

Annual Report
of the
Department of Land Records in the
Bombay Presidency Including Sind
for the year
1916-1917

Government

1918

**INDEX TO THE ANNUAL REPORT OF THE DEPARTMENT
OF LAND RECORDS IN THE BOMBAY PRESIDENCY,
INCLUDING SIND, FOR THE YEAR 1916-17.**

CONTENTS.

	PARAGRAPHS.	PAGES.
Letter No. A. D.—44, dated 12th December 1917, from F. G. H. Anderson, Esquire, M.A., I. C. S., Settlement Commissioner and Director, Land Records—Submitting to Government the Annual Report of the Department of Land Records for the year 1915-16	...	1
CHAPTER I.—PREFATORY.		
Officers of the staff	1—2	1
Tours of the Settlement Commissioner and Director, Land Records	3	1
Tours of the Superintendents of Land Records	4	1
CHAPTER II.—LAND RECORDS ESTABLISHMENT.		
Establishments under the Divisional Superintendents	5	1—2
Training of Junior Civilians and the Officers from the United Provinces and the Nizam's Government	6	2
Training of District Inspectors and Circle Inspectors	7	2
District Survey Offices	8—10	2—3
District Inspectors	11	3
Circle Inspectors	12	3—4
Boundary Marks	13—14	4
Details of measurement and classification	15	4
Measurement of sub-divisions, Northern Division	16—17	4—5
Do. Central Division	18	5—6
Do. Southern Division	19—22	6—8
General Remarks	23	8—9
CHAPTER III.—SURVEY AND SETTLEMENT WORK.		
Revenue Survey Work, Northern Division	24	9
Do. Talukdari Survey	25	9
Do. Central Division	26	9
Do. Southern Division	27	9—10
Revenue Settlement Work, Northern Division	28	10
Do. Central Division	29	10
Do. Southern Division	30	10
City Surveys, Northern Division	31	10—11
Do. Central Division	32	11
Do. Southern Division	33	11—12
Village Site Surveys	34	12—13
Government Photoincino Office	35	13
CHAPTER IV.—RECORD-OF-RIGHTS.		
Rewriting of Record-of-Rights, Northern Division	36	13—14
Do. do. Central Division	37	14
Do. do. Southern Division	38	14—15
General Remarks	38	15
Remarks regarding Office Superintendent	39	15
Do. Divisional Superintendents	40	15
APPENDICES.		
Statement I—Showing crop, waste, boundary marks and other inspection work carried on by Circle Inspectors	...	17
Statement II—Showing measurement and classification work performed by Circle Inspectors	...	18
Statement III—Showing test by Village Officers and Circle Inspectors' inspection work by Sub-divisional Officers and Mámlatdárs	...	20—21
Statement IV—Showing details of work done by District Inspectors	...	22—23
PART III OF THE LAND REVENUE ADMINISTRATION REPORT OF THE PROVINCE OF SIND.		
Introduction of revised rates of assessment and proposals for re-settlement	1	25
Amount of work done by Head Record Office	2	25
Special establishment and work done by them	3	25

	PARAGRAPHS.	PAGES.
Inspection of Record Office	4	25
City Survey of Shikárpur	5	25—26
Superintendent's test of measurement work	6	26
Survey Class for Revenue Officers	7	26
Cost of Land Records Department	8	26
Introduction of Record-of-Rights	9	26
Rewriting of Record-of-Rights	10	26
Maintenance of Record-of-Rights	11	26

APPENDICES.

Appendix A.—Estimated financial results of the new rates sanctioned ... ..	...	27
Appendix B.—Work turned out by the Head Record Office ... ..	...	27
Appendix C.—Do. do. ... ..	...	28
Appendix D.—Test of Tapedars' and supervising Tapedars' inspection work by Sub-divisional Officers ... ..	...	28

No. A.D.—44.

Camp Deur, 12th December 1917.

From

F. G. H. ANDERSON, Esq., M.A., I.C.S.,
Settlement Commissioner and Director of
Land Records, Poona;

To

THE CHIEF SECRETARY TO GOVERNMENT,
Revenue Department, Bombay.

Sir,

I have the honour of submitting the Annual Report of the Department of Settlement and Land Records for the year ending 31st July 1917.

CHAPTER I.

PREFATORY.

1. The charge of the Department was held by me throughout the year.
2. In the Northern Division, Khan Bahadur P. R. Mehta held charge of the office of the Superintendent of Land Records up to 31st October 1916 from which date he went on furlough preparatory to retirement. For the rest of the year Mr. S. E. Reuben held charge. In the Central and Southern Divisions, Messrs. V. B. Mardhekar and A. R. Dalal were Superintendents of Land Records, respectively, throughout the year.
3. I toured in four districts of Northern Division, five of Central Division and all of Southern Division. My time was much taken up, in addition to my work as Inspector-General of Registration, in looking to the working of the several City Surveys in progress and measurement of sub-divisions, in suggesting improvements in the methods adopted and in directing personally the survey of the Tálukdári villages of the Thakor Saheb of Limbdi and the pôt hissa survey of the villages of the Mahád Táluka, Kolába. I inspected a large number of Táluka offices to test the working of the new forms of Revenue Accounts. In March, I visited Sind and inspected the City Survey work of Shikárpur Town, and discussed Survey and Land Records questions with the Superintendent of Land Records.
4. All the Superintendents of Land Records toured comprehensively in their Divisions. They watched the work of all their field parties and examined the preparation of Record of Rights, measurement of sub-divisions, City Surveys and other Land Records work in their Divisions, with the inspection of all the District Survey Offices. All the Superintendents helped my efforts to reform the methods of City Survey, measurement of sub-divisions, and survey of villages on the new Triangulation System, all of which have now reached a much improved standard. The activities of the Department were very extensive, and although the need of strengthening the supervising staff was frequently felt, yet, in view of the need for stringent economy, the Department exerted itself to carry out its programme without the aid of Deputy Superintendents of Land Records in the Northern and Central Divisions. One post of Survey Mámlatdár was transferred from the Karnátic to Central Division. This situation no doubt entailed extra work, but the staff rose to the occasion most laudably.

CHAPTER II.

LAND RECORDS ESTABLISHMENT.

Establishments under Divisional Superintendents.

5. The establishments under the Divisional Superintendents were the District Survey Offices, permanent field parties, and the establishments for

City Surveys and measurement of sub-divisions. All were controlled by the Superintendents and supervised by District Inspectors, Survey Mámlatdárs and Head Surveyors.

Training of Junior Civilians.

6. Four Junior Civilians and two Deputy Collectors were trained by the Superintendents in Survey and Settlement matters. All were declared to be qualified. Two officers of the Nizam's Government (Messrs. Kutubuddin Hussein and D. B. Chinoy) were also trained in Survey and Settlement matters. Mr. Chinoy was under instructions for nearly six months, during which he toured with the Superintendent of Land Records, C. D., in four districts and acquired practical knowledge of field operations in pôt hissa and City Surveys and also of Revenue Survey and Settlement. The United Provinces sent Mr. Sayad Ahmad Hussein, Collector of Bhadoi, to study the principles of the Rayatwari System of our Presidency and its practical working by visiting villages in the Deccan. He took instructions from myself and the Collectors.

Training of District Inspectors and Circle Inspectors.

7. Classes were not held this year for this training. I have made arrangements for the training of Circle Inspectors during the coming fair season, the chief feature of which will be the training in Plane Table Survey and the use of Plane Table maps as cross staff "tippans". This training will be very useful to the Circle Inspectors in doing independent measurement work and in examining the work of the Talátis who are being similarly trained in selected talukas for the upkeep of Hissa Survey and other measurement work.

District Survey Offices.

8. The Central Record Office, Ahmedabad, was inspected by the Superintendent of Land Records, N. D., in July. The work of this office has increased owing to the measurement of sub-divisions and, as usual, help was taken from the pôt hissa establishment in the monsoon to cope with that work. 1,908 cases involving corrections in survey records were disposed of, leaving 429 cases in arrears. Last year the number disposed of was 2,194. The decline in output is due to four members of the staff being deputed as Special Measurer Circle Inspectors in the Broach District. 6,422 miscellaneous cases arising out of Plane Table Survey and correction of village maps were disposed of, leaving a balance of 383. In addition, the staff prepared Himáyat Patraks of 219 villages of Surat, Kaira, Broach and Ahmedabad, tested the recess work done by field party surveyors and corrected village maps for printing. Realisation of fees from extracts of Survey papers and sale of maps was Rs. 1,396 this year, while last year it was Rs. 929. The Head-Quarter Assistant, Mr. M. A. Desai, conducted the work of this office efficiently, although he had to work with a reduced staff.

The District Survey Office, Thána, was inspected by the Superintendent in July. This office disposed of 313 cases of correction of survey records, leaving a balance of 42 cases. Miscellaneous cases disposed of were 2,538, leaving 124 cases outstanding at the close of the year. One hand from the Thána pôt hissa survey party was engaged in the correction of survey records arising out of pôt hissa survey. He disposed of 23 cases involving correction of survey papers of 184 villages, leaving 16 cases in arrears. He also disposed of 271 cases of correction of survey papers necessitated by partitions made under the decrees of the Civil Court and by the relaying of correct boundaries in survey numbers or pôt numbers arising out of boundary dispute cases, leaving 53 cases as arrears. Realisation of fees from extracts of survey papers and sale of maps was Rs. 441 this year as against Rs. 431 last year. The Tab System was introduced in this office at the close of the year. After gaining experience of this system here, it will be introduced in the Ahmedabad Central Record Office and in the offices of the District Inspectors of Land

Records of Gujarát. The Thána District Survey Office is under the supervision of an able District Inspector, Mr. M. P. Desai, who has tried to improve the quality of the work by watching the general routine of the office and by inspecting it twice within nine months he was in charge.

9. All the offices in the Central Division were inspected by the Superintendent, Land Records. The District Survey Offices of East and West Khándesh and Sátára were overworked as they had to supply information required by Assistant Settlement Officers for framing Revision Settlement proposals. The work of the District Survey Offices of Nagar, Násik and Sholápur was increased on account of the corrections in survey papers, owing to mistakes in the original survey found during the survey of sub-divisions. In East Khándesh the survey records of 384 Survey Numbers were to be corrected owing to acquisition of land for the Jámner-Páchora Railway. The acquisition of land for the Tata Electric Works and the measurement of building sites increased work in the Poona District Survey Office. In Násik and Sátára District Survey Offices, preparation of Kamjasti Patraks on account of remission of water assessment and separating the motasthal share of assessment from the patasthal assessment to be abolished is in progress. The Tab System has been introduced in all these offices. It has secured effective check on arrears, specially in respect of measurement cases with Circle Inspectors. All the offices have carried out their work satisfactorily.

10. In the Southern Division, the Superintendent, Land Records, inspected all the District Survey Offices. All the offices have turned out more work than in the previous year. In spite of this, the District Survey Offices of Belgaum, Dhárwár, Bijápur and Kánara show increased arrears. This is chiefly owing to the correction of survey records consequent upon pôt hissa survey. Kolába and Ratnágiri have cleared off most of the heavy arrears with which they began the year. In Dhárwár and Bijápur, the arrears at the close of the year were heavy. These offices have been given the help of field party surveyors and Measurer Circle Inspectors, to clear it off. The Tab System was introduced in Kolába, and is being introduced in Dhárwár. Next year it will be introduced in the other District Survey Offices of the Division.

District Inspectors.

11. Statement IV of Appendix A shows the work performed by these officers. With the general increase of work in the Department the duties of these officers have also become much heavier. From Statement IV it will appear that the District Inspectors in the Northern Division have taken adequate test in their districts. All are reported to have moved about actively and to have discharged their duties satisfactorily. In the Central and Southern Divisions, the work of all the District Inspectors has been reported to be satisfactory. In the Central Division, Messrs. Patwardhan, Vaishampayan, Hatwalne, Yardi and Dev are specially reported to be hard and diligent workers. In the Southern Division, Mr. Kalelkar, the Deputy Superintendent of Land Records, Mr. S. R. Kulkarni, the Survey Mámlatdár, Konkan, and Mr. Gilganchi, the District Inspector of Land Records, Belgaum, are reported to have worked very well.

Circle Inspectors.

12. Statement I of Appendix A shows the work performed by Circle Inspectors. The reports received from most of the Collectors show a marked improvement this year in this class of officers. In some districts they are adversely reported upon. The Collector of Násik writes:—"To the shortage of English-knowing men is due the unsatisfactory character of our Circle Inspectors. They are, perforce, mostly taken from the lower ranks and from men who have little intelligence, less activity, and no partiality for out-door work, and who are entirely devoid of hope of rising to the Upper Branch; their vacancies, when they go on leave, have to be filled by pitch-forking in some taláti. With every desire to make the best men we have serve their time as Circle Inspectors I find it impossible to do so without reducing the

clerical staffs to impotency. Circle Inspectors in this district are, generally speaking, mere travelling kárkuns without a master at their elbow to see that they do their work properly; the work is, in consequence, perfunctorily done, and improvement seems beyond hope until our whole establishment system is revised."

Though I have small concern with the lower Branch of the Revenue Department, still it touches me in the matter of Circle Inspectors. I must say that I feel very much with the Collector of Násik. The lower Revenue establishment is suffering from the division into upper and lower Branches. We wanted better men at the top, and we opened an entrance half way up to admit them, but by largely closing the passage from the lower to the upper Branch we produced the same effect as is produced in a pipe of flowing water, when the outlet is blocked: the inflow at the other end was very largely checked. In other words, it is very difficult to recruit School Final men at Rs. 20 when the possibility of rising to the upper Branch and ending their career as Mámlat-dár or at least Mahálkari is cut off. However, this is a matter into which it is idle to enter now. I attribute most of the apathy and poor work of the Circle Inspector to want of prospects, and to the fact that the Department is only attractive to men who have no prospects. Since this report was written much of the desired reform has been conceded.

Another fairly general complaint about Circle Inspectors is that they are so frequently taken away for entirely extraneous work. It is again useless to go into details, but the District Inspectors must be stirred up to a more active resistance in this matter. Everybody must help in such things as Recruiting, War Loan, and so on, but departmental work cannot go on satisfactorily, unless there is some limitation upon extraneous avocation.

The Collector of Kolába states that many of the Circle Inspectors in his district are elderly and either incapable or unwilling to bestir themselves to come up to the standard of modest activity now demanded of them. Of the 32 Circle Inspectors in the district, none are said to be energetic and capable. About one-third are said to be efficient and satisfactory and four so bad and obstinately slothful that they would have to be reverted as kárkuns. The rest are said to require constant attention to keep them up to their duties.

13. The programme of boundary marks repair was carried through in the districts of Ahmedabad, Surat, Sholápur and Bijápur. Kaira, Broach, East Khándesh, Dhárwár and Kánara are very slightly in arrears which can easily be worked off next year. West Khándesh, Násik, Sátára and Belgaum show some arrears, while in Panch Maháls, Thána, Kolába, Ahmednagar, Poona and Ratnágiri this work is heavily in arrears. In Ahmednagar, Poona and Ratnágiri the repair of boundary marks was postponed as rewriting of the Record of Rights was to be pushed on.

14. Mr. Seddon's system of simplifying boundary marks was again tried this year in all the districts where it was found to be working very satisfactorily both by the District Officers and the people except in the Konkan Districts. The Commissioners in conference have recommended its further trial except in the Konkan where owing to peculiar circumstances the system was found to be unworkable.

15. Details of measurement and classification work done by Circle Inspectors, General Duty Inspectors, and special Measuring Circle Inspectors are given in Statement II. Most districts seem incapable of submitting this return punctually and correctly. The lateness of this report is due only to the impossibility of getting these returns in time.

Measurement of Sub-divisions.

16. *Northern Division.*—In Gujarát 4 parties of 8 surveyors each were working under the supervision of a Head Surveyor. During the year 64 villages of North Daskroi, 63 of South Daskroi, 8 of Kapadvanj, 15 of Borsad and 14 of Mehmedabad were completed. In all 90,487 hissás were measured at an average cost of 4.16 annas per hissa. This year the standard scale of

output was raised from 10 to 12 hissas per day per man. The average actual outturn was 17.2 hissas per day. Such results, either as to cost, or speed have never been attained by previous methods, Cross Staff or 'Phalni' Survey, and these Gujarát Sub-division Surveys by Plane Table give results of an accuracy and utility much above the old style. Up to now Surat and Broach Districts have been completely measured. In Kaira, the táluka of Mátar and some villages of Mehmedabad remain to be measured. The Panch Maháls District and 7 tálukas of Ahmedabad still remain to be done. The Panch Maháls District and Mátar Táluka with the remaining villages of Mehmedabad will be taken up during the coming field season, leaving the Ahmedabad Tálukas to be done next year. Thus the whole of Gujarát will be finished in a couple of years.

17. In Thána 42 surveyors, under 4 Nimtandars and supervised by a Head Surveyor, were employed on measurement and amalgamation of sub-divisions and revision of Record of Rights. One Circle in each of Sálsette, Dáhánu, Umbargaon, Bassein, Kalyán and Máhim (except 1 village) and 7 villages of Murbád were completed. In all 55,254 sub-divisions were measured and mapped and 66,766 entries in Record of Rights examined. The average cost per hissa was 5.5 annas. The average outturn per man per day was 12 hissas. Rs. 15,209 were recovered during the year out of Demand Statements for Rs. 20,850. Up to now the Sálsette, Bassein, Máhim and Kalyán Tálukas, with the exception of one village in Máhim and the villages of Bándra and Dándá, have been completed. Nineteen circles in Murbád, Dáhánu, Umbargaon, Váda and Mokháda, Sháhápur and Bhiwandi now remain to be done. The work in future is to be done entirely by Plane Table. Bándra and Dándá were left over this year as I intend to make a solid survey of these villages on the Triangulation Method and to cover the whole South-West Sálsette with a net work of triangulated stones on which detail maps for the entire area could be based. The records and maps prepared by the Sálsette Development Engineer for the "Holdings Survey" ought to be utilised for this triangulation survey. These maps are in a remarkably good state and the field books seem complete though they require to be classified, indexed and arranged so that our surveyors can use them. For this work a surveyor from the Consulting Surveyor's office is now deputed and is rescuing the papers from confusion, and we hope soon to be able to demarcate the essential points in that Survey and use it for our purposes.

18. *Central Division.*—At the beginning of the year there were 15 parties of 221 men and, as usual, they were employed in the rains on distribution of assessment over sub-divisions measured in the previous fair season. In October a large number of men were drafted for preparing akarbands of several tálukas of the Poona District, revised settlement rates of which were to be levied. Also a party of 17 Measurers and Classers was sent from the Pôt Hissa Parties for the revision survey in Miraj (Junior) State. Consequently calculation of assessment of only 337 villages could be finished and 52 villages were left over when the parties again took field. Therefore a party of 57 men was kept at Poona, to clear off the arrears and was disbanded at the close of the year. In November 12 parties of 134 men took the field. Of these, 7 were working with Chain and Cross Staff and 5 with Plane Table. During the field season more men were trained and added to the parties till ultimately there were 19 parties of 229 men. The Chain and Cross Staff Parties could not reach the same high standard of excellence as the Plane Table Parties. All these parties were therefore converted into Plane Table Parties at the close of the year. In future all sub-divisions in this Division also will be measured exclusively by Plane Table. Work was done in the tálukas of Pandharpur and Mádha of Sholápur, Karád, and Koregaon of Sátára, Párner, Sangamner, Shevgaon and Páthardi Mahál of Ahmednagar and Sinnar and Málegaon of Násik. In all 193,319 sub-divisions were measured in 459 villages, including two Inám villages of Khánápur, one of Khandála Peta and one of Sátára. Assessments were calculated on 136,517 sub-divisions. The head-quarter party calculated assessments on 59,304 sub-divisions in 93 villages. A party of 18 men demarcated 10,261 sub-divisions in 18 irrigated villages of Bhimthadi as per Government Resolution No. A.I.—13510 of 11th December 1915. In course of this operation 3,200

new hissas were also measured. 1,289 sub-divisions were demarcated in 6 villages of Kopargaon. Instructions have been given to see that during these operations all new hissas are measured and the old work is completely scrutinised, so that the whole village may come under revision at the same time. In addition to the parties working under the Survey Mámílatdár two parties of 30 Measurers under the District Inspector of Land Records were working in the Amalner Táluka and Párola Peta of East Khándesh. They measured 19,841 new sub-divisions in 195 villages of Amalner and 81 of Párola. Six Measurers under a Nímtandar measured 3,007 new hissas in Chopda and 5 Measurers measured 2,786 new hissas in 239 villages of 3 tálukas in West Khándesh. Two special Measurers were sent to Nagar and Kopargaon Tálukas for measurement of new hissas. They completed the recess work of last year and measured 1,055 new hissas in Kopargaon and 957 in Nagar. One special Measurer, appointed for the upkeep of sub-division measurement in Bársi, measured 750 new hissas. The aggregate number of hissas thus measured in Central Division was 2½ lakhs. The average cost per hissa in the parties working under the Survey Mámílatdárs ranged from 2·6 to 3·9 annas in Nagar and Násik. Including labour and supervision charges, the cost was 4·9 annas per hissa. In Sátára and Sholápur it ranged from 3 to 3·5 annas. Including labour and supervision charges the cost was 4·5 annas, which is approaching the Gujarát level. Prat phalni which distributes the assessment over the parts of the Survey Number in proportion to all differences of soil quality is not carried out in Gujarát, partly because of the destruction of the classification records, and partly because the fields show less variation in quality than in the Deccan. The average cost for this operation ranged from 2·7 to 3·8 annas. The cost of measurement of new hissas by *special Measurers* was 9·5 annas per hissa. The fee sanctioned for measurement by *Talátis* is 4 annas per hissa. So this difference between 4 annas and 9·5 annas is the true measure (subject to modification no doubt as more experience is gained) of the difference to the public between the two systems. Out of Demand Statements issued for Rs. 69,895, Rs. 45,173 were recovered during the year. The arrears are due to late issue of Demand Statements in Purandhar, Koregaon and Khandála Peta. Up to now measurement of sub-divisions has been completed in East and West Khándesh Districts, 1 peta of Sátára, 6 tálukas and 1 peta of Poona, 3 tálukas of Sholápur, 7 of Nagar and 1 of Násik. Two tálukas each of Sátára, Sholápur and Násik and 1 táluka and 1 peta of Nagar are in hand. Nine tálukas and 2 petas of Sátára, 2 tálukas and 1 peta of Nagar, 3 tálukas of Poona, 2 of Sholápur and 9 of Násik now remain to be done. Roughly speaking it will take another 4 or 5 years to finish the Deccan Division.

19. *Southern Division—Konkan.*—Seven parties of 67 men and 4 parties of 40 men were employed in Ratnágiri and Kolába Districts respectively supervised by a Survey Mámílatdar. 128 villages in Kolába and 11 in Rájápur were finished. Thirty-one villages of Málwan, 1 of Deogad, 7 of Mahád and one Inám village of Karjat are in hand. In Ratnágiri 39,423 hissas were measured by the Phalni system and 12,681 by Plane Table and 15,424 hissas were amalgamated. In Kolába 21,032 hissas were measured by Phalni and 4,626 by Plane Table and 9,934 hissas were amalgamated. The progress this year was slower than last year as the Plane Table was extensively used for the first time by men unfamiliar with it. The work though less in quantity is far superior to Phalni work. The Measurers had no experience of the Plane Table. They were not well trained and also started with a certain amount of prejudice against the new system. These, combined with the well known difficulties of the Konkan, the very irregular field boundaries, extremely bad communications, the hilly country and apathy of the people which rendered it very difficult to secure the attendance of Kabjedars, are accountable for the small output of the year. The causes were investigated by deputing a Gujarát expert to Konkan and the Konkan Survey Mámílatdár to Gujarát, both of whom arrived at the same conclusions. The cost of measurement of each hissa was annas 5 in Sangameshiwar and Ratnágiri, 4 in Vengurla, 6 in Rájápur and 7 in Mángaon. The cost of amalgamation was 1·5 annas in Rájápur, 1·75 in Mángaon, 1·25 in Ratnágiri and 1 anna in Vengurla.

20. There has been some grumbling in the Indian Press about these charges. No doubt 5 or 6 annas is a large charge for some of the minute fragments of almost valueless warkas which sometimes constitute a "Hissa" in Ratnágiri. Not only do I feel confident of reducing the charges next year, but I have also arranged a system of graduating ("assessing") the charges in relation to the size and value of the hissa, which will largely meet the complaint. During the year Rs. 14,346 were recovered in Kolába out of Demand Statements for Rs. 28,199 and Rs. 6,583 were recovered in Ratnágiri out of Demand Statements for Rs. 48,562. The small amount of recovery is due to the Demand Statements not being sent early enough to enable the recoveries being made with the land revenue instalments. Arrangements are now made for the early issue of Demand Statements.

21. A notable feature of the year was the experimental survey of 7 Khoti villages in Mahád according to the methods first tried at Udtara (Sátára District) last year. The object of the survey was to prepare a Record of Rights in accordance with existing sub-divisions of land which have come into existence in the majority of cases, disregarding the old division of fields and their vanished boundaries. Without a solid survey of the whole country, this was not possible. The survey was started personally by me with the help of a small party of 3 Surveyors and a Head Surveyor who had done the Udtara Survey last year. The method of Minor Triangulation with Plane Table interpolation was followed. Pillars were established and triangulated and then the intervening field boundaries were mapped by Plane Table. This reliance on a permanent frame-work was urged in vain upon our Survey Departments half a century ago. If it had been adopted, we should not now have to resurvey these villages. The revision of maps necessitated by 40 years of changes and neglect would have been a minor operation to which our talátis should be trained and competent to carry out every year if need be.

22. *Karnátic.*—A Plane Table class for the training of Measurers was started in Belgaum. On account of heavy rains, field work was started in December with one party in Sampgaon, 3 in Belgaum and 4 in Khánápur. The number of Measurers which was 71 at the beginning was gradually raised to 101 at the close of the season. The Sampgaon Táluka has been completed and Belgaum and Khánápur are partly done. The number of hissas measured is—

Sampgaon	...	...	2,149 by Plane Table.
			5,954 by Phalni.
Belgaum	...	...	21,110 by Plane Table.
			9,345 by Phalni.
Khánápur	...	...	23,840 by Plane Table.
			5,135 by Phalni.

The recess work of Sampgaon, Kod, Kalghatgi and Mudebihál Tálukas measured last year was done in the rains. The work of tálukas measured this year is in progress. The average cost per hissa is 4 annas 2 pies in Kalghatgi, 8 annas 3 pies in Kod, 5 annas 2 pies in Mudebihál and 5 annas in Sampgaon. The high cost in Kod is due to the táluka being the first in the Division in which Plane Table was used and hence the scale of output was low at first. The other tálukas were mostly measured by the Phalni method, which is now abandoned. A good deal of the work done by this Phalni method is so inexact and untrustworthy that a gradual revision by means of trained village accountants will have to be made. In the Dhárwár District, the Accountants in 3 tálukas are now trained, or under training and are doing well, with the exception of those few who, protected by the Watan system, are too incompetent and lazy even for their routine work.

Demand Statements issued and recoveries made during the year are :—

		Demands.	Recoveries.
Dhárwár	...	... 16,588	11,608
Belgaum	...	... 13,628	11,600
Bijápur	...	... 5,301	5,029

The progress up to date of Pôt Hissa work in the Southern Division is as follows :—

District.	Tálukas finished.	Tálukas in progress.
Belgaum	Sampgaon. Parasgad.	Khánápur. Belgaum.
Dhárwár	All Tálukas.	
Bijápur	All Tálukas.	
Kolaba	Pen. Panvel. Roha.	Mahád. Mángaon.
Ratnágiri	Karjat (27 villages). Ratnágiri. Chiplun. Dápoli. Vengurla. Sangameshwar. Rajápur.	Málwan. Deogad.

In Kánara no work has yet been done. Roughly speaking, 3 years should suffice to complete the Southern Division. We are largely increasing the rate.

23. *General Remarks.*—Improvements were made during the year in the method of working and general output. In the Central and Southern Divisions, Plane Table was extensively used. In the Southern Division the Plane Table parties were giving a very low output. Causes were investigated and defects remedied. Arrangements have been made for a thorough reorganisation of the parties and next season the work will be started with a better staff; better trained and equipped. The maintenance of these hissa surveys received my special attention this year. For this purpose the Talátis of the Haveli Táluka and Mulshi Peta were trained in Chain and Cross Staff measurement last year as the original work in these places was done by that process. Unfortunately they were not able to do any work this year as they were engaged in drawing up village accounts consequent to the introduction of 2nd Revision Settlement in the Haveli Táluka and in collecting the land revenue and writing up the Record of Rights in Mulshi Peta. These Talátis will again be given a short training and set to the measurement of new hissas. In the Párdi Táluka of the Surat District 35 Talátis were given training in Plane Table survey. Thirty-one were qualified and 4 were rejected on account of old age and bad eyesight. The trained Talátis were then set on measuring 790 new hissas that were formed during the year. Their work was found to be generally correct with a few discrepancies which were explained to them. Annas 4 were recovered for every hissa thus measured out of which 3 annas were paid to the Taláti for every hissa measured and 1 anna credited to Government for contingent expenses on postage and forms and for the entertainment of temporary hands in the Central Record Office, Ahmedabad, for correction of survey records. The Kabjedars of these newly measured hissas were also given copies of the maps of their hissas. Five of the Talatis did specially good work and were recommended to the Collector for special recognition. In the Southern Division similar classes were held in Bankápur and Hubli Tálukas. In Bankápur 67 Kulkarnis, 3 Circle Inspectors and 1 Head Kárkun were trained, and in Hubli 56 Kulkarnis and 3 Circle Inspectors were trained. After training, the Bankápur Kulkarnis measured 131 new hissas in one month. The Hubli Kulkarnis could not do any work as they were supplied with Plane Tables very late in the season. It is yet too early to say anything on the success of these experiments till it is tried for a period of 5 years or more. More Tálukas will be taken up for this training next year. But with the encouragement of the local Revenue Officers, and with patience and perseverance, I am certain this radical reform of making our village staff responsible for and capable of executing all minor survey work can be carried out. I have never pretended it was so easy or likely at

first to be so faultless as selecting a body of trained measurers, with peons, etc., and sending them touring round the villages : but it can in time and with effort rise to the same standard and cost the country less than half—and that is the crucial test.

CHAPTER III.

SURVEY AND SETTLEMENT WORK.

Revenue Survey Work.

24. *Northern Division.*—The Gujarát Field Party consisted of 10 hands. One of the posts was kept vacant. Of the 9 men remaining, one was deputed as Head Surveyor of Gujarát Hissa Survey, two as Nimtandars in the survey of Limbdi villages; one worked as special Measurer in the Surat District under the scheme sanctioned in R. 4618 of 1916, and one was engaged on making a traverse map on a Vanta of about 700 acres belonging to the Wadhwan Durbar. The rest were employed on the verification of boundary between British and Baroda villages, on road measurement in Daskroi Taluka and other miscellaneous measurement and classification work in Surat and Kaira Districts. In all these four men measured 1,291 acres and classed 213 acres. Of the 3 surveyors constituting the Thana party, one post was kept vacant and the remaining two were engaged in the measurement and classification of land given for reclamation and the verification of the Daman (Portuguese) boundary. They measured 207 acres and classed 158 acres : but of course this is not the whole of their work.

25. *Talukdari Survey.*—The survey of the Talukdari villages belonging to the Thakor of Limbdi in the Dhandhuka Taluka was sanctioned by Government Resolution No. 6487 of 30th June 1916. The survey was started early in December 1916 with a party of 13 men and 3 Nimtandars under my personal supervision. There are 30 villages to be surveyed, 28 belonging to Limbdi and 2 Udhad Jama villages which were not done at the time of the Talukdari detail survey. The survey was carried on by means of the Plane Table based on a network of trigonometrically connected stones covering the village. It is the method first tried by me at Udtara in Wai Taluka. Seventeen villages were completed during the season, covering an area of about 52,350 acres, at a cost of about Rs. 6,500 which works out to not more than annas 2 per acre which is well within my estimates, and not half the estimate of the late Superintendent of Land Records. Registers and maps are being now duplicated for the convenience of the Settlement Officer. It is hoped to complete the remaining villages next season. The maps will be printed after the Settlement registers have been prepared, so as to incorporate any emendations he may make in amalgamating or subdividing plots, and so on.

26. *Central Division.*—The Central Division Field Party was first deputed to pôh hissa survey. By the end of November 1916, a party of 16 Measurers and Classers under a Head Surveyor was deputed to take up the Revision Survey work of Miraj (Junior) State as per Government Resolution, Political Department, No. 5432 of 19th July 1917. Out of the three talukas, Kavtha Taluka was completely finished including classification; one village was completely measured and another in part in the Kuroli Taluka. The villages were measured by Plane Table. Pôh hissa survey was also carried out in 2 villages of Kavtha and 2 of Kuroli Talukas. The village of Udtara, measured last year, was classified this season. The rest of the party continued to work on pôh hissa measurement as part of that establishment till field season closed in June 1917.

27. *Southern Division.*—The strength of the Field Party during the year was 33 surveyors and 4 learners and 1 clerk. Most of these men were employed on paid work. Nearly half the number was absorbed by the Pôh Hissa and City Surveys. The Parma and the Kurundwad (Senior) State surveyors engaged about 10 men and the rest were deputed to dispose of measurement cases in Belgaum and Dhárwár. They measured 273 Survey Numbers and 1,869 new hissás in Belgaum. In Dhárwár 254 measurement cases were disposed of, and 179 mixed Inám numbers were measured. In Parma the classification of 2 villages, Usap and Maneri, was completed. Two

more villages, Kasai and Khokral, were completely surveyed. The traverse work of a fifth village has also been done. The progress is not rapid, as the amount at our disposal (paid by the Desai) is limited : but I have just been there and taken steps to cheapen and accelerate the work. The Revenue Survey of 3 tálukas of Kurundwád (Senior) State and of 2 villages of Wádi Jahgir in the Miraj (Senior) State was undertaken as per Government Resolutions, Political Department, Nos. 1804 of 6th March 1917 and 5243 of 12th July 1917. In Kurundwád all new rice and garden and all alluvial lands were measured and classed in 29 villages of Kurundwád, Angol and Tikota Tálukas.

Revenue Settlement Work.

28. *Northern Division.*—Settlement report for the 7 villages of the Kurla Estate was submitted and rates were sanctioned and announced during the year. Settlement rates were also announced in the Inám villages of Itadi and Habsabad in Modása and Mithipur in North Daskroi. Settlement reports of Mátar and Mehmabad have also reached Government.

29. *Central Division.*—Settlement reports of 11 Inám villages in Sátára, Nagar and Násik Districts were submitted by the Superintendent of Land Records, of which settlement rates for 5 villages were sanctioned during the year. Settlement rates were also sanctioned and introduced into the Máwal Táluka of Poona. Original Settlements were introduced in Vaduth (a Government village) and 6 Inám villages of Sátára, 2 of East Khándesh, 3 of Násik and 1 of Nagar. Revision rates were introduced into 3 inám villages of Násik, 1 of Nagar and 63 of Poona.

The preparation of Akarbands of 3 tálukas of Poona, and 4 tálukas and 1 mahál of Ahmednagar begun last year was completed.

30. *Southern Division.*—Revision Settlement was introduced in 3 Inám villages of the Dhárwár District. Settlement reports of 19 Inám villages of the Belgaum District, 1 of Bijápur and 1 of Ratnágiri, were submitted by the Superintendent, Land Records, during the year.

The work of preparing Akarbands of the newly revised tálukas of Belgaum, Bijápur and Ratnágiri was finished during the year.

CITY SURVEYS.

31. *Northern Division.*—No new City Survey was undertaken this year; it was not advisable to start any fresh City Survey before the City Survey Manual was out. Enquiry work in the towns of Nadiád, A'nand, and Borsad was completed during the year. In these towns more than 3,000 appeals have been made against the decisions of the Enquiry Officer. After the close of the year, an officer was appointed to hear these appeals, after which the maps will be finished off and printed and Sanads issued. Proposals for the appointment of a Maintenance Staff for these City Surveys were sanctioned after the close of the year. Maps of Thána City Survey are being printed at the Photozinco Office. A Surveyor has been appointed for the maintenance of this City Survey. In Bándra a good deal of work had to be done before the maps could be ready for printing. A large number of Theodolite Stations had to be demarcated afresh and the number of storeys had to be shown. The records of Godhra City Survey have been properly maintained by the Surveyor under the supervision of the Assistant Collector. The Surveyor has revised 273 Theodolite stations; and 2,146 properties which had altered since the Survey, only 5 years old. The Record of Rights for the city-surveyed area is being written with the help of a Circle Inspector. The maps of the Viramgám City Survey were prepared and are being printed in the Photozinco Office. Fresh Sanads for this City Survey are being prepared as ordered in Government Order No. 10389 of 30th October 1916. A Maintenance Staff has been entertained and the maintenance of the records and preparation of Record of Rights will be started as soon as printed maps are ready. The revision of the City Surveys of Ahmedabad City and suburbs is being carried out by the existing City Survey staff of 3 Surveyors. In the suburbs 5 village sites have been revised. Two tikas in the city proper have been finished and 2 are in hand. The staff of 2 Surveyors for the revision of 93 tikas of the city is too

small. Proposals have therefore been made to strengthen the staff. The Superintendent of Land Records inspected the City Survey Offices of Surat, Ránder, Bulsár and Broach. It was found (and indeed long known) that the old City Survey has not been kept up to date and there are a vast number of changes to be mapped and recorded. Revision City Surveys in these places are quite necessary. On account of the paucity of staff and financial stringency it is not desirable to take up these revisions in the near future.

32. *Central Division.*—Two City Surveys—Násik and Bhusáwal—were undertaken during the year. The work at Násik and Bhusáwal was commenced about the middle of August 1916. Owing to outbreak of plague in Bhusáwal the survey and enquiry work had to be stopped. The survey work was resumed on 22nd June 1917 but the enquiry work could not be started as plague has again broken out. The survey work in both the City Surveys is being carried out under the improved methods and the final sheet maps are being drawn up on the Bombay lines, showing every possible detail. I inspected the City Survey work at Násik several times and the Superintendent of Land Records at least 3 times. With the improved methods, the cost of City Surveys is considerably reduced. Recess examination is practically abolished and as much of the detail measurement is being done by Plane Table as possible. The traverse work at Bhusáwal was revised under the Superintendent's personal supervision. In Manmád the enquiry work which was abandoned owing to plague was resumed and finished. Tracings of the maps were prepared under the Superintendent's supervision and sent to the Photozinco Office for printing by Vandyke process. These have been printed and sent to the District Survey Office. Tracings of Dhulia City Survey maps were prepared and sent for printing. Copies of about 30 sheets have been struck off. Nandurbár and Jalgaon maps were being traced and have since been printed. In Igatpuri the revision of City Survey sheets is in progress. The Superintendent visited Igatpuri to inspect the progress. The work was found improperly done. Instructions were issued to the District Inspector, Land Records, and the Circle Inspector appointed for that work, as to how the revision is to be carried out. In Poona the small amount of survey work that remained incomplete last year was finished. The enquiry work was held in abeyance owing to plague from 1st November 1916 to 9th April 1917. Mr. Yardi, the District Inspector, Sátára, was appointed as Enquiry Officer, Poona, who took charge of his post from 10th April 1917. The enquiry work is complete for the most part of the city. The work of tracing sheet maps is done in Photozinco Office. About 25 sheets were traced and printed. The sanad-preparation work is also started and the printed sketches are being used for sanads. Record of Rights was introduced in the city-surveyed area of Bársi and Nagar. According to recent Government orders steps are in progress to introduce it in the other city-surveyed areas. At the time of City Survey the theodolite stations were not demarcated by stones at Dhulia, Manmád, Nandurbar, Sholápur, Bársi, Nagar and Poona. The work was undertaken in Dhulia and Manmád during the year and was finished. Allotments for Sholápur and Bársi have been sanctioned and the work will be undertaken soon. Proposals for necessary grants for Poona and Nandurbár have already been submitted. As for Nagar, report is being made in the matter. A small establishment is entertained as per Government Order No. 1908, dated 17th February 1917, to show on the sheets for Sholápur built over and unbuilt portions in house properties, and the work is in progress. Steps are in progress to appoint qualified Surveyors for the maintenance of these City Surveys. A permanent staff has been appointed at Nagar, Bársi, Dhulia, Nandurbár, Igatpuri, Manmád, Jalgaon and Sholápur. For Poona, a staff is sanctioned and will be entertained as soon as Financial sanction is received. The maintenance of the City Surveys is very important and the Land Records Department will have to closely supervise the working at least during the initial stages. District Inspectors are being advised to carefully study City Survey methods described in the Manual and to see that the rules regarding maintenance are being followed by the Surveyors.

33. *Southern Division.*—The City Survey of Ránebennur was completed at the end of May. At the request of the Collector and the Municipality a

separate map of the Municipal area was prepared at a cost of Rs. 96-9-6 which was met by the Municipality. The enquiry lasted from 25th November 1916 to 31st July 1917. Upkeep work has been started since then. Directly the final numbering which is in progress is finished the maps will be sent up for printing and the Property Register writing begun. The cost of the survey works out at Rs. 1-11-0 per property. Sháhápúr City Survey was desired by the SÁNGli State and started with the permission of Government (Government Resolution No. 9094 of 18th December 1916) on 1st February 1917. It was closed at the end of July owing to rain and will be begun again in November. The measurement of all the properties except 210 has been completed. The enquiry is being conducted by the Mámlatdár of Sháhápúr himself, as desired by the State. Byádgi City Survey was started on 13th June. The traverse took about a month and house measurement has been going on since July. It will be completed by the end of October. This is the first such survey conducted from the beginning strictly on the complete lines laid down in my City Survey Manual. The enquiry work in Belgaum was completed on 15th January 1917 and in Bágalkot at the end of December 1916. Final numbering of City Survey Numbers has been completed and the maps sent for printing to the Photozinco Office. Property Registers have been completely written in both places. Sanad-writing will begin immediately on receipt of maps. One trained City Surveyor has been supplied to Belgaum, Bágalkot and Ráne-bennur each for the upkeep work. Steps have been taken to provide the necessary equipment for the Belgaum and Bágalkot offices. Some of the instruments have already been supplied and the Collectors have been asked to provide funds for others. The Surveyors have been personally instructed in the filing of correspondences according to the selfindexing system and they have begun the sorting of records. A proposal has been made to the Collector of Belgaum to provide a clerk for the City Survey in addition to the Surveyor as the number of properties exceeds 7,000 and the work is expected to be heavy: but I hope it will, in time, be found within the powers of one man. In Gadag most of the Sanads have been issued. The whole of the demand, with the exception of Rs. 13, has been recovered. Gadag was the first City Survey in the Southern Division and was made when the methods had not been properly worked out. Consequently there are some defects in it, chiefly that the built and unbuilt areas have not been distinguished. This will be done by degrees by the upkeep Surveyor. The Record of Rights has recently been introduced within the City Survey limits of Gadag as per Government Resolution No. 683 of 20th January 1916. The work was begun on 1st March and completed on 30th June. It was tested by the Special Head Kárkun and the Pránt. The Record was improved and promulgated on 30th July 1917. As no separate City Survey village has been made, the village accounts will be kept by the village officers, and the accounts of the City Survey area by the upkeep establishment. The Dhárwár City Survey is old and has become out of date owing to the absence of any method of upkeep. A few tikkas were revised, to see how far the old survey could be utilised. It was found that it took more time to relay the old stations and base lines than to make an entirely new survey. The conditions of Hubli are similar. Proposals have been sent to the Commissioner for the revision of the Dhárwár City Survey. In Bijápúr also the revision of 2 tikkas was undertaken. The conclusion arrived at is the same as for Dhárwár. I have directed one more tikka to be taken up on different lines, to see whether the old survey can be made any use of. All the old records in the office have been sorted and filed according to the selfindexing system. The writing of the Property Register is making very slow progress.

Village Site Surveys.

34. Record of Rights was declared in the 7 village sites of Surat surveyed last year. In Broach, enquiry was held in the 8 village sites surveyed last year. Record of Rights has been prepared and Mutation Registers maintained. Maps of these village sites have been sent for printing and regular maintenance of these will begin on receipt of printed copies. In Broach the cost of surveying and enquiry in small village sites with a population of less than 2,000 souls was 5 annas 8 pies per plot. For the large village

sites, with a population of more than 2,000 and surveyed on the principles of City Survey, the cost was nearly 9 annas per plot because here the cost of Enquiry was also included. In the Panch Maháls the village sites of Shehera, Vejálpur, Garbada and Jhálod are said to have been surveyed. This is not a regular village site survey with measurement of houses and enquiry into titles, but only a rough survey of roads and open spaces by Chain and Cross Staff by the local Circle Inspectors. No scale drawn maps are prepared. The utility of such a survey is doubtful as without the measurement of houses, enquiry into title and regular maps, it would be difficult to prove encroachments or deal with them. No more such work should be done. When Pôt Hissa Surveys are completed, we shall have a competent trained staff ready to survey as many village sites as desired, at a low cost and in a style that can be permanently maintained.

Government Photozinc Office.

35. The special feature of the year was the adoption of the Cost System, prepared by the Manager, as a result of Mr. Joshi's proposals, which as the result of much consultation, was brought into force from October 1916. During the first half of the year 792, 452 pulls were taken out at a cost of Rs. 4,245-4-8, valued at Rs. 65,955-11-6, leaving a profit of Rs. 23,501-6-10 for the office. According to the cost system the following work was done :—

Name of Section.	Outturn.	Cost.	Average cost rate from which the actual cost is determined.	
			Cost rate.	Per
		Rs. a. p.	Rs. a. p.	
Drawing Branch ...	20,544 hours	6,754 3 11	0 5 3.14	Hour.
Mounting Branch ...	167,467 square inches	1,693 14 6	0 0 1.942	Square inch.
Photozinc and Litho	2,038,654 square inches = 4,928 Negatives.	8,221 5 1	0 0 0.775	Square inch. Negative.
Helio ...	20,929 square inches = 86 plates.	815 14 3	0 0 7.484	Square inch. Plate
Vandyke ...	185,964 square inches = 133 plates.	905 8 10	0 0 0.984	Square inch. Plate.
Engraving ...	6,351 square inches = 146 Blocks.	1,681 5 4	0 4 2.829	Square inch. Block.
Printing Branch ...	834,821 Machine pulls 40,506 Hand pulls	15,289 0 2 1,871 3 1	4 9 1 4 9 11	100 pulls, 100 pulls.

The point of this system is that it gives us—

(a) an exact method of stating the cost of all work done, and charging for it correctly;

(b) a means every half-year of checking the rise or fall of all these 'unit costs', which forms an inexorable and continuous test of efficiency in every detail.

A detailed report on the working of this Department is separately submitted to Government.

CHAPTER IV.

RECORD OF RIGHTS.

36. *Northern Division.*—In Ahmedabad the Record has been completely rewritten throughout the district and was duly declared in all talukas. It was prepared for the first time in 3 villages of Virangám and one of Sánand as these villages were made Khalsa in June 1916. In Kaira the quinquennial revision was completed in Narwadari villages of Anand and 2 villages of Nadiád. Rewriting in the Narwadari villages of Mátar and Borsad was postponed till completion of measurement of sub-divisions. In Panch Maháls the Record was introduced in the Mehwasí village of Naranpaginu Muwadu in Kálol. It is prepared in two parts, one showing the relation between the Mehwasdar and Government and the other between the Mehwasdar and his tenants. In Broach the Record for Bighotia villages of Broach, Amod, and Jambusar was rewritten. Rough copy has been prepared in the Bighotia

villages of Vágra and all the Bhagdari villages of the district. In Surat, rewriting is in progress in all Khalsa, surveyed Inám and Sharakati villages. It was promulgated in the Inám village of Syadla in Olpád. It is also being prepared in 2 parts in the Bhagdari villages of Kumbharia (Chorási), Madhar and Khalipur (Olpád) and Medhar (Jalálpur). In Thána, rewriting is being done in 3 Circles of Sháhápur, 1 each of Murbád, Váda, Umbargaon, Sálsette, Máhim and Bassein and in 2 Circles each of Dáhánu and Mokháda. In one Circle each of Kalyán, Máhim, and Bassein, the rewriting was done side by side with measurement of sub-divisions.

37. *Central Division.*—In East Khándesh, the rewriting commenced last year in Amalner, Ráver and Yáwal was completed. In Páchora, the 2nd rewriting was completed. It is in progress in Bhusáwal and Edlabad peta. Chopda was due for 2nd rewriting this year but was postponed till next year as the 2nd Revision Settlement is to be introduced in it. The Record was prepared for the first time in the Inám villages of Tondapur in Jámner and Bhokri and Tamaswadi in Ráver. In West Khándesh, the rewriting taken up last year was completed. Sindkheda, Sháháda and Shirpur Tálukas were selected for 2nd rewriting this year. Rewriting in Shirpur and Sháháda Tálukas was postponed as the Settlement in these tálukas is to be revised shortly. In Sindkheda, rewriting is in progress. In Násik, rewriting was undertaken in Násik, Chandor, Peint, Kalwan, Nándgaon, Sinnar and Niphád Tálukas. In Kalwan it is finished and is in progress in the remaining 6 tálukas. The Record is being prepared for the first time in 16 Inám villages in the 6 tálukas. In 34 Inám villages rough copy is completed and fair copying is in progress. In Ahmednagar, Sheygaon and Páthardi Mahál and 41 villages of Párner have been completed. In Nagar Táluka rewriting is in progress. In Poona the rewriting was completed in 5 villages out of 10 of Haveli which had remained to be rewritten last year. Rewriting was due this year in Mawal, Sirur, Purandhar and Mulshi. Mawal and Mulshi have been revised and fair copying is in progress. In Purandhar and Sirur it was postponed for want of funds and will be taken up in 1917-18. In Sholápur the preparation of Record of Rights for the city-surveyed area of Bársi was completed and is in progress in Sholápur city-surveyed area. The Record was announced for the first time in the Inám villages of Ganeshgaon and Kolegaon in Málsiras. No táluka was due for rewriting this year. In Sátára rewriting was in progress in 112 villages of Sátára, 74 of Mán, 67 of Khánápur and 3 of Wálwa. Thirty-nine villages of Mán were completed. It was also completed and announced in 9 Inám villages and is in progress in 2 Inám villages of Khánápur. The Record prepared last year in 27 Inám villages of Pátan was announced this year. The Record was also due to be rewritten in Wái, Karád and Koregaon Tálukas, but was postponed for two seasons, pending completion of pot hissa measurement, now in progress.

38. *Southern Division.*—In Belgaum rewriting has been completed in the Parasgad Táluka. In Athni, Chikodi and Sampgaon preliminary inspection has been made and the Record will be announced next year. In the Gokák and Hukeri Tálukas it was postponed, pending completion of hissa survey and also in Belgaum and Khánápur, pending introduction of 2nd Revision Settlement. In Bijápur, rewriting was completed in Indi, Bágewádi, Bádámi and Hungund Tálukas. In Muddebihál, it is being postponed since 1914-15 for completion of hissa survey. Preliminary inquiries are completed and rewriting will soon be taken up. The rewriting due in the Bilgi Peta and one circle of Bágalkot was postponed for being done with the rest of the táluka next year. In Dhárwár, the Record was prepared for the first time in 4 Inám villages of Dhárwár. Rewriting is in progress in Dhárwár, Hubli and Gadag Tálukas. It was postponed in Karajgi and Ránebennur, pending completion of hissa survey. The preparation of the Record in the city-surveyed area of Gadag in progress. In Kolába, the Record for all Government villages of Pen Táluka and Nágothna Mahál and 8 Khoti and 4 Inám villages of Pen was rewritten. In Mahád, it is in progress together with hissa survey in 7 villages. In Khoti villages, the formal writing of the Record has been delayed, because it was found useless to attempt to prepare a Record of

ownership until sub-divisions have been mapped out. The existing survey, pôt and phalni numbers and the whole state of things described in the Suds have now become entirely obsolete; the state of things in the field so largely differs from that described in the Suds that it is often quite impossible to identify plots of lands shown in the old records with the existing holdings in the field. All the Khoti villages should therefore be surveyed afresh on the minor triangulation system with pôt hissa measurements. The Record can then be successfully prepared for these villages. In Ratnágiri the Record was rewritten in one village of Vengurla, 11 of Málwan, 26 of Rájápur, 53 of Ratnágiri and 22 of Sangameshiwar. It was postponed pending completion of hissa survey in 34 villages of Devgad, 12 of Rájápur, 1 each of Ratnágiri, Sangameshiwar and Dápoli and 42 villages of Khed. It was prepared for the first time in 14 sharakati villages of Devgad, 3 of Ratnágiri and 1 of Dápoli. In Kánara, rewriting was completed in Sirsi, Siddápur, Yellápur and Mundgod. In Kárwár, Kumta, Bhatkal and Haliyál it is in progress. In Ankola and Honáwar, the rewriting was postponed till next year for sake of convenience. Supa was due for rewriting this year, but as there were very few mutations, it was postponed for two years more.

It is generally stated that the Record is becoming fairly accurate and reliable and the people, including backward classes, now sufficiently realise the importance and benefits of the Record. Nevertheless complete accuracy cannot be attained until pôt hissa survey has been done and arrangements made for the measurement of new hissás. Where this has been done, one can now step into any field or plot of land, and ask whose it is, and by what right; and one can get a prompt reply, with a map of the plot and its surrounding holdings: and in quite 99 cases out of hundred the information recorded is exactly right. Moreover, the system of maintenance, now closely interlinked with Civil Court work and the collection of revenue, ensures its constantly closer approach to incontestable accuracy.

39. During the year I have lost the services of Mr. Vishnu Balvant Naik, who has been my office Superintendent for 2½ years of my incumbency. He has gone back to the Revenue Department to escape being blocked in his promotion. He has worked indefatigably and most helpfully in the varied activities of the ordinary routine of the Department, and the numerous reform and reorganisation movements I have instituted. No successor has been appointed, and I am getting on quite well with the experienced help of Mr. A. H. Antia. None of the more ambitious and competent senior men will accept the post, as long as it carries a salary of only Rs. 150—10—200; and thus is on a level with junior Mámlatdárs. The junior and promising men who might take it are more wanted in District work. So long as I remain here, now that I have 2½ years' experience of the work, I can dispense with the assistance of a senior man, but if I or any other officer were newly taking up the duties of the Department, it would be necessary to re-agitate this question of grading and appoint a Superintendent.

40. My Superintendents, Messrs. Dalal, Mardhekar and Reuben, have all worked so well and loyally that I do not know whom to praise most. Mr. Dalal has a very trying charge, with great extent and bad communications from Alibág to Bijápur and Harihar. Mr. Mardhekar is most energetic, and has done a lot of extra Settlement work in the Southern Marátha States. Mr. Reuben is promising very well and will, I am sure, justify his selection from the untried junior grades.

F. ANDERSON,

Settlement Commissioner and Director of Land Records.

APPENDIX A.

Statement I showing crop, waste, boundary marks and other inspection carried out by Circle Inspectors in the Districts during the year 1916-17.

Name of District.	Number of Circle Inspectors in the District.		Number of villages in each District.	Number of days actually devoted to inspection work.	Crop and Tenancy Inspection.		Waste Inspection.		Repair of boundary marks.						Inspection of Tagal Work.		Number of entries checked in the birth and death registers.	Number of entries checked in Village Form VI and VII.		
	Number of District.	Total.			Total number of occupied survey numbers.	Number of survey numbers and sub-divisions tested.	Number of waste numbers other than forest.	Number inspected.	Number of villages due for repairs.		Number of villages completely inspected and repaired.		Balance of villages outstanding at close of season.		Average number of days spent by the Circle Inspectors of the District on inspection and repairs.	Number of Tagal Works examined.			Number in which work was finished.	
									Arrears of past year.	Current year's programme.	Arrears of past year.	Current year's programme.	Arrears of past year.	Current year's programme.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
<i>Northern Division.</i>				Average																
Ahmedabad ...	18	459	458	219	175,003	34,700	34,801	5,032	...	48	...	48	...	...	55	5	5	12,810	173,749
Kaira ...	21	520	529	177	811,761	33,228	23,428	3,053	...	73	...	70	...	8	152	20	15	10,699	71,347	
Panch Mahals ...	14	430	407	238	80,180	15,003	12,052	4,028	...	66	...	30	...	30	44	1	1	8,380	10,823	
Broach ...	14	401	393	178	30,303	15,971	10,435	1,836	7	83	7	37	...	1	89	...	...	7,228	75,291
Surat ...	23	820	798	155	255,048	30,008	11,658	1,017	...	75	...	75	...	...	123	...	...	10,876	152,684
Thana ...	37	1,021	1,328	169	198,593	10,153	10,422	3,733	23½	161	21	142½	5½	18½	97	2	2	13,451	217,775	
<i>Central Division.</i>																				
East Khandesh ...	43	1,801½	1,781	187	200,473	24,772	9,060	2,098	17	207½	17	205½	...	2	60	0	6	32,440	35,895	
West Khandesh ...	34	1,215	1,204	80	141,040	23,838	13,687	2,836	10	179	8	170	2	9	43	1	...	20,710	113,113	
Nasik ...	36	1,800	1,638	266	247,586	40,252	10,985	1,873	35	188	24	180	11	8	68	4	4	10,632	250,107	
Ahmednagar ...	48	1,975	1,933	234½	240,711	28,982	6,525	1,000	10½	219	10½	167	...	52	57½	7	3	28,692	357,841	
Puna ...	35	1,176	1,148	90	221,057	23,242	2,489	603	8	111	2	90	1	21	39	...	...	14,915	35,904
Sholapur ...	16	700	700	200	112,945	10,377	1,993	504	2	73	2	73	...	...	21	27	21	14,000	25,669
Satara ...	85	1,242	1,235	175	262,633	121,284	1,911	937	20	118	10	116	10	8	116	7	6	19,491	191,459	
<i>Southern Division.</i>																				
Belgaum ...	30	981	928	140	175,318	24,070	6,753	1,352	4	103	4	90	...	15	68½	4	4	15,591	60,399	
Bijapur ...	32	1,024	1,023	207	173,416	32,050	3,174	1,401	...	84	...	84	...	...	62	22	11	13,841	14,755
Dharwar ...	41	1,200	1,256	272	185,900	41,668	0,131	2,194	...	150½	...	149	...	14	103	80	58	21,057	114,982	
Kolha ...	33	1,553	1,562	42½	154,930	15,213	6,905	1,591	143½	124½	73	87½	67½	87	23½	...	...	14,852	42,544
Ratnagiri ...	22	1,337	903	130	186,619	20,848	4,304	2,030	8½	20½	1½	25½	7	4½	35	2	2	10,627	57,042	
Kanara ...	32	1,419	1,351	180	136,902	47,847	10,676	3,171	...	146	...	145	...	1	77	1	1	10,500	140,004	

F. ANDERSON,
Settlement Commissioner and Director of Land Records.

APPENDIX A—continued.

Statement II showing the measurement and classification work performed by Circle Inspectors during the year 1916-17.

Name of District.	Arrears at the beginning of the year.		New cases received during the year.		Disposed of during the year.		Balance at the close of the year.		Remarks
	Measurement.	Classification.	Measurement.	Classification.	Measurement.	Classification.	Measurement.	Classification.	
1	2	3	4	5	6	7	8	9	10
<i>Northern Division.</i>	S. Nos.	S. Nos.	S. Nos.	S. Nos.	S. Nos.	S. Nos.	S. Nos.	S. Nos.	
Ahmedabad ...	35	80	429	8	455	87	9	1	
Kaira ...	338	15	730	25	833	36	235	4	
Panch Maháls ...	56	...	263	7	278	7	41	...	
Broach ...	77	...	518	8	527	6	68	2	
Surat ...	60	1	643	29	629	27	74	3	
Thána ...	97	43	819	49	746	71	170	21	
<i>Central Division.</i>									
East Khándesh ...	63	...	909	3	863	3	114	...	
West Khándesh ...	7	...	472	40	432	38	47	2	
Násik ...	156	2	1,028	14	1,057	10	125	6	
Ahmednagar ...	69	...	857	37	811	37	115	...	
Poona ...	30	...	423	7	407	6	46	1	
Sholápur ...	186	6	1,410	26	1,424	32	172	...	
Sátára ...	60	14	1,365	37	1,240	51	185	...	
<i>Southern Division.</i>									
Belgaum ...	282	19	1,325	31	1,291	43	316	7	
Bijápur ...	144	3	799	23	814	26	129	...	
Dhárwár ...	1,115	...	868	...	1,334	...	649	...	Accurate information for column 3, 5, 7 and 9 no available.
Kolába ...	127	26	197	70	271	81	53	15	
Ratnágiri ...	141	9	424	37	488	44	77	2	
Kánara ...	283	25	891	45	998	69	176	1	

N. B.—In the case of Broach and Poona the No. of cases are shown and not units of S. Nos.

F. ANDERSON,
Settlement Commissioner and Director of Land Records.

APPENDIX A.

Statement III showing the test of Village Officers' and Circle Inspectors' work

Name of District.	Number of villages.		Number of boundary marks inspected.	
	Total in the district.	Number inspected.		
1	2	3	4	
Ahmedabad...	Sub-divisional Officers ...	459	256	1,824
	Mámlatdárs ...		416	3,520
Kaira ...	Sub-divisional Officers ...	529	277	486
	Mámlatdárs ...		508	1,918
Panch Máhals.	Sub-divisional Officers ...	430	135	3,136
	Mámlatdárs ...		407	4,065
Feroach ...	Sub-divisional Officers ...	401	361	449
	Mámlatdárs ...		388	761
Surat ...	Sub-divisional Officers ...	820	539	7,225
	Mámlatdárs ...		750	4,545
Tbána ...	Sub-divisional Officers ...	1,621	426	7,551
	Mámlatdárs ...		1,071	22,463
East Khán-desh.	Sub-divisional Officers ...	1,801½	346	486
	Mámlatdárs ...		1,409	4,517
West Khán-desh.	Sub-divisional Officers ...	1,215	333	726
	Mámlatdárs ...		1,122	4,708
Násik ...	Sub-divisional Officers ...	1,666	358	418
	Mámlatdárs ...		1,668	11,058
Ahmednagar.	Sub-divisional Officers ...	1,375	498	274
	Mámlatdárs ...		1,143	4,020
Poona ...	Sub-divisional Officers ...	1,176	219	417
	Mámlatdárs ...		933	2,567
Sholápur ...	Sub-divisional Officers ...	700	414	457
	Mámlatdárs ...		526	2,465
Sátára ...	Sub-divisional Officers ...	1,242	362	1,283
	Mámlatdárs ...		1,242	12,890
Belgaum ...	Sub-divisional Officers ...	961	435	1,440
	Mámlatdárs ...		788	3,142
Bijápur ...	Sub-divisional Officers ...	1,024	316	377
	Mámlatdárs ...		952	2,643
Dhárwár ...	Sub-divisional Officers ...	1,290	351	719
	Mámlatdárs ...		1,069	1,750
Kolába ...	Sub-divisional Officers ...	1,553	369	2,546
	Mámlatdárs ...		1,159	18,893
Ratnágiri ...	Sub-divisional Officers ...	1,337	565	1,664
	Mámlatdárs ...		1,128	2,280
Kánara ...	Sub-divisional Officers ...	1,419	361	2,931
	Mámlatdárs ...		1,222	6,752

A—continued.

by Sub-Divisional Officers and Mámlatdárs in the Districts during the year 1916-17.

Number of survey numbers in which crop and tenancy record was checked.		Number of villages in which birth and death registers were checked.	Number of entries checked in Village Forms VI and VII.	Remarks.
Village Officers' work.	Circle Inspectors' work.			
5	6	7	8	9
1,996	418	306	2,230	
6,905	2,474	452	9,005	
1,021	891	243	2,119	
6,813	1,327	485	7,930	
2,540	248	178	3,118	
3,617	1,834	405	5,225	
6,787	142	252	6,206	
4,289	978	874	8,545	
5,897	1,303	420	9,563	
8,807	3,768	711	34,472	
7,220	6,441	827	9,292	
13,161	2,646	882	37,636	
1,841	397	231	4,478	
5,085	2,148	1,282	16,070	
1,295	10	279	2,717	
6,178	1,591	911	15,342	
1,124	451	269	2,485	
5,192	2,082	1,538	25,517	
1,959	35	403	5,891	
5,109	2,508	1,008	97,788	
1,984	411	436	5,077	
7,281	1,953	957	14,494	
1,616	51	353	4,270	
3,757	627	543	10,155	
975	2,057	290	9,181	
7,602	10,418	1,242	68,842	
2,740	506	325	5,989	
4,197	2,794	716	8,387	
3,516	186	262	5,129	
3,823	1,140	819	17,049	
1,514	614	221	1,476	
8,086	2,629	864	10,303	
200	127	218	1,267	
3,646	1,744	934	15,974	
669	109	548	3,350	
2,697	731	1,116	15,791	
3,503	2,853	221	5,144	
10,434	4,796	1,104	46,721	

F. ANDERSON,
Settlement Commissioner and Director of Land Records.

Statement IV showing the details of work done by the District

District.	Number of villages in the District.		Number of days devoted to all kinds of inspection.	Number of days devoted to test work.	Number of Circle Inspectors.	Number of Circles.	Crop and Waste Inspection numbers checked.						Number of boundary marks established.
	Total.	Inspected.					Early.		Late.		Waste.		
							Circle Inspectors' work.	Village Accountants' work.	Circle Inspectors' work.	Village Accountants' work.	Circle Inspectors' work.	Village Accountants' work.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Ahmedabad ...	459	245	139	140	18	18	1,212	3,073	154	236	110	383	5,271
Kaira ...	529	152	127	36	21	21	192	1,276	...	49	16	95	991
Panch Mahals ...	430	144	129	158	14	13	952	200	599	83	168	31	3,231
Eroach ...	401	178	179	160	14	14	518	530	274	291	92	95	3,155
Surat ...	820	286	218	218	24	23	857	554	590	400	186	103	1,616
Thana ...	1,621	394	323	323	37	37	90	1,432	141	41	...	149	14,644
East Khándesh ...	1,501½	272	168	187	43	43	382	310	207	207	116	92	4,855
West Khándesh ...	1,215	239	152	152	34	34	286	361	160	199	68	133	6,037
Násik ...	1,666	254	155	145	38	33	222	1,353	24	627	8	26	2,765
Ahmednagar ...	1,375	104	112	83	48	48	248	67	73	87	...	...	567
Poona ...	1,176	165	145	121	35	31	110	211	172	320	4	24	837
Sholapur ...	700	257	217	179	20	16	...	703	548	1,415	87	175	1,834
Sátara ...	1,242	151	135	134	35	35	117	302	77	...	...	...	3,392
Belgaum ...	961	156	146	78	26	26	21	124	19	137	...	...	974
Bijapur ...	1,024	159	102	47	41	32	194	467	134	491	5	15	1,255
Dnárwár ...	1,290	195	94	22	41	41	64	210	35	641	...	25	1,648
Eolába ...	1,553	107	104	71	33	33	191	242	...	...	4	...	†
Katnágiri ...	*316	70	82	25	21	21	113	141	14	18	5	8	701
Eánara ...	1,410	135	137	88	32	32	86	795	94	66	...	9	495

* Government villages only; † Information not available.

A—concluded.

Inspectors of Land Records of the Districts during the year 1916-17.

Entries in the Return of Population and Agricultural Stock tested.	Entries in the Birth and Death Register tested.	Number of survey numbers tested.				Number of entries in Village Forms VI and VII tested.	Number of Village Accountants examined in final test.	Number of Village Accountants trained by the Survey Department examined in measurement work.	Taluka Forms XX to XXIII tested.	Number of Tagál works inspected.	Number of entries in Village Form XVI inspected.	Remarks.
		Measured by the Circle Inspectors.	Classed by the Circle Inspectors.	Measured by the General Duty Inspectors.	Classed by the General Duty Inspectors.							
15	16	17	18	19	20	21	22	23	24	25	26	27
...	3,757	17	...	7	15	28,868	...	...	All	...	131	
548	332	52	21	16	2	2,488	...	...	Do.	...	169	
...	145	25	5	7	2	2,404	...	...	Do.	...	141	
...	679	22	7	11	7	6,044	...	...	...	...	312	
...	766	51	...	7	2	2,352	...	...	...	208	...	
974	1,666	26	13	4	28	10,625	...	...	...	...	465	
...	1,659	141	...	9	2	6,236	...	...	...	...	972	
...	866	20	...	12	2	3,770	...	...	All	...	291	
...	1,218	80	...	2	4	8,353	...	...	8	2	54	
...	225	96	...	3	2	2,892	...	...	3	...	...
...	452	91	...	6	...	1,603	...	...	...	3	16	
1,734	876	31	...	16	4	4,775	...	...	...	7	624	
...	776	49	...	18	3	4,317	...	...	2	1	...	
...	578	46	...	70	5	3,592	...	...	...	...	13	
602	1,068	34	...	...	1	3,368	...	...	2	...	4	
...	1,089	81	...	6	1	1,578	...	...	...	11	111	
73	467	27	...	3	7	437	...	...	...	...	...
3	13	30	2	1	8	1,451	...	...	...	...	8	
731	940	65	...	5	19	2,768	...	...	5	...	39	

‡ Examined-form XX in 4 talukas.

F. ANDERSON,
Settlement Commissioner and Director of Land Records.

*Part III of the Land Revenue Administration Report of the Province
of Sind for the year 1916-17.*

No. 3416 of 1917.

REVENUE DEPARTMENT:

*Office of the Commissioner in Sind,
Government House, Karachi, 26th November 1917.*

During the year revised settlements were introduced in Jati, Sháhbandar, Sujáwal and Mirpur Bathoro Tálukas of the Karáchi District, Hiral tract comprising 32 dehs of the Pithoro Táluka in the Thar and Párkar District, and Thul, Khandhkot and Kashmir Tálukas in the Upper Sind Frontier District. Appendix A gives the estimated financial results of the new rates sanctioned.

Proposals for the resettlement of tálukas Umarkot, Digri, Jamesabad and the Jamrao tracts of the Mirpurkhas, Sinjhoró and Sánghar Tálukas are under consideration.

2. The work turned out by the Head Record Office is detailed in Appendices B and C. The total number of correction cases disposed of (Appendix B) was 4,877 out of 4,986 as against 5,945 out of 6,145 in the previous year. Only three mistakes were discovered in the entries relating to 1,184 survey numbers examined in the office of the Superintendent, Land Records. The amount of arrears of correction work at the close of the year was insignificant. The number of land registers prepared was 275 pertaining to four tálukas. Besides, 95 copies were made to replace worn out survey registers in the Record Office. There remain five tálukas recently resettled including Hiral tract of the Pithoro Táluka for which these registers have yet to be compiled. The number of maps prepared for supply to Government Officers and to private petitioners on payment was 5,523, out of which 4,134 were supplied during the year and the remaining 1,389 are kept in reserve for use of officers to be shortly employed on the classification of lands commanded by the proposed Right and Left Bank Canals. The number of maps corrected and kept ready for use as office copies or for future reproduction was 862. The total outturn by the Mapping Branch thus amounted to 6,385 maps as against 7,990 in the preceding year. The decrease of 1,605 is due to the Manager, Incumbered Estates' indent being much smaller than the one in the previous year. Appendix C relates to the work done in the Record Office in consequence of new measurements carried out by the village establishments. The number of survey numbers received for examination and entry in the Record Office declined by more than 5,000 to 20,448. It is satisfactory to note that the percentage of survey numbers returned without entry owing to errors fell from 48 to 37. The improvement is apparently due to instructions issued by the district officers and the Superintendent as a result of the remarks of Government contained in their Resolution No. 6304, dated 24th August 1916. Further improvement in this respect and in the general efficiency of the tapedars may be expected when the proposals submitted by the Commissioner in July last for the improvement of the status and the prospects of the village staff are sanctioned.

3. The indexing work is now done by a temporary hand whose entertainment for one year more was sanctioned in Government Resolution No. 10378, dated the 30th October 1916.

4. The annual inspection of the Record Office was conducted by the Superintendent, Land Records, in May and June last and the result was reported to be satisfactory.

5. As in the previous year, no survey parties were organized for the measurements of waste lands owing to financial stringency, but the department was engaged in the prosecution of the city survey operations previously commenced in November 1915 under the supervision of the Special Mukhtiar-kar at Shikárpur. The road measurement work in the town proper was practically completed and the number of houses surveyed amounted to 12,400 leaving 3,500 houses still to be measured at the close of the year. An Enquiry Officer was appointed with effect from 1st February 1917 to enquire into titles.

He completed his work in respect of 5,400 properties. After the close of the year the enquiry work was considerably hampered by malaria and by the exodus of the people as a result of a severe outbreak of cholera in the town. Survey and enquiry work came under the inspection of the Superintendent, the Collector of Sukkur and also the Director of Land Records. In the latter's opinion the survey work was being satisfactorily done in spite of exceptional difficulties arising out of the conditions prevailing in the town.

6. In the course of his tour the Superintendent tested 139 survey numbers measured by the village staff and discovered mistakes in 10 cases. He also discovered some cases of inordinate delay in measurement and in the despatch of measurement papers to the Record Office and brought those to the notice of the district officers concerned.

7. The four weeks' survey class for revenue officers was, as usual, held in August. It was attended by two Assistant Collectors, one Deputy Collector and two Mukhtiarkars who were examined by the Superintendent. All of them passed the test and were granted certificates. In addition, four taluka head munshis and graduates and two munshis from the Record Office successfully passed the test after the usual training for three months.

8. The total cost of the Land Records Department for the year amounted to Rs. 58,996 which includes Rs. 20,184 spent in connection with the city survey at Shikárpur.

9. During the year, the Record of Rights was not newly introduced anywhere in the Province of Sind. In four dehs of the Sinjhoró Taluka in the Nawábshah District, which had formerly been treated erroneously as purely alienated dehs but which were partly alienated and partly unalienated, the record was ordered to be introduced and the rough copy is still in course of preparation. The rough copy of the record prepared for the town of Nawábshah in the previous year could not be fair copied during the year under report owing to the late receipt of the printed standard forms newly sanctioned by Government. The work is now in hand and is expected to be finished shortly. The promulgation of the record prepared in the previous year for nine dehs newly formed in the Rohri Taluka of the Sukkur District is awaiting the decision of some disputed cases, arising out of the record. The Superintendent examined 3,940 entries in 95 villages.

10. The record was due for rewriting in the Kotri Taluka of the Karáchi District, Rato-dero, Mirokhan, Mehar and Kakar Talukas of the Lárkána District, Sháhdápur, Nawábshah and Sinjhoró Talukas of the Nawábshah District and in the Pithoro Taluka of the Thar and Párkar District. The work was however actually carried out in the Kotri Taluka only. In Sháhdápur and Pithoro Talukas it was commenced during the year and is still in progress. In Nawábshah the rewriting was not considered necessary on account of the small number of mutations, while in Sinjhoró, the work will be undertaken on the introduction of the revised settlement, the proposals for which are under consideration. The work in Rato-dero, Mirokhan, Mehar and Kakar was suspended for a year as the Mukhtiarkars of these talukas omitted to comply with some preliminaries laid down in the Manual of the Record of Rights in Sind. The measurement work of sub-divisions of survey numbers is kept up-to-date and the sub-divisions have now been given the status of survey numbers for the purpose of assessment, remission and fallow rules in all the districts of the Province. This concession is much appreciated by the occupants. There were more than 1,500 cases for default in reporting acquisition of rights and the fine imposed aggregated roughly Rs. 4,500.

11. The record was on the whole fairly well maintained during the year and received adequate attention at the hands of the officers concerned. As a result of the issue of the Record of Rights Manual in the previous year, the principles underlying the record are now better understood by the village officers and this is reflected in the improvement of their work.

H. S. LAWRENCE,
Commissioner in Sind.

To

THE CHIEF SECRETARY TO GOVERNMENT,
Revenue Department, Bombay.

APPENDIX A.

Paragraph 1.

District and its area.	Taluka and area for settlement during the year.	Area settled during the year.	Old assessment.	Revised assessment.	Percentage increase.	Percentage decrease.	Remarks.
Acres.	Acres.	Acres.	Rs.	Rs.			
Kardohi 7,527,207	Jad 1,880,498	1,880,498	1,21,759	1,34,451	10.43	.....
	Bhahbandar 888,038	888,038	98,038	1,04,738	6.83	.....
	Sujawal 175,768	175,768	1,21,190	1,33,198	9.98	.....
	Mirpur Bathoro 172,262	172,262	1,49,254	1,68,751	6.38	.....
Thar and Parkar 8,727,495	Pithoro (Hiral tract) 54,233	54,233	62,461	72,998	16.88	.....
Upper Sind Frontier 1,709,972	Thul 317,821	317,821	2,92,778	3,29,641	12.59	.....
	Kandhkot 355,836	355,836	2,41,572	2,71,393	12.84	.....
	Kashmor 343,536	343,536	79,673	86,007	8.08	.....

APPENDIX B.

(Vide paragraph 2.)

Year.	Number of cases (including arrears) necessitating correction in Survey Records.				Number of cases returned duly corrected.				Number of cases remaining for correction at the end of the year.				Number of extracts from Survey Registers supplied.
	Survey Registers.	Maps		List of Karia rebates.	Survey Registers.	Maps		List of Karia rebates.	Survey Registers.	Maps		List of Karia rebates.	
		English.	Sindhi.			English.	Sindhi.			English.	Sindhi.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1915-1916 ..	3,029	144	2,823	149	2,925	144	2,728	148	104	...	95	1	815
1916-1917 ...	2,480	86	2,343	72	2,421	86	2,298	72	59	...	50	...	1,007

Year.	Number of Survey Registers prepared and supplied to			Registers prepared for Record Office.	Number of Maps supplied						Maps prepared for printing.		Maps prepared to replace torn office copies in the Record Office.
	Village Establishment.	District Officers.	Petitioners.		Free of cost to Village Establishment.	On payment to Village Establishment.	To District Officers.		To petitioners on payment.		English.	Sindhi.	
							English.	Sindhi.	English.	Sindhi.			
1	15	16	17	18	19	20	21	22	23	24	25	26	27
1915-1916 ...	43	15	4	607	3,173	96	166	1,323	55	1,647	17	700	808
1916-1917 ...	8	11	12	370	2,625	205	78	1,787	9	810	22	349	401

HOTCHAND CHANDUMAL,
for Commissioner in Sind.

APPENDIX C.

(Vide paragraph 2.)

District.	Number of talukas in which Survey Work was done.	Number of Survey Numbers received for examination and entry in the Survey Records, including previous year's balance.	Number of Survey Numbers returned after making entries in the Survey Records, f. e. maps and registers.	Number of Survey Numbers returned without entry in the Survey Records with list of errors.	Arrears at the end of the year.	Remarks.
1	2	3	4	5	6	7
Karachi ...	10	5,941	3,744	2,197	...	
Hyderabad ...	7	3,831	2,295	1,546	...	
Sukkur ...	8	3,418	2,227	1,191	...	
Larkana ...	11	2,412	1,435	977	...	
Upper Sind Frontier ...	5	1,212	847	365	...	
Thar and Parkar ...	9	1,175	682	493	...	
Nawabshah ...	7	2,459	1,588	871	...	
Total for 1916-1917...	57	20,448	12,808	7,640	...	
Total for 1915-1916 ...	59	25,588	12,743	12,305	540	

APPENDIX D.

Statement showing the test of Tapadars' and Supervising Tapadars' inspection work by Sub-Divisional Officers in the district during the year 1916-17.

Name of District.	Number of dehs.		Number of dehs in which boundary marks repair was examined.	Number of Survey Numbers in which crop and tenancy record was checked.		Number of dehs in which birth and death registers were checked.	Number of entries checked in Village Forms I-C and I-D.	Remarks.
	Total in the district.	Number visited during the year.		Tapadars' work.	Supervising Tapadars' work.			
1	2	3	4	5	6	7	8	9
Karachi ...	797	440	26	5,388	676	162	2,158	
Hyderabad ...	925	593	75	12,530	2,614	87	14,673	
Thar and Parkar ...	963	776	76	31,540 A. K. + 1,563 85 Bigoti measurement.	4,136	890	11,556	
Nawabshah ...	761	404	43	14,063	2,803	106	5,817	
Larkana ...	754	626	242	12,065	936*	163	13,641	*Record of this test was not properly maintained.
Sukkur ...	711	422	48	11,024	2,838	211	8,806	
Upper Sind Frontier ...	430	406	56	8,895 A. K. + 943 10 Bighoti measurement.	1,367	148	864	

HOTCHAND CHANDUMAL,
for Commissioner in Sind.

Department of Land Records.

Report of the — in the Bombay Presidency,
including Sind, for the year 1916-17.

GOVERNMENT OF BOMBAY.

REVENUE DEPARTMENT.

Resolution No. 8994.

Bombay Castle, 3rd September 1918.

Letter from the Settlement Commissioner and Director of Land Records No. A.D.—44 dated 25th February 1918—Submitting, for approval, a proof copy of the Report of the Department of Land Records in the Bombay Presidency for the year 1916-17; and making remarks.

Government memorandum* No. 2897 dated 25th March 1918 to the Settlement Commissioner and Director of Land Records.

Letter* from the Settlement Commissioner and Director of Land Records No. A.D.P.R.IV dated 10th May 1918.

RESOLUTION.—The report submitted by the Department of Land Records on the work of the year 1916-17 gives evidence of continued activity and enterprise within the wide field over which its various operations extend. Expansion in some directions has been retarded by the limitations imposed on expenditure during the war, but on the other hand considerable attention has been paid to the improvement of methods of land survey and record of titles in order to secure greater expedition and accuracy and to effect reduction in the cost of operations. Amongst the improvements recently introduced or further extended during the year may be mentioned the minor triangulation system of village survey, which provides a simple and inexpensive survey of occupancies based on a permanent framework. The principal advantage claimed for this system is that it permits of the recording of changes with greater ease and promptitude than was possible under the more complicated and less stable system followed by the old Survey Department. The whole procedure of survey, record of title to property, and preparation of maps for urban areas has undergone complete revision, and the new methods are set forth in full detail in a Manual of City Survey prepared by Mr. Anderson and published by Government. A third important improvement which has been gradually evolved during the last few years is the plane table system for the survey of sub-divisions of survey numbers. It is now established beyond doubt that the results obtained thereby are more accurate, less expensive and of greater utility both to the land holder and to Government than the results of the methods of survey hitherto followed.

2. Every succeeding annual report bears testimony to the increasing reliability and popularity of the Record of Rights. The administrative advantages which followed from its successful introduction in Government villages led to the extension of the record to agricultural lands in inam villages and to surveyed towns and village sites. During the year under review the record was promulgated in numerous inam villages and introduced in the surveyed sites of Godhra, Sholapur, Bārsi, Ahmednagar and Gadag. The accuracy of the Record of Rights of agricultural holdings increases with the extension of the sub-division survey which provides for each holding, however small, an accurate plan giving the correct area and the proportionate assessment worked out on scientific principles in place of the rough estimates hitherto entered in the record. At the same time the inquiries made on the spot by the surveyors in the presence of the cultivators afford material for the revision of the record. It has therefore been the practice to arrange that the revision of the record should follow the completion of the survey, and it is satisfactory to note that where this arrangement has been effected, a very high standard of accuracy has been attained. The re-writing of the record was in progress and was completed in several talukas in all three divisions of

*Not printed.

the Presidency proper, and this revision appears to be well up-to-date save where, as indicated above, revision operations have been postponed pending the completion of the sub-division survey. In the review of last year's report Government expressed the opinion that the present methods of quinquennial revision could, in all probability, be greatly improved in the light of accumulated experience. They trust that the Commissioners will not suffer this question to escape their attention. There are indications that the form of the record requires further adaptation to the peculiar and complex conditions of holdings in the Konkan, but it is probable that no definite proposals can be formulated until the completion of the sub-division survey.

3. The phalni parties displayed considerable activity in the measurement and mapping of sub-divisions and in the distribution of assessments. The value of this survey as ancillary to the accurate maintenance of the Record of Rights has already been referred to. It has a further utility in exposing the inaccuracies of measurement or classification which may have occurred during the settlement surveys. During the year under review the total number of sub-divisions dealt with was 5,04,196 compared with 4,85,610 in the preceding year. It is satisfactory to note that the maintenance of this survey is receiving due attention. In the Central Division some 11,800 new sub-divisions which were made since the completion of the first operations were dealt with by special measurers, and though separate figures are not given for the other divisions of the Presidency, it is presumed that the same measure of attention is being paid to maintenance in these areas also. The Director is confident that the work of maintenance can be undertaken by each talati for the group of villages in his charge, and with this object in view efforts are being made to impart the necessary instructions. How far the maintenance can be safely entrusted to this agency is still a matter of experiment, but it would appear that if the method proves successful, the operations will be conducted with greater celerity and at less expense to the land-holders than under the present system of itinerant surveyors. The sub-division survey in the Northern Division has been completed in the Surat and Broach districts, in the greater part of Kaira, and over a considerable area of Thána. It is estimated that two or three years will be required to complete the work in this Division. In the Central Division, Khándesh, the greater part of Poona and Nagar, and portions of the remaining districts have come under the survey, which it will take about five years to bring to a close. In the Southern Division the work is complete in Dhárwár, Bijápúr and the greater part of Ratnágiri and in parts of Belgaum and Kolába. In this Division there remains work for the phalni parties for three years. After the completion of these operations it will be possible, if conditions then permit, to take up the important work of mapping and of recording rights in holdings in village sites.

4. The survey of the larger towns with the consequent inquiry into titles and the preparation of property registers and maps was continued during the year. In the Northern Division no new surveys were introduced, but the inquiry work in Nadiád, Anand and Borsad was complete, and a revision of the old survey of Ahmedabad was undertaken. In the Central Division city surveys were introduced in Násik and Bhusáwal in accordance with the improved system, while inquiry work was completed in Manmád and almost completed in the city of Poona. In the Southern Division the city survey of Ránebennur was completed. New surveys were introduced in Sháhápúr (Sángli State) and Byádgi, while the enquiry work was brought to a close in Belgaum. Proposals were also submitted for the resurvey of Dhárwár, as neglect to maintain the records of the old survey had necessitated a complete revision. It is satisfactory to observe that due attention is now paid to the proper maintenance of the records after the completion of the survey and enquiry operations. The fate of the neglected surveys in Bombay, Poona, Ahmedabad, Surat and other towns, which were dealt with many years ago, indicates the importance of recording with promptitude all alterations which may occur within the surveyed area.

5. The survey of inam villages and estates, which constituted the proper duty of the permanent field parties, has since the outbreak of war been cur-

tailed for reasons of economy, and the parties have generally been drafted to city survey and sub-division work, the cost of which is recoverable. During the year 1916-17 the principal settlement work performed was the survey of 17 talukdari villages in the Northern Division and of one taluka of the Miraj (Junior) State by the Central Division field party. In the Southern Division the party carried out measurement and classification work in 29 villages of three talukas of the Kurundwad State. Settlement reports for Matar and Mehmedabad talukas in the Kaira district were submitted to Government, and the second revision settlement was introduced in the Mawal taluka of the Poona district. The Divisional Superintendents also submitted reports dealing with the settlement of 39 inam villages in the Presidency proper, while settlements (original or revision) were introduced into 92 inam villages.

6. The district survey offices continued to work satisfactorily. In many districts heavy work was imposed on the staff in connection with the disposal of the records of the sub-division survey and the corrections required by the discovery of errors in the old survey papers. As usual the work of Circle Inspectors is variously reported on, but the majority of opinions points to an improvement in their efficiency. By a recent revision of the rules governing the subordinate revenue establishment it is now possible for selected men to pass from the lower to the upper branch, and the ordinary Circle Inspector has thus more incentive towards good work than in the past. The Commissioners have been directed to consider what further improvements can be effected in the Revenue establishments, and it will be convenient at the same time to enquire whether more satisfactory arrangements can be made to organise an efficient staff of Circle Inspectors.

7. The Governor in Council desires to record his appreciation of the zeal and enterprise shown by Mr. Anderson in the administration of the departments committed to his control.

8. In Sind, revision settlements were introduced during the year into seven talukas and a portion of an eighth, while proposals for the settlement of three whole talukas and parts of three talukas under the Jamrao Canal were under consideration. The work of the Record Office is satisfactorily reported on, and it appears that a marked improvement has been effected in the survey work of the tapedars, as the percentage of cases in which errors were detected fell from nearly 50 in the previous year to 37 per cent. in the year 1916-17.

Government have now under their consideration certain proposals directed towards the amelioration of the position and prospects of the village staff in Sind, and it is hoped that, under the improved conditions, a higher standard of efficiency will be attained. Amongst other work done by the Department in Sind may be noticed the city survey and enquiry which was in progress throughout the year in Shikarpur. The Record of Rights was due for re-writing in eight talukas, but the operations were carried on in three talukas only, postponements being sanctioned elsewhere for various reasons. The Record is reported to have reached a fair standard of accuracy. The introduction of the Record of Rights Manual and a regularised imposition of fees for failure to register mutations appear to have materially contributed to this result.

A. F. L. BRAYNE,

Under Secretary to Government.

G. R. No. 8994, R. D., dated 3rd September 1918.

To

The Commissioner in Sind,
The Commissioner, N. D.,
The Commissioner, C. D.,
The Commissioner, S. D.,

All Collectors, including the Deputy
Commissioner, Upper Sind Frontier,

The Settlement Commissioner and
Director of Land Records,
The Accountant General,
F. G. H. Anderson, Esq., I.C.S.,
*The Government of India,
*The Under Secretary of State for India.

*By letter.

No.

of 1918.

Copy forwarded for information and guidance to