The public as a whole gave all the assistance possible in assisting the conduct of operations. In the Minbu, Thatôn and Bhamo Districts, grave difficulties were presented by the assemblage of large numbers of persons at the pagoda festivals being held on the date of the final enumeration, but owing to the excellent arrangements and the loyal co-operation of the persons assembled, the tasks were successfully accomplished. During the whole course of the operations no prosecutions under the Census Act were necessary.

38. District Census Charges .- A sum of Rs. 12,753-7-9 was spent in the actual conduct of operations in the various districts and territories of the province as follows:-

	Head of Expenditure.							
						Rs.	Α,	P,
District O				24440		5.894	8	8
Remunerat			Office	ers		179	15	6
Travelling	Allowa	ince	114		***	278	12	0
Local pure	hase of	statio	nery	0.00	***	533	12	6
Postage		12.00	***	Res.	***	98		2
Freight	224	121	100	***	***	684	14	9
Miscellane	ous	***	***	***	***	4,982	9	2
				Total		12,753	7	9

Further details are given for each district in Subsidiary Table III of this chapter. It is to be feared that despite the instructions as to the classification of expenditure issued by the Accountant-General, a very large number of items which should have been entered under more specific heads were grouped together as "Miscellaneous." An examination of each item of district expenditure, with the intention of preparing a more correct and instructive classification than that provided by the district accounts forwarded to the central office, was being conducted by the Deputy Superintendent, Babu A. C. Pal, at the time of his illness in March 1911. In the reorganization of the office consequent upon his death in the following month, the matter was necessarily put aside, and when an attempt was made to take up the work at a subsequent period, the papers were so disarranged that it would have been necessary to have commenced the work afresh to have obtained any satisfactory results. The attempt was therefore abandoned, as neither the time nor the staff at the disposal of the Census Superintendent were adequate for more than the performance of the current business of the office day by day.

The largest items were the costs of the establishments necessary to effect the enumerations and estimated in the remote portions of the Bhamo and Myitkyina Districts and the Northern and the Southern Shan States. Another large item was the cost of stationery in the Chin Hills due to a double enumeration, the first of which was conducted on locally purchased paper. The expendi-diture had been incurred before the Census Superintendent was aware of the magnitude of the preliminary enumeration being effected. An enquiry was held

and the expenditure finally passed.

As the accounts were classified on a different system from that adopted in 1901, it is impossible to institute a comparison between the corresponding items of expenditure for the two enumerations.

39. Special Industrial Census.-The following Resolution of the Government of India dated the 28th July 1910 will indicate the objects of the special Industrial Census, conducted simultaneously with the ordinary census on the 10th March:-

The general and household schedules sanctioned for adoption throughout British India at the Census of 1911 were published with the Home Department Resolution Nos. 67-11 (Census), dated the 31st March 1910. Before the date of that resolution the Census Commissioner for India represented that the general tables of occupations, while they would indicate the main functional distribution of the people, distinguishing workers from dependents

and would give statistics of occupations combined with agriculture, and of occupations by caste, would furnish very meagre information regarding industries and, in particular, no reliable information regarding recent industrial dovelopments. He pointed out that an attempt was made in 1901 to distinguish between workers in factories and those engaged in home industries, and also to distinguish, in the case of factories, between "owners, managers and superior staff" and "operatives," but that the entries in the schedules were far too vague to permit of accurate information on these points being obtained. He therefore recommended that, in addition to the general and household schedule, a special schedule should be prescribed for persons working in mines, factories, etc. His proposal has been generally approved by the local Governments and Administrations and the Government of India have decided to prescribe in connection with the coming census, in addition to the general and household schedule, a special industrial schedule in the form appended to this resolution, to be filled in by the owners or managers of factories, mills, etc., in which at least twenty persons are employed.

2. A list of the industries, with reference to which the Government of India think it desirable that information should be compiled in the form of the special schedule, is attached to this resolution. Local Governments are, however, at liberty to include in the list any other

industries for which they desire to have statistics.

 The examples given below question 1 in the schedule should be chosen locally with reference to the circumstances in each province.

The methods by which the Special Industrial Census were effected were prescribed by Census Circular No. 13 of 1910, dated the 9th October 1910, as follows:—

In accordance with the provisions of sections 9 and 10 of the Census Act (see / urma Gazette, dated the 27th August 1910, Part IIIA, page 117) it has been decided to effect a Special Industrial Census for all mines, factories, mills, etc., of the classes specified in the list Annexure C). This Census will be taken on a Special Census Schedule (Annexure A), which will be forwarded to the Manager, Agent or Owner of each factory with a letter in the form (Annexure B). It will be taken for all mines, factories, mills, etc., specified in List C, in which at least twenty persons are employed.

List C, in which at least twenty persons are employed.

2. I would request you to commence a record of all such Industrial Units in the follow-

ing form which should be prepared in manuscript.

Register of Mines, Factories, Mills, etc., in which at least twenty persons are employed.

Township, Serial of	Nature al of Factory	DA	UMBER OF PERSONS SUALLY EMPLOYED DAILY,		Name of Person in	Address.	Name of Super-	Date of issue of Schedule.	Manner in which		Remarks	
etc.	No.	worked,	Skilled,	Unskilled.	(if any) employed.	charge.		visor.		issued.	Schedule.	
1 2	2	8	4	- 5	6	7	8	9	10	11	12	18
										•		

NOTE.—The serial number in column 2 will be continuous for the whole district.

This register should be completed by the 25th November and a note of the number of factories, etc., included should be sent to me on that date in order that the number of forms required may be printed. The numbers for which English and Burmese Schedules will be required should be given. Government and Railway industrial undertakings, such as printing presses, telegraph and railway workshops, are to be included within the scope of the Census.

3. The schedules should be distributed a few days before the 10th March by the ordinary Census Supervisor, who should be given an extract from the register mentioned in paragraph 2 for all the Industrial Units in his circle. The particulars required are quite few and simple, but in case the Manager is unable to grasp what is required, the Supervisor should be prepared to explain the schedule to him.

Several defects were found in the initial returns, and these had to be corrected by supplementary returns, which were called for from the Census Office when the discrepancies between the occupational returns of the ordinary census and those of the Special Industrial Census, demonstrated that the latter were wanting in several particulars.

PROVISIONAL TOTALS.

40. Instructions for the preparation of Provisional Totals.—The preparation of the Provisional Totals, though in the majority of districts very

satisfactorily and creditably performed, was on the whole, disappointing both as regards promptitude and accuracy. This cannot be attributed to any omissions or want of detail in the instructions issued. The Census Manual contained the following definite instructions to each grade of Census Officers;

To Enumerators.

You will then (on the morning of the 11th March) go without any delay to the place appointed by your Supervisor, and after your book has been inspected by him, you will enter in the abstract printed on the inside of the cover, the number of houses and persons, male and female, in your block.

(ii) To Circle Supervisors.

The Enumerator's Abstract.—On the morning of the 11th March, the Enumerators of each circle should meet you at some place previously selected by you. You should then—

(a) compare the number of books produced with the number of blocks in the circle

and see that you get a book for every block;
(b) see that the Household Schedules shown by the Block List to have been issued have been duly collected and sewn into the right book, and that all loose schedules are accounted for;

(c) read every entry made at the Final Enumeration and correct any obvious errors

or omissions;

(d) have the number of houses and males and females independently added upon separate pieces of paper by the Enumerator of the block and by two other Enumerators. If the totals thus ascertained agree, they may be accepted as correct and entered in the Enumerator's Abstract at the end of the book. If they differ you must check the figures yourself.

When all the Enumerators' Abstracts have been completed and found to be correct, you should select the two best Enumerators and with their assistance prepare the Circle Summary in the Form Appendix E.

The headings and columns 1 and 2 should be filled up by you when the printed form is supplied to you. Do not wait till the 11th March to make these preliminary entries.

Immediately on completing the Circle Summary you should arrange all the Enumeration Books in the serial order of blocks, with the Circle Register corrected up to date placed on the top. These should be tied in a neat bundle and handed to the Charge Superintendent

with the Circle Summary.

In most cases you will do this personally, but in remote circles you will send a trustworthy messenger by the quickest route with the Circle Summary to the Charge Superinten-

dent, and follow yourself with the Enumeration Books and the Circle Register.

After handing these records to the Charge Superintendent you should remain to assist him in preparing his Charge Summary and to make any corrections he directs in the Enumeration Books.

(iii) To charge Superintendents.

Charge Superintendents should fix on a place accessible from all parts of the charge for the Supervisors to bring their-

- (i) Circle Summaries, (ii) Circle Register, (iii) Enumeration Books,

on the morning of the 11th March. In the case of remote circles special arrangements must be made for messengers to bring in as speedily as possible the Circle Summaries only to the charge Superintendent, the Supervisor following with the Circle Register and Enumeration Books.

On receipt of the Circle Summaries the Charge Superintendent must compare them with the Circle List and Enumerator's Abstract to see that no block has been omitted and that the Enumerator's figures have been correctly posted. He must have the totals of each Circle Summary checked independently by two Supervisors, each one adding up the number of houses and males and females on a separate piece of paper.

Charge Summary. -A charge Summary must then be prepared on the Form Appendix E, modified as follows:

- (i) Substitute "Charge" for "Circle" before "Summary" in the main heading.
 (ii) Strike out the word "Circle" in the second line of heading.

- (iii) Omit column 1 entirely.
 (iv) Substitute "Circle" for "Block" in the heading of column 2.
 (v) Substitute "Charge Total" for "Circle Total" in the bottom line.

The totals of the Circle Summaries will be posted in the Charge Summary and added up with the help of the most intelligent Supervisors in the circle on the system of double check just described (Article 18).

On completion the Charge Summary will be placed with the Circle Summaries in

serial order, and sent to the District Headquarters by the quickest possible route, which must be arranged beforehand by the Deputy Commissioner.

In addition, the Census Code contained four lengthy articles dealing with the arrangements for dealing with the provisional totals with respect to:

(i) Special Enumeration Records,

(ii) Assistance of Subdivisional Officers in their preparation,

(iii) Cities and Towns,

(iv) Non-synchronous Tracts,

(v) Remote areas in synchronous tracts,

Attention was also drawn to the fact that the experience of previous censuses had demonstrated that mistakes in the provisional totals were due to-

(a) want of care in collection of Special Enumeration Records;

(b) omissions of entire units, such as circles or blocks;

(c) incorrect totalling by Supervisors and Charge Superintendents;

(d) the posting in the District Summary of the figures at bottom of the first pages of the Charge Summary instead of the grand total.

To supplement these instructions, and to emphasise the importance of the provisional totals, the following circular was issued on the 23rd January 1911, about six weeks before the date of the census.

The attention of all Deputy Commissioners is invited to the necessity of taking adequate precautions in advance to ensure that the Provisional Census Totals for each District may be telegraphed at the latest by the 17th March to the Census Superintendent, Rangoon, and the Census Commissioner, Calcutta. It is not anticipated that there will be any difficulty in non-synchronous areas, the enumeration for which can be completed before the 10th March. The directions in which precautions are specially needed are in remote portions of the synchronous area, particularly with respect to the enumeration records of-

Forest Areas.

Camps of Timber Trading Companies.

Steamers and Launches.

2. Special arrangements should be made for the speedy collection and transmission to Headquarters in all cases where difficulty or delay is anticipated. Wherever there is a danger that the Final Totals may arrive too late, Preliminary Totals should be prepared a week in advance, and used instead of the final totals on the 17th March, if the latter have not arrived.

3. There will be special holidays from normal administrative duties notified

on the 21st and 22nd February for the Preliminary Enumeration, and on the 10th and 11th March for the Final Enumeration and the preparation of Provisional Totals. It is feared that the preparation of the Provisional Totals may encroach on the holidays of the 13th and 14th March, but if the work be apportioned carefully between the Township, Subdivisional and District Staffs, the encroachment may be reduced to a minimum, and possibly may be avoided altogether.

4. Provisional Totals should be despatched by Ordinary Telegram, up to and including the 15th March, but those not completed till the 16th or the 17th March should be despatched by an urgent telegram.

41. Special difficulties experienced in preparing Provisional Totals in Burma.—It is therefore obvious that so far as instructions were concerned the accuracy and the promptitude of the receipt of the Provisional Totals should have been guaranteed. In so far as their preparation failed to come up to expectation, it must be remembered that in Burma, there are almost insuperable obstacles to a speedy collection and calculation of the census totals. Communications by road in Burma are notoriously behind those of any other Indian province, and communications by water are at their worst in March, the month in which the census was taken. Many streams and channels normally open to traffic during the rest of the year are closed owing to insufficiency of water during March. This not only necessitated travelling by lengthy and devious routes in many cases, but it was the cause of the stranding of boats and launches containing census officers and records while on their way to the appointed rendezvous. Several instances of delay from this cause were reported.

Moreover February and March are the busiest months in the whole year for the Land Records and Revenue Staffs of the province. The 15th February is the date fixed for the completion of the assessment rolls of the land planted with the main crop, and Land Records Officers had to prepare their assessment rolls simultaneously with their preliminary census enumeration. To add to their difficulties, new departmental forms were being brought into use in some districts for the first time in 1911. The new forms and the preliminary census enumeration were two additions to the busiest month of the staff of the Land Records Department. The final enumeration and the preparation of the provisional totals similarly made two additions to the heavy work of revenue collection, which reaches a maximum for the remaining administrative officers of a district during the month of March.

42. Date of Census unsuitable for Correct and Rapid Preparation of Provisional Totals.—In normal years there is one breathing space allowed in the middle of the strenuous period of revenue collection. The full moon of Tabaung is a universally recognised Buddhist holiday. But the preparation of the provisional census totals required the sacrifice of this holiday. It fell on Monday and Tuesday, the 13th and 14th of March, in the heart of the period (the 11th to the 17th March) fixed for the preparation of the provisional census totals. In normal years there would have been three and a half days' holiday, from noon on Saturday the 11th March, till Tuesday the 14th March. But the census, in addition to the heavy work it had caused prior to the holidays, claimed their total sacrifice if the work was to be effectively performed. It is almost impossible to appreciate and to acknowledge the general willingness with which the sacrifice was made. Subsidiary Table VI shows that in only two districts was the date for the preparation of the provisional totals exceeded. It was with regard to the accuracy rather than the promptitude of the calculations that several districts failed badly. The instructions quoted above suggest that the provisional totals are the resultant of a series of nicely adjusted co-operations between the Enumerator and the Circle Supervisor, the Circle Supervisor and the Charge Superintendent, and the Charge Superintendent and the District Census Officer. Any failure in the continuity of the series destroys the possibility of accuracy in the total. Where definite enquiries were made as to the causes of want of prompti-tude or accuracy in the provisional totals, they always led to the same result, the want of personal delivery of the records and the abstracts and summaries, to the officer of the next higher grade in the series.

For this, the holidays must be held responsible. After the arduous labour of the final enumeration, it was too much to expect a universal sacrifice of normal holidays for the sake of the provisional totals. In the great majority of cases the instructions were faithfully followed. But, in others, the enumeration abstracts were not completed before delivery to the Circle Supervisor, or were not checked or incorporated into the Circle Summary on receipt. Cases even happened in which enumeration books were handed in to the Charge Superintendents without the Enumeration Abstract being compiled. Instances were recorded in which each grade of census officers, Enumerators, Circle Supervisors and Charge Superintendents had put aside their duties with respect to the provisional totals until after the holidays, and when suddenly pressed for delivery, had made them over to the next officer in succession in an incomplete state. The interposition of holidays in the middle of the period prescribed for the preparation of the provisional totals was unfortunate, not so much because of the delay ensuing, but because of the breaches caused in the continuity of the series of operations

essential for their prompt and accurate completion.

It is therefore principally with regard to the preparation of the provisional totals that I have suggested, in paragraph 13 above, that the census should be taken at an earlier date than the 11th increase of the month of Tabaung and on a day other than Friday. The 8th or 9th increase would give sufficient moonlight up to midnight to enable the operations to be properly conducted and would give time for the majority of census officers to have completed their duties with respect to the provisional totals before the holidays connected with the full moon arrived. An earlier day in the week would prevent the breach of continuity bound to occur owing to the cessation of work on Sunday, if the census is held on a Friday.

43. Actual dates of receipt.—Subsidiary Table VI gives for each district the dates of receipt of the Provisional Totals, the actual discrepancies between the provisional and the final totals and the percentage of the discrepancy to the whole. The Non-Synchronous areas of the Pakôkku Hill Tracts, the Northern Shan States, the Chin Hills and the Northern Arakan District, freed from any

difficulties of final enumeration, naturally were able to submit their totals at an early date. Of the districts in which the normal census was taken, Rangoon was

Prepara provision	ation of nal totals.
Date (March).	Number of Districts,
6	I
8	1
11	2
12	1
13	4
14	1
15	10
16	11
17	8
19	1
21	1

able to repeat its success of 1901 and to give its provisional total on the day following the census. Magwe was the only district for which the totals were prepared on the 12th, and three normal districts only, Pegu, Sagaing and Kyauksè, had their totals ready on the 13th. The promptitude of the calculations in these districts was not attained at the expense of accuracy, and their experience demonstrates that the instructions, if followed, were ample to ensure the completion of the totals within the time permitted, if local arrangements has been properly thought out. The majority of the totals were received on the 15th and 16th, and eight districts supplied the figures on the last day permitted. Tavoy was two days late, and Kyaukpyu was four days late owing to the records from a remote area having gone astray. The delay in the figures for Kyaukpyu District would have delayed the publication of the figures for the whole of India,

but for the fact that the Census Commissioner for India made an estimate of the probable figures (which proved to be exceedingly close), and published the statement of the provisional totals for India as a whole without waiting for those from

Kyaukpyu to be received.

44. Inaccuracy of Provisional Totals.—Of the seven districts whose provisional totals differed from the final figures by more than one thousand,

Provisional T	otals of g	reatest
District.	Discre	pan ^c y.
District.	Actual.	Per cent
Hantha- waddy.	59,494	12.40
Toungoo	9,176	2.22
Meiktila	6,028	2.50
Bassein	4,835	1,11
Rangoon	3 88.4	1.34
Thayetmyo	2,279	0.01
Henzada	1,408	0.20
Province	57,312	0.4753

Hanthawaddy stands out from the rest, both in the magnitude and in the nature of the errors committed. Attention has already been drawn in paragraph 4 to the want of coincidence in the Land Records and the administrative jurisdictions of the province. This is more pronounced in Hanthawaddy than in any other district. Owing to this want of coincidence, the initial formation of charges proceeded on wrong lines, following Land Records jurisdictions rather than township boundaries. On inspection by the Census Superintendent in August 1910, this error was rectified and a revised scheme of charges was effected by the Deputy Commissioner and the Census Superintendent jointly. The new scheme of charges was numbered serially for the district at the time, but the local officers adopted a

different scheme of numbering by Townships as follows :-

Taikgyi-I and II, Tantabin—I, II and III, Insein—I, II and III, etc.,

When the provisional totals were being prepared, the complicated system of local charge numbers prevented a comprehensive view of the charges as a whole from being obtained. It was not noticed at the time that Charges, Taikgyi II and Tantabin II and III, were missing. If the authorised scheme prepared by the Deputy Commissioner and the Census Superintendent had been followed, the absence of Charges II, IV and V from one set of serial numbers could not have been overlooked. But apart from the initial neglect in the formation of Census Charges, followed by the failure to adhere to the corrected scheme after revision, there was gross neglect on the part of the Circle Supervisors and Charge Superintendents of the omitted charges to perform their duties. One Charge Superintendent took five days to prepare the totals for a charge of 8,000 persons, a matter of about two hours' work, and the enquiry instituted demonstrated other departures from instructions which contributed to the magnitude of the error. It is worthy of note that the error for the provisional totals of the whole province was 2,182 less than that for Hanthawaddy District alone. But for this district, the various errors of omission and commission in the several districts, would have cancelled each other to an almost imperceptible proportion of the total population.

The large discrepancy in the provisional totals of the Toungoo District was due to the double inclusion of Shwegyin, Municipality. Its population was included in the figures for the Subdivision, and then added separately as the population of the Town. The large discrepancy in the Meitktila District arose owing to the incomplete first page of a charge Summary being entered in the District Summary instead of complete charge totals. This was one of the errors against which district officers were specially warned in Article 10 of Chapter XIII of the Census Code. A similar error was responsible for the large discrepancy in Bassein District. The Deputy Commissioner reports that in some cases the total at the foot of the first page of the Circle Summary had been taken instead of the total on the last page. The discrepancy in the Rangoon provisional totals was due to the inclusion in the final totals of passengers and crews of ships arriving at Rangoon after the provisional totals had been submitted. The error in the Thayetmyo District which caused so large a discrepancy was the double inclusion of a circle total. It was treated as a "brought forward total" and entered into the following circle figures, as well as being entered on its own account. In Henzada District, the discrepancy was due to the inclusion of an estimate for a few of the circles, whose totals had not arrived in time for inclusion in the provisional calculations.

SUBSIDIARY TABLE I-A.—Census Divisions and Agencies. Synchronous Areas.

341				Number	of	1	Number of		Average n	umber of h	ouses pe
District or State,			Charges.	Circles.	Blocks.	Charge Superin- tendents.	Supervisors.	Enumerators.	Charge Superin- tendent,	Supervisor.	Enumerator.
1			2	3	4	5	6	7	8	9	10
Total	***		454	5,258	64,039	452	5,259	64,039	4,741	413	84
Arakan Division	c		40	439	4,724	40	439	4,724	4,227	385	36
Akyab			23	270	2,840	23	270	2,840	4,706	401	38
Kyaukpyu Sandoway		:::	7	85 84	1,149 735	7	85 84	1,149 735	4,170 2,820	491 236	36
					0 700-17			2000000			
Pegu Division	377	222	89	886	11,568	83	886	11.568	4,915	460	35
City of Rang Hanthawadd	con	***	19	142	1,137	19 16	142	3,161	2,615 6,653	350 741	4.
Tharrawadd	y	***	16	187	3,161 2,448	16	187	2,448	5,504	471	36
Pegu Prome		***	17	189	2,237 2,585	17	189	2,237	4,895 5,369	358	37
											0.0
Irrawaddy Divi	sion	331	80	759	11,818	80	759	11,813	4,530	477	32
Bassein Henzada		:::	24	302	2,796 2, 7 60	24	302	2,796	5,230	779 346	35
Myaungmya			13	115	2,387	13	115	2,387	5,009	100	27
Ma-ubin Pyapôn			9	117	1,863	14	117	1,863	6,623 3,606	509 424	34
Tenasserim Div	ision		65	764	7,773	55	765	7,773	4,985	359	35
Toungoo	***		12	206	2,307	12	206	2,307	6,378	372	34
Salween	***	***	3	8	289	3	8	289	3,585	1,3.14	37
Thatôn Amherst		***	12	102	2,098 1,854	15	182	2,058 1,854	6,375 4,295	398 354	35
Tavoy	***		15	85	555	6	86	555	4,635	323	50
Mergui	•••		7	91	670	7	91	670	2,930	225	31
Magwe Division	E		46	648	7,801	46	648	7,801	5,593	897	88
Thayetmyo	•••		11	143	1,814	11	143	1,814	5,087	391	31
Pakôkku Minbu		***	15	182	2,436 1,929	15 14	182	2,436	5,646 3,971	465 323	35
Magwe	•••	***	6	151	1,622	6	151	1,622	10,169	404	38
Mandalay Divis	ion	33.2	47	441	5,785	51	441	5,785	3,036	351	27
Mandalay	555	***	18	180	2,254	18	180	2,254	4,288	429	3-
Bhamo Myitkyina	(2.0)	••	4	41	447	4	41	447	5,530	540	49
Katha	***	774	10	82	1,289	14	82 102	1,289	3,742	404	30
Ruby Mines		5007	4	36	403	4	36	403	4,899	544	49
Sagaing Divisio	n	our/	46	681	7,915	46	681	7,915	5,605	879	88
Shwebo	550	225	13	212	2,418	13	212	2,418	6,225	382	33
Sagaing Lower Chine	lwin	:::	11	152 220	1,865 2,321	11	152 220	1,865	6,432 7,060	465 321	37
Upper Chine			12	97	1,311	12	97	1,311	2,961	36 6	2
Meiktila Divisio	n		51	640	7,190	51	640	7,190	5,034	401	8
Kyauksè	***	***	11	86	1,169	11	86	1,169	2,525	323 288	24
Meiktila	****	222	12	198	1,687	12	198	1,687	4,744 4,566	288 535	3- 4;
Yamethin											4

SUBSIDIARY TABILE I(B).—Census Divisions and Agencies. Non-Synchronous and Estimated Areas.

District or S	tate.	N	lumbe	er of	N	umber o	E	Average number of houses per			
Name.	Class of Census.	Charges.	Circles.	Blocks.	Charge Superin- tendents.	Supervisors.	Enumerators.	Charge Superin- tendent.	Supervisor.	Enumerator.	
1(a)	1(b)	2	3 4	4	5	6	7	8	9	10	
Total	resta)	46	564	20,652	44	506	1,014	7,529	655	327	
Arakan Division	****	4	7	101	4	7	48	1,527	872	127	
Akyab	Non-synchronous	i	1	56	1	1	7	545	545	77	
Northern Arakan	Non-synchronous	2	5	38	2	5	34	1,728	1,091	160	
Kyaukpyu	Non-synchronous	I	1	7	1	1	7	106	106	15	
Tenasserim Division	****	7	44	138	7	44	102	837	54	1,58	
Amherst	Non-synchronous	3	21	78	3	21	78	656	.94	25	
Tavoy	Non-synchronous	1	1	4	1	1	4	392	393	98	
Mergui	Non-synchronous	3	22	56	3	22	20				
Mandalay Division	(****	13	84	1,37,6	11	87	15	2,041	525	1.497	
Bhamo	Non-synchronous	2	8	464	2	2	5	5,562	5,562	2,225	
Myitkyina	Non-synchronous	7	22	563	7	22	7	1,328	423	1,328	
Katha	Non-synchronous	2	30	35	τ	r	3	1,076	1,076	359	
Ruby Mines	Non-synchronous	2	24	314	ī	12	***	475	15"		
Specially Administered Territories.	25504	22	429	19,087	22	418	849	13,656	719	854	
Northern Shan States	Non-synchronous	,6	215	5,382	.6	215	358	1,355	36	23	
Northern Shan States	Estimated	2	65	727	2	65		38,005	1,169	,	
Southern Shan States	Non-synchronous	7	111	12,048	7	1,1	400	26,243	1,654	459	
Southern Shan States	Estimated	1	3	69	1	3		1,590	530		
Pakôkku Hill Tracts	Non-synchronous	2	15	295	2	4	18	3,494	874	19.	
Pakôkku Hill Tracts	Estimated	1	3	38	1	3	38	1,965	655		
Chin Hills	Non-synchronous	3	17	478	3	17	35	8,514	1,497	73	

SUBSIDIARY TABLE II.—Number of forms supplied.

				Enumera-	Block	General Sc	hedules.	Other	forms iss	ued.	ď
Distri	ct or Sta	ite.		book covers.	and house lists	Actual number.	Per 100 houses.	Household Schedules.	Boat Tickets.	Travellers' Tickets.	Remarks.
	1	,,,		2	3	4	5	6	7	8	9
Province	***		(994	118,810	194,441	1,627,450	66	12,115	51,740	153,900	
Arakan Divisi	on		***	6,189	13,905	102,650	59	250	12,230	12,880	
Akyab		***		3,730	8,400	63,740	59	200	9,300	10,100	
Northern	Arakar			58	340	3,080	56	10	40	40	
Kyaukpyu Sandoway		***	25097	995	3,225 1,940	23,770 12,060	57 61	20	2,020 870	520 2,220	
				21,155	39.884	268,140	66	3.570	9,450	50.600	
Pegu Division	1	***	4.44	21,100		200,140	00	8,870	9,400		
Rangoon Hanthawa	ddy	•••		5,074	8,664 9,950	54,300	110 61	1,970	5,000	40,800	
Tharcawa				3,976	7,030	51,750	58	1,000	1,050	2,100	
Pegu Prome	•••	125		3,265	6,830 7,410	47,000	58	200	2,100 1,100	2,100 5,100	
T-OATTO		5.55	•••	CS#-00-00/9	erector in the	50,590	63	200	5000000		
irrawaddy D	ivision	***	***	15,117	30,024	211,780	58	850	7,970	6,170	
Bassein	0000	•••	***	3,550	7,240	51,290	62	450	2,300	1,500	
Henzada Myaungm	va		***	3,105	8,570 5,320	59,780 36,170	57 56	100	1,520 2,100	1,520 2,100	
Ma-ubin				2,335	5,084	34,950	58	100	2,050	1,050	
Pyapôn	***	***	***	1,982	3,810	29,590	59	5 555 5	575 V 207702000	1:55	
Tenasserim D	livision	•••	***	12,484	25,701	162,300	58	1,270	7,000	9,330	
Toungoo	***	•••		3,320	6,460	42,840	55 56	250	1,250	1,350	
Salween Thatôn	***	•••	•••	387 2,860	6,000	6,070 45,680	50	200	1,000	3,000	
Amherst		:::		3,490	6,239	38,600	60	450	1,500	2,700	
Tavoy Mergui	•••	•••	***	1,234	4,180 2,000	15,090	54 68	90 150	350 2,100	850 630	
	ton.	***		10,190	22,583	159,570	62	790	2,120	6,070	
Magwe Divis		***	***								
Thayetmy Pakôkku	o 	***	***	2,373	5,030 7,225	33,330	60 60	330	550 220	1,050	
Minbu	***	•••	2000	2,490	5,505	30,620	71	110	1,050	4,100	
Magwe	***	***	***	2,294	4,823	35,610	58	150	300	500	
Mandalay Di	ision	***	***	8,607	17,239	117,040	66	1,990	6,540	83,160	
Mandalay				3,160	7,020	53,110	69	1,290	1,050	9,450	
Bhamo Myitkyina			:::	659 1,985	2,260	13,715	62 78	150	1,520		
Katha	***	***	***	1,841	3,770	25,710	62	300	2,600	3,030 2,600	
Ruby Min	es	***	***	962	1,420	11,035	56	100	1,050	1,050	
Sagaing Divi	sion	***	***	10,445	22,320	154,125	59	400	4,720	7,190	
Shwebo	***		2000	3,410	7,140	49,330	61	100	520	2,040	
Sagaing Lower Chi	 indavin		•••	2,306	5,450	39,100	54	100	2,100	1,050	
Upper Ch				1,811	6,370 3,360	45,780 19,915	65 56	100	1,050	2,050	
Meiktila Divi				9,233	21,375	156,995	61	455	1,710	4,200	
Kyauksè				AFFCCCO-CC	5.90-55			HORAGE			
Meiktila			***	1,469 2,153	3,310 5,035	23,690 37,895	8 ₅	100	220 220	1,050	
Yamethin		•••	•••	2,253	5,120	39,320	51	150	220	1,050	
Myingyan		•••	•••	3,358	7,910	56,090	59	105	1,050	1,050	
Specially Admi				23,822	10	283,390	94	240		6,000	
Northern				8,140		127,050	151	100		4,000	
Southern : Pakôkku l			•••	15,090		142,020	77	100		2,000	
Chin Hills		124	***	582		14,270	56	20		***	
Special Dis Census Head	tributio quarter		from	1,568	1,400	11,460	1444	2,300		18,300	

SUBSIDIARY TABLE III.—District Census Charges.

District or State.		Distric Office Establis ment.	h-	House Number- ing.	Remuner a- tion of Census Officers.	Travelling allowance.	Purchase of Stationery.	Postage.	Freight.	Miscel- lancous,	Total.
1				3	4	5	6	7	8	9	10
		Rs. A.	ν.	Rs.	Rs. A. P.	Rs. A. P.	Rs. a. r.	Rs. A. P.	Rs. a. P.	Rs. A. P.	Rs. a.
Arakan Division		::444		***	249 15 6	55 0 0	***	344	s8 6 o	450 II 5	784 0 1
Northern Arakan				***		26 0 0 35 0 0	***	***	12 6 0	345 14 0	378 4 35 0
The state of the s		***		1273	249 15 6	***		922	10 0 0	104 13 5	104 13
Pegu Division		58 5	5	·#3	9997	818 IS 0	124 6 0	9 8 0	7 20 0	314 0 0	717 5
Hanthawaddy				ij.,	***	313 12 0	90 3 0	030	0 2 6	252 10 0	212 13 343 1
Pegu	22	28 5 30 0		#	77	**** ***	34 3 0		0 15 6	34 0 0 16 8 0	45 13 64 0 51 10
rrawaddy Division		144		West	***	12	***		31 # 3	139 8 o	173 10
Bassein		***			***	***	799	1800	9 0 0	82 7 0	91 7
Myaungmya Ma-ubin		***		777 777		***		100	10 2 3	57 1 0	72 1
Pyapôn	***	7 644		444	***	***	***		*4*	***	***
enasserim Division		1744		1115	***	0 18 0	44 4 0	43 19 0	5 13 0	1, 189 10 6	1,386 3
Salween		22			***	347	***	110	***	119 5 0 88 11 6	119 5 88 11
Amherst Tavov					***	0 12 0	***	30 12 0 15 0 0	1 13 0	547 9 0 25 0 0	580 14
Mergui		094		***	344	3154	44 4 0	Same	***	509 1 0	553 5
lagwe Division		189		***	30 0 0	900	5 0 0		23 6 0	198 13 0	*5º 3
Pakokku				:::	30 0 0	***	5 0 0	710	10 10 0	39 10 0 153 3 0	50 4 199 15
M. Commercial		11		110	***	***	***	***	***	:::	
fandalay Division	1	,670 o	6		0464	m		37 13 8	3 4 8 o	838 11 8	s,581 1
		977 0	6	***		***	***	32 13 8		172 0 0 332 14 0	194 13
Myitkyina Katha		693 0			122	22	***	15 0 0	34 8 0	7 0 0	1,309 14 713 8 33 0
was mines	***	***		100	777.1	***	***		J4 0 0	307 5 2	341 13
againg Division					***	4 .		5 44 7	8 18 0	606 6 o	616 6
Sagaing	***	**			***	1 4 0		***	6 6 0	149 8 6 102 9 0	157 0 103 g
Lower Chindwin					***	***	112	***	2 8 0	239 0 6	239 6
leiktila Division		***		m23	344-	900	64 9 0	9.2	78 15 3	311 0 9	463 9
		***			***	***	4 0 0	==	22 I 0 56 14 3	0 11 0	11.15
Yamethin				***	1.	9 0	60 9 0	***	30 14 3	24 0 6 286 4 3	33 0 340 13
pecially Administer Territories	ed 4	. 166	9	ě	323	#	a95 9 6	15 3 6	464 6 3	839 10 4	5,781 0
Northern Shan Stat Southern Shan Stat	es t	179 3	6	9			m	1 3 6	21 4 0	338 6 s	1,540 1
Lakokku Hin Tusci	cs 2	,980 1	3	**	***	***	295 9 6		443 2 3	391 0 0	405 13
Total	. 5	,894 8	8		a79 15 6	278 IZ O	533 18 6	98 15 1	684 14 9	4,982 9 2	11.753 2
rotat	. 5	,094 0	-		1/9 15 0	2/0 12 0	533 11 0	90 15 1	004 14 9	4,982 9 2	11,753 7

SUBSIDIARY TABLE IV(A).—Preliminary Census Calendar issued 15th May 1910.

DISTRICT CENSUS CALENDAR—APRIL TO NOVEMBER 1910.

Period.	Serial No.	Action to be taken.
1	2	3
ist April to	1	Preparation of General Village Register.
r	2	Formation of Charges.
i	3	Appointment of Charge Superintendents (1st July).
	4	Formation of Blocks and Circles.
15th June to	5	Preparation of Circle Lists.
31st July.	6	Preparation of Census Maps.
	7	Supply of Circle Lists to Charge Superintendents.
	8	Supply of Charge Maps to Charge Superintendents.
į	3 4 5 6 7 8	Completion of General Village Register by entries in columns 11, 12 and 13.
r	10	Preparation of Abstract of Circle Lists,
ist August to	11	Abstract of Circle Lists to be sent to the Provincial Superintendent (12th August)
31st August.)	12	Charge Superintendents check arrangements of Circles and Blocks.
(13	Charge Superintendents check fitness of persons named for Supervisors and Enumerators.
ſ	14	Appointment of Supervisors and Enumerators.
i	15	Preparation of Circle Register.
	15	Appointment Orders
rst Septem-	17	Circle Map
ber to 30th 4	17	Supply of Specimen Enumeration Book to Supervisors.
September.	19	Supply of Instructions
187	20	Circle Register
- 4	21	House List Forms
Ų	22	Check of Circle Boundaries by Supervisors.
ıst Oc ^t ober (23	Charge Superintendents to train Supervisors in House-numbering.
to 15th No-	24	Supervisors to train Enumerators in House-rumbering.
vember.	25	House-numbering.
(26	Preparation of House Lists.
۲	27	Final Delimitation of Blocks.
	28	Supervisor to send off copy of corrected Circle Register to Charge Superintendent.
5th Novem-	29	Charge Superintendent to send copy of corrected Abstract of Circle List to
ber to 30th	- 4	District Census Officer.
November.	30	District Census Officer to send revised District Abstract to the Provincia Superintendent.
. (31	Distribution of Enumeration Forms.

SUBSIDIARY TABLE IV(B).—Supplementary Census Calendar issued 15th September 1910.

Date or Period.	Reference to Cer Code,	isus	Action-
i	2	_	3
Isth September September	XI, 3 X, 9	::-:: ::::::	Determination of Military Boundaries. Preparation of Register of Railway Census Divisions (by Railway Agency).
30th September	X, 9	•••	Copies of Register of Railway Census Divisions to be sent to Deputy Commissioners and Provincial Superintendent.
1st to 15th October	XI, 6		House numbering in Cantonments and Preparation of Military House Lists (by Military Agency).
October	XI, 23 (iii)	•••	Deputy Commissioner to visit Cantonments to inspec House-numbering and House Lists.
1st to 20th November.	VII, 5, 7	•••	House Lists and House-numbering in Factories, etc., treater under Chapter VII.
ist November	IX, 4	***	Preparation of Steamer and Launch Lists.
15th November	XI, 11		Military Circle List to be prepared and sent to Deputy Commissioner.
20th to 25th November.		***	Abstract of House List of Factories, etc., specially treated to be sent to Deputy Commissioner.
(IV. 9	•••)
outh November	VII, 6	***	Revised Circle Abstract to be sent to Provincial Super
27th November	X, 9 (a), Note	••	intendent.
- A t - sail December	X1, 12, 23 (V)	***	House-numbering and Preparation of Block Lists on
1st to 15th December	X, 10	0.65	Railways (by Railway Agency).
15th December	VII, 9	•••	Circle Register for special Factories, etc., to be sent to Deputy Commissioners.

SUBSIDIARY TABLE IV(B).—Supplementary Census Calendar issued 15th September 1910—concluded.

Date or Period.	Reference to Census Code-	Action.
1	2	3
15th December	VII,9	Factory, etc. Supervisors and Enumerators appointed.
15th to 31st Decem-	X, 11	Appointment of Railway Census Officers (by Railway
ber, End of December	X, 9 (a)	Agency). Deputy Commissioner inspects Railway Census arrangements.
December {	V VII, to XI, 12, 23, (v)	Distribution of Forms.
December {	V, 5 VII, 10 X, 11 XI, 13	Formation and Distribution of Enumeration Books.
December 1910 and January 1911.	IV, 10 VII, 11 IX, 2(iii), 6(iii), 7 X, 9 (a) (i) XI, 10, 15, 23(iv) XII, 1, 2 See also Manual	Testing of House-numbering and Instructions to Census Officers.
3rd January	X, 9 (a)	Deputy Commissioner reports on adequacy of Railway Census arrangements.
February	XI, 23 (iv)	Deputy Commissioner, to satisfy himself that Military arrangements are satisfactory.
1st February 5th February 1oth February 1oth February 15th February 1st March	XII, 6 VII, 12 XI, 16 X, 12 XII, 6 VI, 18, 20	in Rural Areas, in Factories, etc., treated under Chapter VII, in Military Areas, for Railway Residents, in Towns, in Jails, Hospitals, Reformatories, Asylums, etc.
20th February 25th February 25th February 25th February 25th February 4th March 5th March	XII, 6 VIII, 12 XI, 16 X, 12 XII, 6 VI, 18, 20	in Rural Areas, in Factories, etc., treated under Chapter VII, in Military Areas, for Railway Residents, in Towns, in Jails, Hospitals, Reformatories, Asylums, etc.
5th to 8th March {	X, 14 XI, 5 XII, 9	Distribution of Household Schedules.
7th March	VIII, 7	Distribution of Schedules to sea-going vessels,
10th March	хии	Final Enumeration or Census proper
rith March, etc	VII, 16 VIII, 7, 8, 9, 10, 12 IX, 2, 6, 10, 11, 12 X, 9(a) (iii), 15 XI, 18, 22, 23 (vii) XIII, 7, 8, 9, 10	Enumeration Books Circle Lists Circle Registers Enumeration Books Circle Registers Enumeration Books Circle Registers Enumeration Books Circle Registers Enumeration Books Anily Areas, Millary Areas, Ports, Inland Vessels, Mills, Factories, etc., and other special Census Units.
11th March, etc	XIII, 7, 8, 9 IX, 10 IX, 10 X, 15, 19 XI, 18, 22, 23 (vii)	Enumeration Abstracts Circle Summaries Charge Summaries Preparation of District Provisional Totals. Report of District Provisional Totals by wire to Census Commissioner, Calcutta, and Census Superintendent.
Ę	XIII, 10 XIII, 10	Preparation of District Provisional Totals. Report of District Provisional Totals by wire to Census Commissioner, Calcutta, and Census Superintendent, Rangoon.
7th March	XIII, 13(ii)	Last possible date for telegraphing Provisional Totals,
17th to 20th March	XIII, 14	Despatch of Records to Census Superintendent, Rangoon.

SUBSIDIARY TABLE V(A).—List of contents of first volume of Census Circulars and Forms preserved for reference.

	a	ia ro	rms 1	prese	rvea	or re	j er en	ice.			1000410000
General Department letter	No. I	63—I\	/-12. d	ated ti	ne 22nd	March	1010.	from	Secret	arv	PAGE
to Government								***			1-3
District Census Calendar		***	***	***	40.0		***	9.44	***	***	4
Census Circular 1 of 1910 Census Circular 2 of 1910	***	***	***	***	***	***	."		***	•••	5
Census Circular 3 of 1910	***			***	***		:::			•••	7
Census Circular 4 of 1910		•••	***	***	***		***			***	8
Census Circular 5 of 1910	***	***	***	***	100	***	***	****	•••		9
Census Circular 6 of 1910 Census Circular 7 of 1910		***	555		***	***	***	***	100	***	10
Census Circular 8 of 1910		***	***				***	***			12
		***	***	***			•••		22.0	***	13
Census Circular 10 of 1910			7.75	***	200	***	***	•••	***	***	11
Census Circular 11 of 1910		•••	•••	•••	***	•••	***	•••	***	•••	15-16
Census Circular 12 of 1910 Census Circular 13 of 1910		***	•••		***	***	***	1000	***	***	18—20
Census Circular 14 of 1910		***	***		***	***		***	***	•••	21
Census Circular 15 of 1910		•••	***	***	1999				•••		22
Census Circular 16 of 1910	···.		···	•••	. ::			•		***	23
Census Circular 17 of 1910			istribu		of Form						21-26
of Sea-going Vessels Census Circular 18 of 1910,	with !	Industr	al Cer	15115 Se	hedule	s in En	olish a	nd Bu	rmese	***	24—26 27—29
Census Circular 1 of 1011	***	***					P				30
Census Circular 2 of 1911		•••				***			***		31
Census Circular 3 of 1911	·		•••								32
Census Circular 4 of 1911,		ppendi	x A ar	id Err	ata List		•••	•••		*.*	33-40
Census Circular 5 of 1911 Census Circular 6 of 1911	•••	***	177	***	***	***	**	***	***	•••	41
Census Circular 7 of 1911						***	***		:::		43
Concret Village Desister	***	100		5.00	***	***			***		44
Census Circle List (English	1)	200	***	***	•••	***	***	•••	•••	***	45
Census Circle List (Burmes	se)	***	•••	•••	***	•••	••	***	•••		46
Census Circle Register (En	glish)	***	•••	•••	***	***	•••	***	•••	•••	47 48
Census Circle Register (Bu Circle Summary (English)	rmese,		***					•••			49
Circle Summary (Burmese)		***		•••	•••	***		***	***	•••	50
Census Register of Railway	Pren	nises (I	form I		***		•••	••		***	51
Railway Circle Summary (Form	11)	**:	::5	•••			•••		900	52
Explanation of Symbols on	4.7.2	in Engl	lish an			••••	•••	•••	•••	•••	53
Buddhist Slips Animist Slips				:::							54 54 (reverse)
Hindu Slips								***			55
Mahomedan Slips		•••		***	•••	•••	***		***	***	55 (reverse)
Christian Slips	***		•••	***	•••	***	<i>:::</i>	•••	***	•••	50
Other Slips Slips for Industrial Census	Sched			***	•••		***			•••	56 (reverse)
Register A. Population of	Censi	is Bloc	ks by					***		:::	57 58
Register B. Issue and Re	turn of	Enum					•••	•••	***	***	59
Register C. Work done b	y Cop	yist		***	***	•••	***	***	***	***	60
Register D. Issue of Blan	k slips		perviso	or							61
Register E. Infirmities	1950a 1950a		opyist					2000	1550mil	200	6.
(5)	Super	intende	nt	• •	•••	•••	•••	•••	•	•••	62
Register F. Testing by	v. Sur	perinter	dent	***	•••	•••	•••			•••	63
=		ctors									
Register G. Weekly Sum	mary o	of Worl			•••			***			6.4
Form H. Sorting Box La	bel	7.41	•••		***	•••					65
Register I. Record Keepe	r's Re	gister o	sorti	ng Un	ts and	Sorting	Boxe	5	***	***	66
Register J. Supervisor's I Register K. Sorting Supe	cegiste	F Of So	rting i	Donor	2000	***	***	•••	***	555	67
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Enumeration Pass (Burmese)	e	322		***	***	2.2.2.	***	1000	***	3
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			440	***	***	***	***	***	***	3
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Block List (English)		***	0.00	***	***				***	10
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- (i) Code of Census Procedure, Part I.
- (ii) Code of Census Procedure, Part II.
- (iii) Manual of Instructions (English).
- (iv) Manual of Instructions (Burmese).
- (v) Census Report, 1911, Volume No. IX, Part I.
- (vi) Census Statistical Volume, 1911, Volume No. IX, Part II.
- (vii) Census Administrative Volume, 1911.

SUBSIDIARY TABLE VI.-Provisional Totals.

	Distric	r#			Date of	Pop	ulation.	Discre	pancy.
	Distri				March.	Actual.	Provisional.	Actual.	Per cent
	1				2	3	4	5	6
Province	200				****	12,115,217	12,057,905	57,312	— 0·4753
Arakan Division								. 742	
Akyab	- 1800c		***		16	529,943	530,573	+ 630	+ 0'12
Northern Ar.		***	111	***	13	22,234	22,000	- 135	- 0.61
Kyaukpyu		***	***	***	21	184,916	185,709	+ 793	+ 0'43
Sandoway	***		***		16	102,803	102,740	- 63	= 0.0
Pegu Division	12.6					***	***	.,,	
City of Range	oon	***			11	293,316	289,432	- 3,884	- 1'34
Hanthawadd	y			***	17	539,109	479,615	- 50,494	- 12'40
Tharrawaddy		***			16	433,320	433,866	+ 546	+ 0.13
Pegu	***	• • •	***	***	13	429,121	428,283	- 838	- 0,30
Prome	****	***	0.00	/225	15	378,871	379,285	+ 414	+ 0.11
rrawaddy Divis	ion	***		***			***		
Bassein	77.5	22.5	***	19900	17	440,988	436,133	- 4,855	= 1,11
Henzada		557			15	532,357	533,765	+ 1,408	+ 0.26
Myaungmya	***	•••	***	***	17	334,852	335,395	+ 543	+ 0.16
Ma-ubin Pyapôn	•••	***	***		16	305,073 256,215	304,898 256,859	+ 644	+ 0.52
Tenasserim Divis					*5		i		
	sion	***	***	104		***			***
Toungoo	***	•••	2.77	(250)	15	351,076	360,252	+ 9,176	+ 2'55
Salween Thatôn	***	•••	•••	***	16	46,608	46,720	+ 377	+ 0.00
Amherst				***	16	416,975 367,918	417,352 368,317	+ 377 + 399	+ 0.01
Tavoy	***		•••		10	135,293	134,637	- 656	- 0'40
Mergui	••		***	***	15	111,424	11,1,590	+ 1(6	+ 0.12
Magwe Division	***	***	***	3657		700		***	**.
Thayetmyo	***		***		16	248,275	259,554	+ 3,279	+ 0.01
Pakôkku	***			***	16	409,909	410,011	+ 102	+ 0.03
Minbu	***			***	17	263,939	a64,445	+ 506	+ 0.10
Magwe	***	***	•••		12	316,909	317,377	+ 468	+ 0.12
Mandalay Divisio	n	***				771	222		
Mandalay		100			16	340,770	341,337	+ 567	+ 0.14
Bhamo	200	***	***		17	107,811	108,313	+ 502	+ 0'46
Myitkyina	•••		•••	***	17	85,577	85,510	- 67	- 0.08
Katha	***		***	•••	17	198,193	198,039	- 154	- 0.08
Ruby Mines	***	***	•••	••••	15	100,618	100,596	- 22	- 0'02
Ragaing Division	(225)		222			***			
Shwebo	***	***	***		16	356,363	356,760	+ 397	+ 0.11
Sagaing	***	***			13	212,111	312,068	- 43	- o.o.t
Lower Chindy Upper Chindy		****	***	****	14	316,175	315,959	- 216 - 88	- 0'07
		****	7.77	200	17	170,622	170,534	- 88	- 0.02
Meiktila Division		•••	***	366	***	•••	366	***	366
Kyaukse	2002	•••	***	3.00	13	141,426	141,367	- 59	- 0'04
Meiktila	•••	***	***	223	16	279,822	273,794	- 6,028	- 2.30
Yamèthin Myingyan	***	•••	•••	•••	15	307,419	307,407	- 12 + 104	+ 0.03
17/1 25				****	15	441,905	442,009		2504
Specially Admini			ies	2222	•••	100		•••	***
Northern Sha	n State	s	***		8	458,952	458,952	***	
Southern Shar					15	900,202	899,546	- 656	- 0.07
Pakôkku Hill			***	*	6	26,251	26,251	***	***
Chin Hills	255	***	***		11	119,556	119,556	***	***

CHAPTER II.

Compilation of the results.

GENERAL ARRANGEMENTS.

45. Tabulation Code.—The first step towards the compilation of the results obtained from the enumeration records was the preparation of a Tabulation

Code for the guidance of the staff to perform the various functions of tabulation and compilation. The basis of the code prepared for Burma, was Part II of the Imperial Code of Census Procedure, specially devoted to a description of the method of tabulation and compilation to be adopted. From this, a Tabulation Code for Burma

Chapter.	Contents.
1	The Record Department.
II	Registers.
III	Slip-copying.
IIIA	Slip-copying at Rangoon Central Office.
IIIB	Special Rules for Mandalay Slip-copying Office
IIIc	Rules for Rangoon Branch Slip-copying Offices.
IV	Sorting Department.
v	Compilation Department,
Appendices	Registers, Statements and Schedules.

was prepared in October 1910. It contained eight chapters, there being three supplementary chapters to Chapter III to explain the exact nature of the work to be done at the several offices. The various forms to be used in carrying on the work were printed as appendices to the Code. It was found necessary in actual practice to depart from the Code in many particulars. It was impossible to fore-see six months in advance, when the Code was being drafted, exactly how some of the rules would work. Many modifications were made, especially in the work of compilation. An attempt was made to re-write Chapter V by incorporating all the changes introduced, but like many other intentions, it was frustrated by the pressure of more urgent duties. It is hoped in the course of this chapter to indicate the principal points of departure from the code which were effected in actual practice.

46. Slip-copying in District and Township headquarters.—Mr. Gait, Census Commissioner for India, had suggested before census operations commenced that it would be of great assistance in the work of tabulation if the work of slip-copying could be performed in district headquarters as far as possible. In the course of the inspection tours of the Census Superintendent, this matter was discussed with Deputy Commissioners, and not one was found who was willing to allow the experiment to be tried in his district. The question of approaching the Local Government on the subject was considered, but finally it was decided that it would be best not to attempt to force the hands of Deputy Commissioners by this method. In the light of subsequent experience, it was seen that this course was a mistake. Slip-copying was not completed in Burma till August, and even this belated completion was only effected by constant driving of the staff, and the working of excessive overtime towards the later stages. In comparison, the corresponding work was finished in the Punjab in March; in the North-West Province, in Baluchistan and in Baroda in April; and in Bengal, in Eastern, Bengal and Assam, Central India, Rajputana, Kashmir and Travancore, it was completed in May. It is a considerable handicap to the Superinterdent of Census Operations in Burma, that his time, the energies of his staff, and his office accommodation, should be occupied for six months by an elementary process, which could be much more expeditiously effected in district headquarters. As to the possibility of performing the duties, in the Punjab the work was effected at township headquarters, and it is obvious that a district office in Burma should be able to perform a function, for which a township office in the Punjab is competent. It is therefore strongly recommended that the Local Government should be moved to declare that, ordinarily, slip-copying should be performed in every district headquarters (including the headquarters of the Specially

Administered Territories) and in Kengtung. Any district might for special reasons be exempted, but any such exemption should be granted only on exceptional grounds. The Census Superintendent would have to arrange for the instructions and training of the supervising officers in each district, the supply of slips, translations of the rules, and the rates of payment, and the rest would be done by the local officers.

- 47. Preliminary Staff.—From the commencement of the operations in April 1910 to the end of December, the staff of the office had consisted of two clerks and two peons. With the approach of the Census, the necessity of training a staff for the operations of tabulation and compilation became pressing. A Deputy Superintendent and a Record Keeper were appointed on the 1st January 1911 and a small staff was gradually collected during January and February. The first duty of the extra staff was the examination of the schedules received from the test enumeration and the classification of the mistakes detected. As soon as this was completed, the experimental schedules were used to train the staff in slip-copying, with a view to the appointment of Inspectors and Supervisors of slip-copying, as soon as the actual enumeration schedules began to arrive. By the beginning of March a staff of about thirty had been collected and trained in the duties of slip-copying.
- 48. Offices.—It was impossible to obtain, at a reasonable rate, a large building in Rangoon suitable for the accommodation of the whole of the census staff. Attempts were made to obtain the buildings of the old Chief Court, and of the old Hospital, which were being vacated just about the time of the census, but in each case the application was unsuccessful. A branch office was therefore established in Mandalay in the buildings of the old British Infantry Mess, which were kindly placed at the disposal of the Census Superintendent by the Public Works authorities. It was intended at first that the process of slip-copying only should be effected at Mandalay; but when it was found that owing to the circumstances already described, the work of tabulation in Burma was much behind that of the other provinces, the branch office at Mandalay was transformed into a sorting office.

In Rangoon a large building which had at previous stages of its career been an infantry mess, a dwelling house, and a veterinary school, was secured. The upper portion was occupied by the Superintendent as a dwelling and the lower portion was used as the office, in the earlier stages of the work of tabulation. As the staff increased, the upper portion was invaded by the office. It was intended that the whole of the building should be given up as an office, but the death of the Deputy Superintendent made it imperative for the Superintendent to remain on the spot. The Superintendent therefore remained in a very limited portion of the upper part of the building, and the accommodation for the staff was supplemented by the erection of a shed of the dimensions 40 feet by 30 feet in the compound of the office. Further branch offices were taken for a limited time at three of the schools in the town, but their functions will be subsequently described in connection with the work of slip-copying.

49. Despatch of Enumeration Records.—The method of closing Census operations in each district and of despatching the records to the two census offices was prescribed in Census Circular No. 6 of 1911 which is herewith reproduced:—

The following detailed instructions are issued with reference to the closing of Census Operations in all districts.

- 2. As soon as the Provisional Totals have been despatched the Enumeration Books should be arranged in circle bundles. Each circle bundle should be tied with string, and the circle bundles for a charge should then be made into one large bundle and carefully wrapped in a paper package. All special and occasional records such as—
 - (a) Boat and Steamer Enumeration Records.(b) Records of Forest Circles or Blocks.

(c) Road Enumeration Station Records, etc., should be placed with the records of the appropriate circle or charge.

3. Inside the charge bundle should be packed-(a) The complete Circle List brought up to date.
(b) The Circle Summaries for the charge.
(c) The charge Summary.

On the outside of the charge bundle should be written in bold characters-

(a) The name of the District.(b) The name of the Township. (c) The number of the Charge.

(d) (If in a town) The name of the Town.

The charge bundles should then be packed by townships, and in every township package should be placed the General Town and Village Registers referring

to the township and the towns within its limits.

4. In the case of Railway Records the charge will comprise portions of several townships. There may also be cases (several have been discovered during inspection) in which charges have inadvertently been permitted to run into two or more townships. In such cases the records for Census charge should remain intact and not be split up into constituent townships, but inside the charge bundle should be placed a statement in the following (or nearly allied) form :-

The form is given for Railway charges, but it can be modified to suit all charges passing beyond the limits of a township. It should be sufficiently explicit to make it easy for every record within the charge bundle to be at once placed in its correct town or township.

5. Non-synchronous areas have usually been made into separate charges. Where this is not the case, the records for the charge should be placed into two bundles, one for the synchronous area and one for the non-synchronous area. A non-synchronous bundle should be marked as such on the package next to the entry of the charge number.

6. The charge bundles made up as described should be packed in wooden cases and sent in charge of a clerk to the Census Abstraction Office at Rangoon or Mandalay. Records from the following districts will be sent to Mandalay:-

Shwebo. Meiktila. Mandalay. Sagaing. Bhamo. Yamèthin. Lower Chindwin. Upper Chindwin. Myitkyina. Myingyan.

Southern Shan States. Katha. Kyauksè. Ruby Mines. Northern Shan States.

Records from all other districts will be sent to Rangoon. It is hoped that all records will be despatched before the 25th March.

7. District Census Maps and Town Maps should be sent with the clerk in

charge of the Census records to the Abstraction Office.

8. It is most important that all District Census charges should be met from the Census allotment for the current year. District Census Officers are requested to ensure that all Census charges for freight, establishment (if any) and contingencies are paid and incorporated into the accounts before the 25th March 1911.

The 25th March was mentioned as the date by which all records should be despatched. This was exceeded by several districts, the two latest being Yamethin District, the records for which were not despatched till the 20th April, and the Southern Shan States. The case of the Southern Shan States requires special mention. In 1901, the enumeration over a large portion of the States had been conducted on blank paper and then copied into the enumeration schedules at headquarters. On the visit of the Census Superintendent to Taunggyi in June 1910, this matter was discussed at a conference at which the Superintendent of the Southern Shan States and all the Assistant Superintendents were present. It

was agreed that there would probably be no necessity for any such double record, and the early despatch of the records was promised. As Kengtung is twentyone days' march from the railway, the early receipt of the records was not expected, but the first anticipation of undue delay was received in a letter from the Superintendent, dated 28th March, which stated:-

"The Kengtung schedules will not reach Taunggyi till about 30th April. It will therefore be the first week of May before the complete schedules and staff are sent down. I fear this is later than you counted on, but so far as the staff is concerned it will probably be better than an earlier date."

After some correspondence the schedules for the Southern Shan States, minus those for Kengtung, were received at the Mandalay office on the 16th May. The Kengtung schedules were not despatched from Taunggyi till the 6th July and did not arrive at Mandalay till the 14th of the month. Even these were not complete, and the final consignment was not despatched till the 12th July, arriving in Mandalay on the 19th July. When it is remembered that the schedules for this State were recorded in special dialects, and that the work of slip-copying for these schedules had to be performed by a limited staff laboriously translating each entry, the resulting delay in the general operations, can be estimated or The matter will be further discussed in connection with the description of the process of slip-copying. 2 m 1 th 40 to 105 C

50. Receipt of Enumeration Records.—The method of receipt of enumeration records at the offices at Rangoon and Mandalay is best described by the following rules taken from the Tabulation Code. They explain the methods of checking the receipts and of determining whether the records for any census unit had been omitted:-

Receipt of Enumeration Records.

t. In addition to the Enumeration Books the Record-keeper should receive -

(a) From each District-

- (a) From each District—

 (i) A complete set of Circle Lists (one for each charge).
 (ii) A complete set of Charge and Circle Summaries.
 (iii) A General Town or Village Register from each Township or Town.

 (b) From each District specified by the Provincial Superintendent—

 (i) A District List of Steamers and Launches.
 (ii) Port Register of Vessels and Buildings.
 (iii) Census Register of Railway Premises.
 (iv) List of Railway Stations by Townships.

 (v) Military Circle Lists.
- (v) Military Circle Lists.
- 2. The Record-keeper should check the Enumeration Books received by means of the four sets of serial numbers :-

12 6 3 1 h

- (i) The serial number of the Block (column 6, Circle List).
 (ii) The serial number of the Circle (column 1, Circle List).
 (iii) The serial number of the charge (Heading, Circle List).
- (iv) The serial number of the Village-tract (column 3, Circle List).

By means of these he will determine whether he has received-

(i) A Circle List for every charge.

(ii) The complete sheets of each Circle List.

(iii) An Enumeration Book for each Block.

(iv) The Enumeration Records for each Village-tract.

3. Steamer, Fort, Railway and Military Lists and Registers will enable a similar check to be instituted for the Enumeration Records not comprised within the normal district census operations.

4. The attention of the Deputy Superintendent should be drawn to any omission, or to the absence of any Enumeration Book or Record which should have been received.

5. As soon as the records for any district have been found to be complete, an acknowledgment of receipt should be sent to the Deputy Commissioner and they should be at once entered in Register A (see Article 2, Chapter II).

6. If the records for any district are defective, the orders of the Superintendent should

be obtained as to the course to pursue.

7. If the descriptive particulars of the block on the cover of the Enumeration Book have not been given, the Record-keeper should supply them after reference, if necessary, to the Deputy Superintendent. The treatment of records of Steamer, Boat, Port, Railway, Factory and Military Enumeration will require careful check on this respect.

Immediately after receipt the enumeration records were arranged on racks by Districts, Townships, Towns, Charges and Circles. Railway Charges required separate treatment as they were formed by districts and not by townships. were kept together as railway charges until slip-sopying had been completed.

51. The Record Department.—The centre round which the whole work of the office revolved was the Record Department. The following extract from the Tabulation Code indicates the important share taken by this department in the work of tabulation :-

THE RECORD DEPARTMENT.

General Duties.

- 1. The Record Department will be in charge of the Record-keeper assisted by a staff, which will vary from time to time according to the duties to be per-
- 2. In addition to the custody of Records and Stationery, the Record Department will be the centre round which the whole work of the office revolves. The principal duties will be :-

(i) The receipt, check, and control of Enumeration Records.
(ii) The receipt, check, and control of Stationery.
(iii) The supply of work to the Slip-copying, Sorting, and Compilation Departments.

(iv) The supply of Stationery to all Departments.

(v) The preparation and custody of Registers A and E.

(vi) Upkeep of Registers B, D, and I.

- (vii) Receipt of work when completed from all Departments and carrying out such checks as are prescribed.
 (viii) Compilation of Provincial Tables and Imperial Tables I to VI.

(ix) Care and control of all stock and furniture.

It formed the one permanent feature of the Rangoon office, and, to a less extent, of the Mandalay office. While other portions of the office staff were transformed from slip-copyists into sorters, and from sorters into compilers, the Record Department remained as the connecting link between all departments and all branches of the work. In addition to the initial receipt of the records and the preparation of Registers A and E, it supplied and received work from all departments, and kept a watch on the pace and accuracy of the work performed. All the non-routine work of the second portion of the operations was performed in the Record Department. It was, indeed, in a special sense, the Census office itself.

52. Registers and Forms.-Apart from the slips, the sorters' tickets. the compilation registers and the classification sheets, designed for particular

functions, there were thirteen Registers and forms used in the general supervision and control of the tabulation oper-Reations. gister A was which all the work of the office was allotted. Registers and Forms C, F, G, K, L and M were records

Symbol.	Class.	Description.
A B C	Register	Population of Census Blocks by sex and religion. Issue and return of Enumeration Books.
C	Register	Work done by copyists.
D	Register	Issue of blank slips to { Supervisor. Copyist.
E	Register	Infirmities.
		(Superintendent.
F	Register	Testing of slip copying by Deputy Superintendent. Inspectors.
G H l	Form	Weekly Summary of work (slip copying).
·H	Form	Sorting Box Label.
1	Register	Record Keepers' Register of sorting units and sorting
1.	Register	Supervisors' Register of Sorting Boxes.
K	Register	Sorting Supervisors' Progressive Report.
L	Form	Weekly Progressive Report (Sorting).
I K L M	Form	Weekly Progressive Report (Compilation).

of work performed. Registers B and D were records of issue of work and slips. Register E was a minor Register A, modified for the record of infirmities. Form H and Registers I and J were devised to facilitate the formation and record of the units adopted for the purpose of sorting.

53. Register A.

Population of Census Blocks by Sex and Religion.

District	Township	Charge No,	Cincalan No
District	Town	Charge Ivo,	Circular No.

Block No.	Name of Residential Village Hamlet, Camp,	Village	Serial No. of Village	Name of Copylst.	Bo	im- tion ok.	Pop	Fotal ulati	on,	Bu	id- sts.	Anim	nists	Hin	dus.	Mah- da:		Ch	ris- ns.	Oth	ers.	
	Landing place, Steamer, etc.	Tract.	Tract.		I ssuc.	Receipt.	Male.	Female.	Total	Male.	Female.	Male.	Female.	Male.	Female.	Male,	Female.	Maie.	Female.	Male.	Female.	Remarks.
•		3	4	5	6	7	8	9	10	11	.,	13	14	15	16	17	18	19	30	-	31	23
			Total	***																		

Although specimen forms of Register A have been preserved in the volumes mentioned in Subsidiary Table V of Chapter I of this Volume, it is necessary for a complete understanding of the working of the office to reproduce the form for ready reference. The methods of preparation, the various officers concerned in filling its various columns, and its utility in the preparation of the Imperial and Provincial Tables are indicated in the following extracts from the Tabulation Code.

1. Register A is the most important record in the Census Office. It is the source from which the Provincial Town and Village Tables, Provincial Tables I and II, and Imperial Tables I to VI are compiled, and it regulates the method of formation of Sorting Boxes prior to their delivery to the Sorting Department.

2. Immediately after checking the receipt of the Enumeration Records for

any district, the Record-keeper should cause the headings of this register and the

first four columns to be entered.

3. A separate sheet should be taken for each circle.

4. The sheets of each charge should be loosely tied together.

5. Great care should be taken in entering-

(i) Unnumbered Blocks—such as steamers, cargo boats, etc.

(ii) Blocks in which the Circle, Charge or Township are not specified.
(iii) The Township Heading, Railway Charges (see Article 11, Chapter I).
(iv) Enumeration Books of persons travelling.

In cases of doubt the Record-keeper should refer to the Deputy Superinten-

dent, who should refer, if necessary, to the Superintendent.

6. The sheets of Register A for each charge prepared as in Article 2 above will be given to a Supervisor of the Slip-copying Department together with the Enumeration Books and the Circle and Charge Summaries for that charge (see Article 4, Chapter III).

7. Columns 5 and 6 will be filled in by the Supervisor as soon as he has issued the book, and columns 7 and 10 as soon as he has passed the slips for any

8. The entry in column 10 should be compared with the total for the block in the Circle Summary. If there is any difference the slips should again be compared and counted.

9. Columns 8, 9 and 11 to 22 should be filled in and totalled after the Supervisor or his assistant has sorted by Sex and Religion (Article 11, Chapter

III). The following checks should then be made:-

(i) Columns 8 and 9 with column 10.

(ii) Columns 11, 13, 15, 17, 19, 21 with column 8.
(iii) Columns 12, 14, 16, 18, 20, 22 with column 9.
10. The Supervisor will return Register A to the Record-keeper, one charge at a time, with the slips, Circle Summary and Enumeration Books of the charge concerned (see Articles 4 and 11 of Chapter III).

11. On receipt the Record-keeper will institute the checks mentioned in Articles 8 and 9 above for each circle, and cause the totals for each circle in Register A to be checked. He will also verify by actual count the number of

slips of each kind for one circle of each charge.

12. The Record-keeper will then arrange in serial order the sheets of Register A for each township or town. (This will be the opportunity for dividing Railway Charges into constituent townships.) The Township Volume of Register A should be bound in Brown Cartridge Paper and labelled on the outside with the name of the District and Township or Town.

13. The totals of each circle should then be copied into a Township (or Town) Abstract of Register A (prepared in the same form) and a grand total struck for the township (or town).

14. The Township and Town Abstracts will be bound into a District Volume

with the sheets arranged in the order of townships and towns given in the Civil List. The District Volumes of Register A will be used for the preparation of the Provincial Town and Village Tables, Provincial Tables I and II, and Imperial Tables I to VI.

SLIP-COPYING.

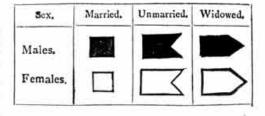
54. The Slip system.—It is not necessary to enter into any justification of the adoption of the slip system of tabulation. It is universally recognised as

the method most suited for the conditions to be found in India. The slip-system actually adopted provided for the transfer of the entries of the enumeration schedules on to small paper slips measuring two inches by four and a half. To avoid the necessity of numerous transcriptions, religion, sex and civil condition were indicated by the different colours of the slips and by different symbols printed on them. Five colours were

Religion.	Colour.				
Buddhist	Brown.				
Animist	Yellow.				
Hindu	Red.				
Mahomedan	Green.				
Christian	Blue.				
Other Religions	White.				

used to denote the five main religions, and white was used to indicate all other religions. Sex and civil condition were indicated by six symbols printed in the

right hand top corner of the slip. The symbols used are shown in the marginal statement. The combination of six colours and six symbols produced 36 classes of slips, and the record of the religion, sex and civil condition of the person enumerated on to the slip, was transformed into the mere act of selection of the appropriate slip from



a rack of 36 pigeon holes. The only variations in the form of the slips, apart from the symbols to denote sex and civil condition, was the introduction of an extra line in the Christian (blue) slips and the slips for other religions (white) for the record of sect and religion respectively. The marginal diagram is a reproduction of the slip used for a female married person of a religion other than the five main religions of the province. The numbers on the slip correspond to the numbers of the columns

in the enumeration schedule.

55. Supply and Printing of Slips.—It was necessary to take steps for the supply and printing of slips long before the period of slip-copying arrived. The indent for paper was despatched on the 6th October and the stock arrived in Neurophys Proofs of the Social Science of the Stock arrived in Neurophys Proofs of the Stock arrived in November. Proofs of the 36 kinds of slips were at once prepared. The following letter to the Superintendent, Government Printing, issued on the 3rd February 1911 will indicate the numbers of slips of the different classes ordered, the arrangements made for an early supply for training purposes,

No	П
Religion-	
7	
8	
9.	
10,	
11	
12.	
13	
14.	
15.	

the stock, obtained on indent, from which the slips were printed, and some of the difficulties of printing :-

I have the honour to requisition slips in the following numbers for use in the Census Office, the slips to be banded in bundles of 500.

i :	T F						Total.
Brown	2,000,000	2,000,000	2,900,000	2,700,000	250,000	600,000	10,450,000
Yellow	130,000	110,000	150,000	140,000	15,000	30,000	575,000
Red	180,000	50,000	180,000	30,000	16,000	10,000	466,000
Green	150,000	100,000	160,000	100,000	16,000	18,000	544,000
Blue	40,000	40,000	80,000	70,000	11,000	7,000	248,000
White	7,000	2,000	6,000	2,000	1,000	500	18,500

Also 15,000 white plain slips size 2" by 3".

2. There is no immediate hurry for delivery but I should like the following numbers supplied early for training purposes.

Brown	 20,000	20,000	20,000	20,000	5,000	5,000
Yellow	 5,000	5,000	5,000	5,000	1,000	1,000
Red	 5,000	5,900	5,000	5,000	1,000	1,000
Green	 5,000	5,000	5,000	5,000	1,000	1,000
Blue	 1,000	1,000	1,000	1,000	1,000	1,000
White	 7,000	2,000	6,000	2,000	1,000	500

3. The stock of paper I have for this purpose is as follows:-

Colou	r•	Reams.	Size-	No. of slips per sheet.	Total number of slips:
Brown		520	18 by 22	.44	10,982,400
Yellow		13	24 by 40}	108	673,920
Red	٠	`ii	24 by 40½	108	570,240
Green		11	24 by 40 ¹ / ₃	108	570,240
Blue		6	24 by 401	108	311,040

For the white, please use cheap white paper from your own stock.

4. I should also require 15,000 plain blank white slips, size 2 inches by 3 inches, to be cut from cheap white paper from your stock.

5. Will this letter suffice or shall I send formal requisitions for the 37 kinds of slips?

SLIP-COPYING, 57

	In the following case the machines are badly adjusted, some of the lines cutting the
slips	in two.
	(a) all the silps.
	This is a bad fault and should be rectified.
	7. The symbols are defective and require to be printed
	ormly all round.
	8. I am not sending for 3rd proofs but you might defer printing the main requirements
until	I have seen the training slips.

It will be noticed that the sizes of the paper, from which the slips were cut, were such that an exact number of slips of the requisite size, two inches by four and a half, could be cut from each sheet without wastage. Special machines were prepared at the Government Press for the purpose of cutting the slips to the size required.

56. Commencement of Slip-copying.—The staff actually entertained on March 11th, 1911, immediately prior to the commencement of slip-copying was as follows:—

Rangoon Office

| Census Superintendent. | Deputy Superintendent. | Record-keeper. | Assistant Record-keeper. | Clerk. | Peons. | Slip-copying Inspector. | Slip-copying Inspector. | Trained Slip-copyists to act as Supervisors. | Record-keeper. | Record-keeper. | Trained Slip-copyists to act as Supervisors. | The enumeration records from Rangoon were received on Monday.

The enumeration records from Rangoon were received on Monday, the 13th March, and their entry into Register A was completed by the Record Staff on that date. The actual work of slip-copying did not commence at Rangoon till

the 15th of March, when 70 slip-copyists were enrolled, and commenced work under trained supervision. Work did not begin at Mandalay till a few days later, the Inspector in charge of the office being engaged in training a few men for supervision, prior to undertaking the work of copying on a large scale. At the end of the first week, on the 18th March, the numbers of copyists actually at work are given in the marginal statement. The work at Mandalay was naturally in a more backward

	Maria de la Constantina del Constantina de la Co	
Class of officers,	Rangoon,	Mandalay.
Inspectors	7	1
Supervisors	10	5
Assistant Super- visors,	9	4
Copyists	Q2	43

stage than Rangoon, partly because of the later receipt of records, and partly because of the necessity of training supervisors before work seriously commenced. Recruits were taken on daily throughout the operation of slip-copying. Two special recruit tables were kept for the training of new comers. These were presided over by specially skilled supervisors and assistants, and after training the copyists were either drafted into the regular tables to supply the wastage that was continually occurring, or formed into new slip-copying groups.

57. Branch Slip-copying Offices.—In order to supplement the slip-copying staff, the managers of the large schools in Rangoon were approached with a view to lending their school buildings during the holidays (from 3rd April to the 15th May), and to recruiting any of the teachers or boys who were willing to work as supervisors or copyists for that period. Favourable replies were received from four schools, and it was anticipated that about 400 to 500 boys would be prepared to work for six weeks. The details of the arrangements were in the hands of the Deputy Superintendent, Babu A. C. Pal. Unfortunately he became seriously ill towards the end of March, and instead of reporting his inability to conduct this branch of his duties, he attempted to continue working when unable to perform them efficiently. Consequently, when the 3rd April arrived, it was

found that only three schools with about 200 scholars were available, instead of four schools and 400 scholars. The continued illness, and the death of Babu Pal on the 12th April, prevented the initial defects from being repaired, and owing to the resulting disorganisation of the office, and the absence of sufficient supervising officers, it was necessary to close the branch at Rangoon College on the 30th

		Total	Slips copied.	
School.	Period.	Number of Copyists.	Total.	Average per Copyist per day.
Rangoon College Buddhist Boys' School Buddhist Girls' School	60 82 99	412,795 451,826 527,524	464 407 399	
	Total	241	1,392,145	423

April. In the end the numof slips ber copied at the schools was slightly than 1,400,000, whereas better fortune number the should have been almost

3,000,000. The relief given to the ordinary staff, even by the diminished amount of assistance received from this source, was considerable. The work was well and conscientiously done, and its performance permitted the subsequent operation of sorting to be undertaken at least a month earlier than would otherwise have been possible.

57. Methods of Slip-copying.—The following rules from the Tabulation Code will explain in detail the method followed in copying the slips.

1. Slip-copying will be carried out by copyists in groups of ten, each group being under the control of a Supervisor with one Assistant Supervisor.

2. Payment of Copyists -Slip-copyists will be paid by piece-work at

rates of pay to be determined by the Superintendent.

3. Duties of Supervisors .- The Supervisor, with the aid of his assistant, is responsible for the efficient working of his gang. It is his duty to get the Enumeration Books, a charge at a time, from the record-room, to issue them one at a time to the copyists, to check the accuracy of their work, to maintain Registers C and D, and, when all the slips for a charge have been copied, to return them to the record-room with the Enumeration Books, the Charge and Circle Summaries and the Circle Sheets of Register A. He is responsible for seeing that under no circumstances are books or slips removed from the office, for the purpose of working at home or for any other reason. Every evening, before leaving office, each copyist should tie up the slips he has copied, place them inside the Enumeration Book with a slip bearing has name, and hand the bundle over to the Supervisor, who will return it to him when office opens next morning.

Each Supervisor will be given a box for the custody of-

(a) Copied books and slips.

(b) Unissued books.

(c) Books in process of being copied.

4. Receipt and Return of Enumeration Books .- The Supervisor will receive Enumeration Books from the Record-keeper together with the corresponding sheets of Register A and the Charge and Circle Summaries, one charge at a time. He will return them with the copied slips sorted as described below in Article 11, one charge at a time. Infirmity Slips with their records will be issued

and returned, a township at a time.

5. Method of Copying.—Slips will be written in pencil. The entries must be clear and legible. The top line will contain the numbers of the charge, the circle, the block and the person enumerated; thus 3/7/12/49. The first three will, of course, be the same throughout an Enumeration Book. If a mistake occurs the original entry should not be erased or written over, but should be neatly crossed out and the correct entry written beside or above it. On receiving a book, the copyist should first go through the serial numbers in column 2 and correct them if they were filled in (contrary to rule) before the Final Census. The copyists should pick out the proper slips for all the persons on a page, ticking off each person as he does so, and place them in order, one below the other, on his left hand before writing up the slips. As each slip is finished it should be placed SLIP-COPYING.

face downwards on the top of the previous slip copied, so that when finished they will be found in serial order. When all the entries in an Enumeration Book have been finished he should tie the slips up neatly and take them with his book to the Supervisor.

6. Abbreviations.—A list of authorised abbreviations will be subsequently issued. These should be carefully studied and mastered. No other abbreviations are permitted. All entries not falling under the authorised abbreviations are to be

copied in full.

7. Religions.-The slips for Christians (blue) and "Others" (white) have an extra line. This will contain the 'Sect' for Christians and the 'Religion' for "Others."

Animist slips (yellow) will be used not only for those shown as Animists, but also for those members of aboriginal tribes whose tribe is entered in column 4. Christian slips (blue) will be used for Europeans whatever the religion professed may be: e. g., for a European pongyi a Christian (blue) slip and not a Buddhist (brown) slip will be used.

59. Method of Checking.—The following rules were framed to guide Supervisors and their Assistants in the methods of checking the work of the copyists :-

Checking will be the main duty of the Supervisors and their assistants.

On the first formation of any slip-copying table every entry in every slip must be checked, special care being taken to see that the proper slip has been chosen. The Supervisor or his assistant should hold the Enumeration Book, and the copyists should read from the slips He should tick off in the Enumeration Book every entry tested by him. A tick against the name in column 3 of the schedule will mean that all the entries for that individual have been tested.

After a little time, when the officer in charge of a slip-copying office

finds that mistakes in-

(i) Selection of slips,

(ii) Noting of age,

(iii) Record of caste or race, etc.,

become very rare, he may permit the Supervisor to concentrate his attention on entries where errors and omissions are most likely to occur, such as-

Non-district birth-places.

(ii) Literacy.

(iii) Lengthy names of occupations.

Such entries should invariably be tested wherever they occur.

2. Corrections.—Trivial mistakes in copying may be corrected at once if they do not exceed one per 100 slips. If they are more numerous, the copyist should be sent back for an hour to revise all his slips. If deliberate omissions are detected (such as the systematic failure to record non-district birth-places or lengthy occupations), every item in the book must be compared, and the copyist will get no payment for the work.

3. Methods of saving labour in Checking.—The Supervisor should not allow the copyist to read out a lot of unnecessary matter. Some of the

methods of saving time are-

(i) Don't read the full serial number on the top for every slip. Only read it for the first slip. After that only read the serial number of the

(ii) Don't read the column numbers except for 9, 10 and 11.

(iii) If all the persons in the books are of the same religion or of the same race, or all speak one language, or all born in the same district, the copyist should say so at the beginning of the checking. Then the entries for these columns need not be read.

(iv) If columns 14 or 15 are blank, nothing should be read.

It was found, after a little experience, that it was impossible for one Supervisor and one Assistant Supervisor to perform efficiently the work of checking for 10 copyists. Consequently, after a little time, the slip copying tables were rearranged, and one Supervisor and one Assistant were allotted to every eight copyists; or alternatively, one Supervisor and two assistants to every twelve copyists. The latter arrangement was the more effective where the space available was sufficient, and the tables were of a size to enable fifteen men to work without being separated, but the former arrangement was the more effective in other circumstances. In addition to the checks instituted by the Supervisors and their assistants, an Inspection staff, varying in size with the number of tables working, went through every bundle of slips copied, and instituted checks where mistakes were most likely to occur. Finally, on receipt of the slips by the Record Department the slips of one bundle from each circle, or two bundles in the case of large circles, were again checked. The principal mistakes were those due to the use of abbreviations for entries for which no abbreviations were prescribed. Many of these were made in good faith and were due to the close similarity of the entries recorded with those for which abbreviations were authorised. In some cases however, the errors seemed to be due to systematic attempts to evade work by entering abbreviations simply to save the time of recording a lengthy entry. Such wilful mistakes were principally concerned with birth-place and occupational entries. Wherever detected, the copyist was at once dismissed, and if the mistake was passed by a Supervisor or an Assistant Supervisor he was reduced or fined. In all cases of the discovery of wilful errors, the work of the copyist previously passed was re-examined.

60. Infirmity Slip-copying.—The entry of Infirmities on the ordinary slips would have probably resulted in numerous omissions. Infirmities were entered in the last column of the schedule, a column particularly likely to be overlooked owing to its being included in the "turn-over" when the enumeration book was opened and turned back at any page. This liability to omission was increased by the infrequency of the entries. The less frequent an entry is made the more it is likely to be overlooked. Consequently the entry of infirmities was excluded from the ordinary slips, and special infirmity slips were written up by a separate staff under the following rules :-

Infirmities.-These will not be copied on the ordinary slips. In copying these, a copyist should be given the books of a circle at a time, and should enter on the correct slip (Religion, Sex and Civil Condition)-

(i) The serial number of the charge, circle, block and person.

(iii) Caste, tribe or race.

(iv) The infirmity (on the line 9——).
2. The Supervisor should be most careful in checking Infirmity Slips, to see-

(i) That no infirmities have been overlooked.(ii) That the proper kind of slip has been used in each case. After passing the slips as correct, the Supervisor should sort them by Sex and Infirmity and post the results for each circle in Register E, which he should total for the charge.

He should then return the sheets of Register E, one township or town at a time, with the Infirmity Slips, to the Record-keeper.

61. General Progress of Slip-copying.—Subsidiary Table I of this chapter gives the progress of slip-copying month by month, the numbers of

Office.	Slips copied.
Rangoon Office	6,492,343
Branch Offices at	1,392,145
Mandalay Office	4,171,723

copyists employed, and the average rates of copy-The average for the Rangoon office was low at first, because slip-copying commenced with the schedules for the City of Rangoon, in which the great varieties of languages, religions, birthplaces and occupations to be transcribed, precluded a high average output. Mandalay, on the contrary, commenced with the rural areas of Upper Burma Districts in which language, religion, birthplace

61

and occupation were identical, and the entries capable of abbreviation, for 90 per cent. of the entries. The average for the Rangoon office maintained a very low

level till the end of April, owing to the fact that it was occupied with the records for the City of Mandalay, for Towns, and for Special Areas like Railway Charges. When these were completed the average rose to 517 slips per copyist per day in May. In June, being occupied with the records for rural areas only, it rose to 626 per day. In July, owing to the eagerness of the copyists to get to what was hoped would be the better paid work of sorting, two hours per day overtime was worked, and the average rose to 852 per day. In Mandalay, the aver-

		y Outturn of S	
Month	ì.	Rangoon.	Mandalay
March		204	438
April	***	327	532
May	191	517	569
June	***	626	439
July	199	852	298
August	***	***	441

age began to decline in June, owing to the commencement of work on the records written in Shan, which had to be translated into Burmese during the process of slip-copying. In July, it fell further on account of the completion of most of the Burmese records and the continuance of slip-copying of records written in Hkün and Shan. On account of the late arrival of records from the Southern Shan States, slip-copying was not completed at Mandalay till August.

62. Causes of Delay in Completion of Slip-copying.—On the whole, the time taken up by the process of slip-copying was excessive. It was anticipated that the work would be completed by the end of May, but it was not finally completed till August. The principal causes of the undue delay were:—

(i) the illness and death of the Deputy Superintendent,

- (ii) the consequent partial breakdown of the arrangements for slip-copying at the schools,
- (iii) the late receipt of the schedules from the Southern Shan States. The illness of the Deputy Superintendent from the 20th March till the 12th of April took place at the most critical time of the whole series of operations. Records were coming into the office at the rate of fifteen to twenty cases daily, and the staff of the record department was endeavouring to check, arrange and register them as they arrived. Recruits were being taken on daily, and arrangements for their engagement, testing, training and subsequent duties, were being made. The Superintendent was tied to Rangoon during this period and unable to visit Mandalay and set the work on a proper basis. The death of the Deputy Superintendent brought matters almost to a standstill, until the arrangements of the office were re-constituted. Recruiting had perforce to be stopped until the reorganised staff was working efficiently. It is not possible to give an accurate estimate of the delay due to the first two of the three causes specified, but jointly they must have been responsible for a delay of about five to six weeks.
- 63. Payment for Slip-copying.—Payment was made by piece work, but there was no recognised rate per hundred or per thousand slips copied. The rates varied from table to table and from month to month. They were arranged to give the most industrious trained copyists in the office a salary of about Rs. 25 per month. The work of the best men from each table was compared, and rates fixed accordingly by the Census Superintendent. The less industrious copyists tailed off to wages of Rs. 20, Rs. 18, Rs. 15 and even less. When overtime was worked, Rs. 30 per month was the standard for the best trained and most industrious copyists. A more rigid system would have led to disaffection and strikes. It is recognised by Government that Rs. 30 per month is the minimum salary for which clerical labour can be obtained in Burma, and this sum was paid only to exceptional copyists for overtime work. The calculation of rates cost the Superintendent a considerable amount of time, but the results were better than if one universal piecework rate had been fixed, and wages paid rigidly in proportion to the number of slips copied. Supervisors were paid Rs. 35 per month and Assistant Supervisors Rs. 30 per month. Sorting Inspectors were graded and paid different salaries according to the Superintendent's estimate of their abilities.
- 64. Special Consideration of Slip-copying for the Shan States.—
 The late delivery of the schedules from the Southern Shan States has already been mentioned. Even had other arrangements not failed, the receipt of a large number of schedules, many of them written in a vernacular requiring a special staff for

translation and slip-copying, at so late a date as the 16th May, and the delay in the receipt of the remaining schedules till the 14th and 19th July, would have completely upset any pre-arranged programme. In June 1910, the Census Superintendent had discussed with the Superintendent of the Southern Shan States the question of slip-copying at Taunggyi and Kengtung, but had been met by the following objections:

(i) there were no suitable buildings available;(ii) there was no staff available for supervision;

(iii) being a non-synchronous census, the enumeration would be completed by the 1st March, and the Superintendent of the Southern Shan States was anxious to despatch the enumeration schedules and get rid of the census work as speedily as possible.

Rather reluctantly, the Census Superintendent acquiesced. Subsequent events justified the wisdom of his proposals, and his extreme weakness in not

insisting on them to the point of acceptance.

As a recommendation to the Census Superintendent of 1921, it is suggested that, whether the policy of slip-copying in district headquarters is adopted generally or not, it is absolutely imperative for the prompt completion of the operations that the slip-copying for the Northern and Southern Shan States should be conducted in Lashio, Taunggyi and Kēngtūng. The objections to slip-copying at a central office are as follows:—

 (i) the elaborate arrangements for the recruitment and transfer of a Shan and Hkün staff to translate the schedules,

(ii) the heavy expense of transporting the staff to Mandalay and the pay-

ment of special rates to the copyists so transferred,

(iii) the impossibility of the ordinary census staff supervising the work owing to its being concerned with the translation of vernacular entries,

(iv) the late receipt of the schedules,

(v) the late recruitment of the special staff,

(vi) the excessive amount of work entailed in the record of the enumeration of the Kengtung State on ordinary paper, then its transcription on to the enumeration schedules, and finally its translation and entry into the slips.

These objections could all be obviated by three local slip-copying centres as suggested. The following quotation from a letter of the Superintendent of the Southern Shan States on the 28th March is conclusive:—

"It will therefore be the first week of May before the complete schedules and staff are sent down. I fear this is later than you counted on, but so far as the staff is concerned it will probably be better than an earlier date. People here funk the rains in Burma, but they funk a Mandalay hot weather even more. They would hardly work properly through a long hot season."

Had this been known to the Census Superintendent in June 1910, the necessity of slip-copying at Taunggyi would have been apparent. Also, had it been known that there would be a double record of the entries in Kengtung State, the large unnecessary waste of time and money entailed in the production of the second set of records, followed by the transfer of an expensive staff, nearly a month's journey in order to translate these records on to the sorting slips, would never have been permitted. The original records could have been translated directly on to the sorting slips, by means of the authorised abbreviations, in one half of the time that the second set of enumeration records took to compile. If this course had been adopted, not only would time have been saved at Kengtung, but the transfer of the Hkün staff to Mandalay and the heart-breaking delays, due to the late receipt of the enumeration records, and the final process of slip-copying, could have been entirely prevented.

SLIP-SORTING.

65. Preliminary Sorting.—A preliminary sorting by sex and by religion was performed by the Supervisors of the slip-copying tables before handing in

63 SLIP-SORTING.

their slips to the Record Department. This was easily effected by means of the colours of the slips and the symbols on the top. The following rule gives the procedure prescribed :-

Sorting by Sex and Religion .- As soon as the Supervisor or his assistant has checked the slips for any Enumeration Book he should sort them by Sex and Religion, count the numbers of slips of each kind and enter them in Register A (columns 11 to 22). He will also enter the total population in columns 8, 9, 10 of the same register and institute the checks specified in Article 9 of Chapter II. The Supervisor should carry out this sorting in pigeon-holes similar to those used by the copyists, a separate set being used for each circle under issue. When all the slips for a circle have been copied, checked, and sorted, those in each pigeon-hole should be counted and the number compared with the corresponding total in Register A. The slips should then be tied up together and a label should be placed on the top showing the District, Township, and Circle, the number of slips in the bundle, and the Religion and Sex to which they refer. The various packets of slips for a circle must be tied up into a circle bundle, and placed with the Enumeration Books of the Circle, the Circle Summary and the corresponding sheet of Register A. When all the circles of a charge have been completed, the whole will be made over to the Record-keeper.

The Record-keeper therefore received the slips from the slip-copying department in a bundle containing -

(i) the Enumeration Books of the circle

(ii) the Circle Summary
(iii) the Circle Sheet of Register A

(iv) twelve bundles of slips as follows :-

Buddhist Males. Buddhist Females. Animist Males. Animist Females. Hindu Males. Hindu Females.

Mahomedan Males. Mahomedan Females-Christian Males. Christian Females. Others, Males. Others, Females.

After instituting the necessary checks, the Record-keeper placed the twelve bundles of slips into a specially constructed almirah containing labelled compart-

ments for each of the twelve classes of slips. From this period the slips of the six religions and the two sexes were kept apart throughout the whole operations. On no account were the slips for separate religions or separate sexes allowed to become The initial sorting into the above twelve divisions was maintained to the end. The slips were placed in the almirahs in Circle Bundles tied loosely round with cotton thread, each

District. Township. Charge. Circle. Religion. Sex. Number of slips.

bundle being headed by a small slip as per margin shewing the District, Township, Charge, Circle, Religion, Sex, and the number of slips it contained.

66. Formation of Sorting Units.—An examination of the figures for any ordinary district in Burma will shew that the numbers of slips in the twelve classes into which they were divided were highly disproportionate. The first problem in the formation of sorting units was to devise some method of giving all the sorters an approximately equal amount of work to do. The first method of approximation was to divide the Buddhist slips into Townships, while leaving the slips for the remaining religions to be sorted by districts. The labelled almirahs mentioned in the last paragraph had separate township compartments for Buddhist males and Buddhist females, whereas district compartments only were provided for the males and females of other religions. Necessary modifications were made in the case of districts like Rangoon, where the adherents of other religions formed a large proportion of the population. However, confining the discussion to the consideration of ordinary districts, and fixing on a specific district, Prome, to illustrate the method of formation of sorting units, the marginal statement will shew the contents of the separate compartments of the sorting almirahs when the slip-copying for the Prome District was completed. A superior limit of 30,000 was fixed as the maximum number of slips for each sorting unit. It will be seen that this limit was exceeded in seven instances in the Buddhist Township compartments for the Prome District. To reduce

them to this limit, the Buddhist slips for all Census Towns were first made into separate sorting units. Each compartment containing less than 30,000 slips was

	Prom	e District-		
	Compartment	Label.		Number
Prome Padaung Padaung Paukkaung Paukkaung Hmawza Imawza Imegen Paungde Paungde Shwedaung Prome Prome Prome	Administrative Area	Religion.	Sex-	of slips.
Prome Prome Padaung Padaung Paukkaung Paukkaung Hmawza Hmawza Hmegôn Paungdè Paungdè Paungdè Paungdè Prome	Town Township District	Buddhist Animist Animist Animist Animist Hindu Hindu Mahomedan Christian Christian Others	Male Female Male	10,628 11,063 23,427 24,078 12,894 12,894 12,893 34,775 37,872 31,255 34,067 33,366 29,772 32,968 5,096 4,208 4,208 4,208 4,208 4,208 4,208 4,208

then automatically made into a sorting unit. Each compartment containing more than that number was divided into two units of appropriate size, care being taken to see that the line of division was a charge boundary, if possible. Thus, in the marginally illustrated case the slips in the compartments for Hmawza, Thègôn, Paungdè and Shwedaung Townships were divided into two or more units each, and the slips in the remaining compartments were each made into one sorting unit. There were ultimately 36 sorting units ranging in size from two slips to 24,078 slips. This scheme of sorting units is given in the marginal statement of paragraph 68 below.

67. Sorting Bags.—As soon as the sorting units for a district had been determined, the circle bundles of slips were re-checked with Register A, and placed into calico or paper bags of appropriate size. For the large units, calico bags, 24" by 50", were used, and the size ranged downwards to 12" by 9", below which size, paper envelopes were used. A list of the contents of each bag was prepared on a "Sorters, Verification Sheet" in the following form:—

Sorters' Verification Sheet. Sorting Bag No.

Sorting Unit.	Religion and Sex.	Charge-	Circle.	Number of Slips.
1	3	3	4	5
			Total	

Agrees with Register A.

Sorter.	D
1007.07.	Record-keepe

This contained particulars of each bundle of slips in the sorting bag, including the number of slips in each circle bundle. On the outside of the bag was written in coloured chalk the number of the bag and particulars of the District, Township, Religion and Sex concerned, and in the case of divided Townships, further details of the Charges or Circles included. The number of the bag was determined in the method subsequently described in the following paragraph.

SLIP-SORTING. 65

68. Sorting boxes.—In order to allow the possibility of checking the work of sorting without wasting the sorters' time, each sorter was given two or more

sorting bags placed in a sorting box. While the work on one bag was being checked, the sorter could be pro-ceeding with his work on another bag. This method also enabled some approach to equality in the size of each sorter's work to be attempted. Thus, in the case of Prome, the 36 sorting units were made up into 11 sorting-boxes as illustrated in the marginal statement. Each sorting-box was given a serial number, there being two series of numbers for the province, one for the boxes sorted at Rangoon, and one for the boxes sorted at Mandalay. Each sorting-bag was given a subnumber, comprising the number of the box in which it was placed and a distinguishing letter to mark it off from the remaining bags in the

ame.	Administratea,			- 17	i i		
Pro Articles in sec		ative	Religion		Sex,		Number of sorting box and bag.
	Township		Buddhist Buddhist Buddhist	::	Male Male Male	Ξ	#14A 114B 114C
914	Township		Buddhist Buddhist Buddhist	::	Female Female Female		151A 115B 115C
		:::	Buddhist Buddhist		Male Male	:::	116A 116B
	State of the State of the State of		Buddhist Buddhist	:::	Female Female	:::	117A 117B
	The same of the	:::	Buddhist Buddhist	**	Male Male	:::	118A 118B
			Buddhist Buddhist	:::	Female Female	:::	119A 119B
100	Township	::	Buddhist Buddhist Buddhist	:: ::	Male Male Male	ï.	120A 120B 120C
***	Township	::	Buddhist Buddhist Buddhist	:	Female Female Female	2	131A 131B 121C
	PP and the second second		Buddhist Buddhist Buddhist	::	Male Male Male	::	122A 122B 122C
100	Township	=	Buddhist Buddhist Buddhist	::	Female Female Female		123A 123B 123C
	District District District District District District District District	1111111	Hindu Hindu Mahomedan Mahomedan Christian Christian Animist Animist Others		Male Female Male Female Male Female Male Female Male		124A 124B 124C 124D 124E 124F 124G 124H 124I
		Township	Township Tow	Township Buddhist Buddhist Township Buddhist Town Buddhist District Hindu District Hindu District Mahomedan District Christian District Animist District Animist District Others	Township Buddhist Town Buddhist Town Buddhist Town Buddhist Township Buddhist Town Buddhist Township Buddhist Buddhist Town Buddhist District Hindu District Hindu District Mahomedan District Mahomedan District Christian District Christian District Christian District Animist District Others	Township Buddhist Female Township Buddhist Female Township Buddhist Female Township Buddhist Female Township Buddhist Male Township Buddhist Male Township Buddhist Male Township Buddhist Female Township Buddhist Male Township Buddhist Male Township Buddhist Male Township Buddhist Male Township Buddhist Female Township Buddhist Female Township Buddhist Female Township Buddhist Female Township Buddhist Male Township Buddhist Female Township Buddhist Male Township Buddhist Female Town Buddhist Female Township Buddhist Female Town Buddhist Female	Township Buddhist Male Male Township Buddhist Female Female Dudhist Male Male Male Male Male Male Township Buddhist Female Female Male Male Male Male Male Male Male M

same box. As soon as the sorting bags and boxes for a district had been made up, they were entered into the Record-keepers' Register of sorting units and sorting boxes in the following form:—

RECORD-KEEPER'S REGISTER OF SORTING UNITS AND SORTING BOXES.

District

Sorti	ng Unit.			Number of		Serial	Verification under Articles	
Name.	Administra- tive Area	Religion.	Sex.	Charges and Circles (to be inserted only in case of divided units).	Number of Slips.	No. of Sorting Bag-	16 and 7 of Chapter IV- Record- keeper's Signature.	Remarks
t	2	3	4	5	6	7	8	9

Each box was then labelled with particulars as to its number and contents, and was ready for issue to the sorting department.

69. Number of Sorting Units.—Altogether there were 1,568 sorting bags distributed into 407 sorting boxes. The marginal statement gives the numbers

		- 1	Num	ber of
Distric	t.		Sorting Boxes.	Sorting Units.
Akyab	***		15	58
Northern Araka	in	799	1	10
Kyaukpyu	***	***	8	29
Sandoway	***	***	. 5	23
City of Rangoo	13	464	27	186
Hanthawaddy	0.04	144	18	41
Tharrawaddy	***	444	13	50
Pega	***	***	7.4	35
Prome	***	77.5	11	30
Bassein	***	***	12	44
Henzada	<.	444	7.3	54
Myaungmya	***	994	9	37
Ma-ubin	***	***	9	32
Pyapôn	***	3.665	9	36
Toungoo	***	***	15	41
Salween	***	944	4	10
Thaton	***	244	13	40
Amherst	***	***	12	44
Tavoy	**	344	5	17
Mergui	***	***	8	31
Thayetmyo	***	***	10	30
Pakokku Minbu	***	***	9	39
	***	***	11	37
Magwe Mandalay	***	***	16	59
	***	***	3	18
Myitkyina	***	***	3	22
Katha			6	25
Ruby Mines			3	24
Shwebo	***		10	39
Sagaing		***	8	28
Lower Chindw	dn.		10	31
Upper Chindy			7	34
Kyankse	***		6	26
Meiktila	***	***	7	28
Yamèthin		***	10	39
Myingyan			12	36
Northern Shar		es	13	40
Southern Shar	State		32	141
Chin Hills	***	***	4	16
7	otal	•••	407	1,568

of units and boxes for each district in the province. The City of Rangoon had 180 sorting units because it was considered necessary to effect a detailed sorting for each religion for each quarter. The Southern Shan States with a population of 1,504,961 naturally claimed the largest number of sorting boxes. Apart from these two special administrative areas the number of sorting units ranged from 10 in Northern Arakan to 58 in Akyab District, and the number of sorting boxes from one in Northern Arakan to 18 in Hanthawaddy District. Subsidiary Table II of this chapter gives the distribution of the 407 sorting boxes between the offices of Rangoon and Mandalay, and the periods of commencement and completion of the sorting for the various Imperial Statistical Tables. In Rangoon, 267 boxes were sorted between April and October, and in Mandalay, 140 boxes were sorted between June and September.

70. Commencement of Sorting.—Sorting commenced in April with the completion of the slip-copying for the City of Rangoon. The enumeration schedules for Rangoon had been written in English, and there were a number of Bengali copyists who were unacquainted with Burmese and unable to do slip-copying for any of the other districts. To keep these employed, and also to

train a staff of persons to act as sorting supervisors as soon as the slip-copying should be finished, the slips for Rangoon were sorted as soon as they were made into sorting units. The slips for a second district, Pegu, were also given out for sorting for training purposes, as soon as the sorting bags were made up, and two sorting tables were kept going during the whole period of slip-copying. It was not however till the end of June that the approaching completion of slip-copying in the Rangoon Office enabled sorting to be seriously taken in hand.

In Mandalay, sorting was not commenced till an even later period. At first it was not intended to do any sorting at Mandalay at all, but the delays experienced in slip-copying rendered it necessary to utilise the services of the staff at Mandalay to accelerate the completion of sorting. A training table for sorting supervisors was started at the end of June, and sorting was started in earnest in July as soon as the slip-copying for the Burmese schedules was completed.

71. Issue of Sorting Boxes and Sorters' Verification Sheets.—
Sorting was effected by groups of 10 sorters, each under the charge of a Sorting
Supervisor. Ten sorting boxes were given out to each supervisor accompanied by
a Sorters' Verification Sheet for each bag, and a Register in the following form:—

SUPERVISOR'S REGISTER OF SORTING BOXES.

		. (Conte	ente.														
v	Sort	ing Unit.	~		Ligger 1	rter.			1	Dates	of Com	pletion	of Sor	ting fo	r Tabl	es.		
No. of Bag.	Name. Administrative Area. Religion. Sex. Numbers of Charges and Charges a		Name of Sorter.	VII.	vIII.	XI.	x.	XIII.	ıx.	xıv.	XVI.	XVA.	XVa.	xvII.	xvIII			
t	,	3	4	5	6	7	8	9	10	11	12	13	14	15	1.6	17	18	19

The first business of the sorter was to verify the number of slips in each sorting bag in his box. The verification comprised the following processes:—

(i) check of number of sorting bags with sorting label pasted on sorting box;
 (ii) check of circle bundles of slips with list of circle bundles in "Sorters' Verification Sheet" (see form in paragraph 67 above);

(iii) check of the number of slips in each circle bundle with the number mentioned on the facing slip of the bundle, and with the number mentioned in the Sorters' Verification Sheet.

It was not until the verification had been completed, and any mistakes detected, adjusted by a recount or a reference to Register A, that the circle bundles of slips could be broken up, and the slips in each sorting bag thrown all togethers and sorting commenced. Under no circumstances however, were two sorting bags from one box permitted to be open at the same time; or the slips from two sorting bags mixed together.

72. Sorting.—After verification was completed sorting began. Each sorter was provided with one sorting box containing two or more sorting bags, the slips

of which he had himself verified, and a rack of 36 pigeon holes. He had to retain this box and complete the sorting for the whole of the Imperial Tables in the order shown in the marginal statement. He first sorted the slips in one of the bags for Imperial Table VII and recorded the result on a specially devised Sorter's Ticket. Having done this he handed the bag and the ticket to the supervisor for check and proceeded to sort the second bag in his box for Imperial Table VII. When the second bag

Imperial Table.	Designation.
VII	Age, Sex and Civil Condition.
VIII	Eduction by religion and age.
XI	Birth-place.
X	Language.
XIII	Caste, Trible, Race or Nationality.
IX	Education by ten selected tribes and races
XIV	Civil condition by age for selected races.
XVI	Occupation by selected races.
XV-A	Occupation or means of livelihood.
XV-B	Subsidiary occupations.
XVII	Territorial distribution of the Christian population by sect or race.
XVIII	Europeans, Armenians and Anglo-Indians by race and age.

Table VII. When the second bag was sorted, he did the same with the third bag, if there was one, and continued until he had sorted all the slips in each bag for Imperial Table VII, preparing one sorter's ticket for each sorting bag contained in his sorting box.

sorter's ticket for each sorting bag contained in his sorting box.

It will facilitate the description of the process of sorting if the actual form of "Sorter's Ticket" used for one of the Imperial Tables is shewn and the actual instructions issued for its preparation are given.

The following is a reproduction of the Sorter's Ticket for Imperial Table VII:

ownshi	or Tan	1.00					
Circles	p or Tow			_ Scx			
ncies				1			
Age.	-			Age.		ber of Perso	
	Unm.	М,	W.		Unm.	M.	w.
Infant	Number of Persons. Unm, M, W. ant 1 2 3 4 3 4 3 9 11 11 2 11 2 3 4 11 2 3 4 11 2 3 4 11 4 11 11 11 11 11 11 1	Brought forward.			-1.1.4.4		
1				30-34			
2				35-39			
3				40-44		-	
4				45-49			
5-9				50-54			
10-14				55-59			
15-19				60-64			
20-24				65-69		114-41	
25-29				70 and over.			
Total				Total			
ested a	nd passe	d as cor	rect.				
Signea	1			Signe	d		

The following instructions were printed on the reverse of the Sorter's Ticket. shewn above :-

Rules for Sorting for Table VII.

1. Write the age-periods 0, 1, 2, 3, 4, 5—9, 10—14, 15—19, 20—24, 25—29, 30—34 35—39, 40—44, 45—49, 50—54, 55—59, 60—64, 65—69, 70 and over, on labels and stick these labels against the pigeon-holes. Keep a separate pigeon-hole for the slips on which no age is shown.

2. Look at the age entered against the printed figure 7 on each slip in turn and place the slip in the appropriate pigeon-hole. For example, if the age is 26 place it in the pigeon-hole labelled "25—29"; if it is 80, place it in the whole labelled "70 and over," and so on.

3. When all the slips have been pigeon-holed take out those in each pigeon-hole in turn and sort them into three heaps for unmarried, married and widowed. This is shown

by the symbols on the slips, viz:



While doing this keep your eye on the age, so as to correct any mistake which you may have made when sorting, and count the slips of the biggest heap, tying them up by hundreds as you do so. Then count the slips in the other two heaps, tie them up in the same way, and enter the figures thus obtained in the proper place on this ticket. The figures (if any) for slips with age unspecified will be entered below the grand total.

4. When you have dealt with all the pigeon-holes fill in the totals on your ticket and

inform the supervisor.

5. For the bundles of slips marked "others," first sort by religion. Then prepare a sorter's ticket for each religion.

When the sorting of all the bags of slips in a box for Imperial Table VII was completed and a sorter's ticket prepared for each sorting bag, a similar process was followed for Imperial Table VIII, and so on, until all the Imperial Tables had been sorted. It will have been noticed that the Imperial Tables were not sorted in serial order. The order of sorting adopted was that in which it was found that the sorting for an Imperial Table either facilitated the sorting of the subsequent Table, or was facilitated by the sorting of the previous Table. It would be but a repetition of the Chapter on Sorting in the Tabulation Code to repeat the instructions for all the separate Tables. Each ticket was devised to contain a record of the number of slips for each category required to be shewn in the Imperial Table for which sorting was being effected, and was accompanied by detailed instructions as to the method by which the sorting was to be performed. The sorting of slips for Imperial Tables XII and XII-A was effected by

means of the special Infirmity slips which had been prepared.

73. Duties of Sorting Supervisors and nature and extent of testing.—The following were the instructions issued prescribing the duties of Sorting Supervisors and the nature and extent of the testing of the work of sorting :-

DUTIES OF SUPERVISORS.

I. Instruction.—It is the duty of the Supervisors to instruct the sorters fully before they commence sorting for each table in turn. They must also watch their methods of sorting, so as to correct at once any misunderstandings which may arise and shew them how they can accelerate their work. When sorting for Table 7, for instance, much time may be saved if the sorter holds the slips to be sorted in his left hand, and while with his right hand he removes and pigeon-holes one slip, looks at the age on the next, and removes his left hand towards the appropriate pigeon-hole in readiness for his right hand to complete the operation. Unless this is pointed out, however, many sorters will sit with all their slips on the table and will pick them up one by one, using their right hand only, with the result that their progress will not be half as rapid as it should be.

Supervisors must always be ready to explain difficulties, and to answer any questions put to them. They will be held personally responsible for the accuracy of the work of their sorters, and will be severely dealt with if mistakes are found in the sorters' tickets after they

have signed them.

2. Testing.—When a sorter announces that he has completed his sorting for any table the Supervisor must at once go and test his work. He will first examine the slips in each pigeon-hole to satisfy himself that they have been properly sorted. As the slips are tied up by hundreds, he can best do this by taking a packet at a time and running a finger along the

SLIP-SORTING

end, keeping his eye fixed on the column for which sorting is being made. Where the column is near the centre of the slip the string should first be slipped towards one end. There is always the risk that a packet of slips of one category may be inadvertently placed with a packet of another category; the utmost care must, therefore, be taken to see that each packet of slips included in a given total properly belongs to it. The misplacing of a packet of 100 slips is of course a far more serious matter than the wrong pigeon-holing of a single slip in the course of sorting.

The counting must also be tested. The Supervisor will take a packet and divide it into

two parts, giving one to the sorter to count and counting the other one himself.

The addition of the details (both vertical and horizontal) must be tested to make sure that they work up to the total. Small discrepancies in the total not exceeding o'2 per cent, may be adjusted by the Deputy Superintendent, but by no one else.

Note.-Special care must be taken to test all the smaller items, and also all entries which seem doubtful,

Where the bulk of the slips are to be found under one or two heads, e.g., "Illiterate" in the case of Tables VIII and IX and "District born" in the case of Table XI, there is a great danger of slips being wrongly placed under these heads by a careless or dishonest sorter. The slips should therefore be carefully examined to see that no such cases of wrong sorting have occurred. In the case of Table XIII the slips for castes, the names of which are liable to be confused with those of other castes, must be carefully examined.

3. Extent of Testing.—The extent of testing will depend on whether mistakes are found or not. If none are detected, it will be sufficient to test ten per cent. of the slips in both the ways mentioned above. If mistakes are found, an additional ten per cent. must be tested.

In addition to this testing, all the entries in the sorters' tickets must be verified by

counting the number of packets of slips covered by each entry.

If the mistakes, either in sorting or in counting, exceed on the average one in every two packets tested, the sorter must be told to examine all the packets himself, and must be allowed for doing so a time equal to one-fifth of the time taken over the original sorting.

- 4. Testing while Sorting is in progress.—It is not necessary to defer testing until the sorting has been completed. A great deal of it can be done while the work is in progress. Whenever the Supervisor has leisure, he should be constantly on the move amongst his sorters, examining the contents of the pigeon-holes. The Supervisor should keep a note of the checking done while sorting is in progress, and may reduce to that extent the checking to be carried out when the sorting is finished.
- 74. Progress of Sorting.—The progress of each sorter was recorded by the Sorting Supervisor in his Register of Sorting Boxes described above in paragraph 70. It is summarised in Subsidiary Table II of this Chapter. sorting for Imperial Tables VII and VIII was completed in the Rangoon Office in August. At Mandalay the slips were sorted for Imperial Tables VII in August and for Imperial Table VIII early in September. The slips for Imperial Tables XVII and XVIII were completed in August. This was possible because they referred to the slips for Christians only. As these were comparatively few, and as the sorting boxes containing the slips for Christians were generally small, the sorting for all the Imperial Tables of these sorting boxes and units was completed much before the sorting of larger boxes and units. The unequal sizes of the sorting boxes caused some sorters to complete their work before the remaining sorters at the same table. The sorters who finished first were put to assist the most backward sorters of their table, the form of assistance usually consisted of taking over one sorting bag and completing the sorting for that bag for the uncompleted Imperial Tables. The slips in the 140 sorting boxes at Mandalay were sorted for all Imperial Tables in September. In Rangoon, sorting was not completed till the first week in October.
- 75. Payment of Sorters.—An attempt was made to measure the work performed by the sorters and pay them by piece work rates. The following instruction as to "Standard Tasks" was formulated:—

Standard Tasks.-The following are the Standard Tasks per day for sorting some of the various tables :-

Table		Class,		Number of Slips,
VII		MATER		4,000
VIII		Males	***	9,000
VIII		Females		15,000
X and XI	5	Town	***	15,000
A and At	*** {	Country		20,000
	(Hindus		10,000
XIII		Mahomedans		15,000
AIII	}	Buddhists		20,000
	(Animists	0.5	10,000
XV	5	Town	***	5,000
AV	5	Country	***	10,000

This table should be used in calculating the entry for column 9 of Register J. For instance, if there are 22,000 slips in a box or bundle the time allowed for— Table XIII, Mahomedans, would be $\frac{22,000}{15,000} = 1$ day 4 hours.

Table VIII, Males, would be $\frac{22,000}{9,000} = 2$ days 4 hours. Table XV, Town, would be $\frac{22,000}{5,000} = 4$ days 3 hours. Eight hours should be $\frac{22,000}{5,000} = 4$ days 3 hours.

Eight hours should be reckoned as one day and the time allowed calculated to the nearest hour.

The preparation of the pay-roll for August on the above basis was followed by a strike on the part of the whole of the sorters in the Rangoon office. On the 1st September none of the sorters appeared, and a message was sent to the Superintendent of a general refusal to work unless the following claims were considered:-

(i) that sorting was a much more difficult task than slip-copying, yet the piece work rates gave the sorters a smaller wage than they had been receiving as slip copyists.

(ii) that the work of sorting was so varied that piece-work rates operated unjustly.

(iii) that there had been a marked rise in the price of paddy, and the salaries paid did not enable the sorters to keep themselves.

(iv) that sorters should receive a minimum salary of Rs. 30 per month. There was truth in the first claim. The men were expert slip-copyists with six months' experience at the work. They had also been working overtime to get on to what they had hoped would be the much more lucrative work of sorting. The change from their skilled work of slip-copying to fresh work at sorting, con-currently with a change from overtime to normal working hours, naturally pro-duced much smaller wages. There was also truth in the second and third claims. Even in slip-copying, variations in the work to be done were so marked in some instances, that special rates had to be paid, and in sorting the variations were still more marked. It was also a fact that in August 1911 the price of paddy, the staple food of the people reached the almost unprecedented price of Rs. 135 per 100 baskets.

A compromise was ultimately effected. The rates fixed for August were to stand, and for subsequent work, a rate of Rs. 30 per month was to be paid, provided one extra half hour a day was worked. Provision was made in case the work of any sorter fell below the standard by a marked amount. The cost of the concessions was but slight. The extra time worked, and the better feeling among the staff, enabled the work of sorting to be completed early in October. The extra wages bill was almost paid by the saving on the heavy standing charges of the staff for the time gained by the speedier completion of the work. Certainly, an unsympathetic attitude would have cost much more in time, money and disorganisation, than the concessions granted. The sorters returned to work at 10-30 a.m. on the 2nd September, the day following their refusal to work at the rates fixed for August.

COMPILATION.

76. Material for compilation.—The process of sorting produced a series of 12 Sorters Tickets (for Imperial Tables VII, VIII, IX, X, XI, XIII, XIV, XV-A, XV-B, XVI, XVII and XVIII) for each of the 1,568 sorting units specified in paragraph 69 above. There were also special Infirmity Sorters Tickets for Imperial Table XII and XII-A. The process of compilation consisted in the preparation of the whole series of Imperial Tables, I to XVIII, Provincial Tables I and II, and the Provincial Town and Village Tables, from Register A and from the above series of Sorter's Tickets. Register A, contained particulars of the Religion and Sex of the inhabitants of every Census Block, Circle and Charge, prepared by the Slip-copying Supervisors, and subsequently checked by means of the Sorters Verification Sheets. The Sorters Tickets contained particulars for the various Imperial Tables by sorting units. The sorting units adopted were generally-

(i) districts, in the case of religions other than Buddhist,

(ii) townships or towns, where the number of slips for one sex did not exceed 30,000,

- (iii) portions of townships, where the number of slips for one sex in a township exceeded 30,000.
- 77. Initial Stages of Compilation.—While the processes of slip-copying and sorting were being effected, the Record Department was engaged in the compilation of the Imperial and Provincial Tables which could be effected directly from Register A without the necessity of special sorting. Register A (the form of which is given above in paragraph 53) was originally prepared in separate sheets for each Census Circle, with one line for each enumeration block. The population of the enumeration blocks in each administrative village-tract was first totalled, and the totals for each village-tract were inserted in red ink. The circle sheets were then totalled, and a Charge Sheet prepared for each Census Charge, giving one line for the totals of each Census Circle. These Charge Sheets were in turn totalled, and combined into the administrative units of Townships or Towns, where necessary. Finally, a combined District Abstract of Register A was prepared with one line for each Township or Town, and a grand total struck for the district. The Circle Sheets of Register A were bound into Township Volumes, and the Charge Sheets and the District Abstract for each district were bound into a District Volume. These Township and District Volumes of Register A formed the material from which the figures for Imperial Tables I, II, III, IV, V and VI, and Provincial Tables I and II were obtained. They also provided the figures for the compilation of the Provincial Town and Village Tables.
- 78. Provincial Town and Village Tables.—In 1901, the population of the province was analysed by towns and residential hamlets, and the results were published in two volumes (Parts III and IV of the Burma Census Report for that year). The analysis was prepared in the following forms:—

DISTRICT.

Table showing the population by sex, the religions, languages and education of the people.

	-noo	Po	pulati	an.		Popu	lation	by re	ligion	ž,	L	angua t	iges o	rdinar 1+	ily	Lite	rate
Name of Village.	Number of pied houses.	Total.	Males.	Females.	Buddhist.	Animist.	Mussalman.	Hindu.	Christian.	Others.	English.	Burmese.	Karen.	Shan.	Others.	Males.	Females.
	2	3	4	5	6	7	8	9	10	11	12	13	15	15	16	17	18
Fotal																	

In consequence of the criticisms received as to the form and utility of the tables for 1901, the whole question of the form and nature of the tables was thoroughly considered. The objections raised were to the following effect:—

(i) that the particulars given were too detailed and too elaborate. They were compiled at a great expenditure of time and money and many

of the details given were of but little value,

(ii) that village tables were required for district, rather than for provincial, reference, and the issue of the tables in provincial volumes totalling 1,215 pages, instead of in small district volumes, was a source of great expense,

(iii) that the size of the volumes detracted from their handiness as works

of reference,

(iv) that the arrangement of the tables by residential hamlets, instead of by village-tracts, was of small administrative utility,

(v) that the tables were not accurate as lists of residential units, the material available not enabling a list of residential units to be prepared without an undue amount of close supervision,

(vi) that lists of village-tracts with their populations were urgently required for administrative purposes, and that the occurrence of a census provided a unique opportunity for their preparation,

(vii) that the previous method of compilation resulted in an inordinate delay. the tables not being issued till 1905, or over four years after the census

had taken place.

To meet these criticisms it was decided;

(i) to curtail the amount of information given,

- (ii) to prepare the lists by administrative village-tracts, rather than by residential units,
- (iii) to publish the lists by district volumes instead of by provincial volumes, (iv) to amalgamate the issue of the Census Town and Village Tables with the B Volume of the District Gazetteer and thus provide one compact and comprehensive work of reference.

The modified form, in which the analysis of the population by Towns and

Villages is being given, is as follows:-

TOWNSHIP.

Population of Towns and Village-tracts by Sex and by Religion.

		Number	Pop	Total pulation	on.	Budd	hists.	Anin	ists.	Hin	dus.	Mah dar	ome-	Chris	stians.	Otl	hers
Serial No.	Town or Village- tract.	of houses,	Male,	Female.	Total.	Maie.	Female,	Male.	Female,	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
_	Total		_			-	-	_			_			-			

79. Verification of Lists of Village-Tracts.—In the course of the check and receipt of the census enumeration records numerous discrepancies had been discovered between the village-tracts as shown in the following records:-

(i) the General Village Census Register,

(ii) the Circle List,

(iii) the Circle Register,

(iv) the descriptive particulars of the Enumeration Book Cover.

No demonstration of the necessity for the preparation of an authoritative list of village-tracts could be more convincing than the nature of the discrepancies in what should have been a series of perfectly harmonious records. There was not one district in the province in which the above four statements were in harmony so far as the designations of their constituent village-tracts were concerned. It was therefore necessary to get the lists corrected and verified by District Officers. The following circular was issued on the 10th June 1911 to this effect.

In the forthcoming B Volume of the District Gazetteer for the District it is intended to include a statement showing the population of each village-tract arranged Township by Township. The attached lists have been compiled from the General Village Census Register and Census Circle Lists, but in order to minimise the possibility of error, they are being forwarded to you for the purpose of check and verification. The Village Headmen's Register is suggested as the best available means of instituting the necessary comparison. Attention is particularly directed towards the following points:

- (i) Omissions.—Have any Village-Tracts been omitted?
- (ii) Incorrect inclusions. Have any names not those of authorized Village-Tracts been included?
- (iii) Names.—Have the correct names been given in every case?

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(iv) Serial Order.—Does the order in the list meet with your approval? If not, could you suggest the order to be adopted either by writing fresh lists, or by inserting the numbers of the serial order perferred in the remarks column of the lists now sent to you?

The return of the verified lists corrected if necessary at an early date is requested.

The corrections effected by Deputy Commissioners, in the majority of instances, tended to make confusion worse confounded. The amended lists received, showed many village-tracts for which no population whatever had been returned, whereas others with large populations were entirely cut out. A few letters were received indignantly questioning the correctness of the lists prepared in the census office, though they were taken direct from the General Village Register and the Circle Lists, which had been prepared by district agency. It was necessary to refer the majority of the lists back with a list of discrepancies prepared in the following form:—

Gazetteer.-Village-Tract Discrepancy List.

Number.		As shown in	As shown in	Queries and suggestions	Final remarks
nship. Number. Nam	Name-	Census List and General Village Register.	Deputy Com- missioner's corrected List.	by Superinten- dent, Gazetteer Revision,	by Deputy Commissioner
2	3	4	5	6	7
	2	2 3			

With this discrepancy list, the original General Village Register and Circle List were sent back, and the majority of the discrepancies were then reconciled. They were principally due to the use of different names given to the same village-tract in the Census lists, and in the official lists in actual use. In some cases the discrepancy lists had to be returned four and even five times before full harmony was established.

80. Revision of "District Gazetteer" B Volumes.—Simultaneously with the preparation of the Census Town and Village Tables, the Census Superintendent was occupied in supervising the revision of the B Volumes of the "District Gazetteer." The following letter from the Chief Secretary to the Government of Burma to all Deputy Commissioners will indicate the nature of the revision effected:—

I am directed to invite your attention to Revenue Department letter No. 82—1G.-4, dated the 4th March 1904, in which instructions were issued for the compilation of B Volumes of the "District Gazetteer." In sub-clause (4) of paragraph 4 of the Government of India's Home Department letter No. 3376, dated the 1st November 1902, which formed an enclosure to the letter above mentioned, it was announced that a new edition of the B Volume should be brought out after each census. I am now to communicate to you the following instructions as to the manner in which the revision of the B Volumes should be undertaken.

2. The orders regarding the method of revision as given in the Government of India's letter of the 1st November 1902 are that "the statistics in the B Volume should be recompiled, and this Volume should be expanded by adding to it any matter that might be required to correct or supplement the A Volume.

Thus if there had been a famine since the A Volume was published, if a new railway had been opened and so forth, information on these points would appear in B as supplementary to the appropriate chapters in A. This process would go on till the time had come for revising the A Volume. Then all the supplementary text matter would be incorporated in the new A Volume, and B would revert to

its original form as a statistical appendix with explanatory notes."

3. The manner in which the A Volumes were to be compiled was given in Revenue Department letter No. 543—1G.-2, dated the 18th January 1905, to Deputy Commissioners in Lower Burma, as modified by letter No. 783—1G.-2, dated the 21st May 1906, to the Financial Commissioner, Burma, which enclosed a copy of letter No. 784—1G.-2, dated the 21st May 1906, to certain Deputy Commissioners in Lower and Upper Burma. In the Northern Arakan, Salween, Sandoway, Mergui, Thayetmyo, Bhamo, Myitkyina, Ruby Mines, Upper Chindwin and Meiktila Districts, the compilation of the A Volumes was to be undertaken by the Deputy Commissioner. In the remaining districts in Lower and Upper Burma the compilation of this Volume would form one of the duties of the Settlement Officer as each district came under Settlement. These orders have since been modified to the extent that in the Meiktila District the compilation of the A Volume is to be undertaken by the Settlement Officer, and in the Yamethin District by the Deputy Commissioner.

4. The only districts for which A Volumes have been completed up to date are the Northern Arakan and Salween Districts. For these two districts the revised B Volumes should embody any matter which is required to correct or supplement the information given in the A Volume. For all the remaining districts in Lower and Upper Burma the revised B Volume will be generally similar in substance to the B Volumes first prepared and will consist mainly of

statistics and of such notes as will be necessary to elucidate the figures.

5. The revision of the B Volumes will be carried out under the supervision of Mr. C. Morgan Webb, I.C.S., Superintendent of Census Operations, Burma. A copy of the existing B Volume of each district should be carefully examined in order to see that the information contained in it is corrected up to date and that the statistics in the Tables are complete and contain the latest figures available, and the corrected Volume should then be sent as early as possible to the Superintendent of Census Operations by whom the information and figures will be checked and the work of printing will be undertaken.

6. The following instructions should be observed in the preparation of the

B Volume before it is sent to the Superintendent of Census Operations:-

(1) In the opening paragraphs of the Volume information under the following heads may be omitted as this will be supplied by the Superintendent of Census Operations from the figures in his office-

(a) List of principal races, tribes and castes with population of each; and of principal languages spoken with total of speakers of each.

(b) List of towns and villages of over a thousand inhabitants at the census

with population of each.

- (2) The following linformation, which was not given in the B Volumes at first prepared, should be embodied in the opening paragraphs of the present revised Volumes :-
 - (a) Township and District areas in Form A appended to this letter.
 (b) List of leased fisheries in Form B appended to this letter.

The last column of the form will be blank at present, and is intended for the entry of any future subdivisions or amalgamations of fisheries.

(3) The average monthly wage for the year 1910-11 should be given in the opening paragraphs for-

(a) an able-bodied agricultural labourer;

- (b) a coolie;
- (c) a carpenter, and

(d) a blacksmith.

The average cart hire per day should also be furnished. This information will replace the figures hitherto shown in Table VII of the Volume which will now be cancelled.

(4) Tables II, VII, XX and XXII will be omitted. The information contained in Tables VII, XX and XXII is not of much value, and Table II will be replaced by District Census Tables to be prepared by the Superintendent of Census Operations and to replace the figures which have been published hitherto

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as Parts III and IV of the Provincial Census Tables. You will be separately addressed by the Superintendent of Census Operations as to the form in which these District Census Tables should be compiled.

(5) In Tables IV and XIII the District figures only need be shown. The Township Tables may be omitted.

7. I am to request that the preparation of the revised B Volumes may be undertaken at once in accordance with these instructions and that the Volumes may be sent to the Superintendent of Census Operations not later than the 15th June 1911. The Volume should be examined by you personally before it is sent in and you should be careful to see that the information is correctly given and that all figures are accurate and complete up to date. The preparation of the work should not be delayed for entry of the figures for 1910-11 if these figures are not available in all cases.

At the date of writing (1st April 1912) the whole of the Provincial Town and Village Tables and the revised B Volumes are ready for the Press. They have been withheld from the Press because the simultaneous printing of 41 district volumes of statistics together with the three main volumes of the Census Report, would have resulted in unduly postponing the publication of the latter. Immediately on the completion of the printing of the three volumes of the Census Report, the printing of the B Volumes of the Gazetteer will be taken in hand, and it is hoped that, commencing from June 1912, they will be published at the rate of about six district volumes per month.

- 81. Imperial Table III.—The first Imperial Table to present difficulties of compilation was Imperial Table III. Compilation had to be effected in two distinct operations. First, the population of each village-tract was entered from Register A, township by township, in a special Tabulation Register, with columns for village-tracts, classified by the numbers of their inhabitants. The township totals were then combined on a Compilation Register, district by district. The totals of the sheets of the Compilation Register were the required entries for Imperial Table III.
- 82. Compilation of Tables VII to XVIII.—Chapter V of the Tabulation Code for Burma, intended to prescribe in advance the methods of compilation, is a most incorrect anticipation of the procedure actually followed. At the time the chapter was written, the profound labour-saving effect of the adoption of the system of district sorting units for religions other than the Buddhist religion, had not been fully appreciated. Normally, compilation would have comprised three distinct processes :-

(i) the combination of the figures on the sorters' tickets into district totals for each religion and sex,

(ii) the combination of the district totals for each religion into one grand district total for each sex,

(iii) the combination of the district totals into a provincial total.

Of these three processes, the first, and the most lengthy of all, had been automatically performed for the non-Buddhist religions in most districts, by sorting for district units. In a few cases; e.g., for Mahomedans in Akyab and for Animists in the Chin Hills, it had been necessary to subdivide the non-Buddhist slips into units smaller than the district. But, with few exceptions, the district totals for each religion and sex were obtained for all non-Buddhist religions, direct from the sorters' tickets. The first of the three processes of compilation was there-

fore reduced to the preparation of district totals for Buddhist Sorters Tickets only.

The amount of labour-saving can be estimated from a comparison of the anticipated method as described in the Tabulation Code for the compilation of figures for Imperial Table VII and the method actually followed. The Code prescribed that the Compilation Register of each district for the first process of Imperial Table VII should consist of 18 sheets or 36 pages. It actually consisted of three sheets or six pages only. When it is considered that each page of this Register comprised 23 columns and 25 rows, the saving of 30 pages of compilation for each of 41 districts can be estimated. Moreover, this saving was for one Imperial Table only. A proportionate saving was effected for each of the other Imperial Tables for which compilation sheets were necessary.

83. Methods of Compilation.—A detailed description of the process of compilation for each Imperial Table would entail a reproduction of each form of Compilation Register prescribed. These registers were large sheets containing sufficient columns for the entry of all the separately recorded figures on the sorters' tickets, and sufficient rows for the entry of all the sorting units in each district. A description of the general nature of the compilation operations, supplemented, where necessary, by details of the difficulties experienced in compiling each Table, will supply all the information required. Compilation operations were lengthy rather than intricate. The separation of religion and sex instituted immediately after slip-copying was accomplished, was maintained up to the end of the first stage of compilation mentioned in the preceding paragraph. This stage was intended to secure for each district, in all cases in which the information was not obtainable direct from the sorters' tickets, the figures to be classified in the Imperial Tables arranged in the twelve categories:

Males.		Females.					
Buddhists		Buddhists					
Animists		Animists	***	***			
Hindus		Hindus					
Mahomedans		Mahomeda	ns				
Christians		Christians	127				
Others	1980	Others					

As already explained, detailed calculations were usually required only in the case of Buddhists, the figures for remaining religions being obtained for most districts direct from the Sorters Tickets. Where the Tables were arranged by religions, as in Imperial Tables VII, VIII and XV-D, or where they were confined to specific religions as in Imperial Tables XVII and XVIII, the figures obtained at this first stage of compilation were ready for immediate insertion into the Imperial Tables.

The second stage was the combination of the separate figures for the six religions into two totals for the males and females in each district. This was effected on the same form of classification sheet as that used in the first stage. One side of the sheet was used for the males of a district, and the reverse for the females. Forty-one such sheets were required for each Imperial Table of the forty-one districts and administrative territories, the number being increased wherever it was found impossible to include the whole of the items of classification for any Table on one sheet. The totals of these sheets were the figures required for the district entries in the Imperial Tables.

It was at the end of this second stage of compilation that the processes of compression and classification, necessary to reduce Imperial Tables X and XIII to comprehensible dimensions, were effected. The condensation of the classification sheets for these two tables and the preparation of the analysis tables on pages 98, 141 and 148 of the Statistical Volume, were perhaps the most delicate and intricate pieces of work performed throughout the whole operations.

The third stage of the compilation was the calculation of Divisional and Provincial Totals from the District totals obtained at the second stage. The work was performed on the manuscript forms of the Imperial Tables, except in the case of Imperial Tables VII, VIII and XI and XV, where special calculation forms were employed.

84. Compilation for Imperial Table XI.—A departure was made from the prescribed form of Compilation Register in the case of Imperial Table XI. It is somewhat difficult to describe, without reference to the forms of the Sorters Ticket and Compilation Register for this table. Briefly the departure consisted in the utilisation of the first column of the Compilation Register for the entry of the birthplace recorded, instead of for the sorting unit, and the entry of the sorting unit, instead of the birthplace into the heading of the columns. The advantage gained by this method was that it substituted two straightforward postings of figures for two cross postings. In the authorised scheme it was necessary to transfer a vertical arrangement of figures in the Sorters Tickets into a horizontal arrangement in the Compilation Register, and subsequently to transfer the horizontal rows of figures from the Compilation Register into vertical columns in the Imperial Table. By modifying the intermediate form used in the process, the cross postings were avoided, and the vertical arrangement of the initial and final

figures was preserved throughout the process of compilation. A considerable saving in time was effected, and the possibilities of errors in copying were minimised by the method adopted.

85. Compilation for Table XV-A.—The number of occupations entered in the occupation columns of the enumeration schedules was far greater than the 160 groups of occupations in the classified scheme. It was therefore essential to devise some means for bringing the recorded occupations into the 169 authorised groups. Every occupation recorded was first placed into its appropriate group on an alphabetical vernacular list of occupations. Group numbers were then entered in red ink on the Sorters Tickets against the name of the occupation. It followed that on many sorters tickets the group number was in many instances repeated several times. For example, the Sorters Tickets would shew Government officials under their various designations separately, but each separate entry would be numbered 144, the number of the group in which their occupations were included. Before the entries of the Sorters' Tickets were ready for entry in the Compilation Register, it was necessary for these multiple entries of group numbers to be combined. This was effected on an intermediate form called a Classification Sheet. The Compilation Register was then prepared from the Compilation Sheets instead of from the Sorters' Tickets, and thenceforth proceeded in the same manner as for other Imperial Tables. The following instructions give in detail the method followed :-

- I. Table XVA .- The compilation for Table XVA is intricate and will have to be done in several stages :-
 - (i) Entry of occupation group numbers on to Sorter's Ticket.

(ii) Preparation of group totals on Classification Sheet.
 (iii) Entry of group totals from Classification Sheet into Compilation Register.

(iv) Preparation of District Totals.

Each occupation will be given a group number in the classified scheme, and this group number must be entered in red ink against the name of the occupation on the sorters' tickets.

3. This will be done in the Record Department. An alphabetical list of occupations will be prepared to facilitate this work. When any occupation not in the alphabetical list is met with, reference should be made to the Deputy Superintendent.

4. After being tested the sorters' tickets so prepared will be passed on to the Compilation Department.

tion Department.

5. Classification Sheet.—The compiler will first prepare group totals with the aid of the classification sheet, using one sheet for each sorter's ticket except as provided in Article 36 below. It will be found that some of the group numbers are repeated twice or three or more times on the sorters' tickets.

6. The compiler will copy all the occupations found in the sorter's ticket on to the classification sheet, arranging them in groups as follows:--

	No. of Actual	Workers,	
Occupation.	Partially Agriculturalists.	Others,	No. of Dependents,
Group 1. Occupation A Occupation B Occupation C	493 11 122	7,720 316 829	2,911 235 795
TOTAL, GROUP 1	626	8,865	3,941
=	=	=	Ξ
Group 9. Occupation X Occupation Y	14	33 5	43 9
TOTAL, GROUP 9	15	38	52

He should tick off each entry on the sorter's ticket as he copies it on to the classification sheet.

7. Should there be any sorters' tickets on which none of the group numbers are repeated classification sheets will not be needed for such tickets.

8. The Compilation Supervisor will test every entry in the classification sheets, crossing the ticks on the sorters' tickets as each item is tested. The total must be added up to see that they agree with the original total of the sorter's ticket. He will also test every sorter's ticket for which no classification sheet has been found necessary, to see if any group number is to be found twice on the same ticket.

9. When all the sorters' tickets for a district have been examined, and classification sheets prepared (where necessary), the group totals should be posted into the Compilation Register, which will be in separate parts for each sex and religion.

86. Progress of Compilation.—Compilation, in so far as it could be effected from Register A had been proceeding in the Record Department as

Imperial Table.		Date of sending to Press.
I II		4th December. 8th September.
iii	****	6th December.
iv	***	8th September.
V		8th September,
VI	144	8th September.
VII	***	8th September.
VIII	000	27th September.
IX	193	17th October.
X	***	11th November.
XI XII	***	30th October, 17th November,
XIII		23rd November.
XIV		7th November.
XVA-I, A-II	***	6th December.
XV B, D, E.	1.00	7th December.
XVI	***	7th December.
XVII	***	8th September.
XVIII	***	8th September.
Provincial Ta	ble	
1		6th December.
11	***	3rd November.

soon as the preliminary sorting by Sex and by Religion as described in paragraph 65 had been completed for any district. Compilation for the main Imperial Tables commenced in July, when two groups of compilers were set to work on Imperial Table VII. In August, Compilation for Imperial Tables XVII and XVIII was commenced, and four groups of compilers were selected and set to work. The strike of sorters early in September, hampered the progress of compilation considerably, for in order to complete sorting at the earliest date possible, and to avoid the possibility of a further strike two of the groups of compilers were put back to sorting, and two groups of compilers only were maintained until the work of sorting was completed. When sorting was over, seven groups of compilers ranging in size from 6 to 12 per group, according to the degree of supervision required, were selected, and the work proceeded more rapidly. The marginal statement gives the dates when the tables were nominally completed and sent to press. But the work was by no means finished when any statement was sent to the press. On return

from the press a complete set of checks was instituted, and numerous arithmetical mistakes in the tables as originally prepared were discovered. A staff was maintained to check the printed tables until all errors were eliminated and the figures finally passed.

87. Compilation Staff.—The greatest difficulty was experienced in obtaining suitable persons to act as compilers. A comparatively high type of accountant was needed to perform with accuracy and rapidity the calculations necessary in the process of compilation. Few outsiders were available and government departments were unable to lend trained officers for the work. The only material available was the staff of sorters, and sorting and slip-copying supervisors. The ablest of these were selected, but they proved to be much below the calibre required. Every compilation sheet had to be totalled both horizontally and vertically and the agreement of the two calculations established before the work was passed. The high proportion of sheets in which this agreement was not attained at the first trial, and the frequent recourse to second and third calculations before the sheets could be passed, demonstrated the low quality of the work performed. A great strain was thrown on the inspecting staff by the unreliability of the initial work of compiling. It was necessary, owing to the difficulty of completing the check while the Imperial Tables were in manuscript, to have them printed before their accuracy was established, and to continue the check from the printed proofs. This would not have been necessary had the staff been of a competency suited to the tasks to be performed. Mr. Lowis drew attention in paragraph 30 of his Administrative Report to the necessity of securing an

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adequate strength of compilers. The difficulty found at the current census was to obtain sufficient men of ordinary capacity to perform the work, and of sufficient intelligence to supervise it.

- 88. The Reports.—With an adequate staff, the Census Superintendent should have had sufficient material and time to commence his report about three months after the Census was taken. He should have been relieved from the supervision of the minute details of the duties of slip-copying, sorting and compiling. But the disorganization of the staff the month after the census was taken, the unexpected delays in the work of slip-copying, the strike in the sorting department, and the incompetency of the compilers, prevented any work from being done on the Census Report until December. From June till December, the report was always intended to be commenced next week. And "next week" it remained, until the work of compilation was finally completed. This left but a most inadequate time for the preparation of two reports, one of which contained 79 Subsidiary Tables and 356 pages of letter press. The Census Report itself was completed and the last chapter sent to press on the 20th March. The present volume is approaching completion at the moment of writing (2nd April). An exact review of the progress made, and of the work on the three volumes under preparation on this date is as follows:—
 - (i) Volume IX, Part I—Report.—All chapters finished, and proofs read for Chapters to I to IX. Chapters X, XI, XII and Introduction are in print, and the proofs are waiting to be read.
 - (ii) Volume IX, Part II—Tables.—Imperial Tables I to VIII are completed and the full number of copies required have been struck off. Imperial Tables IX, X, XI, XII, XIII, XIV, XV-A.I, XV-B, XV-D, XVI, XVII, XVIII and Provincial Tables I and II are complete, the final proofs are being read, and it is hoped that instruction to strike off copies will be issued in a few days. Imperial Tables XV-A.II and XV-E are not quite so advanced, but they should be ready for final printing off within ten days.
 - (i) Administrative Volume.—Chapter I is at the press, Chapter II is nearly complete and Chapter III is awaiting the verified accounts of the expenditure on the Census Operations from the office of the Accountant-General, before it can be finished.

Whether the whole work can be completed, and the volumes ready for distribution by the end of April, is a question which must be left to the course of events to determine.

Subsidiary Table I.—Copying the Slips.

Office.	Population dealt	Number o	of Copyists,	Average daily	2 8
Onica	with.	Minimum,	Maximum.	outturn per head.	Remarks.
3	2	3	4	5	6
Rangoon Head Office	6,492,343	374		323	
March 1911	164,448		134	204	
April 1911	963,844	113	171	327	1
May 1911	1,474,923	138	146	517	
June 1911	1,817,141	135 85	140	626	
July 1911	2,071,987	85	134	852	
Rangoon Branch Offices	1,392,145	344	**		
Rangoon College (from 4th to	412,795	49	60	464	
Buddhist Boys' School (from 3rd April 1911 to 13th May 1911)	451,826	80	82	407	
Buddhist Girls School (from 3rd April 1911 to 15th May 1911).	527,524	87	99	399	
Mandalay Office	4,171,723	***	-	***	
March 1911	184,580		80	438	
April 1011	1,266,388	78	98	532	
May 1911	1,344,816	98	114	569	
June 1911	1,118,729	107	119	439	
July 1911	201,684	37	37	298	
August 1911	55,526	21	21	441	

Subsidiary Table II.—Sorting.

	1					I	lumbe	r of boxe	s sorted	for Impe	rial Tab	le.		
Office.		Period.	VII	VIII	IX	x	xı	XIII	xıv	XV-A	XV-B	xvı	xvII	xviii
1(a)		1(5)	2	3	4	5	6	7	8	9	10	'n	12	13
Rangoo _n	{	April May June July August September October	267 23 5 41 86 112	267 8 19 31 81 128	267 24 9 27 54 147 6	267 26 12 27 76 126	267 27 12 27 99 102	267 24 9 30 61 143	267 24 8 23 54 148	267 2 25 15 29 150 46	267 2 25 15 29 150 46	267 24 8 23 20 148 44	267 27 15 225 	267 27 15 225
Mandalay	{	Total June July August September	7 99 34 	140 1 54 81 4	140 11 31 98	140 11 75 54	140 17 106 17	140 12 54 74	140 12 21 107	140 7 4 129	7 3 130	140 2 21 117	140 1 139	140 139
Both Offices combined.	. {	Total April May June July August September October	407 23 5 48 185 146	407 8 19 32 135 209 4	407 24 9 38 85 245 6	407 26 12 38 151 180	407 27 12 44 205 119	407 24 9 42 115 217	407 24 8 35 75 255 10	407 2 25 22 33 279 46	407 2 25 22 32 280 46	407 24 8 25 41 265 44	407 27 16 364 	407 27 16 364

CHAPTER III.

Cost of the Census.

89. Accounts.—The system of keeping the accounts of Census expenditure adopted in 1911 is different from that adopted at the Census of 1901. Then, there were four main heads, as follows:—

(a) Salaries and allowances.

(b) Establishment.

(c) Travelling allowances.

(d) Contingencies.

These were subdivided into eighteen minor heads. For the current Census a more elaborate system of accounts was devised. The general accounts procedure was prescribed in the following instructions from Article 11 of Chapter II of Part I of the Imperial Code of Census Procedure:—

"The Treasury Accounts will shew under the head "Census" only the extra expenditure which, but for the Census operations, would not have been incurred. The rules on the subject which have been drawn up by the Comptroller-General are appended to this chapter. The charges appertaining to each sub-head in the statement appended to the above rules should be shewn separately on all bills presented at treasuries for payment. Provincial Superintendents should obtain from all disbursing officers monthly returns of bills cashed by them, and should prepare from these monthly statements of the extra cost due to the Census, which they should forward to the Accountant-General for verification with his books."

"It is necessary, however, to show in the Census Reports not only the expenditure, but also the actual charges of all kinds incurred in connection with the Census operations. For this purpose the expenditure in each District and in the Provincial Superintendent's Office should be classified according to the twenty-five headings shown below, and posted in a special register to be maintained in the Provincial Superintendent's Office. An abstract showing the total charges for the province under the above heads should be forwarded monthly to the Census Commissioner with a note explaining the difference between the Treasury and the Departmental figures. The main difference between the Treasury and the Departmental accounts is that in the latter the salaries of officers deputed to Census will be included, while the acting allowances of their substitutes on the regular staff will be omitted. In the Departmental accounts the expenditure on paper and printing is divided between the main heads 'Enumeration,' 'Tabulation' and 'Superintendence.'"

In 1901 the distinction between Departmental and Treasury Accounts was observed, but the heads of account were the same for both systems. For the Census just concluded, the main heads of account are given in the following statement:—

		Treasury.					
A	Enumeration	{	11	District Charges Press Charges		1 2	Superintendence. Enumeration.
В	Tabulation	{	III IV	Office Charges Press Charges		3	Abstraction and Compilation Printing and other stationery
С	Superintendence	{	v vi	Personal Charges Establishment and Charges.	 Office	5	charges. Miscellaneous,

Full details of the two systems with their minor heads of account are given in columns 1 and 2 of Subsidiary Tables I and II of this Chapter. The main difference between the accounts of 1901 and 1911 is the absence of any attempt in the former to discriminate between the three fundamental branches of census operations, Enumeration, Tabulation and Superinten dence. A pertinent criticism of the accounts of 1911 is the want of co-ordination between the two systems of Treasury and Departmental Accounts. It would have been better, in the absence of possibilities of absolute agreement, if a closer correspondence, in order and in terminology, had been effected between the two systems.

90. Treasury Accounts. -- At the time of writing (7th April) the treasury accounts for March 1912 have not been verified, and the expenditure for April 1912

Head of Account,	Expenditure,						
	Rs.	۸.	P,				
Superintendence	19,441	10	10				
Enumeration	13,753	7	9				
Abstraction and Compilation	74,704	3	11				
Printing and other Stationery charges.	19,583	11	6				
Miscellaneous	2,413	14	0				
Total	1,28,897	0	0				

has not been disbursed. An estimate of the probable expenditure up to the anticipated date of completion of the operations (1st May 1912) has been prepared and incorporated into the accounts. If circumstances permit, any changes that may be made will be incorporated into the Expenditure statements. If the opportunity for doing so does not occur, the statements can be accepted as being within a very few rupees of the amount that the final accounts will shew. The first marginal statement

indicates the expenditure actually incurred, distributed under the five main heads of account. It is impossible to prepare a comparative statement of the expenditure

Head of account.		Expenditure,								
Trade of meeting		191	1.	1901.						
		Rs.	Δ,	P,	Rs.	۸,	P			
Salaries and Allowances		4,806	3	1	25,818	0	11			
Establishment	***	81,494	7	3	71,075	15	I			
Travelling allowances	200	6,182	2	7	3,045	6	5			
Contingencies	****	36,414	3	1	33,985	6	6			
Total		1,28,897	0	0	1,33,924	14	(

for the current census of 1901 and 1911 under these heads, so a second marginal statement has been prepared comparing the expenditures for the two enumerations under the heads adopted in 1891. The large diminution under the heads "Salaries and allowances" is due to the employment of outside labour, instead of perma-

nently employed government officials, for most of the subordinate posts in the office. The pay of such persons is included under the head "Establishment," which shews a large increase over the figures for 1901. The cost of Census per thousand persons enumerated has decreased from Rs. 12'8 in 1901 to Rs. 10'6 in 1911.

91. Municipal Contributions.—The following instructions were given as to the contributions to be made by municipalities towards the cost of census operations:—

"Municipalities will meet the cost, if any, of Census Officers and contingent charges in connection with the actual enumeration, and will contribute towards the cost of compilation at the rate of 3 months' salary of one clerk for every 10,000 of the population dealt with. All other charges, including the cost of Census forms will be met by Government."

The charge worked out to Rs. 13-8-0 per 1,000 inhabitants and contributions to the amount of Rs. 13,620-12-10 were received from the various municipalities of the province towards the cost of the census. This amount has already been deducted from the item "Abstraction and Compilation—Establishment. Pay of men without substantive appointment" in the accounts given in Subsidiary Tables I and II. But for this deduction the cost of the census according to Treasury Accounts would have been Rs. 1,42,517-12-10.

92. Departmental Accounts.—Subsidiary Table II gives the comparison between the census expenditure as calculated departmentally and as recorded in the treasury accounts. Of the 25 items of the departmental accounts, the following statement gives particulars of the five items in which agreement has not been established—

	Sub-Head	E								
No.	Designation.	Treasury.		Departmental.			Difference.			
		Rs. A.	Р.	Rs.	۸,	Р.		Rs.	۸.	P.
7(b) 11(a)	Printing at other presses Pay of Working Staff-Officials			36 805	4 6	8	++	36 805	6	8
20	Pay of Superintendent Deputation allowance of Superintendent.	4,806 3	ı	45,058 5,006	7	3	+	45,058	4	2
22	Superintendent's Office Establish- ment.	7.935 o	2	7,865	0	2	-	70	0	•

The difference in item 7(b) is due to the cost of Hindi Enumeration Schedules obtained from the United Provinces, which according to rules were not entered into the Treasury Accounts. The differences in items 11(a) and 22 are due, partly to the different systems of classification adopted, and partly to the pay of men deputed to census duty, which has been entered into the Departmental but not into the Treasury accounts. Similarly, item 19 shews the Superintendent's pay in the Departmental Accounts, though it is not shewn in the Treasury Accounts. The difference in item 20 is due to the deduction of the contributions of the Superintendent to the Civil Service Annuity Fund in the Treasury Accounts, whereas in the Departmental Accounts the Deputation Allowance of the Superintendent is entered in full without any deduction.

The actual departmental cost of the census under its six heads is given in

the following statement :-

Head of Departmenta	Expenditure.				
			Rs.	۸.	P
Grand Total	***		1,74,926	15	10
A. Enumeration	***	***	18,427	12	C
 District charge 	S		12,753	7	9
II. Press charges	***	***	5,674	4	3
B. Tabulation	1.44	(***)	5,674 88,807	6	5
III. Office charges	***		75,909	11	7
IV. Press charges	***	***	12,897	11	10
C. Superintendence	***	•••	67,691	13	5
V. Personal charge			53,708	II	3
V1. Establishment charges.	and	office		1	2

93. Comparison of Departmental Accounts 1901 and 1911.—In order to institute an effective comparison between the Departmental expenditure of 1901

and 1911 it is necessary to add to the former sums of Rs. 8,136 and Rs. 10,752, being acting allowances for officers deputed to Census work which were excluded from the Departmental Accounts for 1901. If this be done, the accounts compare as shown in the marginal statement. Establishment is higher, and salaries and allowances are lower, in 1911 than in 1901, because of the smaller

T - 1 - 5 1 1	Expenditure.										
Head of Account.	191	1.		1901.							
	Rs.	۸.	Ρ.	Rs.	۸.	P.					
Salaries and allowances	50,064	8	3	70,486							
Establishment	82,229	13	11	75,898							
Travelling allowances	6,182		7	5,692							
Contingencies	36,450	7	1	34,480	10	10					
Total	174,926	15	10	1,86,457	10	7					

number of officers deputed to census duty and the greater recourse to outside labour in the later year. Much difficulty was experienced in getting officers seconded or put on deputation for census work, and consequently, many persons having no permanent Government appointments were selected even for the higher posts in the census office.

Rs. 2,519-12-0, and it is anticipated at the date of writing, that about Rs. 300 will be realised by the sale of furniture on the closing of the office, so that the total cost will be reduced to Rs. 2,219-12-0. In 1901, the total cost, less amount realised on resale, was Rs. 2,399-2-3. In 1911, there were two offices to be furnished, at Rangoon and at Mandalay, and the cost would have greatly exceeded the cost for 1901, but for the generous offer of the Judges of the Chief Court, who placed at the disposal of the Census Superintendent a large number of chairs and almirahs, which were available owing to the transfer of the Chief Court to a new building. In Mandalay, it was at first intended to keep the office open for slip copying only, and a contract was made for the supply of the necessary forms and tables for 200 clerks for Rs. 80 per month. When it was subsequently decided to continue the office at Mandalay as a sorting office the contract had to be renewed on the same terms. What would have been an economical arrangement for three months, proved rather expensive for six months. The tables supplied for use at the Rangoon Office were of two sizes; 15 feet by 3 feet, and 12 feet by 3 feet. They comprised tops supported on three trestles each. They were supplied from the Insein Jail, the

larger size at a cost of Rs. 17-8-0, and the smaller kind at Rs. 15 each. Stools at Rs. 2 each were purchased and were utilised for seating the main body of the staff in Rangoon. At Mandalay, the contractor supplied benches, the reason given being that the wood could be utilised again after being made into long benches, but not if it were cut up to make stools. Form racks were supplied by the Italian and Colonial Trading Company. The cost worked out to about Rs. 40 for accommodating the schedules containing the records of 1,000,000 persons. Slip copying and sorting racks of 36 holes each cost Re. 1, as against seven annas paid by Mr. Lowis in 1901. Sorting almirahs were made from the almirahs supplied by the Chief Court.

- 95. Suggestions for the future.—It is impossible to forecast with any certainty the conditions prevailing in 1921 and their effect on the cost of census operations. The main item of cost, that of the slip-copying, sorting and compilation staff, is the one in which reductions should be sought, but I doubt if this can be done by reducing rates of pay. The rates paid in 1911 were higher than those paid in 1901, and so far as can be foreseen, rates of payment in 1921 will be still higher. The greatest room for economy is to be found in the following directions:—
- (i) Slip copying at district headquarters by the aid of school boys, petition writers and licensed copyists. Not only would the rates of pay be less than required in Rangoon and Mandalay, but the earlier completion of the work would result in greater expedition in the later operations.
- (ii) The selection of a highly paid and well trained compilation staff to take over the work of compilation the moment the sorting for any district is completed. With one or two exceptions, even the best members of the sorting staff were generally unfit for the work of compilation. Good men on Rs. 70 or Rs. 80 a month, are far cheaper than promoted sorters on Rs. 35 to Rs. 50 a month. The waste of time in rechecking, and the delay in the preparation of the Report and Imperial Tables caused by incompetent compilers, were sources of great expense.

These are the only two directions in which I can foresee any possibilities of economy. In 1921, census limits will probably be extended to include the total area of the province. This will entail extra enumeration expenses, to effect an estimate or enumeration in difficult areas. The class of census taken in several areas will probably be raised, and this can only be done with an increasing expenditure. I do not therefore look forward to any reductions under the head of enumeration. Nor is there room for much economy in the subsequent tabulation operations, save in the two directions indicated.

SUBSIDIARY TABLE I.—Actual expenses distributed under the heads of account prescribed by the Comptroller-General.

MAIN HEAD.	SUB-HEAD.		1010-11		1011-12	1912-13	Total,	
MAIN HEAD.	No.	No. Designation.				1315.13	6	
1	2 (a)	2 (b)	3		3			
11	41		Rs. A.	P.	Rs. A. P	Rs. A. P.	Rs. A.	
Grand Total		****	34,430 10	9	90,726 14 8	3,739 6 7	128,897 0	
Superintendence	20001	22300	11,035 11	6	7,223 12 3	1,182 3 1	19,441 10 1	
	T	Personal charges— Deputation allowance of officers deputed to Census duty.	2,112 0	0	2,304 0 0	390 3 1	4,806 3	
	2	Establishment— Pay of men without substantive appoint-	1,314 11	II.	1,777 13 3	392 0 0	3,484 9	
	3	ment. Deputation allowance of men deputed to Census duty.	666 9	0	1,470 0 0	300 0 0	2,436 9	
	4	Of Officers	2,768 2		876 I o		3,644 3	
	5	Of Establishment	1,114 #2	1	43 15 0	144	1,158 11	
		(a) Office Rent (b) Purchase and repair of furniture	775 9	0	600 0 0	1 122.20	1,766 4	
	10	(c) Local purchase of Stationery	II I	0	5 11 0		790 9 16 12	
		(d) Postage and Telegram charges . (e) Freight	303 8 35 12	6	10 3 0	***	313 11 35 12	
1		(f) Miscellaneous	867 6	0	121 1 0	41.045	988 7	
numeration	197	m100	11,025 1 1	o	1,728 5 11		12,753 7	
4	7	Temporary establishment in district offices			237 0 6	***	5,894 8	
	9	Remuneration of Census Officers Travelling allowance of Census Officers Contingencies—	62 14 66 o	0	217 1 6	:::	279 15 278 12	
	10	(a) Local purchase of Stationery					533 12	
		(b) Postage (c) House numbering	74 7	8	24 7 6		98 15	
		(d) Freight (e) Miscellaneous	473 12 4,156 10	9	825 14 5		684 14 4,982 9	
bstraction and		1000	1,330 9	0	72,416 7 5	957 3 6	74,704 3	
Compilation,	247	Establishment—			Man Low New York			
	11	Pay of men without substantive appoint- ment. Deputation allowance of officers deputed	***		64,880 15 2 1,105 12 3	37 %	65,879 2	
		to Census duty,	17.04.61		1,100 8 6		1,105 12	
, =	13	Contingencies—	***		1.5	*"	1,100 8	
		(a) Office rent (b) Purchase and repair of furniture	597 6	0	1,767 1 3	191 0 0 -300 0 0	1,958 1	
		(c) Local purchase of stationery	39 6	0	153 7 0	8 0 0	200 13	
		(d) Postage and Telegram charges (e) Freight	10 6	-	180 0 6 137 3 6	10 0 0	200 6 153 4	
		(f) Miscellaneous	667 6	0	1,959 10 3		2,677 0	
Printing and other Stationery	201	(((((())))	10,005 6	5	8,078 5 1	1,500 0 0	19,583 11	
Charges.	15	Cost of stationery (including paper) sup- plied from Central Stores.	6,025 15	3	38 5 0		6,064 4	
	16	Carriage of stationery	511 3	3	27 12 6		538 15	
	17	Printing— (a) At Government Press (b) At Private Press Despatching charges—	3,468 3 1	1	8,012 3 7	1,500 0 0	12,980 7	
	18 19	Postage Other charges						
Miscellaneous	(840)		1,033 14	0	1,280 O O	100 0 0	2,413 14	
		Acting allowance in non-census offices—						
	20	Of Officer			. ""			
1	21	Of Establishment	1,033 14	0	1,280 0 0	100 0 0	2,413 14	

Subsidiary Table II.—Expenditure distributed under the heads prescribed by the Census Commissioner according to (a) Comptroller-General's and (b) Departmental Accounts.

MAIN HEAD.		Expenditure according to Comptroller-General's Accounts SUB-HEAD.		al's Accounts.	Expenditure in 1910-1913 according to	Difference.			
1907/2000 SECULOS ADAS (1			1910-11.	1911-12-	1912-13.	Total, 1910—13,	Departmental Accounts.	Dinerence.	100
1	2(a)	2(8)	•	4	. 5	6	7	8	
			Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Re. A. 7.	Rs. A. F.	
Grand Total		*******	34.430 to g	90,716 14 8	3,739 6 7	1,28,897 0 0	1,74,926 15 10	+46,019 15 10	
A. Enumeration			16,565 2 3	x,8a6 5 9		18,391 8 0	18,427 10 0	+ 16 4 0	1
I,-District charges		••••	11,025 1 10	1,728 5 11	******	12,753 7 9	12,753 7 9		
	3	District Office Establishment Remuneration of Census Officers Travelling allowance of Census Officers.	5,657 8 2 62 14 0 66 0 0	237 0 6 217 1 6 212 12 0	*****	5,894 8 8 279 15 6 278 12 0	5,894 8 8 279 15 6 278 12 0		
	4	Contingencies— (a) Petty stationery (b) Postage (for transmission of forms),	535 12 6 74 7 8	24 7 6		533 12 6 98 15 2	552 13 6 . 98 15 3		
		(c) House numbering (d) Freight (e) Miscellaneous	473 12 9 4,156 10 9	311 2 0 825 14 5	*****	684 14 9 4,982 9 3	684 14 9 4,982 9 2		100
II.—Press charges		Sans	5,540 0 5	97 15 10		5,638 0 3	5,674 4 3	+ 16 4 0	
	5 6 7	Paper Carriage of paper to Press Printing—	3,288 4 5 286 12 0	5 5 10	,	3,293 10 3 286 12 0	3,293 to 3 286 12 0	*****	
	8	(a) At Government Press (b) At other Presses Despatching forms	1,965 o o	92 10 0		3,057 10 0	36 4 0	+ 36 4 0	
B, Tabulation of the results.	***		4.917 9 9	80,627 = 6	2,457 2 6	88,001 15 9	88,807 6 5	+ 805 6 8	
111Office charges			1,330 9 0	72,816 7 5	957 3 6	75,104 3 11	75,909 10 7	+ 805 6 8	
	10	Correspondence and Accounts Establishment. Menial Establishment	,, ···	******		******		*****	1
	11	Working staff, including Super- intendence-	******			7. 444		2000er	
	13	(a) Officials (b) Non-officials Travelling allowance		66,386 II 5 1,100 8 6	998 3 6	67+384 14 11 1,100 8 6	805 6 8 67,384 14 11 1,100 8 6	+ 8os 6 8	l
	13	(a) Rent (b) Furniture	597 6 0	1,767 1 3 1,131 13 0	191 0 0 -300 0 0	1,958 1 5	1,958 1 3	*****	١
		(a) Stationery	19 6 0 10 6 0	153 7 0 180 0 6	8 0 0	200 13 0 200 6 6	200 13 0	*****	1
		(f) Telegrams (f) Freight (g) Miscellaneous	16 1 0 667 6 0	137 3 6 1,959 10 3	50 0 0	153 4 6 2,677 0 3	2,677 0 3		
IV.—Press charges			3,587 0 9	7,810 11 1	1,500 0 0	12,897 11 10	12,897 11 10	*****	
	14 15 16	Paper for slips Paper for compilation Carriage of paper	1,833 7 0 1,361 to 5 224 7 3	55 12 10 1,512 6 2		1,889 3 10 2,874 0 7 251 3 9	1,889 3 10 2,874 0 7 252 3 9	*****	
	17	Printing— (a) At Government Press	167 8 1	6,214 11 7	1,500 0 0	7,882 3 8	7,883 5 8	****	l
	18	(b) At Private Presses Despatching charges	:				*****	*****	
C. Superintendence			IS,947 I4 9	8,273 6 5	1,282 3 1	**:503 8 3	67,691 13 5	+45,188 5 2	
VPersonal charges)*****	4.880 2 0	3,180 t o	390 3 1	8,450 6 1	53,708 11 3	+45;258 5 2	
	19	Pay of Superintendent Deputation allowance of Super-			399 5 1	4,806 5 1	45,058 ± 0 5,006 7 \$	+45,058 1 8 + 300 4 1	
	21	intendent. Travelling allowance of Super- intendent,				3,644 3 0			
VI.—Establishment and Office charges.			8,067 12 9	5,093 5 5	892 0 0	200		- 70 0 0	
	23	Superintendent's Office Estab- lishment, Travelling allowance of Estab-		To the second	792 0 0	21995			3
	24	lishment. Printing— (a) At Government Presses	100000000000000000000000000000000000000	A MEDISOLA		1,158 11 1	2701170-0019	21.53.57	
	25	(a) At Government Presses (b) At Private Presses Contingencies—	878 5 3	169 10 2	*****	1,047 15 5	1,047 15 5	******	
		(δ) Rent (δ) Furniture	775 9 0	15 0 0	100 0 0	790 9 0	790 9 0	*****	
		(c) Stationery (d) Postage (e) Telegrams	251 4 0	5 11 0	*****	16 12 6 261 7 6 52 4	261 7 0	** ***	
		(f) Freight	35 13 6		******	35 12 988 7	35 12 6	******	

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Census of India, 1911

VOLUME IX

BURMA

Part Administrative Volume

BY

C. MORGAN WEBB, M.A., I.C.S.

FELLOW OF THE ROYAL STATISTICAL SOCIETY SUPERINTENDENT, CENSUS OPERATIONS



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