M.R.O. 1—39,000—16-10-29.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No.	309	Press / Mis.
59-60 Dated	4 - 2 -	No 1868

Not to be folded or roughly handled

V/13

Proceedings of the Madras Government, Revenue Department, 4th February 1868.

No. 59. Read the following Proceedings of the Board of Revenue, dated 17th October 1867, No. 6,761 :—

Read the following letter from the Officiating Director of Revenue Settlement, to the Secretary to the Board of Revenue, dated Madras, 10th May 1867, No. 645-19.

ABSTRACT.—Submitting the usual report of the Settlement operations during the year 1866, and forwarding a report from the Superintendent of Revenue Survey on the work of his department for the same period.

Read also the following letter from the same Officer, dated 22nd August 1867, No. 1,021-29.

1. Referring to paragraph 8 of my letter of the 10th May last, No. 645, in which I stated my inability, in the absence of returns, to give the results of the new Settlement in Kurnool proper, and promised to forward the information when received, I have now the honor to furnish the required particulars.

2. Altogether, 143 villages in the three talooks of Ramalkotah, Nundikotcoor, and Nundial were settled in Fusly 1274, that is to say, the Settlement was introduced and the tickets were distributed in that Fusly, the new assessment actually taking effect from the commencement of Fusly 1275. The occupied area and the Jammahbundy Beriz for Fusly 1274 in these 143 villages, were 2,37,510 acres and Rupees 2,61,227, respectively. The application of the Settlement rates to the Survey areas of the above, resulted in an aggregate area of 2,68,404 acres, and an assessment of Rupees 2,79,683. The actual Settlement demand for Fusly 1275, after allowing for relinquishments and new cultivation, was Rupees 2,64,757 on 2,45,387 acres. For Fusly 1276, the figures were Rupees 2,67,855 and 2,49,888 acres, exhibiting an increase in the assessment of Rupees 6,628, or two and a half per cent., over the revenue beriz of the year prior to the introduction of the new Settlement. The increase in the area under occupation, is partly owing to the excess found by Survey measurement, and not entirely attributable to new cultivation.

3. In Fusly 1275, 111 villages in the three talooks above named, and in Sirwell, were settled, and the new rates were brought into force from the commencement of Fusly 1276. For Fusly 1275, the area occupied in these villages, according to the Revenue accounts, was 1,64,613 acres, and the assessment Rupees 2,34,138. According to Survey measurement, the area was 1,80,887 acres, and the assessment at Settlement rates Rupees 2,31,580. The actual results for Fusly 1276, after relinquishments, &c., were 1,74,707 acres, and Rupees 2,26,312.

4. Taking the 254 settled villages together, we find that the occupied area in Fusly 1276, is 4,24,595 acres, bearing an assessment of Rupees 4,94,167, compared with an area (according to the Revenue accounts) of 4,02,123 acres, and an assessment of Rupees 4,95,365 in the year prior to the introduction of the new Settlement. These results will, I trust, be accepted as satisfactory.

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1. Ordered that the foregoing reports be submitted to Government. The Board will give a brief outline of the main features of the report.

Firstly.—Of the operations of the Settlement Department.

2. South Arcot.—The number of villages in the Chidambram talook has been increased by nine; thirteen villages having been transferred from it to Trichinopoly, and twenty-two added to it from the same district. The result of the Settlement of the talook in Fusly 1276 shews a falling off both in extent and assessment, as shewn in the margin, and no reason is assigned for this decrease, notwithstanding there was an addition of nine villages to the talook in the Fusly.

Fusly.	Extent. Acres.	Assessment. Rupees.
1276 ...	1,29,515	5,19,397
1275 ...	1,30,038	5,31,645
Decrease ...	523	12,248

3. Godavery District.—A comparison of the demands for Fusly 1276 with those for the preceding year, in the Western Delta talooks, in which portions only of this district the Settlement had then come into operation, shews a decrease of Rupees 82,587. In each previous year since the introduction of the Settlement there had been a steady increase, and the falling off is explained, as owing to the repugnance of the ryots to the water-rate, which they regard as unjust, and which for some unknown reason they have been led to suppose would be further raised from 3 to 8 Rupees if acceded to without objection. Many have consequently given up their lands, the late bad season having still further increased this discontent.

4. As soon as they become aware that Government will not be influenced by the course of procedure adopted by them, they will doubtless again take up and cultivate their lands. This relinquishment of lands has been confined to the Tanuku and Undi talooks, and has amounted to 4,390 acres in the former, and 12,496 acres in the latter.

5. In the Eastern and Central Deltas, and the Upland talooks of the Godavery District, the new Settlement came into operation at the commencement of Fusly 1276. The result is a decrease of Rupees 1,44,226, or nine per cent. below the Joint-rents of Fusly 1275; but an increase of Rupees 2,54,093, or twenty-one per cent., over the revenue beriz of Fusly 1269, on the accounts of which the Settlement calculations were based. The cause of the resignation of lands is said to have been the same in this case as in the Western Delta.

6. Kurnool.—From the second letter recorded at the head of these Proceedings, it will be seen that the new Settlement rates were introduced in 143 villages in Fusly 1275, and in 111 villages in Fusly 1276. The total number of villages thus brought under the new Settlement is 254 out of 371 comprised in the four talooks of Ramalkotah, Nundikotcoor, Nundial, and Sirwell. The occupied area in the 254 villages, during Fusly 1276, was 4,24,595 acres, bearing an assessment of Rupees 4,94,167, against 4,02,123 acres, assessed at Rupees 4,95,365 in Fusly 1275. The result of the Settlement may be considered satisfactory.

7. Kistna District, *Masulipatam Division.*—The introduction of the new Settlement in 1276 has, as in the Godavery, caused large relinquishments of land. Much land has, however, been newly taken up, and on the 30th September 1866 the demand stood at Rupees 6,50,441, against Rupees 5,79,350, the revenue beriz of Fusly 1275. Had no lands been given up, the introduction of the Settlement would have resulted in an assessment of Rupees 8,77,959, an increase of Rupees 2,98,609, or 51¼ per cent.

8. Trichinopoly.—The Settlement was introduced into this district in Fusly 1274, and the assessment for that year shewed a reduction of Rupees 3,88,056.

Proceedings of the Madras Government, Revenue Department, 4th February 1868.

Since then, however, there has been a steady increase, and the assessment for Fusly 1276 amounts to Rupees 13,25,239, against Rupees 15,82,174 for Fusly 1273, shewing a reduction of the deficit noted in 1274 from Rupees 3,88,056 to Rs. 2,56,935.

Proposals for the Settlement of other Districts.

9. Salem.—Proposals for the Settlement of Talaghat, Baramahal, and Balaghat divisions of this district are about to be submitted to Government.

10. Kistna District.—The Survey areas of Guntoor division are still incomplete, and those of the Palnad talook are not yet furnished. Good progress, however, has been made in the preparation of the Settlement Report.

11. Scene of operation in 1866.—The operations were limited to the Districts of Kistna, Kurnool, and Cuddapah, and consisted of demarcation and classification combined. In the Kistna District the re-classification of the villages for which the accounts were lost in the cyclone, was completed by the extra party organized for the purpose.

12. Compared with the preceding year, the total out-turn of work and cost in 1866 was as follows:—

	1865.		1866.	
	Square miles.	Amount in Rupees.	Square miles.	Amount in Rupees.
Demarcation	1,696	1,41,056	1,241	95,343
Classification and assessment ...	1,367	1,80,972	1,450	1,44,024
		3,22,028		2,39,367
Charges not debitable to parties including Settlement Establishments under Collectors of Nellore and Tinnevelly	.....	30,985	.....	47,841
Total expenditure ...	.....	3,53,013	.....	2,87,208

The decrease in the area demarcated is owing to the breaking up of the parties working in Tinnevelly and Coimbatore, and the cessation of operations in those districts. The area classified is in excess of the previous year's out-turn by 83 square miles, and was chiefly performed in Kurnool. In the statement appended to paragraph 14 of the Report, the extent in square miles demarcated and classified has not been given for some of the districts, and the Board do not understand the reason of this. The Officiating Director of Revenue Settlement will be requested to explain the matter.

13. The expenditure of the year excluding Rupees 47,841, the particulars of which are shewn in the margin, is less than that of the previous year (*minus* a charge of 30,985 of the same nature) by Rupees 82,661. The decrease is owing to reductions of establishments in Coimbatore, Salem, and Tinnevelly.

Charges not debitable to parties.	Rs.
Tinnevelly and Nellore District Settlement Establishments ...	38,669
Madras Deputy Collector ...	1,050
Vizagapatam Establishment ...	173
Pay of Mr. Symonds and Assistant	5,007
Madras Demarcation Establishment	1,524
Cloth for mounting Map ...	1,418
Total ...	47,841

14. The total expenditure was less than the sanctioned estimate by Rupees 1,04,459. In paragraphs 16 to

26 of his first letter, Mr. Master details the work performed in the different districts, and the expenditure incurred in each case. These will be noticed below:—

15. GODAVERY.—The work in this district has consisted of the completion of the introduction of the new Settlement, the results of which have been noted above. The expenditure is in excess of that of the previous year, and this is to be accounted for by the entertainment of additional officers and establishments for the purpose of the Settlement, the cost of printing Registers, and other such items.

16. In addition to the work entailed by the Settlement, considerable progress has been made in the demarcation, classifications, and assessment of land hitherto undemarcated, but now taken up for cultivation.

17. KISTNA.—The introduction of the Settlement into this district, and the restoration of records, &c., destroyed in the cyclone of 1864, have formed the chief work of the past year. Land amounting to 90,788 acres was re-classified, while 31,671 acres were newly classified, and 34,887 acres newly demarcated.

18. KURNOOL AND CUDDAPAH.—The operations of the year were confined almost exclusively to Kurnool, and it is satisfactory to observe that, in spite of many obstacles, the out-turn of work is in excess of that of the previous year. The Budwail talook of Cuddapah was taken up towards the end of December.

19. NELLORE.—A small office and field establishment was maintained during a portion of the year for the correction of defects in the demarcation. This, it appears, has been dispensed with.

20. TRICHINOPOLY.—The work in this district appears to have been preparing Settlement Registers and Village Survey Maps. The party employed in this work has since been broken up. All the records connected with the Settlement of the district have been made over to the Collector on the abolition of the Settlement Office.

21. SALEM.—An expenditure of Rupees 19,433 is entered under classification and assessment, but the extent classified is not given, nor does the Director explain what particular works was performed during the year.

22. TINNEVELLY.—The expenditure in this district was incurred for a small establishment employed under the orders of the Collector and of the Survey Department in correcting and revising demarcation.

23. COIMBATORE.—During the past year the few villages still remaining to be demarcated by the Settlement Department were completed and handed over to the Survey Department.

24. On the whole 307 villages, comprising an area of 1,741 square miles, were demarcated and made over to the Survey Department during the year. Survey areas were received for 973 villages, comprising 2,447 square miles.

25. SURVEY DEPARTMENT.—Survey operations were carried on in the following districts during the year 1866:—

Coimbatore and Salem	Party No. 1
Kurnool	,, 2
Cuddapah and Kistna	,, 3
Tinnevelly...	,, 4
Nelloro	,, 5

26. PARTY No. 1.—The area surveyed was 854·93 square miles, at a cost of Rupees 88,491-6-10, which gives a little more than 103 Rupees per square mile, or about 17 Rupees per square mile less than the cost of the operations of the same party as shewn in last year's report. Of the five talooks remaining unsurveyed in the beginning of the year, two, viz., Tripatore and Kistnagherry, have been completed. A corrected Map of the Shevaroys has been completed shewing every estate. A Map of the Cantonment of Trichinopoly has also been completed.

27. PARTY No. 2.—The area surveyed was 541·20 square miles, at a cost of Rupees 77,733-5-10, being about 143 Rupees per square mile, or about 7 Rupees per square mile, less than the cost of the operations of this party in 1865. The season is reported as having been very unfavorable. Famine, fever, and cholera have impeded the progress of work.

28. PARTY No. 3.—The head-quarters of this party were removed in April from Guntoor to Cuddapah, leaving a branch office at the former place, the work of which was nearly completed. 824·26 square miles were surveyed in Cuddapah at a cost of Rupees 77,185-0-2. In the Kistna District the field areas of 113 villages, comprising 727·47 square miles, were ready for Settlement purposes, and the Settlement Department was also furnished with the areas of eight villages, (48·25 square miles,) the records of which were lost during the cyclone at Masulipatam.

29. PARTY No. 4.—The area surveyed was 327·29 square miles, at a cost of Rupees 67,193-13-4, giving an average of Rupees 205 per square mile, while the cost of the operations in 1864 and 1865 averaged Rupees 97¾ and Rupees 153 per square mile respectively. The small amount of work done, and its greatly increased cost, are attributed to the bad demarcation in the Southern Talooks, to which the work has hitherto been confined. It is anticipated that in the Northern Talooks, when the demarcation is more complete, the expense will be considerably reduced, and that in the end the average cost per square mile for the whole district will not be much in excess of the estimate.

30. PARTY No. 5.—Surveyed 166·90 square miles in Nellore, completing the survey of district. In the statement shewing the area surveyed and cost incurred, appended to Major Hessey's report, the area surveyed in the two districts of Nellore and Madras is given at 166·90 square miles, at a cost of Rupees 72,617-9-8; but from paragraph 61 of the Report, it appears that the entire extent belongs to the single district of Nellore. The cost, however, appears to include that for Madras also. The Deputy Superintendent, Revenue Survey, should have excluded from the statement, charges on account of Madras, and shewn separately.

31. NEILGHERRY SURVEY. (*Waste Lands*).—During the past year fourteen blocks of land, containing 1,547·06 acres, have been surveyed under the Waste Land Rules, at a cost of Rupees 89-1-2, or an average of 11 Pice per acre.

Survey for Neilgherry Hill Settlement.

32. The detailed survey of Ootacamund, Coonoor, and Kotagherry, ordered in Government Order, No. 425, dated 17th February 1866, has been commenced. The Surveyors have had to demarcate as well as survey; and the demarcation is being carefully performed. The boundaries of Coonoor and Ootacamund have been marked out, and the former surveyed as well.

33. The Maps of Coonoor and Ootacamund are being prepared on a large scale, 220 feet to an inch for the former, and 110 feet to an inch for the latter. This has been rendered necessary by the small size of the different holdings.

34. It is suggested for the consideration of Government whether a *plane* survey, which does not shew the inequalities of the ground, will be sufficient, or whether it will be desirable that all the features of the country should be shewn.

35. Coorg Survey.—The Deputy Superintendent Revenue Survey states that a report of the progress of this survey will be made to the Commissioner for the affairs of Coorg. Four Surveyors belonging to No. 1 Party were temporarily employed in Coorg, but have since rejoined No. 1 Party on the Neilgherry Hills.

36. Wynaad Coffee Estate Survey.—No progress appears to have been made in this estate.

37. Purlah Kimedy Survey.—This party is now broken up. The Survey operations having been completed under the orders of Mr. Cardozo, maps and records of 559 villages have been handed over to the Collector for Settlement purposes. The total area surveyed is 544·09 square miles at a cost of Rs. 98,593-8-6, or Rupees 181-3-3 per mile.

38. The total area measured by the first four parties already mentioned, viz., those employed in Coimbatore, Kurnool, Cuddapah, and Tinnevelly, was 2,547·68 square miles at a cost of Rupees 3,10,603-10-2, or nearly 122 Rupees per square mile.

39. Central Office.—The expenditure (chiefly on account of Talook Maps and checking accounts) was Rupees 38,271-4-6. The Lithographic Press turned out one Talook Map and 903 Village Maps.

40. Demarcation.—Previous to 1865 the work of demarcation had been in the hands of the Settlement, and on the promulgation of Government Order, dated 12th December 1864, No. 2,243, ordering that this work should in future fall to the Survey Department, it was arranged between the Heads of the two Departments that works already commenced should be completed by the Settlement Department. It has, therefore, followed that it was not till the close of 1865 that demarcation parties were organized by the Survey Department, and of these, two have been in operation during the past year, one in the district of Madras, the other in Ganjam.

41. The Madras party was placed under the orders of Lieutenant Cloeté, First Assistant Superintendent of Revenue Survey. It was nominally attached to No. 5 Revenue Survey Party, but the frequent reference rendered necessary by the change in the system of demarcation made it advisable that it should receive orders direct from the Central Office. The talook of Sydapet was selected as the opening scene of operations because it was the most difficult to work in, and it was considered that after the party had gained experience, then the demarcation of other talooks would prove comparatively easy. Its proximity to Madras, moreover, facilitated the inspection of the work.

42. During the year the demarcation in 105 villages of Sydapet Talook was completed, and progress had been made in 107 others. In Trivellore, work had been commenced in twenty-one villages, and the total expenditure of the party was Rupees 42,920-15-9 including salary of establishment. The average cost per

mile was Rupees 195-15-9, a very high rate, which is explained thus. The stone for demarcation was difficult to obtain, and for the first few months little was done, as the men were learning their work. The demarcation is also stated to have been performed in a much more complete manner than elsewhere. It is expected that the cost will be materially diminished in succeeding years.

43. The work appears to have been very carefully performed, all the boundaries being permanently marked with stones, bearing distinguishing marks, varied in accordance with the nature of land demarcated. Where several small holdings adjoined one another, the system of clubbing was adopted, but was much opposed, and the adoption of this system has tended to make the demarcation unpopular.

44. Only those station stones for boundaries of villages and for sub-divisions of villages have been charged to Government. All other demarcation marks, as well as the cost of imbedding the station stones in brick and mortar, have been debited to the villagers. Each ryot has been charged for the demarcation of his own holding and for a portion of the demarcation expenses of the village, calculated on his interest in the lands of the village.

45. The cost to the ryots has been 13 Annas per acre of cultivated land, a rate which appears to the Board to be excessive. At the close of the year the Sydapet Talook was completed with the exception of 10 square miles, and operations had been commenced in Trivellore.

46. Ganjam.—This party was placed under the orders of Mr. H. O. Cardozo, who did duty for a short time with the Madras party in order to acquaint himself with the mode of work. The total area demarcated in Ganjam was 87·79 square miles, and the total expenditure Rupees 10,739-15-2, or Rupees 122-5-4 per mile.

47. As the holdings are of large size, the system of clubbing has not been resorted to, and, in consequence, no opposition has been experienced from the ryots. Otherwise the demarcation has been conducted on the same principles as that in the Madras District, and the same difficulty has been experienced in the want of stones. The work was confined to the Chicacole Talook, thirty-nine villages having been completed, and progress reported in twenty-two.

48. The original reports from Lieutenant Cloeté and Mr. Cardozo have been forwarded with Major Hessey's report, and are submitted herewith to Government.

No. 60. Order thereon, 4th February 1868, No. 309.

Land Revenue.

1. Ordered to be recorded.

2. The Government trust that efforts will be made to submit these reports in future more speedily, after the expiration of the year to which they refer.

3. They anticipate more favorable results from the Godavery and Kistna Districts for the year now expiring, than those reported. The progress in Trichinopoly and the results in Kurnool are satisfactory. The Collector of South Arcot should have been required to explain the falling off in the Chidambram Talook.

4. As regards the question whether a *plane* survey not shewing the inequalities of the ground, hills, and valleys, will suffice for the hill stations on the Nilgiris, the Government are of opinion that looking to the facilities which the more elaborate survey will afford for disposing of questions relating to conservancy, drainage, the

Proceedings of the Madras Government, Revenue Department, 4th February 1868.

laying out of roads, and the appropriation of building sites and Government land, it would be advisable *not* to record the field-work in the comparatively imperfect form of a *plane* survey; but they desire to have the question submitted to them by Lieutenant-Colonel Priestley in fuller detail, and with explanation of relative cost and time required for either plan, in a separate communication.

5. The subject should not have been brought forward incidentally in a progress report.

(True Extract.)

(Signed) W. HUDLESTON,

Secretary to Government.

To the Board of Revenue.
„ the Officiating Director of Revenue Settlement.
„ the Superintendent of Revenue Survey.

Exd. S. T. Augustin.

REVENUE SURVEY OFFICE
Chepauk, 26th April 1867.

No. $\frac{750}{13}$.

From

LIEUTENANT COLONEL F. J. B. PRIESTLEY,
Superintendent, Revenue Survey.

To

R. E. MASTER, ESQ.,
Officiating Director, Revenue Settlement.

SIR,

Major Hessey having been in charge of the Survey to so late a date in 1866, and of Demarcation till the end of the year, I have thought it best to forward his Report as received. I purpose, however, at an early date, addressing the Board of Revenue on the subject of the Demarcation as at present performed. I have, therefore, omitted the paragraphs relating to that process, reserving their transmission till then.

2. During my absence, on sick leave, Major Hessey has acted for me, and to him is due the credit of placing Demarcation on such an efficient footing. He has also introduced into the Survey some beneficial changes in details, and has drawn up a Code of Rules for the guidance of the Demarcation Department. He has, moreover, revised and re-arranged the Rules for the Revenue Survey.

3. The greatest zeal and energy in the superintendence of the Department has been shewn by him, and I beg leave to record my obligation for the efficient manner he has performed the duties that devolved on him during my absence.

I have, &c.

(Signed) F. J. B. PRIESTLEY, Lieut. Colonel,
Superintendent Revenue Survey.

REPORT

ON THE

REVENUE SURVEY AND DEMARCATION OF THE MADRAS PRESIDENCY,

From 1st January to 31st December 1866.

NO. 1 REVENUE SURVEY—COIMBATORE AND SALEM.—No. 1 Revenue Survey Party has been under the charge of Mr. W. Beaumont. During the greater part of the year, he had but one Assistant, Lieutenant Baynes; Lieutenant Francklyne joined him as Probationer on 19th November 1866.

2. The Party has been employed in the Salem and Coimbatore districts.

3. In Salem the field areas of two talooks, Tripatoor and Kistnagherry, have been completed, and the Village Maps of the former talook have had topographical details inserted.

4. At the close of the year, the amount of work mentioned below remained to be completed in the Salem district:—

Plotting to be closed.

Salem	4 villages.
Oottengari	7 do.
	11 villages.

Topographical details to be inserted.

Salem	9 villages.
Oottengari	56 do.
	65 villages.

5. In the Report for 1865, it was mentioned that several villages, which had originally been excluded from Survey, had, under the authority of Proceedings of Board of Revenue, been taken up for Survey. Of the villages mentioned in the margin, the field plotting in 186 has been closed, and the field areas are in readiness for the Settlement Department.

No. 882 of 6th February 1866.
Villages originally excluded from Survey.

	Villages.
Salem	9
Oottengari	128
Tripatoor	12
Kistnagherry	11
Ossoor...	142
Total.....	302

6. Out of the villages originally selected by the Deputy Director of Revenue Settlement for Survey and Settlement, seven only remain unclosed.

7. The Collector of the district considered it advisable that the extent of land on the Shervaroy Hills, in possession of Malayallies, or to be reserved for their use, should be marked out and surveyed. This work has accordingly been taken in hand. The boundaries of thirty-four villages have been surveyed, and those of three remain to be completed.

Proceedings Board of Revenue, No. 2,552 of 12th April 1866.

8. In the Coimbatore district, the field plotting of all but one village has been completed in the Coimbatore talook.

9. In the Pulladam talook, work has progressed but slowly, owing to the inferior quality of the Demarcation. The original measurements have been found to need much correction.

10. The boundaries of all villages in the Sattimungalam talook have been run, and the field measurements of all but two villages completed.

11. In Perundorai, Surveyors were at work at the close of the year. Up to that time the boundaries of 151 villages had been run, and the field measurements completed in eighty villages.

12. Progress of No. 1 Party (in the plains)

	Villages.	Sq. Miles.
Boundaries traversed	419	854·93
Fields measured	202	529·17
Field plotting completed	563	1,196·99
Topographical details inserted	445	544·78
Maps completed and sent to Central Office ...	601	826·36
Field areas ready for Settlement purposes ...	731	1,029·04
Minor circuits traversed	No. 2,627	
Shervaroy Hills.		
Estates and waste land blocks surveyed ...	46	0·11
Reserved lands for Malayallies surveyed ...	34	7·57

13. The expenditure, during the year, has been Rupees 88,170-14-10; excluding Shervaroy Hills, Rupees 1,625-5-5. The average expenditure per square-mile in four talooks completed has been Rupees 112-3-2.

14. The difficulties met with in the Salem and Coimbatore districts have been detailed in previous Reports; the large cost has certainly not been owing to want of energy on the part of Mr. W. Beaumont.

15. Several Talook Maps are in progress, but none have been completed during the year.

16. The Survey on the Shervaroy Hills has been connected with 11 G. T. Stations. The average error is 2·1 feet per mile.

17. Fines to the amount of Rupees 151 have been inflicted under the Boundary Act. No person has been imprisoned in default of payment.

18. The year 1866 has been very unhealthy, many of the subordinates have suffered severely.

19. A connected Map of the Shervaroys, on the scale of eight inches to the mile, has been completed. In this every estate has been shown.

20. A Map of the Cantonment of Trichinopoly has also been completed, agreeably to orders of Board of Revenue, No. 5,588 of the 11th August 1866.

No. 2 REVENUE SURVEY—KURNOOL.—21. No. 2 Revenue Survey Party has been under the superintendence of Mr. J. H. Wright, assisted by Mr. T. A. Tomlinson.

22. It has been employed in the Kurnool district. The greater portion of the party has been in the Patticondah talook, but there have been detachments in other talooks also; the Nundikotakur talook has been completed.

23. The total out-turn of the party is given below:—

	Villages.	Sq. miles.
Boundaries traversed	59	541·20
Fields measured	37	509·94
Field plotting completed	86	560·64
Topographical details inserted	111	517·22
Maps completed and sent to Central Office ...	100	656·60
Field areas ready for Settlement purposes ...	121	643·40
Minor circuits traversed	No. 2,192	

24. It was mentioned in the Report for 1865, paragraph 21, that the strength of the party had been distributed along the line of the Irrigation Canal, surveying villages said to be likely to be irrigated within a short time. Several talooks are, therefore, in a partially complete state. It is hoped that a few months will see them quite finished.

25. The total expenditure during the year has been Rupees 83,574-12-10.

26. The season has been very unfavourable. Famine, fever, and cholera have impeded the progress of work. From May to August cholera raged in the district; from August to the close of the year, fever of very virulent type prevailed. Only nine men died, but many have had their health much shaken.

27. Three Talook Maps are in progress, and will soon be completed.

28. Fines have been inflicted under the Boundary Act, amounting to Rupees 76-8-0.

No. 3 REVENUE SURVEY—CUDDAPAH AND KISTNA.—29. No. 3 Survey Party has been employed in the Kistna and Cuddapah districts. About the middle of April the head-quarters were removed from Guntur to Cuddapah, leaving a branch Office at the former station in charge of Mr. Gompertz, Assistant Superintendent, Revenue Survey.

30. The detachment at Cuddapah was under Mr. J. J. Tomlinson, till it was taken charge of by Colonel Crewe. There was only one Assistant throughout the year attached to this district.

9th May 1866.

31. During the year the boundary and field Survey of the Jammalmadagoo and Poddatoor talooks was completed, and work commenced in the Cuddapah talook.

32. The progress of the Survey during the year is given below:—

	Villages.	Sq. Miles.
Boundaries traversed	120	824·26
Fields measured	101	480·68
Field plotting completed	92	398·50
Minor circuits traversed	No. 2,107	

33. The expenditure amounts to Rupees 52,527-3-3.

34. The out-turn is small, and the cost consequently high; but this is attributable to a large proportion of both Field and Office Establishments having been prostrated by fever.

35. Fines under Act XXVIII of 1860 have been inflicted, amounting to Rupees 122.

36. In the Kistna district additional fields, to the extent of 31·96 square-miles, have been measured.

37. The work of the branch Office at Guntur has been nearly brought to a close, and what remained to be performed at the close of the year will be completed by the middle of April.

38. The amount of work done during the year is as follows :—

	Villages.	Sq. Miles.
Topographical details inserted	242	1,569·17
Maps completed and sent to Central Office ...	117	810·49
Field areas ready for Settlement purposes ...	113	727·47

39. The Settlement Department has also been furnished with areas of eight villages (48·25 square-miles), the records of which were lost during the inundation at Masulipatam.

40. The expenditure, during the year, on account of the branch Office is Rupees 36,752-7-0.

41. The Nundigama Talook Map has been completed and sent to the Central Office, and those of three are in progress.

42. Fines to the extent of Rupees 7 have been inflicted under the Boundary Act.

No. 4 Revenue Survey—Tinnevelly.—43. No. 4 Party has been under the charge of Major Barber. He has been assisted by Mr. B. W. Puckle, who was removed to Ganjam in August 1866, and by Lieutenants Clerk and Graham, who were promoted from Probationers to Assistants in July 1866.

44. The party has been engaged in the Tinnevelly district. The talooks of Tinnevelly Tenkasi, Tenkarai, Ambasamudram, and Nanganery have been under Survey.

45. The district was commenced in June 1863. The progress of the Survey has not been so rapid as could have been wished.

46. On Mr. R. K. Puckle, who had been in charge of the Demarcation, joining the district as Collector, he requested the Acting Superintendent to direct that Topographical Surveys of the villages should be made, as he thought that he would be able to make a general scheme for the settlement of the district with the aid of Topographical Maps alone, without waiting for the closing of the plotting of all the fields.

47. The Acting Superintendent gave the necessary orders, but in the course of a few months the Collector saw reason to alter his opinion.

48. In June 1866, the Collector having commented on the slow progress of the Survey, the Acting Superintendent was called on to report the reason of the delay.

See G. O. No. 2,003 of 9th August 1866.

49. In August 1866, the Acting Superintendent visited the district, and after a careful inspection of Major Barber's Office, examined the state of Demarcation in several talooks.

50. The results have been communicated in a letter to the Revenue Board (see letter No. 1,277-48 of 19th September 1866). It was therein stated that the main hindrance to rapid progress was the very faulty Demarcation. A diary, recording the Acting Superintendent's observations in thirty-four villages, accompanied the letter. The Government, in Proceedings of 15th January 1867, No. 131, state that the slow progress made by the Survey Department in mapping the district of Tinnevelly has been due almost entirely to bad Demarcation.

51. The revision of Demarcation has been taken in hand by the Collector, and the progress now is likely to be satisfactory. A small party of Demarcators had been at the disposal of Major Barber from the commencement of the Survey of the Nanganery talook. In that talook he has been able to advance much more quickly than elsewhere, as any imperfections in Demarcation were corrected directly they were discovered.

52. The progress made during the past year is shewn below :—

	Villages.	Sq. Miles.
Boundaries traversed	60	179·67
Fields measured	74	327·29
Field plotting completed	118	227·36
Topographical details inserted	155	279·71
Maps completed and sent to Central Office ...	183	231·77
Field areas ready for Settlement purposes ...	172	225·49
Minor circuits traversed...	No. 1,550	

53. The total expenditure in Tinnevelly has been Rupees 73,259-14-11.

54. As no one talook has yet been completed, the exact cost per square-mile cannot as yet be given; the cost of Survey of the Southern talooks is likely to be very large. It is, however, hoped that when the party moves into the Northern talooks, where the Demarcation is more complete, the expenditure will be found to be less; and that on the completion of the district, the average cost per square-mile will be not greatly in excess of the estimate.

55. The preparation of Talook Maps is keeping pace with the completion of Village Maps.

56. During the year, fines under the Boundary Act, have been inflicted in 119 instances, to the amount of Rupees 1,659-12-0. In one case, a man was imprisoned for three days in default of payment. Every case has been most carefully enquired into.

57. Major Barber reports most favourably of Lieutenants Clerk and Graham. Much credit is due to Major Barber for the way in which he has carried on work in the face of so many and great obstacles.

No. 5 Revenue Survey—Madras and Nellore.—58. No. 5 Party has been under the charge of Mr. F. C. Puckle. He has been assisted by Lieutenant Clay and Captain Sherman.

59. The party has been engaged in the completion of the Nellore district. All the Village Maps have been plotted, and forty-eight villages, containing 349·73 square-miles, remain to be closed. The Topographical details of 305 villages, containing 1,455·96 square-miles, remain to be inserted.

60. The accounts of two talooks, Nellore and Atmakur, have been furnished to the Settlement. Those of another talook, Repur, were at the close of the year ready for despatch. The accounts of two more, Guduru and Kavali, can be handed over at a few days' notice. The preparation of the accounts of the remaining talooks keeps pace with the completion of the maps.

61. The progress of the party has been as follows :—

	Villages.	Sq. Miles.
Boundaries traversed...	20	166·90
Fields measured	26	73·25
Field plotting completed.....	105	653·35
Topographical details inserted	281	1,658·73
Maps completed and sent to Central Office...	59	351·26
Field areas ready for Settlement purposes.	9	129·03
Minor circuits traversed...	No. 398	

62. The total expenditure has been Rupees 77,501-4-0.

63. The average cost per mile for completed talooks has been Rupees 105-14-2. In the next report the cost of the Survey of the whole district, with the rate per mile and acre in each talook, will be given.

64. It was thought advisable that the party should not be divided during the past year. Though the Field Measurers and Boundary Surveyors had completed their work early in the season, yet they have been advantageously employed in assisting in the completion of maps. The party was at the beginning of this year (1867) able to move into the Madras district, leaving but little arrears behind it.

65. The work has been connected with 13 G. T. points. The average error is 5·3 feet per mile.

66. During the past year, fines to the amount of Rupees 5 only have been inflicted under the Boundary Act.

67. Mr. F. C. Puckle reports that Lieutenant Clay rendered him great assistance during a particularly hot season.

Neilgherry Survey (Waste lands).—68. During the past year fourteen blocks of land, containing 1,547·06 acres, have been surveyed under the Waste Land Rules.

69. The total expenditure on that account has been Rupees 89-1-2, which gives an average of Rs. 0-0-11 per acre.

Survey for Neilgherry Hill Settlement.—70. In G. O. 17th February 1866, No. 425, the detailed Survey of the three Settlements, Ootacamund, Coonoor, and Kotagherry was ordered.

71. No officer was available for the charge of the work till June 1866, when Lieutenant Freeth was detached from Coorg, for work on the hills, during the south-west monsoon, when surveying in Coorg is impracticable. Mr. Starr, the head-quarter Office Assistant, directed the work for about a month previous to Lieutenant Freeth's arrival, and again for about forty days after that officer's departure. On the Superintendent of Survey rejoining from leave, he ordered Major Hessey to take charge.

72. The boundary of Coonoor has been marked out and surveyed, all the main roads have been laid in. The greater part of the lands held on puttah, as well as several quit-rent properties, have been demarcated and surveyed.

73. The Surveyors have had to demarcate as well as Survey. The utter uselessness of the most elaborate Survey without permanent Demarcation having been seen elsewhere, endeavours have been made to perform the latter work satisfactorily. Stones were found insufficient to retain native cultivators within bounds. The Collector ordered that all puttah lands should have a trench dug round them, the Revenue Board did not consider that they were warranted by law in extending this order (see Proceedings Board of Revenue, 22nd November 1866, No. 8,417). By the close of the year the boundary of Ootacamund had been marked out, and considerable progress had been made with the Demarcation of the more populous parts of the settlement.

74. The number of Surveyors available for work has, from the month of June, varied from four to sixteen Four East Indian Surveyors, transferred from the Wynaad Survey by order of the Board of Revenue, have been almost continuously ill and unfit for work. Native Surveyors are, as a general rule, unfit for field work on the hills. The men received from the Sapper Corps are exceptions; a draft of eleven men from that corps is expected soon. The Survey of the hill settlements will then progress much more rapidly. It is hoped that the work will be completed within the time ordered by Government.

75. One great obstacle to progress is the absence of correct registers of holders of land; hundreds of men holding patches of land in the towns of Coonoor and Ootacamund are unable to produce any puttah or grant in support of their claims. There is no mention of their holdings in the talook accounts. The lands of these squatters are (by request of the Collector) being marked out according to occupation, many of these patches of land have changed hands several times, and have been sold for large sums.

76. The Map of Coonoor is being plotted on the scale of twenty-four inches to one mile, or one inch to 220 feet. A key Map, on the scale of eight inches to one mile, or one inch to 660 feet, is also being prepared. In Ootacamund, the pieces of land occupied as building sites are so excessively minute, that to shew them plainly a still larger scale will be necessary. It is proposed, therefore, to plot the native town on the scale of 110 feet to one inch.

77. The expenditure is given below—

	RS.	A.	P.
Salaries of Surveyors	8,858	1	2
Salary of Lieutenant Freeth, from 16th June to 10th September	1,475	7	4
Salary of Major Hessey, from 27th October to the end of December	2,691	2	8
Cost of Demarcation	549	4	9
Total Rupees...	13,573	15	11

It is mentioned in the report on Demarcation, that the Superintendent of Survey, on his return from leave, directed Major Hessey to continue to supervise the two Demarcation parties in Madras and Ganjam, till the close of the year. He also directed him to arrange for printing all the orders that had been issued on the subject of Demarcation. The whole of Major Hessey's salary, therefore, cannot be said to be strictly chargeable to the Neilgherry Survey.

78. It is a question, for the consideration of Government, whether a plane Survey, in which the inequalities of ground, hills, and valleys should not be shewn, will be sufficient for all practical purposes; or whether it will be necessary that the whole of the features of the country should be laid in.

79. The whole of the plotting of the boundaries of puttah lands, quit-rent, and freehold lands, and Government reserves, within the settlement of Coonoor, will be finished long before this Report is likely to be in the hands of Government. The insertion of details will then be in progress.

COORG SURVEY.—80. A report of the progress of the Coorg Survey will be made to the Commissioner for the Affairs of Coorg. It is only necessary to mention in this Report, that four Surveyors, belonging to No. 1 Party were temporarily employed in Coorg under the orders of Lieutenant Freeth.

81. These men rejoined No. 1 Party on the Neilgherry Hills in June 1866.

82. The enlargement of the Coorg party having been approved of by the Commissioner, and it being found next to impossible to obtain Surveyors in that country, three men were again detached on 29th October 1866, their pay continuing to be drawn in No. 1 Party. Sanction for the increase having been granted in G. I. No. 3,028 of the 31st October 1866, the necessary adjustment of accounts will now be made.

83. Lieutenant Freeth draws his pay with the Coorg Survey Party, but his name still continues to be borne on the books of No. 4 Party, to which he originally belonged.

WYNAAD COFFEE ESTATE SURVEY.—84. It having been ordered (see Proceedings Board of Revenue, No. 5,506 of 9th August 1866) that the survey of extension of plantation in coffee estates in Wynaad should, in future, be performed under the orders of the Superintendent of Survey, the Deputy Collector in charge of Wynaad was requested to send a list of demarcated estates ready for survey.

85. No sketches were received till 26th November 1866. The men who had been before employed in Wynaad were unfit for work, owing to severe fever contracted there. A Surveyor was not sent to Wynaad till the beginning of 1867.

PURLA KIMEDY SURVEY.—86. Up to 27th June 1866, this party continued under the charge of Lieutenant H. St. M. Wynch. It was then placed under the orders of Mr. H. O. C. Cardozo, who had been detached to Ganjam for the purpose of organizing Demarcation and Survey parties for the Government talooks. Lieutenant Wynch was ordered to join No. 2 Survey in Kurnool. A special allowance of 100 Rupees was granted to Mr. Cardozo by the Court of Wards, in consideration of the extra trouble and responsibility thrown on him.

87. Mr. Cardozo has, during the time he has held charge, handed over the fair Maps and Records of 559 villages to the Collector for Settlement purposes. The total area surveyed in the talook is 544·00 square-miles. The total expenditure Rupees 98,593-8-6,* or Rupees 181-3-3 per mile.

* Inclusive of Equipment, Instruments, Demarcation, &c.

88. The party is now broken up, the best men have been draughted into the Ganjam Survey.

89. A Talook Map, on the scale of two inches to a mile, and another on the scale of one inch, have been drawn.

90. A detailed report of the Survey will be submitted to the Court of Wards.

Talooks.	
Rajahmundry. Ellore.	Godavery District.
Gudiwada. Bandar.	Kistna do.

CENTRAL OFFICE.—91. The expenditure in the Central Office has been Rupees 38,271-4-6. As usual it has been engaged in check of accounts and preparation of Talook Maps.

LITHOGRAPHIC PRESS.—92. During the year the Press has printed 25,976 copies of 903 Village Maps, comprising an area of 1,970·13 square-miles, also one Talook Map.

	No.	Sq. miles.
Talook Maps ...	1	468·14
Village Maps ...	903	1970·13

93. The expenditure is given in the margin. The cost of lithography is Rupees 4-3-5 per mile for Village Maps, or Annas 1 Pice 5 per copy.

GENERAL REMARKS.—94. Major Hessey remained in charge till the end of October 1866, when Lieutenant-Colonel Priestley rejoined from sick leave.

95. An abstract of the total expenditure and of the work done is appended.

DEMARCATION.—96. The Government in Proceedings 12th December 1864, No. 2,243, ordered that, in all districts to be taken up, the Demarcation should be performed by the Survey Department.

97. It was arranged between the Officiating Director of Revenue Settlement and the Acting Superintendent of Survey, that the Demarcation of the Cuddapah, Kurnool, and Tinnevelly districts should be completed by the Settlement Department, and the talooks then in progress, in the Coimbatore district should also be completed by the same agency. The organization of any Demarcation party under the orders of the Superintendent of Survey, did not, therefore, become necessary till the close of 1865.

98. A scale for the Demarcation and Survey Parties of the Government talooks in Ganjam was submitted in November 1865, (see G. O. No. 2,950, of 28th November 1865,) and another scale for the Demarcation party in the Madras district was submitted in February 1866 (see G. O. No. 839, of 12th April 1866).

99. The organization of the Madras party was entrusted to Lieutenant Cloete, First Assistant Superintendent Revenue Survey. Though nominally attached to No. 5 Revenue Survey Party, yet it was found advisable that he should report to, and receive orders from, the Central Office.

100. The change in the system of Demarcation ordered in the G. O. above quoted, rendered reference frequently necessary. The old Demarcation Rules, though doubtless most admirably drawn up by the late Director of Revenue Settlement, left many minor details to the discretion of Executive Officers, and thus complete uniformity of practice was almost impossible. It was impossible to foresee all the subjects on which additional regulations would be necessary; in some cases, where a principle appeared involved, instructions were sought from the Revenue Board. A revised Code of Regulations has been drawn up, and is now passing through the Press.

MADRAS.—101. On the 16th January 1866, Lieutenant Cloete received his orders. There were many persons lately employed in the Settlement Department who were desirous of being taken on; but it was thought advisable to limit enlistments to a number that might be thoroughly supervised by Lieutenant Cloete in person.

102. Work was commenced in the Sydapet talook. The newly engaged men were collected in two villages, in close proximity to the Collector's Cutcherry and to the Demarcation Office; there each man was thoroughly trained, and when pronounced qualified, sent out to work alone.

103. On the 10th March, Lieutenant Cloete was joined by Mr. Addis, who has been however of but little assistance. A separate report of his qualifications and conduct has been made in letter dated 14th December 1866, No. 1,789-65.

104. During the first four months the extent of land completely demarcated was but small the party had not attained its full strength.

	Sanctioned strength of Party.	Strength on 30th April.
First Assistant	1	1
Second do.	1	1
Inspectors	2	0
Deputy Inspectors	2	2
Head Gumastahs...	17	12
Gumastahs	56	33

Month by month the party became more complete. There was no lack of applicants, but it was not easy to obtain men suited in every respect for the work.

105. By the end of the year an area of 219·24 square-miles was demarcated; the details of the work are given below:—

Talooks	No. of Villages completed	In progress.	Area demarcated.	No. of Fields demarcated.	STONES ERECTED. Boundary Stations.	Khandam Stations.	Offsets.	Field Stones.
Sydapet	105	107	208·84	56,568	3,668	7,409	23,742	1,68,555
Trivellore	...	21	10·40	3,346	3	...	76	11,045
Total	105	128	219·24	59,914	3,671	7,409	23,818	1,79,600

106. The total expenditure has been Rupees 42,920-15-9.

	RS.	A.	P.
Cost of village boundary and of village sub-divisions (Khandam) demarcation stones	13,749	5	5
Salary of Establishment	29,171	10	4
	42,920	15	9

This gives on the area demarcated a rate of Rupees 62-12-6 for materials, and of Rupees 133-3-3 for agency, in all, an expenditure of Rupees 195-15-9 per mile. This is very large indeed, far greater than had been originally contemplated.

107. It is believed that the cost will be greatly diminished in succeeding years. In the first place, for the months of February, March, and April, but little work was done; the attention of the Assistant being directed to training his men. Secondly, the material for demarcation (stone) was not obtainable on the spot at reasonable rates, the demands made by the stone-cutters being most exorbitant; stones had to be brought by water from the Seven Pagodas, and by rail from Sholingur. Thirdly, the Demarcation is much more complete than it has been elsewhere.

108. The talook of Sydapet was selected for Demarcation as being likely to be the most difficult to work in, and in order that all the difficulties likely to be met with might be faced and dealt with at once; also in order that the work might, from its vicinity to Madras, be easily inspected.

109. In the Demarcation the following principles have been observed:—Village boundaries have been permanently marked with stones. All junctions of three or more villages have been marked with stones $3\frac{1}{2} \times 1 \times \frac{3}{4}$ feet imbedded in brick and mortar. Such bends of the village boundaries as have been selected for Theodolite Stations have also been similarly marked. All other bends on the boundaries have been marked by stones $3 \times \frac{1}{2} \times \frac{1}{2}$ feet, imbedded two-thirds of their length in the ground. The cultivated or culturable land of villages has been divided into blocks of fifty acres or thereabouts, and the boundaries of these blocks have been defined by stones firmly imbedded in the ground, and bearing distinguishing marks. Tracts of Poramboke, or unculturable waste, have been demarcated as they exist. Of the culturable waste, such portions as are likely to be taken up within two or three years have been laid out in fields of four acres in wet, and ten in dry land. In the cultivated land, each man's holding is, as a rule, demarcated *as it exists*. The following are the exceptions to the rule:—

First.—When the holding is large, and the owner wishes it laid out in small fields, his wish is complied with, provided that the fields, so created are not less than two acres in wet and four in dry land.

Second.—When several small holdings adjoin one another, and by clubbing two or more together to form one Survey field, the ground will be made easier for Survey, such fields have been clubbed, but the aggregate area of a Survey field so formed is in no case greater than two acres in wet and four in dry land.

110. Important roads or cart tracts and channels are demarcated separately, other channels or strips of unprofitable land, less than six feet wide, running through cultivated land, are included in the same fields with such land, a remark being made in the Land Register to guide the Settlement Officer.

111. All the Demarcation stones bear the Government broad arrow, chiselled on one side.

112. The station stones only for boundaries of villages and sub-divisions (Khandams) of villages have been charged to Government. All other Demarcation marks, as well as the cost of imbedding the station stones in brick and mortar, have been debited to the villagers. Each Ryot is charged for the Demarcation of his own holding, and for a portion of the Demarcation expenses of his village, calculated on his interest in the lands of that village.

113. A very large proportion of land-holders in the Madras district are non-resident. It has been found difficult to secure their attendance or the attendance of their agents. The Merusi rights have rendered Demarcation less easy. The tact, temper, and sound judgment of Lieutenant Cloete have carried him through his work without collision with the land-holders.

114. The Demarcation has not been popular; this is owing chiefly to the fact of its not being a *property* survey. A petition was addressed to the Board of Revenue, requesting that each individual holding might be marked out and surveyed separately. The Board were unable to alter the order of Government on this subject. See Proceedings Board of Revenue, No. 3,019 of the 30th April 1866.

115. The cost to the Ryots has been thirteen annas per acre of cultivated land. A large part of the talook was demarcated, in the first place, at the expense of Government, the cost being recovered from land-holders under the authority of Section VI of the Boundary Act.

116. Fines have been inflicted in twenty cases only, to the amount of Rupees 153.

117. At the close of the year, ten square-miles of the Sydapet talook remained incomplete. The party has now moved into the Trivellore talook, where progress will, it is confidently hoped, be much more rapid. Stone is plentiful, the holdings are larger, the workmen are more experienced, and the greater part of the land-holders reside in the villages in which they own property.

118. All the stones for demarcation purposes have been provided by contract.

GANJAM.—119. Mr. H. O. Cardozo was appointed to the charge of Demarcation in Ganjam on the 23rd February 1866. After doing duty for some short time with Lieutenant Cloete, in order to acquaint himself with the mode of work, he proceeded to join his district.

120. It had been thought advisable that the work should begin in the immediate neighbourhood of the head-quarters of the district. The Collector, however, in consequence of the scarcity then prevailing in the Northern talooks, thought it better that the Chicacole talook should be first taken in hand.

121. Mr. H. O. Cardozo has, from the first, been in close communication with the Principal Assistant Collector Mr. Leman; he has, therefore, not felt so much the disadvantage of being at a distance from the chief Revenue authority of the district.

122. A draft of men from the old Kimedy Survey party joined Mr. Cardozo on arrival, small drafts were received from the Southern Demarcation parties. The whole of the establishment was at the close of the year complete.

1 Inspector.
1 Deputy Inspector.
5 Head Gumashtas.
25 Gumashtas.

123. Mr. B. W. Puckle joined as Assistant on the 2nd of September, and took charge of the field hands of the demarcation party, thus leaving Mr. Cardozo at liberty to devote more of his time to office work, to completing the records of the Kimedy Survey, and to training Surveyors for the Survey of the Government talooks.

124. The total area demarcated during the year has been 87·79 square-miles.

125. The total expenditure has been Rupees 10,739-15-2, or Rupees 122-5-4 per mile. The Demarcation of Chicacole talook, in Ganjam, has been conducted on the same principles as the Demarcation of the Sydapet talook, in Madras district, with this difference, that, as the holdings were generally of considerable size, clubbing holdings together to form Survey fields was not considered necessary. Each property has been demarcated separately. The consequence has been that there has been no opposition of any sort on the part of the Ryots.

126. At the outset it was found impossible to induce any contractor to undertake the supply of stones. The work would have come to a stand still had not Mr. Cardozo organized gangs of stone-cutters at several quarries. His intimate acquaintance with the language, his conciliatory manners, and his great energy have given him much influence in the talook. The supply of stones is now abundant.

127. Almost the whole of the fields were demarcated, in the first instance, at the cost of Government. The money so expended is gradually being recovered. The cost to the Ryots has varied from two annas to eight annas per acre.

128. The strength of the Ganjam party has been less than half that of the Madras party.

GENERAL REMARKS.—129. The cost of the Demarcation executed during the past year cannot well be compared with the cost of the Demarcation executed under the orders of the Director of Revenue Settlement. In the first place, the blocks into which the villages are sub-divided average from fifty to eighty acres, instead of from 200 to 800, and the station stones for these blocks, as well as for the village boundaries, have been provided by Government. In Trichinopoly this was not the case, nor it is believed was it the case to any extent in Salem, Godavery, Kistna, Nellore, Cuddapah, Kurnool or Tinnevelly. The labour expended in marking out these small sub-divisions has been very great. The supervision of the Demarcation has been most rigid, a great part of the money expended showed no direct return, as no person in either party has been allowed to work on his own account till he had passed an examination and shown himself perfectly acquainted with the principles and practice of Demarcation.

130. The Superintendent of Survey, on re-joining from leave, thought fit to continue Major Hessey in charge of Demarcation till the close of the year. Major Hessey has to thank Lieutenant Cloete and Mr. Cardozo for their cordial and zealous co-operation with him.

131. The work in the Madras district, whilst in progress, was repeatedly inspected by the Acting Superintendent. The work in Ganjam was also inspected on one occasion, the Acting Superintendent then spent a fortnight with the officer in charge, and went through most of the villages in which work had then been commenced.

132. The Reports from Lieutenant Cloete and Mr. Cardozo are so full and interesting, that it has been thought advisable to enclose them for reference.

(Signed) W. H. HESSEY, Major,
Deputy Superintendent, Revenue Survey.

REVENUE SURVEY OFFICE
OOTACAMUND,
20th April 1867.

Return of area surveyed and cost incurred during the year 1866.

Names of Parties.	Extent measured in square miles.	Actual expenditure during the year.	Estimated measurement allowance.	Expenditure including estimated measurement allowance.	Share of Central Office exclusive of Superintendent's Regimental allowance.	Expenditure of each party including all charges of the Central Office.	Remarks.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
No. 1, Coimbatore and Salem.	831·93	85,091 6 10	3,400 0 0	88,491 6 10	4,935 9 9	93,477 0 7	
" 2, Kurnool	641·20	74,553 5 10	3,200 0 0	77,753 5 10	4,985 9 9	82,718 15 7	
" 3, Cuddapah and Kistna.	824·26	72,935 0 2	3,300 0 0	77,135 0 2	4,985 9 9	82,120 9 11	
" 4, Tinnevelly	327·29	65,193 13 4	2,100 0 0	67,193 13 4	4,985 9 9	72,179 7 1	
" 5, Nellore and Madras...	106·90	72,117 9 3	500 0 0	72,617 9 3	4,985 9 9	77,603 3 0	
" 6, Ganjam	*3·30	3,317 15 4	... ...	3,317 15 4	... ...	3,317 15 4	
Total...	2,719·88	3,74,539 2 9	12,500 0 0	3,87,039 2 9	24,928 0 9	4,11,967 3 6	
Nellgherry Hills	...	11,426 7 7	... ...	11,426 7 7	... ...	11,426 7 7	
Shervaroy Hills	...	1,623 5 5	... ...	1,623 5 5	... ...	1,623 5 5	
Grand Total...	2,719·88	3,87,590 15 9	12,500 0 0	4,00,090 15 9	24,928 0 9	4,25,019 0 6	

Charges to General Fund.					Total expenditure including all charges.	Remarks.
Regimental Allowance of the Superintendent and Officers.	Measurers and Coolies.	Instruments issued.	Total chargeable to General Fund.			
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.		Rs. A. P.	
4,472 7 0	... ...	409 8 9	4,881 15 9		99,359 0 4	
1,292 15 0	9,041 7 0	... ...	10,434 6 0		92,153 5 7	
11,327 7 0	5,460 2 1	74 4 10	16,861 13 11		99,032 7 10	
9,359 0 7	... ...	230 10 4	9,739 10 11		81,469 2 6	
6,776 9 0	... ...	209 2 1	6,985 11 10		84,588 14 10	
... ...	496 5 11	1,260 0 0	1,756 5 11		5,574 5 5	Expenditure, Cooly Hire, Carriage, &c., not yet published in Lithography.
33,223 7 4	14,997 15 0	2,183 10 0	50,710 0 4		4,62,677 3 10	
2,146 4 4	... ...	1,083 12 0	3,233 10 4		14,662 1 11	
... ...	... ...	... ...	... ...		1,623 5 5	
35,67[illegible] 5 8	14,997 15 0	3,272 6 0	53,945 10 8		4,78,964 11 3	

(Signed) W. H. HESSEY, Major,
Deputy Superintendent, Revenue Survey.

REVENUE SURVEY OFFICE,
OOTACAMUND,
20th April 1867.

Statement of Expenditure of the Revenue Survey Lithographic Department for the year 1866.

	Extent in square-miles.	Expenditure.			Cost per square-mile.		
		Rs.	A.	P.	Rs.	A.	P.
Village Maps	1,970·13	8,304	2	11	4	3	5
Talook Maps.	468·14	977	15	1	...	...	...
Total.....	2,438·27	9,282	2	0	...	...	...

REVENUE SURVEY OFFICE,
OOTACAMUND,
20th April 1867.

(Signed) W. H. HESSEY, Major,
Deputy Superintendent, Revenue Survey.

Statement of Comparative distances between Trigonometrical Stations.

District.	Stations.	Distances. By Trigonometrical Survey.	Distances. By Revenue Survey.	Difference.	Error per mile.
		Feet.	Feet.	Feet.	Feet.
Salem. (Shervaroy Hills.)	Martin H. to Fisher H. ...	3,609	3,602	7	10·3
	South Hill, Twin Hill to do...	12,323	12,290	33	14·2
	Do. to Sholai Caradoo ...	20,250	20,397	147	38·4
	Puliyur Mallay to do. ...	9,363	9,418	55	31·1
	Do. to Sanganathi Mallay.	2,066	2,078	12	30·3
	Karadiyur Mallay to do. ...	16,886	16,870	16	5·0
	Do. to Puliyur Mallay ...	17,860	17,815	45	13·3
	Martin H. to South H. Twin Hill	10,887	10,876	11	5·3
	Puliyur Mallay to Catoopady Mallay	5,831	5,841	10	9·1
	Sanganathi Mallay to do ...	5,000	4,994	6	6·4
	Sholai Caradoo to Martin H...	22,694	22,715	21	4·9
	South H. Twin Hill to Puliyur Mallay	27,995	28,223	228	43·1
	Shervaroy H. to Sholai Caradoo	7,042	7,079	37	27·8
	Do. to South H. Twin Hill...	15,556	15,694	138	46·9
	Do. to Martin Hill ...	15,862	15,903	41	13·7
	Do. to Fisher Hill ...	19,150	19,560	110	29·9
	Puliyur Mallay to Cunnapady Mallay	28,549	28,753	204	37·8
	Sanganatlly Mallay to Valoor E. Hill	24,527	24,621	94	20·2
Nellore.	Meadaramettato Ongole H. S.	85,234	85,067	167	10·3
	Neturpaliam to do.	92,134	91,857	277	15·9
	Puripad to do.	97,135	96,845	290	15·8
	Do. to Neturpaliam	77,334	77,294	40	2·7
	Do. to Darutippa	85,379	85,296	83	5·1
	Kusaram to do.	50,234	50,225	9	0·9
	Do. to Nishanbotu ...	87,490	87,456	34	2·1
	Do. to Rajalli H. S. ...	1,03,675	1,03,574	101	5·1
	Pallakonda H. S. to do. ...	1,22,002	1,21,971	31	1·3
	Do. to Kistama H. S....	1,03,499	1,03,461	38	1·9
	Udkur H. S. to do. ...	79,503	79,537	34	2·3
	Bandaldurru to do. ...	84,519	84,422	97	6·1
	Pallakonda H. S. to Udkur H.S.	1,04,141	1,04,053	88	4·5
	Bandaldurru to do. ...	84,273	84,200	73	4·6
	Gudali H. S. to do. ...	1,36,509	1,36,390	119	4·6
	Do. to Bandaldurru.	1,07,168	1,07,188	20	1·0
	Average error on the whole.	...	...	...	8·1

REVENUE SURVEY OFFICE,
OOTACAMUND,
20th April 1867.

(Signed) W. H. HESSEY, Major,
Deputy Superintendent, Revenue Survey.

Statement shewing the extent of Demarcation work performed by the Demarcation Parties, and the expenditure incurred thereon for 1866.

Districts and Talooks.	No. of villages completed.	No. of villages in progress.	Actual work in square-miles.	Cost.	Share of Central Office.	Total.	Average cost per square-mile.	Cost of Pillars.
				Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
MADRAS DISTRICT.								
Sydapet	105	107	203·84	29,171 10 4	4,252 5 9	33,424 0 1	152 7 2	13,749 5 5
Trivellore... ...	...	21	10·40					
Total...	105	128	219·24	29,171 10 4	4,252 5 9	33,424 0 1	152 7 2	13,749 5 5
GANJAM DISTRICT.								
Chicacole	39	22	87·79	10,739 15 2	2,126 3 0	12,866 2 2	146 8 9	1,113 13 4
Total...	39	22	87·79	10,739 15 2	2,126 3 0	12,866 2 2	146 8 9	1,113 13 4
Grand Total...	144	150	307·03	39,911 9 6	6,378 8 9	46,290 2 3	150 12 1	14,863 2 9

(Signed) W. H. HESSEY, Major,
Deputy Superintendent, Revenue Survey.

REVENUE SURVEY OFFICE,
OOTACAMUND,
20th April 1867.

REPORT ON THE PROGRESS OF THE DEMARCATION OF THE MADRAS DISTRICT DURING THE YAER 1866.

ORDERS RECEIVED 16TH JANUARY.—1. On the 16th January, orders for the organization of the party were received.

PRELIMINARY OPERATIONS.—2. Up to the end of April but nineteen square-miles had been demarcated, the time having been employed in training men, making arrangements for the collection of material, preparing and circulating notices to villagers, and collecting information regarding the country to be demarcated.

STRENGTH ON 30TH APRIL.—3. On the 30th April the strength of the party was—

1 First Assistant.
1 Second Assistant.
2 Deputy Inspectors.
12 Head Gumastahs.
33 Gumastahs.

Mr. Addis, the Second Assistant, joined on the 16th March. After the end of April the party was gradually increased until, at the end of the year, it attained very nearly its full strength.

ENTERTAINMENT OF MEN.—4. In accordance with the Acting Superintendent's instructions, no man was sent to work in the field till the officer in charge had satisfied himself that he was thoroughly acquainted with the Demarcation Rules, and the late orders of Government on the subject. No difficulty has been experienced in the matter of filling up vacancies; large numbers of applicants have appeared for employment, the preference having, in all cases, been given to those who had been thrown out of employ, owing to reduction of establishment, and who presented certificates of good conduct from the officers under whom they had been employed.

OUT-TURN.—5. The work was almost entirely confined to the Sydapet talook during the year. The area demarcated, up to the 31st December, is 219·24 square-miles; the number of field stones and offsets erected 2,03,488; details are given in the accompanying statement marked A.

COST.—6. The cost up to the end of the year has been Rupees 42,920-15-9; of this sum Rupees 13,749-5-5 has been expended in Village and Khandam boundary stones, the remainder is the cost of establishment and contingencies; the cost, therefore, per square-mile has been for establishment, &c., Rupees 133-3-3, for stones Rupees 62-12-6, or a total of Rupees 195-15-9 per square-mile demarcated. The time, however, up to the 30th April, having been almost entirely spent in the organization of the party, and in making arrangements for the prosecution of the work, it seems but fair, in calculating the cost per square-mile, not to take into account the amount spent before the 1st May; and deducting also the work done up to that date from the total out-turn, the cost per square-mile comes to Rupees 177-1-3, of which Rupees 65-2-6, or more than one-third, is for stones, the cost of which Government have had to bear in accordance with their orders.

COST TO RYOTS.—7. Attached is a statement (marked B) shewing the average cost to ryots of the Demarcation per field, holding, acre, and square-mile, and the data from which these averages have been deduced. The cost of the actual labour of putting the stones into the ground, and of clearing chain lines, is alone not included in this calculation; a fair allowance on this account would be ten per cent. on the averages already arrived at.

PRINCIPLES ON WHICH DEMARCATION HAS BEEN CONDUCTED.—8. The following are some of the main principles we are following in the Demarcation of this district:—

(1.) Village boundaries are permanently marked; the Theodolite stations are of granite, imbedded two feet in brick and mortar; the offset marks ($3 \times \frac{1}{2} \times \frac{1}{2}$), also of granite, are firmly imbedded $1\frac{1}{4}$ or 2 feet.

(2.) Tracts of Poromboke are demarcated as they exist, permanent stone marks being erected on their exterior boundary.

(3.) All cultivated and cultivable land is laid out in permanent blocks of from fifty to seventy or eighty acres.

(4.) Of the culturable waste, such portions as are likely to be taken up within two or three years are laid out in fields of four acres in wet, and ten in dry land.

(5.) In the cultivated land, each man's holding is, as a rule, demarcated as it exists; the following are the exceptions to the rule:—

Firstly.—When the holding is large, and the owner wishes it laid out in small fields, his wish is complied with so long as the Survey field is not smaller than two acres in wet, or four in dry land.

Secondly.—Where several small holdings adjoin, and there is evident advantage to the Surveyor from clubbing them, they are so clubbed into one Survey field, the aggregate area of a Survey field so formed being in no case more than two in wet, or four in dry land.

(6.) Important roads or cart tracks and main channels are demarcated out separately; other channels or strips of unprofitable land, less than six feet wide, running through cultivated land are included in the same field, with such land; a remark being made in the Land Register to guide the Settlement Officer.

(7.) The old Demarcation Rules are observed, except where they differ from the general principles above given.

8. A Memorandum of suggestions regarding some of the details of the work is enclosed.

DISPUTES.—9. Fifty boundary disputes were settled up to the 31st December, a great number of them of long standing; one only was settled by formal arbitration, some by amicable adjustment between the parties themselves, and others by the Officer in charge and the Inspectors under paragraph 5 of the Demarcation Rules. These disputes have taken up much of the time of the officers and the upper subordinates of the party, partly owing to the tenacity of the opposing parties, and partly because the experience necessary had to be gained by all as the cases arose; hereafter, the settlement of disputes will be somewhat easier.

FINES UNDER SECTION 4 ACT XXVIII OF 1860.—10. In Statement D. attached, is shewn the number and amount of fines inflicted. In no case was imprisonment in default necessary.

NATURE OF BOUNDARY MARKS.—11. The marks erected are all of stone, varying in size from $3\frac{1}{2} \times 1 \times \frac{1}{2}$ to $2 \times \frac{1}{2} \times \frac{1}{2}$ and are now all imbedded two-thirds of their length. The Village Boundary Station stones are imbedded in brick and mortar. The stones all have the Government broad arrow chiselled on the side.

The greatest difficulty has been experienced in procuring material in sufficient quantity. In the talook (Sydapet) in which the work has been going on, there are but three or four hills from which stones at all suitable are procurable, and the demand being very much greater than the ordinary supply, the stone-masons were for some time able to charge almost any price they wished; afterwards they lowered their prices when they found that as good material could be got from Sholingur by rail, at cheaper rates than they were supplying them at, on the spot. The Village and Khandam boundary pillars were supplied by contractors at an average rate of Rupees 1-4-0 each, delivered within the village boundary. In Trivellore, arrangements have been made for the supply of the same stones at the Railway Stations at 12 *Annas*.

DIFFICULTIES EXPERIENCED.—12. The two main reasons why a larger amount of work has not been perfomed are—

Firstly.—Scarcity of material.

Secondly.—The non-residence of a large number of land-holders, and the unwillingness of those who do reside in their villages to render any assistance.

The past year has been an exceptionally bad one, and it was hardly to be expected that the extra charge for demarcation would be cheerfully borne, more especially at the commencement when the ryots could not or would not see any possible advantage that the immediate outlay was likely to gain for them; they believed, too, that whatever part of the work they did *not* perform,

Government *would* perform for them, they were certain of getting off any immediate payment in this way, and hoped eventually to get off altogether.

MONEY ADVANCED AND RECOVERED.—13. In cases where it was absolutely impossible to get Ryots to supply their own labour and material, the cost was advanced on the part of Government. Up to the end of the year Rupees 7,362-3-7 had been advanced on this account, and of that sum, Rupees 925-3-4 recovered. Some delay necessarily occurs in the preparation of the bills for the recovery of these sums, and a great deal in the collection of the money.

PROGRESS OF WORK, TALOOKWAR.—14. At the end of the year only ten square-miles of field demarcation remained to be done in the Sydapet talook, but in many villages the boundary work is in arrears, and in several the completion of the work is delayed, owing to some of the cultivated land on portions of the village boundary being submerged. At the end of November a few Gumastahs were sent into the Trivellore talook, and their numbers are being increased as the work in this talook is being brought to.

The Trivellore talook was taken up at the e[illegible]ish of the Collector—a large tract of land on the talook boundary having been for a long time under dispute.

CONDUCT OF SUBORDINATES.—15. The conduct of the subordinates of the party has been, on the whole, tolerably satisfactory; four Gumastahs had to be dismissed or made to resign for bad work, and three Head Gumastahs were reduced during the year for incompetence. The grades of Inspector and Deputy Inspector are the most difficult to fill efficiently; the men I have at present in these posts are not up to the required standard. In one or two cases serious charges of corruption have been made against subordinates; but they have all turned out on enquiry to be so utterly improbable, that no criminal prosecution was instituted.

REVENUE SURVEY OFFICE,
SAINT THOMAS' MOUNT,
11th February 1867.

(Signed) J. G. CLOETE, Lieutenant,
First Assistant Superintendent, Revenue Survey.
In charge of Madras Demarcation.

(True copy.)

REVENUE SURVEY OFFICE,
CHEPAUK,
26th April 1867.

(Signed) F. J. B. PRIESTLEY, Lieutenant Colonel,
Superintendent, Revenue Survey.

A.

Statement shewing the work performed by the Madras Demarcation Party up to 31st December 1866.

Talook.	No. of villages completed.	In progress.	Area demarcated.	No. of fields demarcated.	Stones erected.			
					Boundary Stations.	Khandam Stations.	Offsets.	Field Stones.
			Square-miles.					
Sydapet	105	107	208·84	56,568	3,668	7,409	23,742	1,68,555
Trivellore	...	21	10·40	3,346	3	...	76	11,045
Total....	105	128	219·24	59,914	3,671	7,409	23,818	1,79,600

Revenue Survey Office,
Saint Thomas' Mount,
11*th February* 1867.

(Signed) J. G. CLOETE, Lieutenant,
First Assistant Superintendent, Revenue Survey,
In charge of Madras Demarcation.

B.

Tabular Statement shewing dates from which the cost to Ryots of the Demarcation has been calculated per field, acre, square-mile, and holding.

Name of Village.	Total No. of Fields and Ayakat.		Cultivation.			Field Stones.		Offsets.		Imbedding Village Boundary Stones in brick and mortar.		Total cost.
	No. of fields.	Ayakat.	No. of fields.	Area.	No. of Puttahs	No.	Cost.	No.	Cost.	No.	Cost.	
		Acre. Dec.		Acre. Dec.			Rs. A. P.		Rs. A. P.		Rs. A. P.	Rs. A. P.
1. Arasankelani	88	284 31	65	106 63	10	214	53 8 0	27	13 8 0	9	18 0 0	85 0 0
2. Pallippattu	79	195 16	67	161 90	25	183	45 12 0	30	15 0 0	10	20 0 0	80 12 0
3. Tarammni	122	238 23	75	173 5	26	357	89 4 0	59	29 8 0	7	14 0 0	132 12 0
4. Karikkanuram	80	157 29	60	109 33	3	208	52 0 0	20	10 0 0	10	20 0 0	82 0 0
5. Palavakkam	142	514 76	74	155 52	28	350	87 8 0	46	23 0 0	14	28 0 0	138 8 0
6. Jalodumpettai	236	553 45	175	303 87	60	727	181 12 0	88	44 0 0	15	30 0 0	255 12 0
7. Velacheri	710	1,952 56	590	1,167 60	150	1,501	375 4 0	582	291 0 0	23	46 0 0	712 4 0
8. Sivaram	67	164 27	30	76 50	9	156	39 0 0	19	9 8 0	9	18 0 0	66 8 0
9. Rajakilpakkam	146	671 92	111	202 35	5	454	113 8 0	77	38 8 0	15	30 0 0	182 0 0
10. Perungudi	221	823 68	155	318 4	22	498	124 8 0	73	36 8 0	16	32 0 0	193 0 0
11. Geveripakkam	81	191 73	56	88 23	5	198	49 8 0	28	14 0 0	10	20 0 0	83 8 0
12 Kattiriveilu	125	347 61	102	215 9	9	355	88 12 0	54	27 0 0	10	20 0 0	135 12 0
13. Amirjikkarai	70	230 35	54	141 64	27	242	60 8 0	58	29 0 0	13	26 0 0	105 8 0
14. Velakkupatti	16	33 78	16	33 78	6	62	15 8 0	29	14 8 0	3	6 0 0	36 0 0
15. Jambali	55	92 47	43	71 88	14	118	29 8 0	29	14 8 0	8	16 0 0	60 0 0
16. Peruvallur	382	499 19	323	288 42	51	572	218 0 0	165	75 8 0	19	38 0 0	333 8 0
17 Arakaputtur	321	505 16	229	298 57	20	925	231 4 0	146	73 0 0	16	32 0 0	336 4 0
18. Nemalicheri	160	362 57	135	193 61	10	362	90 8 0	68	34 0 0	12	24 0 0	148 8 0
19. Sirrapanincheri	96	64 ...	62	44 98	10	305	76 4 0	20	10 0 0	4	8 0 0	94 4 0
20. Parampattur	197	167 84	129	110 2	13	570	142 8 0	84	42 0 0	14	28 0 0	212 8 0
21. Arumbakkam	252	443 66	185	338 67	27	646	161 8 0	130	65 0 0	23	46 0 0	272 8 0
22. Ullagaram	99	264 90	74	144 50	5	213	53 4 0	79	39 8 0	12	24 0 0	116 12 0
23. Talakkanjeri	138	385 56	100	190 67	15	293	73 4 0	89	44 8 0	14	28 0 0	145 12 0
24. Kelattuvanjeri	166	224 96	112	144 28	13	478	119 8 0	69	34 8 0	9	18 0 0	172 0 0
25. Nandambakkam	170	561 99	126	318 ..	40	446	111 8 0	119	59 8 0	20	40 0 0	211 0 0
Total..	4,239	9,931 40	3,149	5,397 16	603	10,693	2,673 4 0	2,178	1,089 0 0	315	630 0 0	4,392 4 0

Average deduced from the foregoing.

Cost.					
Per cultivated field.	Per Survey No.	Per acre on cultivated land.	Per acre on Ayakat.	Per square-mile on Ayakat.	Per Puttah.
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1 6 3	1 0 7	0 13 0	0 7 1	283 0 1	7 4 6

Revenue Survey Office,
Saint Thomas' Mount,
11*th February* 1867.

(Signed) J. G. CLOETE, Lieutenant,
First Assistant Superintendent, Revenue Survey,
in charge of Madras Demarcation.

C.

Tabular Statement shewing data from which the cost of Demarcation chargeable to Government has been calculated per square-mile and village.

Name of Village.	Ayakat in Acres.	Boundary Stations.	Khandam Stations.	Total cost.
1	2	3	4	5
				Rs. A. P.
1. Arasanka'ani	284 31	9	20	36 4 0
2. Pallippattu	195 16	10	13	28 12 0
3. Taramani	238 23	7	8	18 12 0
4. Kalikkunram	157 29	10	...	12 8 0
5. Palavakkam	514 76	14	14	35 0 0
6. Jalladampettai	553 45	15	36	63 12 0
7. Velacheri	1,952 56	23	89	140 0 0
8. Sivaram	164 27	10	2	15 0 0
9. Rajakilpakkam	671 92	15	24	48 12 0
10. Perungudi	823 68	16	31	58 12 0
11. Geruripakkam	191 73	9	18	33 12 0
12. Kattirivedu	347 61	11	20	38 12 0
13. Aminjikkarai	230 35	13	9	27 8 0
14. Velakkupatti	33 78	3	...	3 12 0
15. Jambali	92 47	7	3	12 8 0
16. Peruvallur	499 19	19	30	61 4 0
17. Anakaputtur	505 16	16	31	58 12 0
18. Nemalicheri	362 57	12	25	46 4 0
19. Sinnapannicheri	34 ...	4	...	5 0 0
20. Paraniputtur	257 84	14	15	36 4 0
21. Arumbakkam	443 66	23	31	67 8 0
23. Ullagaram	264 90	12	12	30 0 0
23. Talaikkanjeri	385 56	14	19	41 4 0
24. Kolattivanjeri	224 96	9	8	21 4 0
25. Nandambakkam	561 99	20	27	58 12 0
Total...	9,931 40	315	485	1,000 0 0

Average deduced from the foregoing.

Cost per village..... Rs. 40 0 0
Cost pe rsquare-mile..... ,, 64 7 0

Revenue Survey Office,
Saint Thomas' Mount,
11th *February* 1867.

(Signed) J. G. CLOETE, Lieutenant,
First Assistant Superintendent, Revenue Survey,
in charge of Madras Demarcation.

D.

Statement shewing the number of cases in which offenders have been punished under Section IV, Act XXVIII of 1860, *and the amount of fines levied.*

Talook.	No. of Cases.	No. of Offenders.	Amount of fines inflicted.	Amount levied.	Remarks.
			Rs. A. P.	Rs. A. P.	
Sydapet.....	20	37	153 0 0	153 0 0	Imprisonment in default has in no case been found necessary.
Trivellore...	...	...	... ...	... ...	
Total... ...	20	37	153 0 0	153 0 0	

Revenue Survey Office,
Saint Thomas' Mount,
11th *February* 1867.

(Signed) J. G. CLOETE, Lieutenant,
First Assistant Superintendent, Revenue Survey,
in charge of Madras Demarcation.

E.

Statement shewing the total cost up to 31st December 1866.

	Expended in Establishment.	Expended in Boundary Pillars.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Up to 30th April 1866....	6,787 8 11	717 8 6	7,505 1 5
From 1st May to 31st December 1866.	22,384 1 5	13,031 12 11	35,415 14 4
Total.....	29,171 10 4	13,749 5 5	42,920 15 9

Revenue Survey Office,
Saint Thomas' Mount,
11th *February* 1867.

(Signed) J. G. CLOETE, Lieutenant,
First Assistant Superintendent, Revenue Survey,
in charge of Madras Demarcation.

F.

Statement shewing the strength of the Madras Demarcation Party on 31st December 1866, *and the Establishment sanctioned.*

	1st Asst. Supt.	2nd Asst. Supt.	Inspector and Depy. Inspector.	Head Gumastahs.	Gumastahs and Office Gumastahs.	Duffadar.	Head Peons and Peons and Sweeper.	Muchies.	Dressers.
Strength	1	1	4	15	56	1	97	3	1
Sanction	1	1	4	17	56	1	101	3	1

Revenue Survey Office,
Saint Thomas' Mount,
11th *February* 1867.

(Signed) J. G. CLOETE, Lieutenant,
First Assistant Superintendent, Revenue Survey,
in charge of Madras Demarcation.

(True Copies.)

Revenue Survey Office, Chepauk,
26th *April* 1867.

(Signed) W. STARR,
Assistant, Revenue Survey Office.

REPORT ON THE OPERATIONS OF THE GANJAM DEMARCATION PARTY FOR 1866.

ORGANIZATION AND STRENGTH OF PARTY.—I was appointed to the charge of the Ganjam Demarcation and Survey Parties on the 23rd February 1866.

After doing duty for a few days with the Demarcation Party at Saint Thomas' Mount, I proceeded to Ganjam, and was informed by the Collector that he wished the work to begin at Chicacole.

On receipt of orders to the same effect from the Acting Superintendent, Revenue Survey, I went to Chicacole, and, on the 4th April, Captain Wynch, then in charge of the Kimedy Survey, handed over to me the following establishment :—

1 Deputy Inspector.
1 Office Gumastah.
1 Head Gumastah.
17 Gumastahs.

Acting Boundary Inspector V. Ramakristnama and three Gumastahs arrived from Madras on the same date.

Of the men handed over by Captain Wynch, only two knew any thing of Demarcation, and of the remainder the majority did not turn out well.

At present only eight Gumastahs of those handed over are on the list.

The months of April, May, June and July were spent in training men and collecting materials.

Actual work did not fairly commence till August.

The party then consisted of five Head Gumastahs and twenty-one Gumastahs, besides the Inspector and Deputy Inspector.

Mr. B. W. Puckle, Second Assistant Superintendent, Revenue Survey, joined on the 2nd September, and has since been in charge of the work in the field.

The party is now working at full strength—

1 Inspector.
1 Deputy Inspector.
5 Head Gumastahs.
25 Demarcation Gumastahs.

Besides the above establishment, one Deputy Surveyor and six Survey Amins or Gumastahs have, by permission of the Superintendent, been temporarily employed in Demarcation since November.

PRINCIPLES ON WHICH DEMARCATION HAS BEEN CONDUCTED.—2. A cut-stone station or offset is fixed at each bend or junction of fields on village boundaries.

The station stones are set in masonry.

All the culturable land is divided into Khandams of about fifty acres, following natural boundaries when such exist; and these are marked with cut-stone stations three and a half feet long and roughly squared offsets from two to three feet long, the longer offset stones being fixed at bends, and the smaller at junctions of fields on the Khandam boundary.

Village sites and tanks which it would be impossible for the Amin to measure, and tracts of unculturable waste, hills, jungles, &c., are marked as separate Khandams, without reference to size.

The fields are marked with stones two feet long, roughly squared and scored with the broad arrow; distinct properties being separately demarcated instead of being clubbed to form Survey fields as in other districts.

The whole of the stones, except for a very few Inams, have been supplied at the cost of Government under Section VII of the Boundary Act, and, under the same Section, for the past two months four coolies have been employed under each Gumastah to fix the stones in their proper places, and a bricklayer under each Head Gumastah to set the boundary stations in masonry.

DIFFICULTIES MET WITH IN SUPPLY OF STONES, AND STEPS TAKEN TO OVERCOME THOSE DIFFICULTIES.—3. Considerable difficulty has been experienced in getting stones. Quarrying on a large scale had not been attempted in the neighbourhood, and few workmen were to be had. The ryots were unable to do anything more than send their bandies to the quarries for such stones as I could get ready with the labour procurable.

Advertisements for a Contractor were not responded to. Workmen were, however, gradually collected, and in July I obtained the services of a quarry Contractor, who however would sign no contract unless I guaranteed regular monthly payment for all stones delivered during the previous month. As I had not sufficient funds at my disposal for this, I could give no such guarantee.

He has, however, continued to supply stones to my order, receiving payment as fast as I can collect money from villagers.

The rates for stones varied a little at first, are at present fixed as follows :—

Boundary Stations	3½ × 1 × ½ feet	each 12 Annas delivered in the villages.
Khandam Stations	3½ × ¾ × ½ „	
Boundary Offsets	3 × ½ × ½ „	per 100 Rs. 23-7-0 at quarry.
Khandam Offsets and field stones	2 to 3 × ½ × ½ „	per 100 Rs. 5-12-0 at quarry.

The supply of stones is at present sufficient, and, though liable to occasional falling off from want of labour, as during the late paddy harvest, is likely to remain so.

The ryots are almost always willing to send their bandies for all field stones and offsets required for their villages.

CHIEF OBSTACLES TO PROGRESS OF DEMARCATION.—4. In this district the only real obstacle to progress, which cannot be easily got over, is the difficulty experienced in getting a sufficient supply of stones, and of the kind required, on the ground, before Demarcation commences. The ryots put off sending their bandies to the quarries till the last moment, and it is often only the actual presence of the Gumastah in the village and positive entreaty on his part that induces them to send at all. When the stones have reached the village, they have to be carried often a long way to the fields; and unless all this is done before the Gumastah begins to demarcate, his work cannot go on. By giving the Gumastah a few* paid coolies, he can get from 100 to 150 stones fixed in a day, but the stones must be ready on the ground to get this amount done. In the dry weather, when the ground becomes hard, it will probably be necessary to increase the number of coolies. My best men now turn out from 600 to 900 acres a month, but others again only do half that amount. Some such inducement to increased exertion, as the measurement allowance to Survey Ameens would, I think, be attended with the best results.

* Four are at present sufficient.

At present first class Gumastahs get only one rupee more pay than first class Ameens. I would place them on the same footing, and give them the same allowance of one rupee for every 100 acres really well demarcated, not including Poramboke Khandams. The extra cost would be well laid out.

The preparation of fair copies of sketches in the field is, I find, a difficulty. It can be done much more neatly, correctly and expeditiously in the Office, with tracing glasses.

INFLUENCE ON PROGRESS OF WORK OF DEMARCATING EACH PROPERTY.—5. Demarcating each property separately, the average size of fields is 1-3 acre in wet land and 1·7 acre in dry. The average number of stones per acre is at present 2·5.

With properties clubbed under Demarcation Rule 26, I should say from experiments in wet and dry Khandams, that the number of stones per acre would be from 1-5 to 2, the saving being greatest in dry land.

The saving of labour is not exactly represented by the number of stones, as the Gumastah would have to sketch in the clubbed fields, and they would all have to be registered. I estimate the saving roughly at about twenty-five per cent.

COST OF DEMARCATION TO THE RYOTS.—6. The cost of Demarcation to the Ryots in

Government villages, varies from two annas to eight annas per acre. Cartage is a most serious item, and is nearly always avoided by inducing those Ryots who possess bandies to send them to the quarries for all stones required for the village. It is, in fact, the only extra charge to which refractory villagers subject themselves.

Under ordinary circumstances, stones form the principal item. Masonry for boundary stations, at the rate of eight annas a station; hire of coolies at two annas each per day for fixing stones; cost of printed stone bills at three pice each, and pay of Gumastah preparing accounts, and of Peons collecting bills form the other items charged to the Ryots.

The cost of Demarcation for the whole village is written out, and each item read to the assembled Ryots, in their own village, usually by the Boundary Inspector.

All objections are listened to and explained, and when all are satisfied the whole cost is divided among them in proportion to the [illegible] their puttahs. This method of dividing the cost was adopted at the request of the Principal Assistant Collector, as best suited to the comparatively primitive condition of the Ryots in this district.

COST TO GOVERNMENT.—7. The cost to Government, as detailed in the appended table, has been—

	RS.	A.	P.
Per acre	0	3	1
Per square mile	122	5	5

This will be much reduced when the talook is finished.

RECOVERY OF COST OF DEMARCATION FROM RYOTS.—8. Owing to successive bad seasons and general scarcity, collection of cost of Demarcation was at first very slow and troublesome. It is now much less so, though still attended with considerable delay. Many of the land-holders in some villages live at a distance, and sublet their lands. Others are temporarily absent at the time of collection.

At first I sent the bills to the Tahsildar for collection, but have since, by request of the Principal Assistant Collector, employed a Head Gumastah on this duty. I find that he can collect the money much more quickly than the Tahsildar.

The total amount received from the Ryots up to the 31st December was Rupees 3,578-13-11, and the outstanding advances on that date amounted to Rupees 3,856-10-10.

NUMBER OF BOUNDARY DISPUTES SETTLED, AND HOW.—9. There have been very few boundary disputes. One was settled by arbitration and another by "razinama." The villagers are generally willing to submit their disputes to the decision of the Boundary Inspector.

NUMBER OF FINES INFLICTED UNDER THE ACT.—10. Fines under the Boundary Act have been inflicted in one case only upon three ryots in one village; the total amount levied was Rupees 60. The money was paid immediately, and there have been no further cases requiring serious notice.

GENERAL REMARKS ON PARTY.—11. The men have now had five months' experience, and are improving daily. Want of good Head Gumastahs has been much felt. The permission to employ a few Survey Ameens or Gumastahs is of great service, as without it no trained men were available to fill vacant posts among the Demarcators.

TOTAL AMOUNT OF WORK COMPLETED AND IN PROGRESS.—12. The total amount of work finished is—

29	Government villages,	1·31	square-miles, Ayakat.
8	Agraharams "	5·94	" "
1	Mokasa "	0·54	" "
1	Zemindary "	10·80	" "

Total area finished villages, 87·79 square-miles. The actual amount demarcated in detail, including portions of unfinished villages, is 68·74 square-miles.

The number of villages now in progress is twenty-two, and their total Ayakat amounts to 32·63 square-miles.

The first main circuit, consisting of thirty-seven villages, is finished, and is now under Survey.

TOTAL COST.—13. The total expenditure during the year was Rupees 10,739-15-2, a little more than half the sanctioned amount.

NATURE OF COUNTRY DEMARCATED.—14. The country demarcated lies between the Chicacole and Calingapatam rivers, and has a sea-board of about fifteen miles. It is open and highly cultivated, there being little culturable land not taken up. The uncultivable waste is chiefly open, stony ground, covered with stunted grass, and is used for pasturage. There is no jungle, and there are no extensive swamps.

DISPOSITION OF RYOTS TOWARDS THE DEMARCATION.—15. No opposition whatever has been shewn by the people to the work of Demarcation. They appear to fully appreciate the advantage of having their lands permanently laid out. They are, however, much opposed to clubbing.

NATURE OF SEASON.—16. The season has, on the whole, been favourable. Considerable delay from rain was experienced in August, September, and October. Rain fell on thirty-nine days during the three months.

HEALTH OF PARTY.—17. The health of the party has been good.

REVENUE SURVEY OFFICE,
CHICACOLE,
29th January 1867.

(Signed) J. C. CARDOZO,
First Assistant Superintendent, Revenue Survey,
In charge of Ganjam Party.

(True Copy.)

REVENUE SURVEY OFFICE,
CHEPAUK,
26th April 1867.

(Signed) J. F. B. PRIESTLEY, Lieutenant Colonel,
Superintendent, Revenue Survey.

Statement shewing the sizes of Fields, and costs of Demarcation to Ryots.

VILLAGE.	Khandams.	Government. Wet. Fields.	Government. Wet. Acres.	Government. Dry. Fields.	Government. Dry. Acres.	Inam. Fields.	Inam. Acres.	Poramboke. Fields.	Poramboke. Acres.	Total. Fields.	Total. Acres.	Revenue.	Cost of Demarcation to Ryots.	Cost of Demarcation to Ryots. In each rupee of Revenue.	Cost of Demarcation to Ryots. Per Field.	Cost of Demarcation to Ryots. Per Acre.	Cost of Demarcation to Ryots. Per Square Mile.	No of Stones fixed.
												Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Mafusbandar	8	150	144	101	161	15	19	30	205	296	529	805 14 7	168 7 5	0 3 4	0 9 1	0 5 1	293 11 1	1,240
Kallipalli	15	9	349	40	209	34	120	59	157	482	834	1,883 7 4	367 4 10	0	12 9	0 7 1	281 13 10	2,862
Ampolu...	[illegible]		995	13	2,037	108	337	308	2,012	2,166	5,211	4,284 14 [illegible]	885 0 [illegible]	0	7 6	0 3 0	113 14 9	12,450
Singapuram...	63	749	[illegible]	822	1,520	70	283	169	1,749	1,801	4,452	8,642 15 [illegible]	766 15 7	0 1 5	11 4	0 [illegible]	110 4 1	11,183
Bairi	12	284	478	152	87	53	124	52	77	641	766	3,516 2 2	230 14 10	0 1 1	5 9	0 4 10	102 15 1	3,093
Korun	11	459	386	216	101	44	60	46	122	765	678	1,905 6 4	237 4 10	0 2 0	5 0	0 3 7	224 0 6	2,022
Pedapadu	28	427	595	256	471	39	161	96	595	818	1,962	2,332 2 5	366 3 0	0 2 6	0 7 2	0 3 3	128 10 1	4,587
Ambalanalasa	14	140	394	56	94	17	58	37	68	250	614	1,291 0 3	161 14 9	0 2 0	0 10 4	0 4 3	42 12 3	2,099
Tuluga...	17	540	405	298	548	43	103	82	152	963	1,203	1,864 1 3	293 3 10	0 2 6	0 4 11	0 3 11	155 5 11	3,836
Vamaranalli	29	123	116	800	1,297	66	94	70	2,379	1,158	3,856	4,301 15 11	428 11 0	0 1 7	0 5 11	0 1 9	70 9 8	5,795
Total ...	281	3,074	5,131	3,844	6,525	489	1,258	949	7,146	9,256	20,000	31,431 12 10	4,666 6 4	0 2 0	0 6 0	0 3 2	127 10 1	50,034

REVENUE SURVEY OFFICE,
CAMP CHICACOLE,
29th January 1867.

(Signed) J. C. CARDOZO,
First Assistant Superintendent,
In charge of Ganjam Party.

Statement shewing cost of Demarcation to Government.

Total expenditure up to 31st December.	Area demarcated up to 31st December. Completed villages. Government. No.	Government. Square-Miles.	Agraharams and Proprietory. No.	Agraharams and Proprietory. Square-Miles.	Total. No.	Total. Square-Miles.	Total area demarcated in detail, including portions of incomplete villages. Acres.	Total area demarcated in detail, including portions of incomplete villages. Square-Miles.	Cost per Square Mile. Completed villages only.	Cost per Square Mile. Total ma-
Rs. As. P.										

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Copy of Report from Dir
of Revenue Settlt to the
Secretary to the Board of
Revenue dated 10 May
1867 No. 615/19 regarding
Survey & Settlement ope=
rations during 1866-

37

Trichinopoly were made over to the Collector of that district, on the breaking up of the Settlement office.

SALEM.—24. At the commencement of the year the Deputy Director was engaged on his report on the northern talooks and on the accounts connected therewith. He visited the talooks and arranged the grouping of the villages. The report was despatched to the Central Office in April. In May, Mr. Puckle left the department to take up his appointment in Tinnevelly, and the Deputy Director's office was placed under the native Uncovenanted Assistant, Vencatacharri. On the temporary transfer of the latter to Tinnevelly, for employment under the Collector, Supervisor Seshayengar was placed in charge of the office. The establishment was greatly reduced, and such hands as were retained were employed to the best advantage in office during the remainder of the year.

Board's Proceedings, 7th June 1866, No. 8914.

TINNEVELLY.—25. The expenditure set opposite this district consists of the pay of a small establishment employed under the orders of the Collector and of the Survey Department in correcting and revising Demarcation. Several servants were detached from the Salem party on this duty at Mr Puckle's request.

COIMBATORE.—26. The Demarcation in Coimbatore, so far as it was arranged to be performed by the Settlement department, was nearly completed in 1865. During the year under report the remaining villages were completed, and made over to the Survey department. In the first quarter 5,576 boundary and Khandam pillars were built, besides some 12,000 boundary and Khandam offsets. The party was finally broken up in the second quarter. The diminished expenditure set opposite this party is thus accounted for.

27. The following statement shews the total expenditure of the year compared with that of 1865, and with the sanctioned amount. This latter comprises parts of two Budget allotments, viz., for 1865-66 and 1866-67, one-third of the former and two-thirds of the latter being taken, those being the proportions of the two official years which make up the calendar year, now under report. The total sanctioned amount thus arrived at was Rupees 3,91,667, and the total expenditure Rupees 2,87,208, being Rupees 1,04,459 less than the sanctioned amount, and Rupees 65,805 less than the expenditure of the year 1865. The decrease in the actual expenditure below the sanctioned amount is owing to the reductions made in some establishments, on the breaking up of parties, and to others not having been maintained at full strength. Owing to the slow progress made in printing the Settlement Registers, a much smaller sum was actually expended under this head during the year than had been provided for the purpose. It will be observed that the expenditure on the Settlement establishments, under the Collectors of Nellore and Tinnevelly, exceeds the sanction. The reason is, that in the Budget of 1865-66 no separate provision was made under this head, the required amount being taken from the other funds of the Department. The sum of Rupees 56,866, surplus funds of the Settlement Budget for 1866-67, was in accordance with Government Order dated 10th December 1866, No. 3,320, transferred to the Superintendent of Revenue Survey for the purposes of his Department. The item of Rupees 9,172, entered at the foot of the statement as "charges not debitable to parties, consists of the pay, for three months, of the Deputy Collector employed in revising the assessment of the Madras district under the orders of the Collector, debitable to this department by Government Order dated 24th January 1865, No. 108; of the pay of a small establishment employed by the Collector of Vizagapatam in making experiments of produce, Government Order 19th July 1865, No. 1,665; of the pay of Mr. Symonds, Assistant Director of Revenue Settlement and of Native Assistant Vencatacharri placed at the disposal of the Collector of Tinnevelly; of the pay of a Supervisor and party of Demarcators placed at the disposal of the Superintendent of Revenue Survey for employment in the Madras Demarcation, and of the price of certain bales of cloth purchased for mounting Maps. The details are given in the margin.

	RS.
Madras Deputy Collector	1,050
Vizagapatam Establishment	173
Pay of Mr Symonds and Native Assistant Vencatacharri	5,007
Madras Demarcation Establishment	1,524
Long Cloth for Mounting Maps	1,416
	9,172

18. On the completion of the actual Settlement, copies of the Asamiwar accounts were made for the information and guidance of the Tahsildars, pending the preparation of the final Registers, on which the extra establishment was employed from the middle of August. By the end of the year, 208 Registers had been completed with the exception of the entries of the detailed areas of the interstitial fields to be hereafter inserted. The total area re-classified under Mr. Cox was 99,788 acres. The area of new Classification and new Demarcation, executed partly under Mr. Cox and partly under Mr. Wilson, amounted to 31,671 and 34,887 acres, respectively. The new work was of a very scattered nature, and the difficulty of executing it was enhanced by the indifference and neglect of the ryots, and by the scarcity of suitable materials for marks in the delta talooks.

19. During the latter half of the year, Mr. Wilson was much engaged on the Guntoor Report, and on the various detailed accounts and statements connected therewith. During the harvest, steps were taken to procure as many trustworthy experiments of produce as possible. In the expenditure a considerable increase will be observed, attributable to the debit of Mr. Wilson's allowances, and to the increased establishments employed in connection with the Settlement.

KURNOOL AND CUDDAPAH.—20. As usual, these two districts will be noticed together, as the work in them has been performed by the same party. During the year under report, however, the operations were confined almost exclusively to Kurnool. At the commencement of 1866, the party was employed in the Pattikonda talook, and on its completion, in April, moved to the Cumbum and Markapur talooks. In Pattikonda the heat and drought impeded the work, the water having actually failed in the previous November. The same impediments were met with in Cumbum and Markapur. The season was not only unprecedentedly hot, but also unusually sickly. The great drought was followed by an exceptionally heavy monsoon. Cholera prevailed for more than three months, and when it abated, a most virulent and fatal description of fever set in, and continued to prevail for the rest of the year. It is creditable to the exertions of the party, that in spite of these obstacles, the out-turn of work is in excess of that of the previous year. Towards the end of December, the Budwail talook of Cuddapah was taken up.

21. The new Settlement was introduced by Mr. Melville in 111 more villages of the four talooks of Kurnool proper, for which Survey areas had been received, and it was brought into force in them from the 1st July 1866. During the previous year, 143 villages had been settled, so that there now remain but 117 villages to be settled out of the 371 villages comprised in the four talooks. I hope that most of these will be settled during the course of this year. The vernacular portions of the diglott Registers for 108 villages were written. The expenditure in this party was higher than in the previous year. The items in which the increase chiefly occurs are the salaries, &c., of European Officers, Regimental allowances, and boundary pillars. The Deputy Director's allowances are debited for the whole year, whereas in 1865, they were partly charged to the Kistna district. The number of Assistants was, during a part of the year, in excess of the usual strength. Captain Stuart's Regimental allowances are debited for the whole year. A larger number of boundary pillars was erected than in 1865.

NELLORE.—22. The expenditure set opposite Nellore consists of the pay of a small office and field establishment maintained during a portion of the year for the correction of certain defects in the Demarcation, brought to notice by the Survey Department. This establishment has now been altogether dispensed with.

TRICHINOPOLY.—23. The expenditure set opposite this district was incurred in the first and second quarters, the party employed in it having been afterwards broken up or transferred to other districts. In the first quarter, the writing and printing of the Settlement Registers were completed, 142 having been written and 190 printed. A complete set of the printed Registers and Village Survey Maps has been bound in volumes and mounted on cloth for the Board's use. The Registers of twenty-two villages, transferred from Trichinopoly to the South Arcot District, were forwarded to the Collector in manuscript, none of the Registers of the Chidambaram talook having been printed. All records connected with the Settlement of

15. I now proceed to make such remarks on the work performed in the several districts and the expenditure incurred, as seem required in each case.

GODAVERY.—16. The preparation of accounts having sufficiently advanced to allow of the introduction of the Settlement in the Godavery District being commenced, I proceeded thither at the end of December 1865, and during the first three months of 1866, and for a part of April, was personally engaged on this duty in the Eastern and Central deltas and Upland talooks. By that time the two deltas, aggregating 300 villages, and parts of the Upland talooks of Rajahmundry, Peddapoor, and Yernagudem had been settled. On my return to Madras, the remaining villages were taken up by Mr. Cox, who completed the duty within the Fusly, the total number of villages settled being 577. By the 1st July 1866, the whole of the Government villages in the Godavery district with the exception of the jungle tracts excluded from Survey, and the islands in the Godavery had been brought under the new Settlement. During the latter half of the year the establishment was chiefly employed in office in preparing the final Settlement Registers in diglott for the press. In their order of the 31st August 1866, No. 2,306, the Government sanctioned the conclusion of a contract with Messrs. Graves, Cookson, and Co., to print the above Registers as well as those of the Masulipatam division of the Kistna district and of Kurnool. Some delay took place in the preparation of the deed of agreement, which was not finally executed till the 22nd October. By the end of the year, however, the required number of copies of the Registers of 129 villages had been turned out by the contractors. In addition to the office work, numerous tracts of land hitherto undemarcated in detail, but now taken up for cultivation, were, on the requisition of the local Revenue Officers, demarcated, classified, and assessed. This work was necessarily of a scattered nature, and though aggregating only six square-miles of Demarcation, and five square-miles of Classification, was equal in the labour and trouble it involved to a far larger area. The expenditure was considerably higher than in the previous year, the chief causes of the increase being the debit of Mr. Cox's salary for three months, the additional establishments employed for the purposes of Settlement, the payments made to the contractors for printing, and the increased salary granted to the Native Assistant under Government Order, dated 21st May 1866, No. 1,203.

KISTNA.—17. At the commencement of the year, the services of Mr. Wilson, then Head Assistant in the Kistna District, were placed temporarily at my disposal for the introduction of the Settlement in the Masulipatam division, and for the compilation of the Report on the Guntoor division of the district. Mr. Cox being at the same time specially employed in re-classifying those villages in both divisions, the accounts of which had been lost in the cyclone of 1864, as well as in newly demarcating and classifying lands, which, though left untouched when the original field operations were in progress, had subsequently been taken up for cultivation. Mr. Cox had completed the re-classification by the end of March, and then joined me in the Godavery district as stated above. On his departure from the Kistna, the new Demarcation and Classification work there was supervised by Mr. Wilson, who, in addition to his Settlement duties, was from the beginning of April appointed to the charge of Sub-Collectorate. By that time the work of actually introducing the Settlement in Masulipatam had been nearly completed, but a great deal of office work remained to be performed for that division, and the accounts and data for the Guntoor Report, many of which were not forthcoming after the cyclone, had to be collected a second time. Mr. Wilson continued cheerfully to perform the double duty during the remainder of the year. Some difficulty was at first experienced in introducing the new Settlement in the talook of Gudivada, where considerable opposition was shewn by the ryots; but this was in a very short time overcome by the firmness of the Settlement Officer, aided by the Acting Collector, and the ryots, who shortly before had tumultuously and obstinately refused to take their tickets, were as anxious to accept as they had before been to reject them. From that time all opposition ceased, and none was manifested in any of the other talooks.

G. O. 20th December 1865, No. 3,079.

Classification and Assessment.														Demarcation.								Total Expenditure.		Difference.
Names of Districts.	Extent in square-miles.		Expenditure.		Average cost per square-mile.									Extent in square-miles.		Expenditure.		Average cost per square-mile.						
	1865.	1866.	1865.	1866.	1865.			1866.						1865.	1866.	1865.	1866.	1865.			1866.			
1	8	9	10	11	12			13						2	3	4	5	6			7		14	15	16
	Sq. M.	Sq. M.	Rs.	Rs.	Rs.	A.	P.	Rs.	A.	P.				Sq. M.	Sq. M.	Rs.	Rs.	Rs.	A.	P.	Rs.	A.	P.	Rs.	Rs.	Rs.
Godavery	...	5	9,456	21,340	...	...		...	...					...	6	1,119	529	...	...		...	...		10,575	21,869	+11,294
Nellore	...	...	...	...	...	...		...	...					...	...	6,340	929	...	...		...	...		6,340	929	−5,411
Kistna	...	174	20,089	27,228	...	...		...	...					12	63	1,663	4,642	...	...		...	...		21,752	31,850	+10,122
Kurnool	544	1,270	27,983	53,657	50	15	9	41	10	10				486	1,179	28,032	63,200	52	5	3	49	0	0	55,040	1,16,957	+60,917
Cuddapah	403	422	22,836	...	55	9	4	...	...					416	3	25,032	5,808	58	4	10	...	...		47,868	6,320	−41,548
South Arcot, Chidambaram Taluk ...	415	1	479	...	...	...		...	...					...	...	...	...	...	...		...	...		479	479	
Trichinopoly	...	...	94,037	21,934	...	...		...	...					...	...	3,779	...	...	...		...	...		94,037	21,934	−72,103
Salem	...	...	6,057	19,423	...	...		...	...					...	...	32,514	2,952	86	0	5	...	...		9,806	19,433	+9,567
Tinnevelly	...	...	...	...	...	...		...	...					...	...	42,557	17,093	100	6	1	...	...		32,514	2,052	−23,462
Coimbatore	...	...	...	...	...	...		...	...					...	...	...	...	...	...		...	...		42,557	17,093	−25,464
Total.....	1,367	1,450	1,80,972	1,44,024	...	...		...	...					1,696	1,211	1,41,056	93,343	...	...		...	...		3,22,028	2,39,376	−82,661
Charges not debitable to parties, including Settlement Establishments under Collectors of Nellore and Tinnevelly	...	...	...	...	...	...		...	...					...	...	...	...	...	...		...	...		30,965	47,841	+16,856
Grand Total.....	...	...	...	...	...	...		...	...					...	...	...	...	...	...		...	...		3,53,013	2,87,208	−65,805

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with another report from the Deputy Director, was forwarded with my subsequent letter of the 29th August, No. 1,211. These papers are under the Board's consideration.

12. The survey areas of the Guntoor division of the Kistna district are still incomplete; those for the Palnaud talook not having been yet furnished. The Acting Sub-Collector on special duty has, however, made good progress in the preparation of the Settlement Report, and I expect shortly to receive it, accompanied by accounts based, for most of the talooks, on survey areas.

Scene of operations during the year 1866.—13. During the year under report regular field operations were limited to the districts of Kistna, Kurnool, and Cuddapah. In the first named district, the reclassification of the villages, for which the accounts had been lost in the cyclone, commenced in the previous year, was continued and completed by the extra party organized for the purpose, and which party also performed such fresh Demarcation and Classification as the extension of cultivation since the execution of the original field work rendered necessary. In Kurnool and Cuddapah the work consisted of Demarcation and Classification combined.

14. The statements in Appendix A. exhibit, in detail, the work performed, and the expenditure incurred in each district during the year. Annexed is an abstract giving the results at one view, and comparing them with those for 1865. In the area demarcated there is, as was to be expected, a decrease, owing to the breaking up of the parties working in Tinnevelly and Coimbatore, and the cessation of operations in those districts. The area classified is in excess of the previous year's out-turn by eighty-three square miles, and was chiefly performed in Kurnool. The expenditure of the year, excluding Rupees 47,841, not debitable to the parties, and the particulars of which will be explained in the sequel, is less than that of the previous year by Rupees 82,661, the figures being Rupees 2,39,367 against Rupees 3,22,028. The decrease is owing chiefly to reductions of establishments in Coimbatore, Salem, and Tinnevelly.

pees 1,45,544. I have not received the exact figures for each talook after the completion of the Jamabundy of the current Fusly, but those which I have, are up to so late a date that the demand will not have been altered subsequently to any material extent. The occupied area for the Fusly was 4,60,571 acres, and the assessment, including water-rate, Rupees 13,35,507. Next year a great increase may be anticipated. The splendid harvest of the current Fusly, and the improvements which have been lately effected, and are now being effected in the irrigation and drainage, cannot fail to give a great stimulus to cultivation. During my recent visit to the district I received gratifying accounts from the Tahsildars and other local officials of the eagerness with which applications were being made for land. In two talooks alone, durkhasts for upwards of 6,500 acres, assessed at Rupees 25,000, have already been received for next Fusly, and many more may be expected during the next few months.

RESULT OF THE NEW SETTLEMENT IN KURNOOL.—8. I am unable to give the particulars of the present area of cultivation and assessment in those villages of Kurnool proper in which the new Settlement has been introduced, the required returns not having been received from the district. The information shall be furnished separately hereafter.

RESULT OF THE NEW SETTLEMENT IN THE MASULIPATAM DIVISION OF THE KISTNA DISTRICT.—9. The introduction of the new Settlement into this tract was completed by Mr. Wilson within Fusly 1275, and it was brought into force from the commencement of Fusly 1276. The effect of applying the new rates to the occupied area of Fusly 1275 was an assessment, including water-rate on the delta irrigated land, of Rupees 8,77,959 against Rupees 5,79,350, the revenue beriz of the year, an increase of Rupees 2,98,609, or 51½ per cent. In this district also, land was largely given up by the ryots, especially in the delta, where the water-rate had never before been fully imposed. The total relinquishments up to the 31st May amounted to 60,372 acres, assessed, including water-rate, at Rupees 2,71,077, of which amount, however, no less a sum than Rupees 1,74,853 consisted of water-rate. The remarks which I have made above on the relinquishments in the Godavery delta, apply in a great measure to the Kistna also. I am not in possession of the particulars of the actual Jamabundy Settlement of the current Fusly, but up to the 30th September last, 16,592 acres, assessed, with water-rate, at Rupees 43,559, had been newly taken up, and the demand at that date stood at Rupees 6,50,441, shewing an increase over the demand of the previous Fusly of Rupees 71,091, or 12 per cent. The final results of the Fusly will doubtless shew a still larger increase.

RESULT OF THE NEW SETTLEMENT IN TRICHINOPOLY.—10. The introduction of the new Settlement into the Trichinopoly district, as already reported, was completed by Mr. Puckle early in 1865, and it has consequently now been in force for three years, including the year of introduction. In Fusly 1273, the year before the Settlement, the assessment of Government lands, exclusive of the amount levied on unsurveyed cultivation and occasional second crop, was Rupees 15,82,174. The new assessment amounted to Rupees 11,94,018, or a reduction of Rupees 3,88,056. The following statement, furnished to me by the Acting Collector, will shew that the new system has resulted in a steady increase, both in the cultivated area and in the assessment, and that already Rupees 1,31,121 out of the Rupees 3,88,056 has been recovered :—

Fuslies.	Extent.	Assessment.
	Acres.	RS.
1274	7,64,494	11,94,018
1275	8,36,340	12,72,688
1276	8,86,763	13,25,239

PROPOSALS FOR THE SETTLEMENT OF OTHER DISTRICTS.—11. A proposal for the Settlement of the Talaghat division of the Salem district, accompanied by a report from the late Deputy Director, Mr. R. K. Puckle, was submitted with my letter of the 8th March 1866, No. 286. A further proposal for the Settlement of the Baramahal and Balaghat divisions of the same district,

new system, assessed as dry, they were as fairly chargeable with water-rate, as the dry lands converted into wet. The season of Fusly 1275 was unfavorable, and the ryots were discouraged At this juncture, the water-rate was suddenly raised to four rupees by Government order, dated 12th May 1865, No. 1,006, and so dissatisfied were the ryots in consequence, that at the Jamabundy, they refused for a whole week to take their puttahs, solely on the ground of the alleged exorbitancy of the water tax. The leading men among them are of the Rajah caste, wealthy and influential. They appear to have determined to make a stand against the water-rate, and try if by largely relinquishing land, they could not coerce the authorities into reducing it. Reports were industriously circulated that it was the intention of the Government shortly to raise the rate to six and even to eight rupees, and some color was given to this report by the fact that the rate in Kurnool, on lands under the Irrigation Company's works, was raised to the first named amount. In addition, it may be mentioned, that both the irrigation and drainage works in the sub-division, and especially in Undi, are still very imperfect. The result of the above causes combined was the relinquishment of 12,496 acres in the Undi talook and 4,390 acres in Tanuku, and the diminution in the demand of the amount above stated.

Sub-Collector's Annual Settlement Report for Fusly 1275, paragraph 2.

Sub-Collector's Annual Setttlement Report for Fusly 1275, paragraph 9.

6. I trust, however, that this reaction will be but temporary. As contrasted with the previous year, Fusly 1276 was a most favorable one, and the crops unusually abundant. The ryots had cause to regret that they had thrown up lands, which if cultivated, would have yielded them heavy crops, convertible into money at the almost famine prices which prevailed last year. Experience will now have made them wiser. They will perceive that the Government have not reduced the water-rate in consequence of their obstruction, and they will no longer care to deprive themselves of the ample profits which will still remain to them after paying that rate. I have every reason to expect that a large portion of the land thrown up will be again brought under cultivation in the coming Fusly, and I know that the energetic Engineer, who at present has charge of the range, (Mr. Rundall), is doing all that the means at his command will allow, to remedy the admitted defects in the irrigation and drainage of these talooks.

RESULT OF THE NEW SETTLEMENT IN THE EASTERN AND CENTRAL DELTAS AND UPLAND TALOOKS OF THE GODAVERY DISTRICT.—7. The introduction of the new Settlement in these tracts was completed during the first half of the year 1866, and the new rates were brought into force throughout the talooks from the 1st July, the commencement of Fusly 1276. The application of the sanctioned rates to the occupied area of Fusly 1275, viz., 5,05,905 acres, resulted in an assessment, including water-rate on the delta irrigated land, of Rupees 14,81,051, shewing an increase of Rupees 2,54,093, or 21 per cent. over the revenue beriz of 1269, on the accounts of which the original settlement calculations were based, but a decrease of Rupees 1,44,226 or 9 per cent. below the joint rents of the previous Fusly 1275. As was to be expected in the transition from joint-rents to ryotwary, a considerable extent of land was relinquished, and I am inclined to think that the causes to which I have alluded above in paragraph 5, viz., the unfavorable character of the season of Fusly 1275, and the enhancement of the water-rate at that particular period, led to the ryots availing themselves of the privilege to a greater extent than they would otherwise have done. At the same time I was well aware that much land must of necessity be relinquished. Under the joint-rent system it was the common practice for the ryots to retain in their occupation land practically useless to them. In many villages, especially in the delta, large tracts, though in the actual possession of the ryots, and included in the Amaracum, have been for years left uncultivated either through defect of irrigation or other cause. They are included in the joint-rent, and perhaps used for pasture; the assessment nominally apportioned on them being really paid out of the profits of other lands. The total area thrown up, after allowing for the extent taken up again immediately by other ryots, was 45,334 acres, assessed, including water-rate, at Ru-

REVENUE SETTLEMENT OFFICE,
MADRAS, 10*th May* 1867.

No. $\frac{645}{19}$.

From

R. E. MASTER, Esquire,
Officiating Director of Revenue Settlement,

To

R. A. DALYELL, Esquire,
Secretary to the Board of Revenue.

SIR,

OPENING REMARKS.—I have the honor to submit the usual Report of the operations of the Settlement Department during the year 1866, and to forward a Report from the Superintendent of Revenue Survey on the work of his Department for the same period.

2. It will be convenient that, in the first place, I should, as usual, briefly allude to the condition of those districts and parts of districts which have been brought under the new Settlement, as regards their present area of cultivation and assessment.

RESULT OF THE NEW SETTLEMENT IN THE CHIDAMBARAM TALOOK OF SOUTH ARCOT.—3. The number of newly settled villages in this talook has undergone an alteration, thirteen villages having been transferred from it to the Trichinopoly district, and twenty-two villages having been added to it from the same district. The total number of villages is now 396. The aggregate area under cultivation in Fusly 1275 was 1,30,038 acres, and the assessment thereon, including Kusser and Fussal jasti, Rupees 5,31,645. In Fusly 1276 there was a falling off in the area under cultivation, the extent being only 1,29,515 acres, the assessment on which, including the afore-named items, amounted to Rupees 5,19,397. In the twenty-two villages transferred from Trichinopoly, both the area under cultivation and the assessment are increasing. In Fusly 1274, when the Settlement was introduced, the area was 9,103 acres and the assessment Rupees 20,450. In Fusly 1275 the area increased to 9,879 acres and the assessment to Rupees 21,998. In Fusly 1276 the area again rose to 10,233 acres and the assessment to Rupees 22,868.

RESULT OF THE NEW SETTLEMENT IN THE WESTERN DELTA TALOOKS OF THE GODAVERY DISTRICT.—4. The new Settlement was introduced into these talooks in Fusly 1271, and was brought into operation from the commencement of Fusly 1272. It has consequently been in force for five years, and although, at first, the revenue fell, as was to be expected, owing to the large relinquishments of land inevitable on the change from the joint-renting to the ryotwary system, it very soon began to rise again, and each year I have hitherto had the pleasure of reporting a steady increase in the area under occupation and in the assessment. In Fusly 1275, the demand on the lands in occupation amounted to Rupees 7,42,840, an increase over the joint-rents of the year prior to the introduction of the settlement, of Rupees 1,71,467. I regret that I have now to report a falling off, instead of a still further increase in the revenue. The demand for Fusly 1276 amounts to only Rupees 6,60,253, shewing a decrease below that of the previous Fusly of Rupees 82,587. The decrease occurs in two talooks only, viz., Tanuku and Undi, and the greater part of it in the latter. The explanation of this retrograde movement, from the enquiries which I have made, I believe to be as follows.

5. The ryots of the sub-division, and especially those of the Undi talook, never became quite reconciled to the water-rate, even of three rupees. They considered it an unjust charge on their usual wet lands, and could not be made to understand that as such lands were, under the

Districts.	Sanctioned amount for the year 1866.	Actual expenditure in 1865.	Actual expenditure in 1866.	Difference between Columns 2 and 4.	Difference between Columns 3 and 4.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
Godavery		8,918	17,447		
Nellore	1,08,988	5,441	741	—50,907	—10,657
Kistna		18,310	25,430		
Coimbatore		36,039	14,463		
Salem		8,322	15,501		
Trichinopoly		79,287	17,497		
Tinnevelly	90,473	27,477	2,952	—54,523	—79,540
South Arcot (Chidambaram Talook) ...		404	...		
Kurnool...	1,03,404	47,276	94,061	— 3,969	+ 11,372
Cuddapah		40,787	5,374		
Central Office	55,469	49,737	45,901	— 9,568	— 3,836
Total ...	3,58,334	3,22,028	2,39,367	—1,18,967	—82,661
Tinnevelly and Nellore District Settlement Establishments...	33,333	11,011	38,669	+ 5,336	+27,658
Charges not debitable to parties ...	...	19,974	9,172	+ 9,172	—10,802
...	33,333	30,985	47,841	+ 14,508	+ 16,856
	3,91,867	3,53,013	2,87,208	—1,04,459	—65,805

ERECTION OF BOUNDARY PILLARS.—28. Statement B. in the Appendix shews in detail the number of boundary pillars constructed during the year. Annexed is an abstract of it.

Items.	Total
Village Boundaries.	
Villages	239
Khandam or Sub-divisions	3,481
Tri-junction pillars	296
Secondary pillars	7,464
Other marks on village boundaries	10,116
Marks on Khandams	49,183
Field Boundaries.	
Number of villages	403
Villages divided into Khandams ... No. of Villages...	213
Villages divided into Khandams ... No. of Khandams	3,723
No. of Fields marked	1,29,398

29. The annexed statement shews the number of villages and the demarcated area made over to the Survey Department during the year

Districts.	No. of villages.	Extent in square-miles.
Kurnool	106	1,004
Cuddapah	161	522
Coimbatore	40	215

30. The following statement shews the villages for which survey areas were received during the year :—

Districts.	No. of Villages.	Area in Square Miles.
Kistna*	121	775
Kurnool	121	643
Salem	731	1,029

* Including forty-eight square-miles, the area of eight villages furnished a second time, owing to the Lists first received having been lost in the cyclone.

GENERAL REMARKS.—The staff of European Officers attached to the Department has been reduced by one Deputy Director and four Assistants during the past year. In May, as already mentioned, Mr. Puckle was appointed Collector and Magistrate of Tinnevelly. In March Mr. Addis was transferred to the Survey Department, in accordance with Government Order of the 3rd of that month, No. 553. In Government Order of the 20th July, No. 1,788, the services of Majors C. Smith and E. O. Leggatt, no longer required owing to the breaking up of their parties, were placed at the disposal of the Military Department, and in Government Order of the 31st of the same month, No. 1,905, Mr. T. Pritchard was allowed to join his substantive appointment as Deputy Collector.

32. In conclusion, I have gratefully to acknowledge the valuable aid afforded me by Mr. Puckle during the period he remained in the Department, and by Messrs. Melville and Wilson during the whole year. Mr. Cox was of the greatest assistance to me in the Kistna and Godavery Districts, and afterwards did good service in Kurnool. The other Assistants are also favourably spoken of by their superiors.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) R. E. MASTER,
Officiating Director of Revenue Settlement.

APPENDIX A.

Statement shewing the extent of Demarcation and Classification work performed by the Settlement Parties, and the expenditure incurred thereon for 1866.

	Districts and Talooks.	Number of villages completed.	Number of villages in progress.	Ayakut or gross area in square-miles.	Actual work in square-miles.	Cost of field work.	Cost of work in the office.	Local superintendence.	Central Office proportion.	Total.	Average cost per square-mile. Rs.	A.	P.
	Godavery.			Sq. M.	Sq. M.	Rs.	Rs.	Rs.	Rs.	Rs.			
Demarcation.	Nursapur	...	...	...	5·78	190	...	221	104	515	...	...	...
	Tanuku	...	...	...									
	Undi	...	...	...									
	Amlapur	...	...	...									
	Ramachendrapur	...	...	...									
	Rajahmundry	...	...	...									
	Peddapur	...	...	...									
	Yernagudem	...	...	...									
	Ellore	...	...	...									
	Total.....	...	...	...	5·78	190	...	221	104	515	...	...	...
	Add cost of boundary pillars.	...	...	...	...	14	...	...	...	14	...	...	...
	Total...	...	...	...	...	204	...	221	104	529	...	...	...
Classification and Assessment.	Nursapur	...	...	...	5·05	16	1,651	1,937	913	4,512	...	...	...
	Tanuku	...	...	...			852	997	470	2,323	...	...	...
	Undi	...	...	...			711	830	391	1,933	...	...	...
	Amlapur	...	...	...			561	654	308	1,523	...	...	...
	Ramachendrapur	...	...	...			835	973	458	2,266	...	...	...
	Rajahmundry	...	...	...			307	358	169	834	...	...	...
	Peddapur	...	...	...			218	254	120	592	...	...	...
	Yernagudem	...	...	...			452	526	248	1,226	...	...	...
	Ellore	...	...	...			830	967	456	2,253	...	...	...
	Total...	...	...	...	5·05	16	6,417	7,496	3,533	17,462	...	...	...
	Cost of printing Settlement Registers and of mounting Maps...	...	...	...	...	...	3,093	...	785	3,878	...	...	...
	Total...	...	...	...	...	16	9,510	7,496	4,318	21,340	...	...	...
	Grand Total...	...	...	...	...	220	9,510	7,717	4,422	21,869	...	...	...
	Nellore.												
Demarcation.	Gudur	...	...	...	...	22	...	10	8	40	...	...	...
	Kavali	...	...	...	...	4	...	2	2	8	...	...	...
	Udiagheri	...	...	...	...	53	...	23	19	95	...	...	...
	Kandakur	...	...	...	...	190	...	83	69	342	...	...	...
	Kanigherri	...	...	...	...	36	...	16	13	65	...	...	...
	Ongole	...	...	...	...	210	...	92	77	379	...	...	...
	Total...	...	...	...	...	515	...	226	188	929	...	...	...
	Kistna.												
Demarcation.	Bandar	11	...	...	·52	94	...	167	66	327	...	...	...
	Bezwada	8	...	...	·65	65	...	115	46	226	...	...	...
	Gudiwada	10	...	...	1·77	17	...	30	12	59	...	...	...
	Nandigama	19	...	...	3·28	97	...	172	68	337	...	...	...
	Rajapet	33	2	...	11·60	144	...	255	101	500	...	...	...
	Bapatla	15	5	...	13·50	248	...	439	174	861	...	...	...
	Krosur	41	1	...	4·20	183	...	324	129	636	...	...	...
	Vinukonda	19	1	...	5·49	108	...	191	76	375	...	...	...
	Palnad	17	1	...	4·24	186	...	330	131	647	...	...	...
	Guntoor	11	...	...	4·41	73	...	129	51	253	...	...	...
	Repalli	16	...	...	3·54	121	...	215	85	421	...	...	...
	Total...	200	10	...	53·30	1,336	...	2,367	939	4,642	...	...	...

A.—(*Continued.*)

Statement shewing the extent of Demarcation and Classification work performed by the Settlement Parties, and the expenditure incurred thereon for 1866.

	Districts and Talooks.	Number of villages completed.	Number of villages in progress.	Ayakut or gross area in square-miles.	Actual work in square-miles.	Cost of field work.	Cost of work in the Office.	Local superintendence.	Central Office proportion.	Total.	Average cost per square-mile.		
	Kistna—(Continued.)			Sq. M.	Sq. M.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	A.	P.
Classification and Assessment.	Bandar	11	...	...	·53	46	984	1,825	724	3,579	...	..	...
	Bezwada	8	...	...	·63	46	255	533	212	1,046	...	..	...
	Gudiwada	10	...	...	1·56	17	1,241	2,228	884	4,370	...	..	...
	Nandigama	19	...	...	2·91	60	210	514	204	1,008	...	..	..
	Vissanapetah	...	...	...	...	...	6	11	4	21	..	..	..
	Rajahpet	33	2	...	10·69	70	286	631	250	1,237	...	..	..
	Bapatla	34	5	...	80·26	1,312	494	3,200	1,270	6,276	...	..	..
	Krosur	43	1	...	4·19	412	477	1,576	625	3,090	...	..	..
	Vinukonda	18	1	...	4·67	45	115	284	113	557	...	..	..
	Palnad	17	1	...	4·23	45	228	484	192	949	...	..	..
	Guntoor	11	..	...	4·15	28	250	493	196	967	...	..	..
	Repalli	47	...	...	59·72	565	503	1,893	751	3,712	...	..	..
	Total...	251	10	...	173·54	2,666	5,049	13,672	5,425	26,812	...	..	..
	Cost of Mounting Maps ...	...	...	...		...	340	...	86	426	...	..	..
	Total...	..	...	...	...	2,666	5,389	13,672	5,511	27,238	...	..	..
	Grand Total...	...	...	...	...	4,002	5,389	16,039	6,450	31,880	...	..	..
	Kurnool.												
Demarcation.	Ramalkota	...	...	...	...	84	...	97	46	227	...	..	..
	Nundikotkur	...	...	...	...	24	...	28	13	65	...	..	..
	Nundial	...	...	...	...	85	...	98	46	229	...	..	..
	Sirwell	...	...	...	...	23	...	27	12	62	...	..	..
	Koilkuntla	...	...	...	...	219	...	254	122	595	...	..	..
	Pattikonda	63	...	315	263	5,417	...	6,280	2,967	14,664	...	..	..
	Cumbum	60	11	373	338	7,609	...	8,820	4,167	20,596	...	..	..
	Markapur	63	4	491	426	8,523	...	9,880	4,667	23,070	...	..	..
	Total...	186	15	1,179	1,027	21,984	...	25,484	12,040	59,508	49	3	4
	Cost of boundary pillars ...	...	...	...	..	3,792	...	...	...	3,792	...	..	..
	Total...	...	...	...	...	25,776	...	25,484	12,040	63,300	...	..	..
Classification and Assessment.	Nundikotkur	...	..	...	...	...	1,026	1,189	562	2,777	...	..	..
	Nundial	...	..	...	..	..	1,023	1,186	560	2,769	...	..	..
	Sirwell	...	...	...	..	...	1,023	1,186	560	2,769	..	..	..
	Pattikonda	67	...	431	284	5,025	...	5,825	2,752	13,602	...	..	..
	Cumbum	60	13	352	263	5,574	...	6,461	3,053	15,088	...	..	..
	Markapur	63	4	487	333	6,141	...	7,118	3,363	16,622	...	..	..
	Total...	189	17	1,270	880	16,740	3,072	22,965	10,850	53,627	35	10	10
	Printing Settlement Registers.	...	...	...	...	...	24	...	6	30	...	..	..
	Total...	...	...	...	...	16,740	3,096	22,965	10,856	53,657	...	..	..
	Grand Total...	...	...	...	...	42,516	3,096	62,449	22,896	1,16,957	...	..	..
	Cuddapah.												
Demarcation.	Jammalamadugu	...	...	...	...	372	...	431	203	1,006	...	..	..
	Poddatur	...	...	...	...	370	...	429	203	1,002	...	..	..
	Cuddapah	...	...	...	...	225	...	261	123	609	...	..	..
	Sidhout	...	...	...	...	236	...	273	129	638	...	..	..
	Budvail	...	9	3	3	370	..	429	203	1,002	...	..	..
	Total...	...	9	3	3	1,573	...	1,823	861	4,257	..	..	..
	Cost of boundary pillars ...	...	..	...	...	1,641	...	..	...	1,641	..	..	..
	Total...	...	...	...	...	3,214	...	1,823	861	5,898	...	..	..

A.—(*Concluded*).

Statement shewing the extent of Demarcation and Classification work performed by the Settlement Parties, and the expenditure incurred thereon for 1866.

	Districts and Talooks.	Number of villages completed.	Number of villages in progress.	Ayakut or gross area in square-miles.	Actual work in square-miles.	Cost of field work.	Cost of work in the Office.	Local superintendence.	Central Office proportion.	Total.	Average cost per square-mile.		
	Cuddapah.—(Continued.)			Sq. M.	Sq. M.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	A.	P.
Classification.	Cuddapah	...	...	...	...	142	...	165	77	384	...	..	..
	Budvail	...	4	1	1	14	...	16	8	38	...	..	..
	Total...	...	4	1	1	156	...	181	85	422	38	..	..
	Grand Total...	...	...	...	...	3,370	...	2,004	946	6,320	...	..	..
	Trichinopoly.												
Assessment.	Office work	...	...	...	...	...	6,193	11,153	4,399	21,745	...	..	..
	Mounting Maps and binding Settlement Registers	...	...	...	...	...	151	...	38	189	...	..	..
	Total...	...	...	...	...	...	6,344	11,153	4,437	21,934	...	..	..
	Salem.												
Assessment.	Office work	...	...	...	...	...	6,343	9,158	3,932	19,433	...	..	..
	Tinnevelly	...	...	...	...	2,944	...	...	...	2,944	...	..	..
Demarcation.	Cost of boundary pillars	...	...	...	...	8	...	...	...	8	...	..	..
	Total...	..	...	...	...	2,952	...	...	...	2,952	...	..	..
	Coimbatore.												
Demarcation.	Bowany	...	...	...	...	283	...	3,232	891	4,406	..	..	..
	Perindorai	...	...	...	...	186	...	2,124	586	2,896	...	.	.
	Darapuram	...	...	...	...	366	...	4,179	1,153	5,698	...	..	..
	Total...	...	...	...	...	835	...	9,535	2,630	13,000	...	..	..
	Cost of boundary pillars	...	...	...	...	4,093	...	...	...	4,093	...	..	..
	Grand Total...	...	...	...	...	4,928	...	9,535	2,630	17,093	...	.	..

REVENUE SETTLEMENT OFFICE,
MADRAS, 10*th May* 1867.

(Signed) R. E. MASTER,
Officiating Director of Revenue Settlement.

ABSTRACT OF APPENDIX A.

District.	Total expenditure of 1866.
	RS.
Central Office	45,901
Godavery	17,447
Nellore	741
Kistna	25,430
Kurnool	94,061
Cuddapah	5,374
Trichinopoly	17,497
Salem.	15,501
Tinnevelly	2,952
Coimbatore	14,463
Total...	2,39,367
Add charges not debitable to Parties...	47,841
Grand Total...	2,87,208

REVENUE SETTLEMENT OFFICE,
MADRAS, 10*th May* 1867.

(Signed) R. E. MASTER,
Officiating Director of Revenue Settlement.

APPENDIX B.

Statement shewing the number and description of boundary marks put up by the several Settlement Parties for the year 1866.

Items.	Kurnool.	Cuddapah.	Coimbatore.	Kistna.	Total.
1	2	3	4	5	6
Village Boundaries.					
Villages	222	...	17	...	239
Khandams or Sub-divisions	2,810	36	635	...	3,481
Tri-junction Pillars	252	12	32	...	296
Secondary do.	7,047	147	270	...	7,464
Other marks on Village Boundaries... ...	7,430	259	2,427	...	10,116
Marks on Khandams	26,297	422	22,464	...	49,183
Field Boundaries.					
Number of villages	186	...	17	200	403
Villages divided into Khandams. { No. of Villages	186	...	17	10	213
{ No. of Khandams ...	3,049	13	635	26	3,723
Number of fields marked	1,07,440	398	16,304	5,256	1,29,398

REVENUE SETTLEMENT OFFICE,
MADRAS, 10*th May* 1867.

(Signed) R. E. MASTER,
Officiating Director of Revenue Settlement.

The Deputy Superintendent, Revenue Survey, should have excluded from the Statement, charges on account of Madras, and shown separately.

31. NEILGHERRY SURVEY, (*Waste Lands.*)—During the past year fourteen blocks of land, containing 1,547·06 acres, have been surveyed under the Waste Land Rules, at a cost of Rupees 89-1-2, or an average of 11 pice per acre.

Survey for Neilgherry Hill Settlement.

32. The detailed Survey of Ootacamund, Coonoor, and Kotagherry, ordered in Government Order, No. 425, dated 17th February 1866, has been commenced. The Surveyors have had to demarcate as well as survey; and the demarcation is being carefully performed. The boundaries of Coonoor and Ootacamund have been marked out, and the former surveyed as well.

33. The Maps of Coonoor and Ootacamund are being prepared on a large scale, 220 feet to an inch for the former, and 110 feet to an inch for the latter. This has been rendered necessary by the small size of the different holdings.

34. It is suggested for the consideration of Government whether a *plane* Survey, which does not show the inequalities of the ground, will be sufficient, or whether it will be desirable that all the features of the country should be shown.

35. COORG SURVEY.—The Deputy Superintendent, Revenue Survey, states that a report of the progress of this Survey will be made to the Commissioner for the affairs of Coorg. Four Surveyors belonging to No. 1 party were temporarily employed in Coorg, but have since rejoined No. 1 party on the Neilgherry Hills.

36. WYNAAD COFFEE ESTATE SURVEY.—No progress appears to have been made in this estate.

37. PUBLAH KIMEDY SURVEY.—This party is now broken up. The Survey operations having been completed under the orders of Mr. Cardozo, maps and records of 559 villages have been handed over to the Collector for Settlement purposes. The total area surveyed is 544·09 square miles at a cost of Rupees 98,593-8-6, or Rupees 181-2-3 per mile.

38. The total area measured by the first four parties already mentioned, namely, those employed in Coimbatore, Kurnool, Cuddapah, and Tinnevelly, was 2,547·68 square miles at a cost of Rupees 3,10,603-10-2, or nearly 122 rupees per square mile.

39. CENTRAL OFFICE.—The expenditure (chiefly on account of Talook Maps and checking accounts) was Rupees 38,271-4-6. The Lithographic Press turned out one Talook Map, and 903 Village Maps.

40. DEMARCATION.—Previous to 1865 the work of demarcation had been in the hands of the Settlement, and on the promulgation of Government Order, dated 12th December 1864, No. 2,243, ordering that this work should in future fall to the Survey Department, it was arranged between the Heads of the two Departments that works already commenced should be completed by the Settlement Department. It has, therefore, followed that it was not till the close of 1865 that Demarcation parties were organized by the Survey Department, and of these, two have been in operation during the past year, one in the District of Madras, the other in Ganjam.

41. The Madras party was placed under the orders of Lieutenant Cloete, First Assistant Superintendent of Revenue Survey. It was nominally attached to No. 5 Revenue Survey party, but the frequent reference rendered necessary by the change in the system of demarcation made it advisable that it should receive orders direct from the Central Office. The talook of Sydapett was selected as the opening scene of operations because it was the most difficult to work in, and it was considered that after the party had gained experience, then the demarcation of other talooks would prove comparatively easy. Its proximity to Madras, moreover, facilitated the inspection of the work.

42. During the year the demarcation in 105 villages of Sydapett talook was completed, and progress had been made in 107 others. In Trivellore, work had been commenced in 21 villages, and the total expenditure of the party was Rupees 42,920-15-9 including salary of Establishment.

The average cost per mile was Rupees 195-15-9, a very high rate, which is explained thus. The stone for demarcation was difficult to obtain, and for the first few months little was done, as the men were learning their work. The demarcation is also stated to have been performed in a much more complete manner than elsewhere. It is expected that the cost will be materially diminished in succeeding years.

43. The work appears to have been very carefully performed, all the boundaries being permanently marked with stones, bearing distinguishing marks, varied in accordance with the nature of land demarcated. Where several small holdings adjoined one another, the system of clubbing was adopted, but was much opposed, and the adoption of this system has tended to make the demarcation unpopular.

44. Only those station-stones for boundaries of villages and for sub-divisions of villages have been charged to Government. All other demarcation marks, as well as the cost of imbedding the station-stones in brick and mortar, have been debited to the villagers. Each ryot has been charged for the demarcation of his own holding and for a portion of the demarcation expenses of the village, calculated on his interest in the lands of the village.

45. The cost to the ryots has been 13 annas per acre of cultivated land, a rate which appears to the Board to be excessive. At the close of the year the Sydapett talook was completed with the exception of 10 square miles, and operations had been commenced in Trivellore.

46. GANJAM.—This party was placed under the orders of Mr. H. O. Cardozo, who did duty for a short time with the Madras party in order to acquaint himself with the mode of work. The total area demarcated in Ganjam was 87·79 square miles, and the total expenditure Rupees 10,739-15-2, or Rupees 122-5-4 per mile.

47. As the holdings are of large size, the system of clubbing has not been resorted to, and in consequence no opposition has been experienced from the ryots. Otherwise the demarcation has been conducted on the same principles as that in the Madras District, and the same difficulty has been experienced in the want of stones. The work was confined to the Chicacole talook, thirty-nine villages having been completed, and progress reported in twenty-two.

48. The original reports from Lieutenant Cloete and Mr. Cardozo have been forwarded with Major Hessey's report, and are submitted herewith to Government.

(A true Copy and Extract.)

Secretary.

To the Secretary to Government, Revenue Department,
with six copies of letter from Officiating Director of Revenue Settlement,
dated 10th May 1867, No. 645-19.

Copy to the Collector of Ganjam,
" to the Collector of the Godavery District,
" to the Collector of the Kistna District,
" to the Collector of Nellore,
" to the Collector of Cuddapah,
" to the Collector of Kurnool,
" to the Collector of Madras,
" to the Collector of Salem,
" to the Collector of South Arcot,
" to the Collector of Trichinopoly,
" to the Collector of Tinnevelly,
" to the Collector of Coimbatore,
" to the Collector of Malabar,
} with one copy of do.
" to the Officiating Director of Revenue Settlement.
" to the Superintendent of Revenue Survey.

Exd. J. Wright.

No. 309

E.

M.R.O. 14 – 5,450—22-10-25.

S RECORD OFFICE.

Drainage - Enlarging existing drains
& abandonment of building sites
in Ashburnham Park, & the adjacent
Lands, & for the adjudication
of all Claims arising from the said Works &
Compensation & Damages to be paid
for Land taken. &c. &c.

Petition to Parliament from
the Commissioners of Sewers
for the Rape of Hastings praying
for the Passing of a Bill for the
Purposes therein mentioned.

Referred to the Examiners of Petitions for Private Bills.

Report from the Examiners that the Petition complies with the Standing Orders.

Bill ordered to be brought in upon the Petition.

Bill brought in upon the Petition, and read the first time.

Ordered, That the Bill be read a second time upon Monday next.

Bill read a second time upon Monday next.

Ordered, That the Bill be committed to a Committee of the whole House upon Monday next.

Bill committed to a Committee of the whole House upon Monday next.

Ordered, That the Bill be committed to the Committee on Petitions for Private Bills.

Bill committed to the Committee on Petitions for Private Bills.

Ordered, That the Bill be reported to the House as amended.

Bill reported to the House as amended.

Ordered, That the Bill be read a third time upon Monday next.

Bill read a third time upon Monday next.

Ordered, That the Bill do pass and be sent to the Lords.

V.B.

11th February 1868

14 Copies Title & Rape Diagrams
13 — Report of Examiners
10 — Report of Committee