

# REPORT

1922

ON THE

## SURVEY OPERATIONS

OF THE

LOWER PROVINCES,

FROM

1ST OCTOBER 1855 TO 30TH SEPTEMBER 1856.

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CALCUTTA :

JOHN GRAY, "CALCUTTA GAZETTE" OFFICE.

1857.



FROM

THE JUNIOR SECRETARY TO THE  
BOARD OF REVENUE,  
LOWER PROVINCES,

TO

THE SECRETARY TO THE GOVERNMENT OF BENGAL,  
REVENUE DEPARTMENT.

*Dated Fort William, the 21st April 1857.*

LAND REVENUE.  
W. DAMPIER, }  
AND } ESQRS.  
H. STAINFORTH, }

SIR,

I AM directed by the Board of Revenue to submit the Statements noted

- on the margin, together with copies of the several Reports received by them, describing the progress of the Survey operations during the year ending the 30th September last.
- No. 1.—Work performed in the four Bengal Survey Superintendencies.  
No. 2.—Condition of the Demarcation operations, including Khusrul.  
No. 3.—Condition of the Survey Registers.  
No. 4.—Expenses incurred on account of the four Bengal Survey Superintendencies.  
Letter from Deputy Surveyor General, dated 1st February 1857, No. 23 A., with Annual Report of Progress, and Tables A., B., E., and F.  
Letter from Superintendent of Survey, 1st Division, dated 4th December 1856, No. 608.  
Letter from Superintendent 2nd Division, dated 6th idem, No. 53.  
Letter from Collector of Burdwan, dated 24th November 1856, No. 277.  
Letter from Superintendent 3rd Division, dated 11th idem, No. 29.  
Letter from Superintendent 4th Division, dated 15th idem, No. 314.

2. Mr. Pemberton, with a force of 7 European and 41 Native Surveyors, took the field on the 1st December, in Bograh, on the right bank of the Jeenae or Juboona River, accomplishing, by the 1st May ensuing, 1,049½ square miles, belonging to 57 Pergunnahs, besides two River Circuits of 68 square miles, at a cost of Rupees 30,327-7-0, exclusive of Rupees 925 expended on Mehalwaree calculations, not properly chargeable to this branch of the Survey. The rate per square mile is Rupees 28-12-9, or Rupees 6-8-10 lower than in the previous season. These results would have been still better, but for the necessity of retiring early from the field, in order to execute a large amount of map and compilation work.

3. The whole of the Pergunnah and Village Maps and Registers have been completed and deposited in the Deputy Surveyor General's office, including the arrears caused by the upsetting of a boat containing records of previous years in a storm in the Gauges.

4. The party is this season employed in the District of Rungpore.

5. The non-professional branch was successively under the superintendence of Messrs. Birch, W. L. Robinson, and Morris. Deputy Collectors Hurro Chunder Ghose and Mr. Ryland took the field with 8 Peshkars and 80 Ameens in the District of Rungpore, and prepared 1,975 entire villages for survey, covering an estimated area of 1,700 square miles, and containing 8,732 separately defined plots belonging to other estates—an area, Mr. Morris remarks, "hitherto unequalled in the Department, considering the establishment employed." Baboo Hurro Chunder operated in the Eastern part of the District bordering on the Burrampooter and

the independent territory of Cooch Behar, the frontier line of which was laid down; while Mr. Ryland's circuit extended from the Kuratoya River on the West to the Teesta on the East. All the map work of the season, with a trifling exception, was brought up, and made over to the Surveyor.

6. The boundary disputes on the file during the year were fewer than in the other Divisions, being 320 in all, of which 273 were disposed of before the close of the year. Of 241 appeals to the Superintendent, 138 were disposed of; the decisions in 94 of these being upheld; and 49 cases were sent back for further investigation, the result of precipitancy on the part of Baboo Hurro Chunder Ghose in coming to a decision in the first instance. The number of miscellaneous cases undisposed of at the close of the year was large.

7. In order to prevent too great a lead in advance of the survey, the attention of the Deputy Collectors is this season directed to the definition of the boundaries of the released rent-free tenures situated within the demarcated tract, lists of which had recently been received from the Collector. This arrangement will probably affect the out-turn of the season, but the work already prepared for the professional Surveyor is deemed sufficient to keep him fully employed.

8. The Survey Registers of Purneah are complete, but in those of Rajshahye, Pubna, and Bograh, much still remains to be done. Deputy Collector Ally Ahmed, on whom the preparation of the Rajshahye Registers devolved for a considerable time, performed his work so ill, that it is still under revision. This Officer is not now in the Department. Baboo Issen Chunder Dutt has the bulk of the registry work in his hands. Difficulty in the compilation of the Rajshahye and Pubna Registers arises from the circumstance that at the time of demarcation, in 1849 to 1852, sufficient care was not taken to identify and define the estates and villages shown in the Collectors' lists; and as these must all be accounted for, local enquiries and measurements are now necessary to remedy former defects of system.

9. The old khusreh arrears of this Division have been disposed of, as the following Memo. shows; but as the registry work progresses, fresh cases are brought to light requiring local measurement and enquiry, from the cause just explained. All but 10 cases were disposed of by internal plotting, and only 7 required actual field by field measurement. In 4 of these, 2,190 fields had to be measured, the average size of each being less than a beegah.

DISTRICTS.	Remaining from last year.	Instituted this year.	Disposed of.	Remaining.
Rajshahye ...	0	44	41	3
Pubna ...	74	151	225	0
Bograh ...	0	16	16	0

10. The cost of this branch of the operations during the year was Rupees 67,198-5-14, besides Rupees 2,567-12-8 disbursed on account of the khusreh arrears from former savings. The average rate per square mile, calculated on the former sum, gives Rupees 39-2-7, or about one-third less than in the previous year.

11. In this Division, both the professional and non-professional branches were under Major Smyth, who united in his person the heretofore separate  
2ND DIVISION. offices of Revenue Surveyor and Superintendent, aided by 5 European Assistants, including Captain Row, and 37 Native Surveyors. Major Smyth commenced operations in the North-eastern part of Burdwan on the 1st December, and by the end of the field season, 1,578½ square miles, in fifteen Pergunnahs, including eight River Circuits, was surveyed at a cost of Rupees 34,285-1-0, besides Rupees 1,265-13-9 for Mehalwar calculations, not properly chargeable to the professional branch, giving an average rate of Rupees 21-11-6, or Rupees 9-7-6 less per square mile than in the previous year, a result which the Deputy Surveyor General regards as the best out-turn of survey work obtained in Bengal for many years.

12. The demarcations of the previous season proving insufficient to employ the professional establishment, which had lately been brought up to the full strength, for the whole season, Major Smyth was driven to the expedient of directing the Deputy Collectors to furnish external boundaries only, the Ameens being allowed to retain the original thakbusts to enable them to continue the internal measurements simultaneously with the professional survey of the exterior boundaries. This course was a deviation from the rule which requires that the work made over to the Surveyor should be complete in every respect; but as both branches were under the same Officer, who was able to adjust the movements of each party according to circumstances, no practical inconvenience resulted from it. An extra establishment of 40 Ameens set matters all right by removing the pressure on the demarcation branch.

13. With this timely aid, and the regular field establishment of 10 Peshkars and 100 Ameens, an area of 1,440 square miles was prepared, of which 640 square miles came at once under survey, and 800 square miles remained for the present season. The amount of labor and difficulty with which this area was obtained, may be judged of from the fact that no less than 108,150 chucks of Mehalwar land were found scattered over the space. The necessity also of defining the chakeran lands, averaging only a beegah or two in extent, contributed to increase the labor, and rendered the Burdwan District, contrary to all expectation, more difficult of demarcation than any that have yet fallen to this party.

14. The boundary disputes were more numerous than in any other Division except the 3rd; nevertheless, the proportion disposed of during the year was very commendable. Some arrears of maps to be copied remained, caused by the protracted detention of the Ameens in the field for demarcation purposes.

15. The Registers of Nuddea have been completed by Mr. Reid, Collector of Burdwan, and formerly Superintendent of the Division. Those of Bancoorah cannot be furnished and made over to the Collector of the District till the receipt from Captain Gastrell, Revenue Surveyor of the 4th Division, by whom the District was surveyed, of the details which are required to accompany the block maps.

16. The total cost of this branch, including the expense of Mr. Reid's separate establishment, is Rupees 46,902-8-2, which, distributed over the 1,440 square miles demarcated, gives an average of Rupees 32-9-1 to the square mile, or Rupees 3-5-3 more than in the previous year, attributable to the greater intricacy of the internal demarcations effected this year.

17. The professional records of this survey were inspected by Major Thuillier and found to be admirably executed.

18. The party is now engaged in completing Burdwan, after which Dinagepore will be taken up. A Deputy Collector, with a demarcating party, has already proceeded thither to prepare a field for next season's survey.

19. Mr. Wyatt, aided by 7 European Assistants and 37 Native Surveyors, resumed the survey of Mymensing, on the North-eastern part of that District, in the middle of December. The area surveyed comprised 1,433 $\frac{3}{4}$  square miles in 29 Pergunnahs, and was accomplished at a cost of Rupees 34,663-4-3, exclusive of Rupees 816 disbursed for area calculations. The rate per square mile averaged Rupees 24-2-8, or about one-third below that of the previous season. The party retired to Dacca for the recess on the 1st May.

3RD DIVISION.  
*Professional.*

20. The Maps, Registers, and Calculations have been brought up, and for the most part lodged with the Deputy Surveyor General.

21. The country bordering on the Garrow Hills, and estimated to contain 1,000 square miles, forms the work of the present season, at the close of which, it is hoped, that the District of Mymensing will be completed. This tract being entirely hill and jungle, does not admit of being demarcated, but must be topographically surveyed by the professional party.

22. Mr. H. Muspratt superintended the non-professional branch during the whole year. Two Deputy Collectors, Joy Chunder Moojoomdar and Brijsoonder Mitter, with a force of 8 Peshkars and 80 Ameens (2 Peshkars and 10 Ameens being employed solely in bringing up last season's arrears), commenced the demarcations to the North-east of Mymensing, in Pergunnah Soosung, and by the end of January were able to make over a tract of about 400 square miles to the Surveyor to keep him well employed. The entire tract demarcated during the season contained 2,106 villages, inclusive of 221 villages remaining unfinished from the previous season, estimated to cover an area of 1,480 square miles, which, it is believed, will suffice to occupy the professional party during the present season. No more demarcation work remained to be done in this District, and Dacca is now taken up.

*Demarcations, &c.*

23. The boundary disputes in the new field demarcated have not been so numerous as before, though the number is still large enough to impede the field operations, besides delaying the compilation of the Maps and Registers. Of 1,911 disputes, 1,774 were disposed of during the year. The number of such cases in this Division is more than in all the other Divisions put together, and it is very creditable to the exertions of the Officers employed, that they have succeeded so well in keeping pace with the influx of work of this description. The number of cases of surplus and missing lands, however, remaining undisposed of in this Division was larger than in any other. This will be adverted to in the sequel.

24. Baboo Frankishen Roy, the third Deputy Collector attached to this Division, with 2 Peshkars and 20 Ameens, was employed in bringing up the work, chiefly boundary disputes, left unfinished from the previous season.

25. The number of appeals to the Superintendent from the orders of subordinate Officers was 744, being more than in all the other Divisions taken together. Only 402 were disposed of within the year, and 43 of these had to be revised in consequence of the Officers who decided the cases in the first instance having exceeded their powers. Of the pending cases, no less than 221 were institutions of the last quarter only.

26. In this Division, also, the imperfect character of the work done in former years necessitates partial local investigations before the Registers can be completed. Very little progress has therefore yet been made in this department of the work.

27. The Board have recently deemed it right to strengthen this party by the addition of another Deputy Collector, Baboo Satkowry Roy, who has by this time joined the head-quarters at Dacca. Baboo Frankishen Roy, after disposing of the outstanding boundary disputes, is to take up the registry work.

28. The amount expended on the operations of this branch was Rupees 61,498-10-3, including Rupees 3,125 disbursed in the purchase of elephants. The average rate per square mile calculated on the total expenditure is Rupees 41-7-0, or about 7 Rupees less than in the previous year. Mr. Muspratt makes the average Rupees 33-13-6½, by leaving out a large sum expended on account of the previous season's work; but as this expenditure did not enter into the account for that year, the Board think it is properly chargeable to the year of review.

29. Captain Gastrell, with 6 European and 28 Native Assistants, completed Ban-  
 4TH DIVISION. coorah, and passing over the interjacent Districts of Burdwan and  
*Professional.* Nuddea already surveyed, broke new ground in Jessore. In Ban-  
 coorah 776¾ square miles of difficult country was surveyed, and by the middle of May, 575 square miles in the Northern part of Jessore was added to the surveyed area, giving a total out-turn of 1,351¾ square miles, accomplished at a cost of Rupees 32,179-3-3, exclusive of Rupees 1,318-15-5 for Mehalwar calculations, giving an average per square mile of Rupees 23-12-9, or Rupees 3-1-0 less than in the previous year.

30. The maps were excellently executed and lodged in a complete manner in the Deputy Surveyor General's office.

31. This season's work lies wholly in Jessore.

32. Mr. Watson had the aid of a Covenanted Assistant from the 1st February. Two  
*Demarcations, &c.* Deputy Collectors, Tarucknath Ghose and Ahsan Ahmed, with a  
 field party of 10 Peshkars and 100 Ameens, prosecuted the demar-  
 cations in Jessore, preparing an estimated area of 1,900 square miles, which is more even than the field prepared in the 1st Division by Mr. Morris, who, however, it should be stated, had a party of 80 Ameens. This, with the 100 square miles left of the previous season's work, will give the professional party full occupation. Both in this and in the 1st Division, the progress in advance of the survey seems to be too rapid, and unless the Surveyors feel confident of being able to cope with the work prepared for them, it will be expedient to reduce the strength of the establishment for a time. Indeed, it was not intended that the full complement of Ameens should be set to work, unless, by a close observance of the requirements of the professional party, this

should appear necessary. The proper course is to vary the strength of the party as occasion may require. It has been over and over inculcated, that too great an advance is to be deprecated nearly as much as short work. Any number of Ameen retained beyond the number required to furnish the Surveyor with a sufficient field, risks needless enhancement of the cost of a Department already sufficiently expensive. The attention of the Superintendents will be called to this subject.

33. All the thakbust plans were made over to the Surveyor in September, except those of 85 hulkas, which were retained for decision of a few boundary disputes.

34. The number of boundary disputes, though greater than in the preceding year, was not large in comparison with those in other Divisions, and the file at the end of the year was lighter than elsewhere. The file of miscellaneous cases on the other hand was heavy.

35. Very fair progress has been made in the registry work of this Division.

36. The average rate per square mile, calculated on the total cost of Rupees 65,884-1-2, is Rupees 34-10-10, or about one-half of the previous season's average.

37. This season the demarcation of Jessore is expected to be completed, and a commencement made in that part of Furreedpore which lies to the South of the Ganges. The Assistant, Mr. Waterfield, remains at Berhampore to bring up the registry work.

38. Mr. O'Donel having his establishment made up to the full complement of a regular survey party, took the field in the Akyab District in the middle of December, proceeding from the small area previously surveyed in the vicinity of the Town, in a Northerly direction, till 789½ square miles, comprised in 47 circuits of Keoukships, had been completed. The difficult character of the country, consisting as it does of immense tracts of jungle, the scanty population, the tidal rivers, and the unhealthy climate, all combined to impede progress. The area of cultivation was found to be 65,372 acres to 5,05,118 acres of jungle. The cost incurred was Rupees 26,795-10-6, giving an average of Rupees 33-15-2 per square mile. All the difficulty, labor, and expense of organizing and training the native establishment had to be encountered in this, the first season of effective operations in that part of the country, and Major Thuillier hopes that, as the work proceeds and the subordinates become more practised, the rate will be reduced.

39. The plans and other documents have been neatly drawn up and lodged in a complete manner.

40. The survey is proceeding in Akyab during the current season in the direction of Chittagong.

41. The following Table exhibits at one view the work done in all the Bengal Divisions in both branches, with the cost incurred, in comparison with the previous year.



DIVISIONS.	Years.	PROFESSIONAL.			NON-PROFESSIONAL.		
		Area surveyed in square miles.	Cost.	Rate per square mile.	Area demarcated in square miles.	Cost.	Rate per square mile.
1st ..	1854-55 ..	853½	Rs. 30181	35 5 7	1299	Rs. 73967	57 0 0
	1855-56 ..	1117½	„ 30327	28 12 9	1700	„ 67198	39 2 7
	Difference..	+ 263½	+ 146	- 6 8 10	+ 401	- 6769	- 17 13 5
2nd ..	1854-55 ..	959½	Rs. 29930	31 3 0	1900	Rs. 55562	29 3 10
	1855-56 ..	1578½	„ 34285	21 11 6	1440	„ 46902	32 9 1
	Difference..	+ 619	+ 4355	- 9 7 6	- 460	- 8660	+ 3 5 3
3rd ..	1854-55 ..	1081	Rs. 34145	31 9 3	1100	Rs. 53280	48 7 0
	1855-56 ..	1433½	„ 34663	24 2 8	1480	„ 61499	41 9 0
	Difference..	+ 352½	+ 518	- 7 6 7	+ 380	+ 8219	- 6 14 0
4th ..	1854-55 ..	1144½	Rs. 31827	26 13 9	670	Rs. 45630	68 1 8
	1855-56 ..	1351½	„ 32179	23 12 9	1900	„ 65384	34 10 10
	Difference..	+ 207½	+ 352	- 3 1 0	+ 1230	+ 20254	- 33 6 10

42. The comparison is in every case favorable to the year under review, except in regard to the demarcations in the 2nd Division, which were executed at a somewhat enhanced cost, in consequence of the unusual amount of Mehalwar details.

43. Major Smyth's Report has some remarks on the working of the combined system experimentally introduced in Burdwan, but the Board reserve their conclusions on this important subject till the receipt of his final Report.

44. Major Thuillier is apparently satisfied with all the Surveyors, but mentions Major Smyth in terms of special commendation. The Board entirely concur with him in regarding this Officer's approaching departure to Europe, on account of the failure of his health, as a serious loss to the Department, and they believe him to be fully deserving of the very high opinion expressed of his services by Major Thuillier.

45. The Board also desire to record their high sense of the able and efficient manner in which Major Thuillier, the Deputy Surveyor General, has continued to superintend the professional part of the Survey, and to acknowledge the valuable assistance which he has from time to time rendered them in dealing with questions connected with the Department.

46. The Board have intimated to Major Thuillier their approval of the promotions granted by him to the Assistants named in his 9th paragraph.

47. The Board are satisfied with the manner in which the several Superintendents have conducted their duties. All the Deputy Collectors are mentioned with approbation, with one or two exceptions. The names of the meritorious Officers are given in the Board's Report on the Administration of the Land Revenue along with those of the Officers attached to the general branch of the service.

48. The Board will now advert to para. 43 of the Lieutenant-Governor's Resolution, dated the 9th April last, wherein explanations are called for on certain points.

49. The first point of enquiry is—"The present state of the Registers and boundary disputes in Mymensing, and whether any reason can be given for the little progress effected in this respect in the 3rd as compared with the 2nd Division."

50. The state of the records and boundary disputes in Mymensing at the close of the past season is shown in the accompanying Statements Nos. 1 and 3. The first of these exhibits a considerable diminution in the number of boundary disputes as compared with the previous year,\* which is so far satisfactory; and the agency at the disposal of the Superintendent is quite sufficient to cope with the work at the present rate of institutions.

* On the file during 1854-55 ..	2,791 cases.
Ditto .....	1855-56 .. 1,911 "
Pending at close of 1854-55 ..	537 "
Ditto .....	1855-56 .. 137 "

Statement No. 3 shows not a single Register completed, though all have apparently been commenced.

51. Delay in the decision of boundary disputes must of necessity, the Board observe, impede the completion of the Registers, but this cause can have contributed only in a partial and limited degree to that result in the present instance. When disputes have threatened to accumulate, as was the case some time back, a special agency was provided to meet the emergency, and the file of such cases is now by no means so formidable as it has been. The chief cause of the difficulty in the Registry Department is *the incomplete and incorrect character of the demarcations*. The due compilation of the Registers requires, as an indispensable preliminary, that the distribution of lands to their respective villages and mehals shall have been correctly made, and if this duty has been neglected in the first instance, the registry work is necessarily placed in abeyance, till all mistakes are corrected and discrepancies reconciled.

52. Mr. Muspratt, the Superintendent of the Division, in a letter dated the 11th September last, No. 201, enumerates the following as the reasons why the Registers of Mymensing have been so long delayed:—

"1. Each Pergunnah extends over a large tract of country. The Pergunnahs are much intermixed. Each Pergunnah was let to several proprietors at the time of the decennial settlement, without the lands of each proprietor being distinctly specified.

"2. The work having to be performed during the first field season by men who were unacquainted with the system. Not one of the Ameens or Peshkars had been before employed on survey work.

"3. The great sickness that prevailed among the Peshkars and Ameens in demarcating in and near the Modopore jungle.

"4. The changes of the head of the office before the work had been regularly orga-

\* Mr. Campbell left in June 1855, making over charge to the present Superintendent. The changes amongst the Deputy Collectors were as follows:—  
Abdool Hamed, from December 1849 to 31st March 1850, and again from 9th February 1852 to 10th February 1853.

Kishen Chunder Roy, from 31st March 1850 to 10th February 1853.

Frankisben Roy, from December 1849 to September 1851, and again from March 1852 to 23rd June 1853; rejoined once more in December 1855, and still remains.

E. D'Rosario, from 20th October 1851 to 16th November 1852, and again from 23rd June 1852 to 1st November 1854.

Salamutoollah Khan, from 29th December 1853 to 2nd July 1855.

Joy Chunder Mooljoondar, joined 10th February 1853, and still remains.

Lrijsouder Mitter, joined 1st November 1854, and still remains.

nized. Mr. Chapman was Superintendent from December 1849 to 14th February 1851, Mr. Belli from 14th February 1851 to 16th December of the same year, when

Mr. Campbell received the appointment.\*

“ 5. The frequent changes among the Deputy Collectors as noted in the 31st para.

“ 6. The delay in making enquiries regarding such villages as are mentioned in the Collectoree papers, but which had not come under survey. The carelessness and incapacity of the Sherishtadar, who was for a long period employed solely on the preparation of the Mehal-milanee.

“ 7. The litigiousness of the Zemindars ; their wish to conceal all rent-free holdings in their estates, from fear they should be resumed ; their fear that Government intended after survey to revise their settlements ; and hence their failure to afford the survey all the information and assistance required from them.

“ 8. Some land-holders being in possession of two or three divided shares in the same Pergunnah, and the consequent ignorance of the Village Munduls as to what portions of these villages belonged to each Mehal.”

53. Of the above reasons, the 1st, 3rd and 7th are, the Board observe, common to all surveys, and if the difficulties which they suppose are capable of being overcome in one quarter, they are equally so in another. The 2nd reason can only be allowed to have force for a limited period, a single season being quite sufficient to render Ameens efficient in their work. The 4th and 5th are identical, and are no doubt a great evil in every Department of the administration, but not peculiar to Mymensing. The 8th reason is not very intelligible, but the 6th is more to the point, and discloses, the Board are disposed to think, the chief cause of the delay. Had the work been properly done by the Deputy Collectors in charge of the demarcation parties and properly looked into by the Superintendents at the initial stage, had the comparisons been made with the Collectorate lists and defects supplied and discrepancies reconciled there and then, the embarrassment which has since occurred would have been avoided. Instead however of this course having been followed, the task of drawing up the Registers was confided to an incompetent Officer, and the defects of his work were not brought to light till long afterwards.

54. The foregoing observations seem to supersede the necessity of comparing results with the 2nd Division. The point of contrast is just this, that in the 2nd Division, the demarcations were effected by Deputy Collectors who understood their business under the orders of an able Superintendent like Mr. Reid, who, by making his enquiries complete from the first, saved much embarrassment afterwards ; while those of the 3rd Division were performed by Officers of little experience, less efficiently instructed and supervised.

55. The second point of enquiry is—“ When it may be expected that the arrears of the 1st Division will be cleared off, and the Division placed on the same footing as the other Divisions.”

56. On this point the Board beg to refer His Honor to paras. 8 or 9 of this Report. Similar mistakes and imperfections as those just noticed were made in the earlier proceedings of this Division, with this redeeming feature however, that in the 1st Division, the errors belong chiefly to a period when the old system of demarcations prevailed. The following is an extract from Mr. Morris's letter of the 25th August last on this subject :—

“ There are no ostensible arrears connected with the Districts of Pubna and Bograh, but I attribute nearly all the difficulties experienced in the preparation of their Registers

“ to the imperfect and incorrect manner in which the demarcations were conducted in them  
 “ in previous years. Every new village that has had to be measured, and every fresh local  
 “ investigation that has had to be made, may be justly considered as arrears ; and these, in  
 “ Pubna alone, during the past year, number 331. How many arrears there are in Bograh  
 “ cannot yet be certified, for the registry of the Pergunnahs of that District has only  
 “ recently been commenced. Until however this Division is clear of those Districts in which  
 “ the work under the old system prevailed, it cannot be held to stand on the same  
 “ footing as the other Divisions. Nor am I yet in a position to state with exactness when  
 “ this consummation will be attained. It is expected that Rajshahye will be finished before  
 “ the close of the present year, but Pubna will probably demand another year, and  
 “ Bograh perhaps two.”

57. The third point is—“ What decision has been arrived at and steps taken in  
 “ regard to the re-survey of the Hooghly District.”

58. In order to a correct judgment being formed as to the necessity of a re-survey, Mr. Reid, the late Controller of Surveys and Superintendent of the Division, was desired to re-demarcate Pergunnah Baroe, containing 31 villages, and to report the result. This Report, which bears date the 4th January 1854, is in the main unfavorable to the correctness of Mr. Wilson's survey of 1846-47. Mr. Reid sums up as follows in his 9th and 10th paras. :—

“ The thakbusts were all done on the old principle, that is to say, *andazee*, and were, I  
 “ believe, very incorrect. Such as they were, however, the Revenue Surveyor did not consult  
 “ them, but surveyed such boundaries as were pointed out to him by the villagers and others.  
 “ The boundaries so surveyed by him were perhaps (generally speaking) as near the truth as  
 “ if he had taken the thakbust proceedings as his guide ; but in some instances it would  
 “ appear that he fell into the mistake of surveying as distinct villages only *paras* or  
 “ *tolas*, or in other words, component parts of a village, and which, by the thakbust, had  
 “ been properly delineated as comprised in one and the same village. The amalgamation  
 “ of these improperly-dealt-with sub-divisions, and their inclusion in village plans, exhibit-  
 “ ing the correct dimensions of the village, of which they form parts, would of course be  
 “ a matter of trifling difficulty, while to alter the Pergunnah and District Maps in  
 “ respect to them would, I presume, be an easy matter.

“ The main question seems to be—Can a professional re-survey of the Hooghly  
 “ District be dispensed with ? This is a point on which I feel extreme diffidence in  
 “ venturing an opinion, and it is one on which I think the Board should be mainly  
 “ guided in coming to a decision by the opinion of the Officers of the professional branch  
 “ The geographical position of the several Hooghly villages *quoad* each other has, it  
 “ may be assumed, been correctly shown in the maps by the Survey Officers, and the  
 “ gross areas of villages, as calculated by the survey, would appear (as far as I have had  
 “ an opportunity of judging) to correspond pretty correctly with the total quantity of  
 “ land held by the villages in question. It is the *position* of the land which is wrongly  
 “ shown in the village plans, and as a necessary consequence in the Pergunnah Maps.  
 “ For example, a part of Village A. is included in Village B., a part of Village B. in Village  
 “ C., and so forth. If the position of these misplaced portions could be rectified without  
 “ proceeding to a re-survey, and if the numerical areas could be re-adjusted in accordance  
 “ with such rectification, I should say, by all means let a re-survey be dispensed with.  
 “ I do not see, however, at all clearly how the above operation could be effected without

“proceeding to a re-demarcation and re-survey of the whole District; and the District is so valuable an one, and contains so much sub-division of property, that I think it would greatly enhance the value of the latter, and save much subsequent litigation, if a re-survey and re-demarcation were effected, such use being made of the original demarcation and survey papers while effecting it as they might be found to be worth.”

59. The Deputy Surveyor General's opinion is given in the following extract from his letter of the 20th April 1854, paras. 4 and 5 :—

“I glean from the Controller's Report, that the chief object is now to trace out and define the internal Mehals, which appear to have been altogether neglected in the original operations. If I am right in this conjecture, but of which I was not before aware, I am decidedly of opinion, that no measurements of such small parcels of land can possibly be based on the old surveyed boundaries, that is, it would, from the evidence of discrepancies now established, be impracticable to demarcate and plan the internal Mehals, with a view to ascertaining their superficial content, without correctly defining the true existing boundary of the village. To do this, a fresh demarcation process seems indispensable. The old maps are manifestly insufficient for this purpose, and the more so, since the topographical details of the Hooghly Survey are not shown with sufficient minuteness for the large scale maps, and good points of reference are therefore wanting, whereby the triple junction boundary stations might be readily identified.

“It is to be presumed that, according to the system then in force, a regular khusreh was made of all the Mouzahs in which *khetbut* existed; if so, the necessity of now demarcating and recording the details of property according to the new system is not apparent. If however such enquiries are essential for the perfecting of the Mehalwaree Registers, I should deprecate any thing less than a complete re-survey, and consequently concur in the opinion expressed in the Controller's 10th para.”

60. Unfavorable as these opinions are in the main, the Board have not yet come to a final decision on the subject, but have agreed to the Deputy Surveyor General's proposal to re-survey Pergunnah Bulleah, which was left incomplete by Mr. Wilson, after the usual demarcations. This Pergunnah contains 236 square miles, and the entire re-survey of it is expected to afford data for estimating fairly the value of the rest of the District. This partial operation is however deferred till the completion of the remaining Districts of Bengal.

61. The last point of enquiry is—“Whether any reason can be assigned for there being so few *izad* and *adumnishan* cases in the 3rd Division, and so many in the others, but more particularly in the 4th Division.”

62. The paucity of these cases in the 3rd Division is, the Board observe, more apparent than real. In the Statement No. 1 accompanying their Report for 1854-55, only 12 cases are shown, whereas, in the similar Statement now submitted, the number of these cases is shown to be no less than 3,207, or nearly double the number in all the other Divisions taken together. The inference from this is, that *it was not known till during the past year whether there were any such cases in the Division or not*, that is, the comparison with the Collectorate lists, which would have led to the detection of

such cases, was apparently not made till the past year, although the demarcations have been going on since 1850. "The izad and adumnishan work of this Division," says Mr. Muspratt, in his letter before cited, "seems never to have been taken in hand, except by Baboo Joy Chunder, and that only in a few cases." Speaking of Pergunnah Attea, he says "I dispatched 1 Peshkar and 8 Ameens to the Pergunnah to obtain the necessary information regarding these villages, and also regarding many excess villages of which no notice had been taken when they were demarcated. The result was, that the number of izad and adumnishan cases in Attea Pergunnah alone amount to 1,868." It is clear then, the Board observe, that neither the Deputy Collectors nor the Ameens were aware, to within a recent period, what their duties were, or how they should be performed.

63. The cases alluded to in the 4th Division originated in the khusreh chittas, prepared by the Revenue Surveyor, of certain Monghyr and Bhaugulpore Pergunnahs surveyed under the old system, exhibiting considerable discrepancies when compared with the Collectorate lists, and all these discrepancies had to be reconciled. Another fruitful source of such cases was an order of the Board passed in 1852, directing the invalid holdings which had been omitted by the khusreh Ameens, to be defined and recorded. The files were accordingly for a time encumbered with such cases, but the Returns for the past two years show that the occurrence of such cases is not now a remarkable feature in this Division.

I have the honor to be,

SIR,

Your most obedient Servant,

  
Junior Secretary.

WORK performed in the four Bengal Survey Superintendencies from 1st October 1855 to 30th September 1856.

135-A

137

1. DIVISIONS.	2. Districts in which operations were in progress.	3. Names of Officers.	4. Number of Villages demarcated, as shown in Statement No. 2, Column 5.	5. No. of completed Thakbusts made over to the Revenue Surveyor.	6. Boundary Disputes.			7. Izad and Adumnishan Cases.			8. Duplicates of Maps.			9. Miscellaneous Cases not embraced in foregoing Columns.			10. Appeals from decisions of Deputy Collectors.			
					On the file during the year.	Disposed of.	Pending.	On the file during the year.	Disposed of.	Pending.	On the file during the year.	Disposed of.	Pending.	On the file during the year.	Disposed of.	Pending.	On the file during the year.	Disposed of.	Pending.	
1st or Northern Division.	Rajshahye Patna Bograh Rungpore	Mr. E. G. Birch, Superintendent, from 1st Oct. 1855 to 20th Feb. 1856																		
		Mr. W. L. Robinson, Officiating, from 21st Feb. to 30th April 1856																		
		Mr. G. G. Morris, Superintendent, from 1st May to 30th Sept. 1856																		
		Mr. W. L. Robinson, Assistant, from 27th Dec. 1855 to 20th Feb. 1856	26	26	1	1														
		Mr. W. J. Money, Assistant, from 26th May to 30th Sept. 1856																		
		Baboo Issen Chunder Dutt, Deputy Collector, from 1st Oct. 1855 to 30th Sept. 1856			24	18	6	159	136	23	866	867	19	533	454	79				
		Baboo Hurro Chunder Ghose, Deputy Collector, from 1st Oct. 1855 to 30th Sept. 1856	888	888	223	176	47	64	41	23	1,103	1,103		406	352	54				
		Mr. W. H. Ryland, Deputy Collector, from 1st Oct. 1855 to 30th Sept. 1856	1,061	1,061	80	77	3	136	121	15	1,568	1,568		708	642	66				
		Moulvee Ally Ahmed, Deputy Collector, from 1st Oct. 1855 to 20th April 1856			1	1		3	3		288	288		23	23					
		Total	1,975	1,975	329	273	56	384	311	73	4,191	4,167	24	2,403	1,970	433	241	158	83	
2nd or Southern Division.	Bancoorah Burdwan	Mr. H. M. Reid, Collector of Burdwan								168	168		18	17	1	219	198	21		
		Major R. Smyth, Superintendent, from 1st Oct. 1855 to 30th Sept. 1856											148	84	64	8	5	3		
		Baboo Doorgapersaud Ghose, Deputy Collector, from 1st Oct. 1855 to 30th Sept. 1856	759	731	344	313	31	409	401	8	1,071	675	396	511	503	8				
		Baboo Tara Chand Ghose, Deputy Collector, from 1st Oct. 1855 to 30th Sept. 1856	1,138	393	448	418	30	596	551	45	1,735	1,198	537	1,018	1,006	12				
		Total	1,897	1,124	792	731	61	1,005	952	53	2,974	2,041	933	1,695	1,610	85	227	203	24	
3rd or Eastern Division.	Mymensing	Mr. H. Muspratt, Superintendent, from 1st Oct. 1855 to 30th Sept. 1856		0	25	14	11	1,939	1,233	656	261	261		197	168	39	744	402	342	
		Baboo Brijsoonder Mitter, Deputy Collector, from 1st Oct. 1855 to 30th Sept. 1856	776		318	315	3	939	932	7				532	487	45				
		Baboo Joychunder Mooljoondar, Deputy Collector, from 1st Oct. 1855 to 30th Sept. 1856	1,109	1,627	731	658	73	329	102	227				295	260	35				
		Baboo Frankishen Roy, Depy. Collr., from Dec. 1855 to 30th Sept. 1856	221		837	787	50	0		0				103	90	13				
		Total	2,106	1,627	1,911	1,774	137	3,207	2,317	890	261	261		1,127	995	132	744	402	342	
4th or Western Division.	Moorshedabad Jessore	Mr. J. Watson, Superintendent, from 1st Oct. 1855 to 30th Sept. 1856			1		1	109	140	59				561	317	244	122	97	25	
		Mr. W. Waterfield, Assistant, from Feb. to 30th Sept. 1856	121		36	36		198	114	84	145	145		115	83	32				
		Baboo Tarucknath Ghose, Deputy Collector, from 1st Oct. 1855 to 30th Sept. 1856	1,311	2,358	222	222		5	4	1	2,086	2,086		464	457	7				
		Moulvee Ahsan Ahmed, Deputy Collector, from 1st Oct. 1855 to 30th Sept. 1856	1,231		187	158	29	54	39	15	2,000	1,992	8	607	518	89				

CONDITION of the Demarcation Operations, including Khusreh, in the four Bengal Survey Superintendencies, from 1st October 1855 to 30th September 1856.

136-A1

1. DIVISIONS.	2. Incomplete Villages remaining from last Season.	3. Villages taken up this year.	4. Total in hand during the year.	5. Completed externally and internally during the year.				6. Remaining in hand to be completed next year.	7. REMARKS.
				By khusreh.	By internal plotting.	By external demarcation.	Total.		
1st or Northern Division	1,194	4,198	5,392	.....	1,166	809	1,975	2,409	The villages in this Division are not reckoned on the same way as in the other Divisions. The discrepancy of 1,008 between Column 4 and the aggregate of Columns 5 and 6 is owing to the former Column giving the number of villages as shown by the Collectors' lists, many of which prove on enquiry to be only detached portions of other villages, whereas Column 5 gives the number actually found. The 2,409 remaining villages will probably, for the same reason, be found to be much fewer, in proportion to the number of detached portions of other villages which they may contain.
2nd or Southern Division	8	1,889	1,897	6	1,830	61	1,897	.....	The number of daghs in the villages measured by khusreh and internally plotted, as well as in 629 villages which remained over for plotting from last year, is 108,150.
3rd or Eastern Division....	233	1,873	2,106	.....	809	1,297	2,106	.....	The internal plottings comprised 27,020 chucks.
4th or Western Division. ....	.....	2,664	2,664	5	1,746	912	2,663	1	The completion of this village was delayed by the effacement of some boundary-marks by an overflow of water. The villages internally plotted contained 46,684 plots or blocks of land, and the 5 villages measured by khusreh contained 8,692 fields, with an area of 9,954 beegahs.



CONDITION of the Survey Registers in the four Bengal Superintendencies from 1st October 1855 to 30th September 1856.

137-A

1. DIVISIONS.	2. DISTRICTS.	3. Number of Pargannahs in which Survey has been completed.	MEHALWAR.										MOUZAHWAR.														
			ENGLISH.					VERNACULAR.					ENGLISH.					VERNACULAR.									
			4. Registers completed and forwarded to Collectors.	5. Completed but not yet forwarded.	6. Total completed.	7. Remaining incomplete.		8. Registers completed and forwarded to Collectors.	9. Completed but not yet forwarded.	10. Total completed.	11. Remaining incomplete.		12. Registers completed and forwarded to Collectors.	13. Completed but not yet forwarded.	14. Total completed.	15. No. of entries of Villages in Registers of preceding Column.	16. Remaining incomplete.		17. No. of entries of Villages made, and to be made, in Registers of preceding Column.	18. Registers completed and forwarded to Collectors.	19. Completed but not yet forwarded.	20. Total completed.	21. No. of entries of Villages in Registers of preceding Column.	22. Remaining incomplete.		23. No. of entries of Villages made, and to be made, in Registers of preceding Column.	
						Half finished.	Less than half finished.				Half finished.	Less than half finished.					Half finished.	Less than half finished.						Half finished.	Less than half finished.		Half finished.
1st or Northern Division ...	Purneah ... ..	32	32	0	32	0	0	32	0	32	0	0	32	0	32	6,558	0	0	0	32	0	32	6,558	0	0	0	
	Rajshahye .. ..	44	18	18	36	0	8	18	20	38	4	2	18	18	36	4,477	0	8	7,179	18	20	38	7,355	4	2	4,301	
	Pubna ... ..	52	0	22	22	0	30	0	22	22	1	29	0	22	22	876	0	30	4,144	0	22	22	876	7	23	4,144	
	Bograh ... ..	17	0	1	1	5	11	0	1	1	16	0	0	0	1	1	70	5	11	Not stated	0	1	1	70	16	0	Not stated
	Dinagepore ... ..	4	0	4	4	0	0	0	4	4	0	0	0	0	4	4	1,173	0	0	0	0	4	4	1,173	0	0	0
	Rungpore ... ..	5	0	0	0	0	5	0	0	0	0	5	0	0	0	0	0	0	5	Not stated	0	0	0	0	5	0	Not stated
	Total ..	154	50	45	95	5	54	50	47	97	26	31	50	45	95	13,154	5	54	11,323	50	47	97	16,032	32	25	8,445	
2nd or Southern Division ...	Nuddea ... ..	27	27	0	27	0	0	27	0	27	0	0	27	0	27	4,064	0	0	0	27	0	27	4,064	0	0	0	
	Bancoorah ... ..	4	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	4	4,631	0	0	0	0	0	4	4,631	
	Total ...	31	27	0	27	0	4	27	0	27	0	4	27	0	27	4,064	0	4	4,631	27	0	27	4,064	0	4	4,631	
3rd or Eastern Division ...	Mymensing ... ..	17	0	0	0	0	17	0	0	0	0	17	0	0	0	0	0	17	7,527	0	0	0	0	0	17	7,527	
4th or Western Division ...	Bhaugulpore .. ..	33	33	0	33	0	0	33	0	33	0	0	33	0	33	6,214	0	0	0	33	0	33	6,214	0	0	0	
	Moorshedabad ... ..	64	32	1	39	3	28	32	11	43	6	15	32	1	33	1,269	6	25	1,642	32	11	43	8,122	6	15	7,000	

EXPENSES incurred on account of the four Bengal Survey Superintendencies from 1st October 1855 to 30th September 1856.

138-A

138-A<sub>2</sub>

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.																																																																																								
MONTHS.	Salaries of Superintendents.	Salaries of Assistants.	Salaries and Office Establishment of Deputy Collectors.	Officiating Deputation Allowance.	Office Establishment of Superintendents.	Office Establishment of Assistants.	Extra Establishments.	Office Rent.	Field Establishments.	Ticca and Muzkoores Peons.	Contingencies.	Total.	REMARKS.																																																																																								
October 1855	3,280 10 4	0 0 0	4,435 7 7	0 0 0	1,376 0 0	0 0 0	500 0 0	291 0 0	4,290 15 9	74 10 0	843 10 11	14,592 0 7	<p>The Contingencies are made up of the following items;—</p> <table border="1"> <thead> <tr> <th rowspan="2">DIVISIONS.</th> <th colspan="10">TRAVELLING ALLOWANCES.</th> <th colspan="3">OFFICE CONTINGENCIES.</th> <th rowspan="2">TOTAL.</th> </tr> <tr> <th>Of Superintendents.</th> <th>Of Establishments.</th> <th>Of Assistants.</th> <th>Of Establishments.</th> <th>Of Deputy Collectors.</th> <th>Of Establishments.</th> <th>Stationery.</th> <th>Purchase of Elephants.</th> <th>Feed of Elephants.</th> <th>Native Doctors.</th> <th>Of Superintendents.</th> <th>Of Assistants.</th> <th>Of Deputy Collectors.</th> </tr> </thead> <tbody> <tr> <td>1st ..</td> <td>595 0 0</td> <td>893 8 7</td> <td>630 0 0</td> <td>54 2 6</td> <td>2058 0 0</td> <td>639 3 6</td> <td>461 11 0</td> <td>450 0 0</td> <td>870 4 4</td> <td>0 0 0</td> <td>485 8 9</td> <td>50 7 9</td> <td>756 15 6</td> <td>67745 5 3</td> </tr> <tr> <td>2nd ..</td> <td>0 0 0</td> <td>94 12 9</td> <td>0 0 0</td> <td>0 0 0</td> <td>1353 0 0</td> <td>867 6 4</td> <td>175 1 11</td> <td>0 0 0</td> <td>532 2 9</td> <td>0 0 0</td> <td>225 14 1</td> <td>0 0 0</td> <td>90 4 4</td> <td>2838 10 2</td> </tr> <tr> <td>3rd ..</td> <td>830 0 0</td> <td>489 9 11</td> <td>0 0 0</td> <td>0 0 0</td> <td>1077 0 0</td> <td>582 1 11</td> <td>402 1 11</td> <td>3125 0 0</td> <td>940 14 4</td> <td>199 0 6</td> <td>480 12 7</td> <td>0 0 0</td> <td>467 13 11</td> <td>9503 1 1</td> </tr> <tr> <td>4th ..</td> <td>690 0 0</td> <td>696 14 9</td> <td>700 0 0</td> <td>132 0 0</td> <td>1404 0 0</td> <td>486 6 9</td> <td>425 9 6</td> <td>500 0 0</td> <td>416 3 10</td> <td>68 8 9</td> <td>446 5 11</td> <td>68 9 6</td> <td>205 5 6</td> <td>6198 15 5</td> </tr> </tbody> </table> <p>The cost of the Field Establishment, 4th Division, includes Rupees 804-5-1, remitted to the Superintendent of the 2nd Division, on account of the expense incurred in re-erecting certain <i>dhooes</i> or land-marks in Bancorah, which had been obliterated.</p> <p>The total cost in the 1st Division is exclusive of Rupees 2,567-12-8 incurred on khushch arrears from the savings of former years.</p> <p>The savings shown in this Statement are on account of the year of report; those of former years not being exhibited. In addition to the sum shown in the 4th Division, there is an item of Rupees 492-1-1 realized from fees in boundary dispute cases, to be carried to credit of savings. A sum of Rupees 928-11-8, realized from fees in the 3rd Division, has been remitted by Draft to the Collector of Mynensing, and a sum of Rupees 196-1-9, realized on a similar account in the 2nd Division, has been remitted to the Collector of Burdwan, to be available, when required, for demarcation purposes.</p>	DIVISIONS.	TRAVELLING ALLOWANCES.										OFFICE CONTINGENCIES.			TOTAL.	Of Superintendents.	Of Establishments.	Of Assistants.	Of Establishments.	Of Deputy Collectors.	Of Establishments.	Stationery.	Purchase of Elephants.	Feed of Elephants.	Native Doctors.	Of Superintendents.	Of Assistants.	Of Deputy Collectors.	1st ..	595 0 0	893 8 7	630 0 0	54 2 6	2058 0 0	639 3 6	461 11 0	450 0 0	870 4 4	0 0 0	485 8 9	50 7 9	756 15 6	67745 5 3	2nd ..	0 0 0	94 12 9	0 0 0	0 0 0	1353 0 0	867 6 4	175 1 11	0 0 0	532 2 9	0 0 0	225 14 1	0 0 0	90 4 4	2838 10 2	3rd ..	830 0 0	489 9 11	0 0 0	0 0 0	1077 0 0	582 1 11	402 1 11	3125 0 0	940 14 4	199 0 6	480 12 7	0 0 0	467 13 11	9503 1 1	4th ..	690 0 0	696 14 9	700 0 0	132 0 0	1404 0 0	486 6 9	425 9 6	500 0 0	416 3 10	68 8 9	446 5 11	68 9 6	205 5 6	6198 15 5
DIVISIONS.	TRAVELLING ALLOWANCES.										OFFICE CONTINGENCIES.				TOTAL.																																																																																						
	Of Superintendents.	Of Establishments.	Of Assistants.	Of Establishments.	Of Deputy Collectors.	Of Establishments.	Stationery.	Purchase of Elephants.	Feed of Elephants.	Native Doctors.	Of Superintendents.	Of Assistants.		Of Deputy Collectors.																																																																																							
1st ..	595 0 0	893 8 7	630 0 0	54 2 6	2058 0 0	639 3 6	461 11 0	450 0 0	870 4 4	0 0 0	485 8 9	50 7 9		756 15 6	67745 5 3																																																																																						
2nd ..	0 0 0	94 12 9	0 0 0	0 0 0	1353 0 0	867 6 4	175 1 11	0 0 0	532 2 9	0 0 0	225 14 1	0 0 0		90 4 4	2838 10 2																																																																																						
3rd ..	830 0 0	489 9 11	0 0 0	0 0 0	1077 0 0	582 1 11	402 1 11	3125 0 0	940 14 4	199 0 6	480 12 7	0 0 0		467 13 11	9503 1 1																																																																																						
4th ..	690 0 0	696 14 9	700 0 0	132 0 0	1404 0 0	486 6 9	425 9 6	500 0 0	416 3 10	68 8 9	446 5 11	68 9 6		205 5 6	6198 15 5																																																																																						
November	3,700 0 0	0 0 0	4,432 8 0	0 0 0	1,371 0 0	0 0 0	500 0 0	254 10 5	4,536 9 9	70 0 0	1,997 1 6	16,861 19 2																																																																																									
December	3,700 0 0	500 0 0	5,000 0 0	0 0 0	1,376 0 0	0 0 0	500 0 0	215 13 9	7,669 0 5	72 12 0	3,777 9 6	22,811 9 8																																																																																									
January 1856	3,700 0 0	900 0 0	5,000 0 0	0 0 0	1,350 3 3	100 0 0	548 6 2	215 0 0	8,149 10 1	104 14 0	4,451 11 3	24,519 12 9																																																																																									
February	3,700 0 0	900 0 0	5,000 0 0	68 15 0	1,368 3 10	200 0 0	550 0 0	215 0 0	7,817 9 6	87 4 0	2,853 1 6	22,759 15 10																																																																																									
March	3,700 0 0	900 0 0	5,000 0 0	200 0 0	1,371 7 9	200 0 0	1,115 8 8	215 0 0	8,130 15 7	84 14 0	2,804 0 0	23,721 14 0																																																																																									
April	3,700 0 0	920 0 0	4,833 5 4	200 0 0	1,365 0 0	100 0 0	1,164 0 0	211 10 8	7,661 9 4	68 12 0	3,191 4 8	23,415 9 0																																																																																									
May	3,700 0 0	900 0 0	4,500 0 0	0 0 0	1,384 0 9	200 0 0	1,130 5 0	250 0 0	7,679 8 6	67 4 0	2,657 2 8	22,474 4 6																																																																																									
June	3,700 0 0	900 0 0	4,500 0 0	0 0 0	1,367 12 0	200 0 0	1,260 9 2	250 0 0	5,054 19 2	81 14 0	2,027 14 7	19,342 14 11																																																																																									
July	3,700 0 0	900 0 0	4,500 0 0	0 0 0	1,347 8 0	200 0 0	592 0 1	205 10 3	4,675 4 4	128 0 1	1,144 11 9	17,438 8 6																																																																																									
August	3,700 0 0	900 0 0	4,500 0 0	0 0 0	1,353 0 6	193 9 0	517 6 8	285 0 0	4,718 7 9	127 10 0	695 12 4	16,885 13 9																																																																																									
September	3,700 0 0	900 0 0	4,500 0 0	0 0 0	1,285 8 0	183 1 0	520 0 0	285 0 0	4,721 6 3	121 12 0	442 1 0	16,658 13 0																																																																																									
Total drawn for each Class	43,980 10 4	8,620 0 0	56,201 4 11	468 15 0	16,316 13 1	1,576 10 0	8,894 3 9	2,953 13 1	75,101 8 5	1,085 0 1	26,286 0 0	2,41,483 8 8																																																																																									
Authorized for each Class	43,980 10 4	8,620 0 0	56,201 4 11	468 15 0	16,752 0 0	1,600 0 0	0,200 12 0	2,953 13 1	76,272 0 0	1,086 0 1	26,286 0 0	2,43,421 7 5																																																																																									
Amount unexpended	0 0 0	0 0 0	0 0 0	0 0	436 3 11	23 6 0	300 8 3	0 0 0	1,170 12 7	1 0 0	0 0 0	1,937 14 9																																																																																									
The Sum drawn is thus distributed divisionally:													SAVINGS.																																																																																								
1st or Northern Division	11,580 10 4	4,430 0 0	18,803 9 1	488 15 0	4,286 0 0	800 0 0	2,283 5 4	764 9 1	15,569 1 0	516 14 0	7,745 5 9	67,198 5 1	630 15 0																																																																																								
2nd or Southern Division	2,400 0 0	0 0 0	13,200 0 0	0 0 0	4,402 13 6	0 0 0	3,725 1 7	600 0 0	10,735 14 11	0 0 0	2,838 10 2	40,002 8 2	856 2 0																																																																																								
3rd or Eastern Division	12,000 0 0	0 0 0	13,430 0 0	0 0 0	3,472 3 10	0 0 0	1,085 12 10	928 5 4	12,076 3 2	608 0 0	6,608 1 1	61,408 10 3	176 2 10																																																																																								
4th or Western Division	18,000 0 0	4,190 0 0	10,767 11 10	0 0 0	4,204 10 9	770 10 0	1,200 0 0	660 14 8	10,820 0 4	65 2 1	6,108 15 6	65,884 1 2	274 10 11																																																																																								

FROM

THE DEPUTY SURVEYOR GENERAL, 139

TO

E. T. TREVOR, ESQUIRE,  
Secretary to the Board of Revenue, Lower Provinces,

FORT WILLIAM.

SIR,

I HAVE the honor to submit herewith, for the information of the Board of Revenue, Lower Provinces, and for transmission to His Honor the Lieutenant-Governor of Bengal, a Tabular Statement embracing a condensed Annual Report of the Revenue Survey operations in that part of this Presidency under His Honor's jurisdiction, for the past season of 1855-56, accompanied by the original Returns\* received from each Surveyor, and the usual Tables detailing the amount and distribution of the expenditure and the sums saved to Government.

- \*Tables Nos. 1 and 2 B.
- 1st or Northern Division.
- Table B.
- 2nd or Southern Division.
- Table B.
- 3rd or Eastern Division.
- Table B.
- 4th or Western Division.
- Table B.
- Arracan Division.

2. The total out-turn of the season under review amounts to 3,969,921 acres or 6,203 square miles, yielding the average of 1,240 square miles to each of the five parties employed, the whole lying on 51 Pergunnahs and portions of Pergunnahs in the several Districts cited in the margin, and embraced in 35 main circuits containing 8,126 villages within 6,768 separately demarcated circuits, averaging 511.94 acres each, exclusive of the large

- Burdwan.
- Bograh.
- Rungpore.
- Jessore.
- Bancoorah.
- Mymensing.
- Akyab.

keoukships in Aracan, of which only 47 afford an area of 789.24 square miles, and would therefore disturb the general averages.

3. The following general results are recapitulated in this place, with a view of contrasting them with those of the preceding season :—

Names of Divisions.	Names of Superintending Officers.	Pergunnah.	Number of hulkas or traverse circuits.	Average size of traverse circuits.	Total area surveyed in square miles.	Total cost.	Average rate per square mile.	Average rate per circuit.
1st or Northern } Division ... }	Mr. Pemberton	4	1,290	634.50	1049.53	Rs. As. P. 31,252 7 0	Rs. As. P. 29 12 3	Rs. As. P. 24 3 8
2nd or Southern } Division ... }	Major Smyth ...	15	1,929	523.00	1578.69	35,550 14 9	22 8 3	18 6 10
3rd or Eastern } Division ... }	Mr. Wyatt ...	29	1,691	542.68	1433.86	35,479 4 3	24 11 2	20 15 8
4th or Western } Division ... }	Captain Gastrell .	0	1,858	471.25	1351.71	33,498 2 8	24 12 5	18 0 5
5th or Arracan } Division ... }	Mr. O'Donel ...	3	47	10747.00	789.24	26,795 10 6	33 15 2	0 0 0
Total for 1855-56 ...		51	6,815	5781.11	6203.03	1,62,576 7 2	26 3 2	23 13 7
Total for 1854-55 ..		Portions of 91	6,162	475.21	4038.47	1,43,729 11 2½	30 15 2	20 4 5
Difference ...		- 40	+ 653	+ 5305.90	+ 2164.56	+ 18,846 11 11½	- 4 12 0	+ 3 9 2

4. The mileage rates, it will be seen, are considerably in favor of the season under review, 2,164 square miles additional area having been obtained at the small additional outlay of Rupees 18,846, which reduces the average by Rupees 4-12-0 the square mile.

The progress has thus been enhanced one-third more by the increase granted to the working power of the several parties, and fully establishes the soundness of the views on which that recommendation was made.

5. The entire outlay for the season amounts to Company's Rupees 1,62,576-7-2 (one lakh sixty-two thousand five hundred and seventy-six, seven annas and two pie), inclusive of the cost of the Mehalwaree calculations, which must be debited, as heretofore, to the civil branch of the Department under which these detail measurements are conducted. Deducting this item, the charges proper to the professional branch are equal to Company's Rupees 1,58,250-10-0, on which the average rates are Company's Rupees 25-8-2, and Company's Rupees 23-3-6, per square mile and circuit, respectively, as exhibited in Table A., whilst Table E. shows the savings effected to Government in the various items of expenditure, and aggregating Company's Rupees 25,043-8-10 out of Company's Rupees 1,87,620-0-0, the authorized annual maximum grant at the uniform rate of Company's Rupees 37,524-0-0 sanctioned for each survey establishment. A further outlay of Company's Rupees 2,137-14-11, on account of Captain Sherwill's salary during furlough, and staff allowances as a Revenue Surveyor on deputation, not otherwise provided for, reduces the amount to Company's Rupees 22,905-9-11, as the *bonâ fide* and absolute savings to Government, after paying all charges, proper and extraneous, incidental to the professional operations.

6. The details connected with each separate party will be found recorded in the Tabular Statement.

7. The only additional remark I have to make is with advertence to the system of the combined duties of Surveyor and Civil Superintendent as carried out in the 2nd Division, under the able and zealous control of Major Smyth. That Officer has submitted

\* Dated the 6th December 1856, No. 53.

a full Report to the Board on this subject\* and has shown that the Burdwan work, civil and professional combined, has been executed

	Total cost per village circuit.			Total cost per square mile.		
	Rs.	A.	P.	Rs.	A.	P.
Mean of three Division, Civil and Professional combined . . . .	77	2	0	73	8	0
Burdwan ditto . . . .	52	5	0	55	3	0
Difference . . . .	24	7	0	18	5	0

at the reduced rates as noted in the margin, showing a comparison of Rupees 77 to Rupees 52 on the village circuits, and Rupees 73 to Rupees 55 on the square mile, or nearly one-third less. A better comparison, however, can be made at the close of the present season, before which it would be premature to pronounce a decided opinion as to the precise advantages or dis-

advantages of the new system.

8. The duties, it is easy to see, are of a most arduous nature, and Major Smyth's health, I much regret to say, has, under the pressure of this and other unforeseen circumstances, given way, and he will not be able to continue at his post. He has announced his intention of proceeding to Europe on medical certificate in July next, by which time he hopes to have the Burdwan District field work completed, and all the maps and computations in such a forward state, that his successor will have no difficulty in putting them in a final shape. I need scarcely expatiate to the Board on the loss that this excellent officer will be to the Department. Major Smyth has served an honorable career of nearly

twenty years in it, and the work he leaves behind him sufficiently testifies as to the value of his services. I cannot contemplate his departure without feelings of the most unfeigned regret. Under these circumstances, it will be necessary for the Board to make provision for the civil duties in this Division. The District of Dinagepore will be required for survey at the commencement of the next season, and it is most essential that a sufficient number of villages be now demarcated and adjusted during the present field season, so as to prevent the possibility of a stoppage to the professional operations in November 1857.

9. It affords me much pleasure to state, that the Revenue Surveyors have reported most favorably of the continued zeal and unabated exertions of their subordinates,

<i>1st Division.</i>		Ra.	Ra.
Mr. W. H. Beatson, promoted 1st December 1856	.....	from 100	to 150
Mr. D. W. Burnett, ditto ditto	.....	from 75	to 100
<i>3rd Division.</i>			
Mr. G. C. Bolst, promoted 1st November 1856	.....	from 75	to 100
Mr. G. S. Swiney, ditto 1st January 1857	.....	from 200	to 250
Mr. J. K. Moran, ditto ditto	.....	from 150	to 175
<i>4th Division.</i>			
Mr. A. Smart, promoted 1st January 1855	.....	from 150	to 200
Lallaram, ditto 1st February 1850	.....	from 125	to 150
<i>Arracan Division.</i>			
Mr. A. Phillipps, promoted 1st January 1857	.....	from 150	to 200
Mr. J. Pickhard, ditto ditto	.....	from 125	to 175
Mr. E. Reignier, ditto ditto	.....	a deputation allowance of 50 Rupees.	

of whom several, as per margin, have been recommended for promotion to the next higher grades, as specified opposite to their respective names. As these recommendations appeared to me well merited, and the extra expense falls

within the authorized annual maximum, I have directed the same to be carried out from the 1st January last, subject to the usual confirmation, which is now solicited.

10. The Sub-Assistants in Arracan all draw a special personal allowance of Rupees 50 each, in consequence of the extreme dearness of provisions, labor, and house rent in that Province, and without which it would be unreasonable to expect the Sub-Assistants to volunteer for that duty. This expense is duly provided for out of the authorized grants.

11. In the 58th para. of my last Report, a balance of Company's Rupees 3,193-3-1 was shown as lying to the credit of Government on account of the sale of maps to the public, of which sum Company's Rupees 1,500-0-0 was deposited in the General Treasury on the 5th May 1856, the Sub-Treasurer's receipt for which was forwarded to the Board with my letter No. 62, dated 8th May 1856. During the current year of 1856, the sales of maps have been effected by the public Libraries, as sanctioned by the Government of India, and the Account Sales will be payable, I am informed, on the 31st March, when an Account Current shall be rendered, and the balance available paid into the General Treasury.

12. The prospects of the current season of 1856-57 are promising, and unless unforeseen accidents or great sickness occur, the out-turn will, I trust, be equal to that now recorded.

I have, &c.,

(Signed) H. L. THUILLIER, *Major,*  
*Deputy Surveyor General.*

**ANNUAL REPORT of the Progress of the several Revenue Surveys carrying on in the three Divisions of the Bengal Presidency, viz. Lower Provinces, North-Western Provinces, and the Punjab, for the Season 1855-56.**

**REVENUE SURVEY DEPARTMENT.**

**Lower Provinces, under the jurisdiction of the Lieutenant-Governor of Bengal.**

AND DATE OF APPOINTMENT.	On what duty employed during the year.	Progress and present state of the work.	On what duty proposed to be employed during the ensuing year.	REMARKS.																								
<p><i>Superintendent.</i> I. L. Thuillier, Esq., Deputy Surveyor-General, and Assistant Surveyor, 5th Army 1847.</p>	<p>General superintendence and control of the operations, the charge of the Revenue Survey Office, and the duties devolving on the Deputy Surveyor-General of India in the General Department.</p>	<p>The general progress of the Revenue Surveys on this side of India was fully reported on in my Despatch No. 27, dated the 5th April 1856, to the address of the Surveyor-General of India, which gave a general idea of the operations, from the year 1846-47 to the end of season 1854-55. The season now under review exhibits the following general results; fourteen parties have been employed aggregating as follows:—</p> <table border="1"> <thead> <tr> <th>Provinces.</th> <th>Area surveyed.</th> <th>Cost.</th> <th>Rate per square mile.</th> </tr> <tr> <td></td> <td>Sq. Miles.</td> <td>Rs. A. P.</td> <td>Rs. A. P.</td> </tr> </thead> <tbody> <tr> <td>5 Lower Provinces (Bengal) ... ..</td> <td>6203.03</td> <td>1,56,931 10 7</td> <td>25 4 7</td> </tr> <tr> <td>5 North-Western Provinces ... ..</td> <td>3995.63</td> <td>1,43,257 11 7½</td> <td>35 13 7</td> </tr> <tr> <td>4 Punjab and Sindh ... ..</td> <td>8115.31</td> <td>1,17,963 14 10</td> <td>14 8 5</td> </tr> <tr> <td>Total ... ..</td> <td>18313.97</td> <td>4,18,153 5 0½</td> <td>22 13 2</td> </tr> </tbody> </table> <p>Of this area we have the whole on the 1-inch scale, and the topography shown on the maps is complete and full to the scale. Besides this, we have an area of 12,530 square miles on the larger scale of 20 chains to the inch, as customary with the village definition.</p>	Provinces.	Area surveyed.	Cost.	Rate per square mile.		Sq. Miles.	Rs. A. P.	Rs. A. P.	5 Lower Provinces (Bengal) ... ..	6203.03	1,56,931 10 7	25 4 7	5 North-Western Provinces ... ..	3995.63	1,43,257 11 7½	35 13 7	4 Punjab and Sindh ... ..	8115.31	1,17,963 14 10	14 8 5	Total ... ..	18313.97	4,18,153 5 0½	22 13 2	<p>Continuation of the conduct of the Lower Provinces, the Saugor and Nerbudda Territories, Bhartupore, and Bundelcund of the North-Western Provinces, and the Punjab and Sindh.</p>	<p><i>Bengal Districts in hand.</i> Burdwan. Rungpore. Mymensing. Jessore.  <i>Ditto still untouched.</i> Dacca. Dacca Jellalpoore. Backergunge. Sylhet. Dinagopore. Tipperah. Bulloeah.  Arracan in hand.</p>
Provinces.	Area surveyed.	Cost.	Rate per square mile.																									
	Sq. Miles.	Rs. A. P.	Rs. A. P.																									
5 Lower Provinces (Bengal) ... ..	6203.03	1,56,931 10 7	25 4 7																									
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4 Punjab and Sindh ... ..	8115.31	1,17,963 14 10	14 8 5																									
Total ... ..	18313.97	4,18,153 5 0½	22 13 2																									

143

In the Lower Provinces a fair out-turn of work has been accomplished, the several parties having been strengthened in order to push on with the work, with a view of bringing these Districts, amongst the oldest of our possessions, under survey. The Districts of Bancoorah and Bograh have been completed; Burdwan about two-thirds done; Mymensing brought very nearly to a close; Rungpore and Jessore entered upon; whilst in Arracan a sensible impression has been made on the Akyab District. There are still four Districts of Bengal Proper in hand, and seven untouched; the area remaining is about 30,000 square miles, which, at the present rate of progress, will occupy nearly six years; and by the expiration of which time, Arracan may likewise be expected to be completed, a full establishment being now actively employed on it. The Chota Nagpore and Rangpur Divisions of the South-Western Frontier Agency will then only remain to be taken up to complete the Lower Provinces, and these Districts will, in all probability, be reached by the two topographical parties working up from the South. Owing to the extreme intricacy of the fiscal tenures in Eastern Bengal, the main circuits of the survey are made in compact and convenient blocks, without reference, to the limits of the Pergunnabs, which are entirely destructive of professional requirements; and the village survey, on the 20-chain-1-inch scale, is rendered on uniform imperial size sheets, exhibiting a series of villages congregated together, bound up into a strong and convenient Atlas, with the statistical registers, and traverse data recorded in a separate volume. The final District maps of Nuddea and Moorshedabad, on the 4-mile-1-inch scale, have been transmitted, through the Surveyor General of India, on the 5th May last, to the India House, in anticipation of the annual dispatch. The final maps of Pubna and Bancoorah, on the same scale, are in hand and well advanced, and will be dispatched as soon as ready. Bograh is just about to be taken in hand. A new edition of the Behar Districts, on the scale of 2 miles to the inch, has been commenced, exhibiting the re-adjusted civil and criminal jurisdictions, and Tirhoot has been published. Nuddea, on the same scale, is in hand, but want of establishment in this branch of my office prevents the progress of the compilation of such an enormous influx of work as is herein described, to be what I am anxious to see it. Whilst my establishment has remained fixed and extremely limited, the number of survey parties has been nearly trebled, and the amount of work demanding attention quadrupled.

LOWER PROVINCES, BENGAL PRESIDENCY.

1st Division or Northern.

NAME AND DATE OF APPOINTMENT.	On what duty employed during the year.	Progress and present state of the work.	On what duty proposed to be employed during the ensuing year.	REMARKS.
Pemberton, Esq., Revenue Surveyor, at January 1835	In executive charge of the Survey of the Bograha and Rungpore Districts.	The field season with this party commenced on the 1st December 1855. In the District of Bograha, on the right bank of the Juboona or Jenae River (in reality the Brahmapootra), portions of no less than 57 Pergunnahs, all greatly intermixed with Districts Rajshahye and Rungpore, including the large estate of Pateladeaha of the latter District, have been accomplished, aggregating an area of 1049.53 square miles, embraced in 1,288 mouzah circuits surveyed by traverse, and 2 river circuits to the extent of 68 square miles. The average size of the village circuit is 684.50 acres. The total cost of the establishment, including all charges, except for the feed and keep of elephants, of which 6 are allowed to each survey circuit, is Rupees 30,327-7-0, yielding a mileage rate of Rupees 28-13-9 and per village circuit of Rupees 23-8-7. The whole of the Pergunnah 1-inch maps, together with the village maps and registers, have been duly lodged in a satisfactory and complete manner, as well as a large amount of arrears which had unfortunately been caused by the loss of the prepared records of previous seasons on the Ganges, thereby involving the re-copying of 3,500 village maps, registers, and traverses. The preliminary District map of Bograha, 4 miles to the inch, has been compiled and is now ready for the Press, and will speedily be issued, whilst the map of the District previously surveyed by this party, Pubna, has already been lithographed and distributed, and the 1-inch maps have been likewise taken in hand.	During the current season this party is employed in the Rungpore District, where a tract, estimated at about 1,900 square miles, with 2,298 village circuits, has been duly prepared in the Northern part of the District subtending the independent State of Cooch Behar.	The triangulation of the Assam Longitudinal Series has not yet been met by this party, but during the current season it is to be hoped a proper junction will be formed either on the principal stations, of which a sketch map has been furnished to the Revenue Surveyor, or with some of the secondary work, regarding which the two Surveyors have been instructed to co-operate. A good connection has been formed with the two independent Surveys of Mymensing and Gowaipara Districts.
R. A. Smith, 1st } February 1841 } J. R. Pringle, } at March 1838 }	Assisting. Ditto.			
Sub-Assistants.				
C. Mullins, 1st } November 1833 }	Assisting.			
W. H. Bealson, } at October 1850 }	Ditto.			
D.W. Burnett, 1st } November 1852 }	Ditto.			
C. P. Brownfield, } 8th September } 1856 }	Ditto.	The comparison with the rates of the former season is as follows:— <i>Per Square Mile.</i> Season 1854-55 ..... Co.'s Rs. 35 5 7 ..... Co.'s Rs. 20 14 1 " 1855-56 ..... " 28 12 9 ..... " 23 8 7 Difference.... Co.'s Rs. — 6 8 10 Co.'s Rs. + 2 10 6	The estimated area of Rungpore is about 3,377 square miles.	A very large area, extending from Rampore Bauleah, in the Rajshahye District to the Juboona River, has been traversed by this party, without the benefit of any triangulation to close upon. Mr. C. P. Brownfield, a Sub-Assistant 4th Class pupil of La Martiniere School, was appointed to this party on the 24th September last, having been found duly qualified.
J. Daviott, 1st } February 1854 }	Ditto.	The village plans of the past season's work are all on the new system and very well got up indeed.		
Native Surveyors.				



2nd Division or Southern.

NAME AND DATE OF APPOINTMENT.	On what duty employed during the year.	Progress and present state of the work.	On what duty proposed to be employed during the ensuing year.	REMARKS.
Major R. Smyth, Artillery, Revenue Surveyor, 21st November 1837	In executive charge of the Survey of the Burdwan District.	On the completion of the Nuddea District, this party took up Burdwan, and commenced field work on the 1st December 1855 at the North-eastern extremity, where the Moorshe- dabad and Nuddea Districts diverge. The combined duties of Superintendent and Surveyor were entrusted to Major Smyth at the close of the previous field season in May 1855, at which time only 593 villages were demarcated ready for survey; but by the 1st December, through the aid of additional demarcating establishment, and by the admirable management of the new Superintendent, no less than 1,336 village circuits were ready for survey; and as the season advanced, the demarcations kept so well ahead of the survey, that the large area of 1,578 square miles, embracing 1,929 village circuits, was accomplished without any hindrance whatever. This tract of country, all of the most level and luxuriant cultivation, was formed into 7 main circuits for convenience of survey, and contained 15 Pergunnahs, besides 8 small river circuits. The average size of the unit or village circuit, as divided by traverse, is 523 acres. The total cost amounts to Rupees 34,285-1-0, exclusive of a sum of Rupees 1,265-13-9 expended on account of ascertaining areas on the demarcation maps of the small internal estates taken up and measured by the civil branch. The average cost per square mile comes to Rupees 21-11-6, and per village circuit to Rupees 17-12-4. Contrasted with the previous season, it stands thus:—	About 1,200 square miles of the Burdwan District forms the work of the current season of 1856-57, and on which the party is now actively engaged.	A Covenanted Assistant, Captain W. S. Row, of the 33rd N. I., previously employed in the Department of Public Works, was appointed by the Bengal Government to this establishment on the 27th January 1856.
Assistant. Captain W. S. Row, 33rd Regt. N. I., 27th January 1856	Assisting.	The tract lies to the West of the town of Burdwan, between the Adjees and the Damoodah Rivers, and also subtending the Bancoorah surveyed work South of the Damoodah. About 1,000 village circuits have been demarcated ahead of the Survey by Major Smyth, with his civil establishment.	The Bengal Surveys having long been without an Assistant, who might be trained up for the charge of a party in the event of any sudden emergency arising, it was deemed advisable to nominate one under the able instruction of Major Smyth.	The Bengal Surveys having long been without an Assistant, who might be trained up for the charge of a party in the event of any sudden emergency arising, it was deemed advisable to nominate one under the able instruction of Major Smyth.
Mr. W. Ivey, 1st December 1849	Ditto.	Per Square Mile. Season 1854-55 ..... Co.'s Rs. 31 3 0 " 1855-56 ..... " 21 11 6 Difference .. Co.'s Rs. — 9 7 6	Per Circuit. Season 1854-55 ..... Co.'s Rs. 38 13 1 " 1855-56 ..... " 17 12 4 Difference .. Co.'s Rs. — 11 0 9	During the year he has been employed, Captain Row has shown much aptitude for the work and is highly spoken of.
Sub-Assistants. Mr. W. Davey, 1st December 1847	Assisting.	A reduction of no less than one-third in the mileage rate is certainly remarkable, and clearly evinces that an able and experienced Surveyor can do with a fair field before him. This out-turn is the best we have had in Bengal for many years and decidedly the best ever attained, if the whole state of the work is taken into consideration and contrasted with what used to be given in former periods.	The next District for this party is Dinagore on the Calcutta Meridional Series, which, from various causes, has been left untouched thus long.	Mr. P. Agabeg, Sub-Assistant 2nd Class, resigned his situation on the 23rd
Mr. P. Agabeg, 1st December 1851	Ditto.	7 Native Surveyors.		

2nd Division or Southern.—(Continued.)

<p>DATE OF APPOINTMENT.</p>	<p>On what duty employed during the year.</p>	<p>Progress and present state of the work.</p>	<p>On what duty proposed to be employed during the ensuing year.</p>	<p>REMARKS.</p>
		<p>But not only has a direct influence been thus obtained on the cost and progress of the professional survey, but through the laborious exertions of this valuable Officer in volunteering to carry out the experimental arrangement of doing the duty of two persons, the high salary of the Civil Officer has been saved and the cost of the work in the civil branch likewise reduced about one-third.</p> <p>Having had an opportunity of inspecting Major Smyth's office and examined all his maps, I am enabled to say that they equal, if not surpass, his former productions. They are all most admirable documents, leaving nothing to wish for, either in respect of the mechanical part of the work, or the style and detail of the survey. The Burdwan village maps are on the new system. The Revenue Surveyor is justly entitled to all the praise it is in my humble power to accord to him, and I earnestly trust his most laborious and valuable services may meet the approval of higher authority.</p> <p>Of the former season's work of this party, the whole of the Nuddea District 1-inch maps have been lithographed or are in the course of early completion. The preliminary District map, on the 4-mile-to-the-inch scale, has likewise been published and distributed. The final map of the same District, on the same scale, has also been transmitted through the Surveyor General of India to the Hon'ble Court of Directors. The 1-inch maps have been much appreciated by the Railway Engineers now employed on the Calcutta and Dacca Eastern proposed line.</p>	<p>The demarcations have now just been commenced.</p> <p style="text-align: center;">T</p>	<p>December 1856, and Mr. G. Hyde, a young man of European birth and education, who was found duly qualified, was appointed to fill the vacancy. Messrs. N. Davey, W. Ivey, and W. Davey are excellent Assistants on this Survey, highly spoken of by the Superintending Surveyor.</p> <p>A few principal points of the Calcutta Meridional Series, G. T. Survey, have been met with on the borders of the Burdwan District and duly connected, and the work well identified with the Nuddea and Moorsheadabad Surveys.</p>

3rd Division or Eastern.

S AND DATE OF APPOINTMENT.	On what duty employed during the year.	Progress and present state of the work.	On what duty proposed to be employed during the ensuing year.	REMARKS.												
under Wyatt, } T. Revenue Sur- } vivor, 8th October } 44	In executive charge of the Mymensing District Survey.	The survey of the large District of Mymensing was resumed by this party on the 15th December 1855, and prosecuted on the left bank of the old course of the Brahmapootra River, on the confines of the Sylhet District and the Garrow Hills to the North-east. Portions of 29 Pergunnahs of the Mymensing and surrounding Districts, all confusedly mixed up together, were surveyed, aggregating an area of 1,433 square miles, which were divided off into 11 main circuits, containing 1,691 village circuits surveyed by traverse, the average size of which is 542 acres. The cost incurred amounts to Rupees 34,663-4-3 for the professional work alone, exclusive of 816 drawn in abstract, but chargeable to the civil department on account of the area calculations of the small internal estates, which were laid down by the demarcating Officer. The rates per square mile and per village circuit are as follows, which, contrasted with the same for 1854-55, are very favorable as regards the quantity of work done, there being a diminution of Rupees 7-6-7 on the square mile, whilst the circuit cost is higher, owing to the enhanced average size of the villages:—	The remainder and most difficult part of the District bordering on the Garrow Hills, estimated at about 1,000 square miles, in addition to the Hill Territory, which will have to be penetrated and examined, forms the work of the current season. The whole of this has been demarcated, and the next District to be taken up by this party will be Dacca, Jellalpoore, as much of it as lies to the North of the Ganges River.	The G. T. Survey has not extended to this District, but several masonry pillars have been erected in convenient positions at the extremities of the District, with a view to future connection. Many objects of a permanent character have likewise been fixed, and their positions computed and laid down on the maps for a similar purpose.												
C. Bell, 1st October 1851	Assisting.	<table border="0"> <tr> <td></td> <td><i>Per Square Mile.</i></td> <td><i>Per Circuit.</i></td> </tr> <tr> <td>Season 1854-55</td> <td>Co.'s Rs. 31 9 3</td> <td>Co.'s Rs. 15 11 6</td> </tr> <tr> <td>" 1855-56</td> <td>" 24 2 8</td> <td>" 20 7 10</td> </tr> <tr> <td>Difference</td> <td>Co.'s Rs. — 7 6 7</td> <td>Co.'s Rs. + 4 12 4</td> </tr> </table>		<i>Per Square Mile.</i>	<i>Per Circuit.</i>	Season 1854-55	Co.'s Rs. 31 9 3	Co.'s Rs. 15 11 6	" 1855-56	" 24 2 8	" 20 7 10	Difference	Co.'s Rs. — 7 6 7	Co.'s Rs. + 4 12 4	This will be commenced on the opening of season 1857-58.	Mr. R. Barclay, pupil of Mr. Martiniere, has been appointed as a Sub-Assistant 4th Class on this establishment from 20th September 1856.
	<i>Per Square Mile.</i>	<i>Per Circuit.</i>														
Season 1854-55	Co.'s Rs. 31 9 3	Co.'s Rs. 15 11 6														
" 1855-56	" 24 2 8	" 20 7 10														
Difference	Co.'s Rs. — 7 6 7	Co.'s Rs. + 4 12 4														
G. S. Swiney, } at July 1853 } ... }	Assisting.															
H. M. Smith, October 1850	Ditto.															
S. Phillips, October 1837	Ditto.	On the 1st May 1856 the party retired for the recess to Dacca, the nearest civil station, where sufficient accommodation could be obtained. The maps, registers, and calculations have been satisfactorily brought up, and for the most part lodged in this office. A map of a portion of the District, all that lying to the West of the old course of the Brahmapootra River, has been prepared and lithographed in the usual preliminary form on the 4-mile-to-the-inch scale, and the general compilation of the whole District will now be taken in hand, so as to ensure its completion the moment the survey is concluded.														
J. K. Moran, 1st January 1856	Ditto.															
R. Barclay, 20th September 1856	Ditto.															
G. C. Bolst, Draffeman, 15th October 1850	Ditto.															
Native Surveyors.																

4th Division or Western.

AND DATE OF APPOINTMENT.	On what duty employed during the year.	Progress and present state of the work.	On what duty proposed to be employed during the ensuing year.	REMARKS.
J. E. Gastrell, Regt. N. I., Revenue Surveyor, January 1852	In executive charge of the Survey of the Bancoorah and Jessore Districts.	<p>In consequence of some confusion in the mode of taking up the several Districts for demarcation prior to survey, and likewise from the inaccuracy of the existing maps and our imperfect knowledge of the true disposition of the Districts in the Lower Provinces, this party has unfortunately had a break in their operations. After the completion of Beerbhoom and Moorsabad, it was supposed that Bancoorah came next in succession South of the Adjee River; but it has since been discovered that Burdwan intervenes. The Bancoorah District is therefore isolated from the others previously surveyed by the 4th Division, and after its completion it was necessary to pass over the intermediate Districts of Burdwan and Nudda of the 2nd Division and take up Jessore.</p>	Continuation of the survey of the District from North to South. The lower part of the District is exceedingly swampy and unhealthy, and the whole District, estimated at 3,283 square miles, of which only 575 have been as yet effected, will not be got through during season 1856-57. The Soonderbuns will also cause much trouble and delay.	Captain Gastrell, Revenue Surveyor, who had been remanded to regimental duty in August 1855, for the Sonchal Expedition, returned in January 1856, and resumed charge of the establishment. In the interim the charge was held by Mr. C. Bradley, the senior Assistant, who however did not prove himself equal to such a responsibility.
Smart, 21st number 1846 ... } -Assistants.	Ditto.	<p>During the season under review, therefore, the operations of the party have been prosecuted partly in Bancoorah and partly in Jessore, after effecting an area of 776 square miles in 1,120 village circuits in the former District, which was extremely difficult, from the very jungly state of the country and the very small size of the village circuits, from the Jessore District, carrying on the survey from the stations of the Nudda and Pubna completed works, and by pushing on until the middle of the month of May 1856, 575 square miles, containing 738 village circuits, were got through, giving an excellent general out-turn of 1,351 square miles, and 1,858 village circuits separately taken up by traverse, the general average of which comes to 471.25 acres each. The total expenditure has been Rupees 32,179-3-3, giving an average rate of Rupees 23-12-9 per square mile, and Rupees 17-5-1 per village circuit, which, in comparison with the results of the previous season, shows a satisfactory decrease as follows:—</p>	<p>After Jessore, Dacca, Jellapore, South of the Ganges, will come under survey by this party, and is now being demarcated.</p>	The Bancoorah work has been well connected with the Calcutta Longitudinal Series, every point traversing the District having been taken up.
Hyde, 19th number 1856 ... } Stevens, 20th ... }	Ditto.	<p>Per Square Mile. Season 1854-55 ..... Co.'s Rs. 26 13 9 " 1855-56 ..... " 23 12 10 Difference ..... Co.'s Rs. — 3 0 11</p>	For the Jessore District, there is no triangulation forthcoming. The Bancoorah work is identical with the boundaries of the adjoining District of Burdwan.	Messrs. A. Hyde, W. Stevens, and H. W. Stevens have been appointed as Sub-Assistants 4th Class on
David, (Office) 1st January ... } The Surveyors.	Ditto.	<p>The maps of the whole of this work have been prepared and lodged in a most satisfactory and complete manner in Captain Gastrell's usual admirable style. An accomplished and elegant draftsman himself, his work is always turned out in a way that insures admiration.</p>		

149

The comparison of the results of the distances between the G. T. Survey points, as derived from the two operations, gives a ratio of error as follows:—

Names of G. T. Stations.	From Revenue Survey.		From G. T. Survey.		Error of Revenue Survey.		Error per Mile.	
	Feet.		Feet.		Feet.		Feet.	
1 Ramsagur to Kursoli...	65,452.26	...	65,427.01	+	25.16		2.02	
2 Kursoli to Kooleah	112,031.70	...	112,014.92	+	16.78		0.79	
3 Kursoli to Gangua	106,861.92	...	106,687.91	+	194.01		9.58	
4 Kooleah to Gangua	92,908.20	...	92,831.04	+	77.16		4.38	
5 Ramsagur to Banea Poker Telegraph, } Secondary Station	47,147.76	...	47,028.04	+	119.36		13.36	
6 Kursoli to Banea Poker Telegraph, } Secondary Station	66,775.50	...	66,602.03	+	173.20		13.69	

this establishment during the recess. These young gentlemen of European birth and education, having very creditably passed the usual examination and shown considerable proficiency in Plan Drawing, are considered very eligible additions to the Department.

Mr. Robert Smart, Assistant Surveyor, is a young man of great promise, and is highly spoken of.

The Bancoorah, as well as the Jessore village plans, are on uniform size large sheets, according to the new system, and are highly approved of as most practical useful records, superior in every way to the old style of furnishing them. They are likewise substantially bound up with complete indices and alphabetical lists, and may be considered as permanent as the old volumes. The general style of getting up these plans is excellent, and reflects much credit on the Surveyor and his efficient establishment. The maps of the Moorsheadabad District surveyed by this party have all been lithographed and distributed, both on the 1-inch scale, and the preliminary District map on the 4-mile-to-the-inch scale. The final manuscript map of this District has been duly transmitted through the Surveyor General of India to the Hon'ble Court. The Bancoorah preliminary map has been compiled and is now in the Press for early lithography.



TABLE A. 151

GENERAL RETURN of Professional Work for Season 1855-56, viz. from 1st October 1855 to 30th September 1856, exhibiting Cost, Area, and Average Rates per Square Mile and per Circuit.

DIVISIONS.	Names of Superintending Officers.	Names of Districts.	PROFESSIONAL WORK.										Average Rate per Tru-averse Circuit.
			Number of Pergunnahs	Number of Main Circuits.	Number of Mouzahs.	Number of Hilltracs or Traversé Circuits.	Average size of Traversé Circuits.	In Acres.	In Square Miles.	Cost of Work, including Guard.	Average Rate per Square Mile.		
1st	Mr. J. J. Pemberton, Revenue Surveyor	Banspore, Bhat, Pootha, and Tosen Rivers Mehalwaré Calculations	4	4	1,288	1,288	634.50	628160.26	991.31	30,327 7 0	28 12 9	23 8 7	
			2	2	21768.24	43536.48	68.02	925 0 0	29 12 3	24 8 8			
2nd	Major R. Smyth, Revenue Surveyor	Burdwan Mehalwaré Calculations	15	7	3,011	1,929	523	1010327.00	1578.69	34,285 1 0	21 11 6	17 12 4	
			15	7	3,011	1,929	523	1010327.00	1578.69	35,550 14 9	22 8 3	18 6 10	
3rd	Mr. A. Wyatt, Revenue Surveyor	Mymensing Dacca Tippurah Sylhet Intermixed Pergunnahs and Districts Mehalwaré Calculations	13	11	1,594	1,691	542.68	917673.16	1433.86	* 34,663 4 3	24 2 8	20 7 10	
			8	4	816 0 0	35,479 4 3	24 11 2	20 15 8					
4th	Captain J. E. Gastrell, Revenue Surveyor	Bancoorah—excluding part of Circuit No. 3 of last season and outside of District in Poorulia and Málnapore Jessore—Circuit No. 3 partly finished and No. 4 commenced upon Mehalwaré Calculations	0	4	1,433	1,220	443.80	467064.62	778.66	18,475 4 0	23 12 7 1/2	16 7 10	
			0	3	800	738	498.69	363062.57	575.05	13,703 15 3	23 12 9 1/2	17 5 1	
6th or 7th	Mr. J. H. O'Donel, Revenue Surveyor	Akyab	0	7	2,233	1,858	471.25	865007.19	1351.71	33,498 2 8	24 12 5	18 0 5	
			3	4	47	47	107.47	505118.32	789.24	26,795 10 6	33 15 2	570 1 11	
Total including Arracan Survey			51	35	8,173	6,815	5731.11	3760021.51	6203.03	162,176 7 2	26 3 2	23 13 7	
Grand Total and Averages excluding expense of Mehalwaré Calculations			51	35	8,173	6,815	5781.11	3909921.51	6203.03	158,250 10 0	25 8 2	23 3 6	

\* This sum includes the personal allowance of Company's Ruppes 100 per mensem to Mr. Wyatt, and also Company's Ruppes 63-15-3 for building masonry pillars (vide letter No. 2 dated 13th January 1849 from Board of Revenue, Lower Provinces.)  
† Includes Company's Ruppes 1,530-0-0 drawn for Mr. Assistant Surveyor H. A. Porteous on medical leave to Europe.

REVENUE SURVEYOR GENERAL'S OFFICE,  
Calcutta, 1st February 1857.

(Signed) H. L. THULLIER.

Deputy Surveyor General.

TABLE B. 152.

GENERAL STATEMENT of Expense of Native Establishments of each Survey for Season 1855-56.

SURVEYS.	Superintending Officers.	Khursrah, including purtaling and contract work.	Professional Survey, including Guards and Mehaldaree Computers.	TOTAL.
or Northern Division, Rungpore ... ..	J. J. Pemberton, Esquire ... ..	0 0 0	12,940 7 0	12,940 7 0
or Southern Ditto, Burdwan ... ..	Major R. Smyth ... ..	0 0 0	14,298 9 9	14,298 9 9
or Eastern Ditto, Mymensing ... ..	A. Wyatt, Esquire ... ..	0 0 0	13,421 14 8	13,421 14 8
or Western Ditto, Bancoorah and Jessore... ..	Captain J. E. Gastrell ... ..	0 0 0	14,260 5 10	14,260 5 10
or Arracan Ditto, Akyab ... ..	J. H. O'Donel, Esquire ... ..	0 0 0	9,445 0 0	9,445 0 0
Total Native Establishment ... ..		0 0 0	64,366 5 3	64,366 5 3
Superintending Officers and Contingencies ... ..		0 0 0	44,613 5 4	44,613 5 4
European Assistants ... ..		0 0 0	53,596 12 7	53,596 12 7
Total corresponding with Table A. ... ..		0 0 0	162,576 7 2	162,576 7 2

(Signed)

H. L. THULLIER,  
Deputy Surveyor General.



TABLE E.

GENERAL STATEMENT of Sums actually drawn, inclusive of Guards, for the five Revenue Surveys, during the Season 1855-56, exhibiting amount short drawn in each Class. 153

	Superintending Officer's and Contingent Allowance.	European Assistants.	Native Establishment, inclusive of Mehalwarre Computers.	Guards.	TOTAL.
October 1855	Rs. 3,630 0 0	Rs. 4,000 8 3	Rs. 2,987 6 10	Rs. 100 12 4	Rs. 10,727 11 5
November	3,653 5 4	4,230 0 0	4,803 15 10	123 13 9	12,845 2 11
December	3,700 0 0	3,840 5 2	7,140 0 0	258 12 0	14,969 1 2
January 1856	3,700 0 0	4,315 5 0	7,572 15 8	266 10 11	15,874 15 7
February	3,730 0 0	4,450 0 0	7,090 9 9	298 12 0	15,629 5 9
March	3,730 0 0	4,662 14 10	*7,143 8 3	298 12 0	15,795 3 1
April	3,730 0 0	4,625 0 0	6,880 6 0	172 12 6	13,494 2 0
May	3,730 0 0	4,695 0 0	5,458 4 3	172 12 6	14,056 0 11
June	3,730 0 0	4,787 14 0	5,458 4 3	134 12 0	13,949 4 4
July	3,730 0 0	4,670 0 0	5,242 6 3	134 12 0	13,949 4 4
August	3,730 0 0	4,670 0 0	5,242 6 3	134 12 0	13,949 4 4
September	3,730 0 0	4,650 13 4	3,230 10 5	134 12 0	11,825 15 0
	41,613 5 4	53,506 12 7	62,171 13 5	2,194 7 10	1,62,576 7 2
Total drawn for each Class	43,600 0 0	68,400 0 0	69,900 0 0	5,760 0 0	1,87,620 0 0
Total passed for each Class.	1,033 5 4	14,803 3 5	7,728 2 7	3,565 8 2	25,043 8 10
Total Savings to Government					

Of the above Statement the following Table exhibits the expense under each Class and the savings on each of the five Revenue Surveys.

NUMBERS.	SURVEYS.	Buryor's and Contingent Allowance.		Assistants.		Guard.		Native Buryors.		Classes or Measurers.		Mehalwarre Computers.		Total Expense.		Total Savings.	
		Number.	Rs.	Number.	Rs.	Number.	Rs.	Number.	Rs.	Number.	Rs.	Number.	Rs.	Number.	Rs.	Number.	Rs.
1st	or Northern Division, Rangpore.	6,712	0 0 5	9,090	0 0 7	361	14 11 41	5,673	1 3 130	5,980	6 10	925	0 0	31,252	7 0	6,271	0 0
2nd	or Southern Division, Burdwan ..	8,712	0 0 5	12,540	5 0 12	589	1 2 37	5,313	7 3 160	7,130	3 7	1,265	13 9	35,550	14 9	1,973	1 3
3rd	or Eastern Division, Mymenag.	9,912	0 0 6	12,145	5 7 8	460	1 1 37	5,467	0 6 160	6,614	13 10	810	0 0	495,479	4 3	2,044	11 9
4th	{ or Western Division, Bancoorah } and Jessore .. .. .	8,712	0 0 6	10,525	12 10 7	364	2 4 26	5,617	15 8 160	6,959	4 4 1	1,318	15 5	33,498	2 8	4,025	13 4
5th	or Aracan Division, Akyab ..	8,665	5 4 5	8,785	5 2 6	419	4 4 29	3,933	2 9 85	5,702	8 11	0	0 0	26,795	10 6	10,798	5 6
	Total. . . . .	44,013	5 4	53,506	12 7	2,194	7 10	25,394	11 5 1	32,387	5 6 1	4,325	13 2	1,62,576	7 2	25,043	8 10

Devtour.  
 Captain Sherwill's half staff for 6 months . . . . . }  
 Ditto ditto full staff for 2 }  
 days, August 1856 . . . . }  
 Ditto ditto for September 1856 }  
 Amount saved after payment }  
 of all expenditure . . . . . }

(Signed) H. L. THULLIER,  
 Deputy Surveyor General.

\* Inclusive of Company's Rupees 63-15-3 *ut supra*.  
 † 62,171-13-5.

REVENUE SURVEYOR GENERAL'S OFFICE }  
 Calcutta, 1st February 1857.

TABLE F. 154

STATEMENT of the Savings in each Class of the under-mentioned Surveys respectively for Season 1855-56.

SURVEYS.	Superintending Officers.					TOTAL.
	Superintending Officers and Contingent Allowances.	Assistants	Native Establishments, inclusive of Measurement Calculations.	Guards.	TOTAL.	
or Northern Division, Rungpore .. .. .	Mr. J. J. Pemberton, Revenue Surveyor .. .. .	4,080 0 0	1,401 7 11	790 1 1	6,271 9 0	
or Southern Division, Burtwan .. .. .	Major R. Smyth, Revenue Surveyor .. .. .	0 0 0	270 7 5	502 14 10	1,073 1 3	
or Eastern Division, Mymensing .. .. .	Mr. A. Wyatt, Revenue Surveyor .. .. .	+1,900 0 0	1,082 1 8	601 14 11	2,044 11 9	
or Western Division, Jessore and Bancowrah .. .. .	Captain J. E. Gastrell, Revenue Surveyor .. .. .	0 0 0	83 12 6	787 13 8	4,025 13 4	
or Arracan Division, Akyab .. .. .	Mr. J. H. O'Donel, Revenue Surveyor .. .. .	146 10 8	4,894 4 4	732 11 8	10,728 5 6	
BALANCE AS SHOWN IN TABLE E.		1,053 5 4	7,728 2 7	3,565 8 2	25,043 8 10	
* Exclusive of Company's Rupees 63-15-3 <i>et supra</i> .						
or Northern Division .. .. .	Excess for Superintending Officers.	0 0 0	0 0 0	0 0 0	0 0 0	
or Southern Division .. .. .	Excess for Native Establishments.	0 0 0	0 0 0	0 0 0	0 0 0	
or Eastern Division .. .. .	Excess for Assistants.	1,200 0 0	0 0 0	0 0 0	0 0 0	
or Western Division .. .. .	Excess for Guards.	0 0 0	0 0 0	0 0 0	0 0 0	
or Arracan Division .. .. .	Excess for Native Establishments.	0 0 0	0 0 0	0 0 0	0 0 0	

(Signed) H. L. TRUILLIER, Deputy Surveyor General.

FROM

THE SUPERINTENDENT OF SURVEY, 1st DIVISION,

To

THE OFFICIATING SECRETARY TO THE  
BOARD OF REVENUE, LOWER PROVINCES,

FORT WILLIAM.

*Dated Berhampore, the 4th December 1856.*

SIR,

I HAVE the honor to forward the General Returns relating to this Division for the Survey year ending the 30th September last.

2. The accompanying Statement shows the number of Covenanted and Uncovenanted Officers employed, and the nature and extent of their work during this period:—

Names and description of Officers and period during which employed.	Villages demarcated and rendered ready for survey.	Boundary disputes decided.	Enquiry for excess and missing lands.	Other miscellaneous cases.	Appeals.	Khusreh arrears disposed of in Rajshahye, Pubna, and Bograd.	Registers, Mouzahwar and Mehalwar.		Duplicate copies of Maps.
							English.	Vernacular.	
Mr. E. G. Birch, Superintendent of Survey, from 1st October 1855 to 20th February 1856 .. .. .	0	0	0	234	74	0	13	5	0
Mr. W. L. Robinson, Officiating Superintendent of Survey, from 21st February to 30th April 1856 .. .	0	0	1	69	18	0	0	0	0
Mr. G. G. Morris, Superintendent of Survey, from 1st May to 30th September 1856 .. .. .	0	0	7	194	66	0	1	1	0
Mr. W. L. Robinson, Assistant Superintendent, Survey, from 27th December 1855 to 20th February 1856 .. .	26	1	0	1	0	0	14	0	0
Mr. W. J. Money, Assistant Superintendent, Survey, from 16th May to 30th September 1856 .. .. .	0	0	2	1	0	0	0	0	341
Baboo Hurrochunder Ghose, Deputy Collector, from 1st October 1855 to 30th September 1856 .. .. .	888	176	41	352	0	16	0	0	1103
Baboo Issen Chunder Dutt, Deputy Collector, from 1st October 1855 to 30th September 1856 .. .. .	0	18	136	454	0	250	17	17	867
Mr. W. H. Ryland, Deputy Collector, from 1st October 1855 to 30th September 1856 .. .. .	1061	77	121	642	0	0	0	0	1568
Moulvee Ally Ahmed Khan, Deputy Collector, from 1st October to 20th April 1856 .. .. .	0	1	3	23	0	16	0	0	288
Total .. .. .	1975	273	311	1970	158	282	45	23	4167

3. To two Deputy Collectors, Moulvee Ally Ahmed Khan and Baboo Issen Chunder Dutt, were assigned the duty of clearing off, what may be termed, the arrears of this Division. The one was engaged, till the 20th April last, in completing the Registers of three Pergunnahs of Rajshahye, and the other, first in measuring certain outlying lands belonging to Jessore, within the Pubna District, and then in preparing the Registers of the greater number of the Pubna Pergunnahs. The former Officer performed his duty so ineffectually, that, as the Board are aware, the three Registers of Rajshahye are still in hand, while the Moulvee himself has been visited with severe reprehension. Baboo Issen Chunder Dutt, to whom the pending Registers of Rajshahye were entrusted on the departure of Moulvee Ally Ahmed, labored with diligence and with as much success as could have been expected from the limited ticca establishment which he employed. His Ameen visited 225 villages, and according to a statement received from him,

"measured 2,131 chucks or 15,388 stations by mehalwaree, and 9,693 beegahs 6 cottahs "in 6,243 fields by khusreh." The Districts of Rajshahye and Pubna were demarcated at a time (1849-50-51-52) when sufficient care was not taken to distinguish and delineate all the estates and villages entered in the Collectorate lists. The consequence is that, when the Registers of their Pergunnah are being prepared, numbers of villages and estates are found totally unaccounted for in the thakbust records. This necessitates enquiries from recorded proprietors, local investigation, and in many instances fresh demarcations. The above statement is no criterion of what Baboo Issen Chunder Dutt has effected during the year. As far as such a statement is concerned, many investigations prosecuted for months lead to no result. A village noted in the Collector's books, after long search and enquiry, is at last definitely discovered to have been absorbed in the Ganges; another, known by a different name in the Mofussil, is, after an equal delay, discovered as already measured under that designation, in connection perhaps with a wrong estate. Hence it is, after demarcations have been conducted on wrong or imperfect data, that registry work is so tedious a process, and that in the present instance, although their demarcation and survey have been so long concluded, there still remain six Pergunnahs to be completed in Zillah Rajshahye and thirty Pergunnahs in Zillah Pubna. The ticca establishment employed in these two Districts has been maintained at a total cost of Rupees 2,567-12-8, which sum has been entirely defrayed from the savings which have accrued from the yearly authorized grants for the Division. The Board have already been informed of the necessity of another ticca establishment being entertained this year in the same quarter.

4. The District of Rungpore has been the scene of the new demarcations effected during the past field season. With a field establishment of 8 Peshkars and 80 Ameens, under 2 Deputy Collectors, Baboo Hurro Chunder Ghose and Mr. Ryland, (for Mr. Robinson remained so short a time as Assistant Superintendent that he can hardly be said to have taken a circuit in hand), 1,975 entire villages were measured, covering an estimated area of 1,700 square miles, and containing 8,732 separately defined parcels of lands of different estates. This is an extent of area prepared for the Revenue Surveyor,

\* Considering the establishment employed.

hitherto\* unequalled in the Department, and sufficiently demonstrates (although no doubt in this instance allowance must be made for the large size of the villages and the absence of excessive intermixture of property), that the civil establishment can always keep pace with the professional one. Mr. Pemberton has informed me, that he has still in hand 200 square miles prepared for him of the season of 1854-55. It is therefore obvious that, without extraordinary exertions, his balance of area must continue to increase. To prevent, however, the Civil Department maintaining too great a lead, I have desired the Deputy Collectors to direct their attention first to the demarcation of certain waguzashtee tenures situated within the villages demarcated during the past two years, complete lists of which were only furnished to me during the past recess from the Rungpore Collectorate. It cannot consequently be expected that so great an out-turn of new demarcation work will be furnished this year as in the last. In directing and controlling the large body of Ameens, respectively, under them, and in preparing and arranging the maps and records connected with their work, both Deputy Collectors, Baboo Hurro Chunder Ghose and Mr. Ryland, have exerted themselves with energy and success. The former Officer was engaged on the Eastern side of the Rungpore District, and prepared a large tract of country bordered by the River Berhampooter and the independent territory of Cooch Behar. The number of boundary disputes instituted before and decided by this Deputy Collector were very numerous. They related mostly to chur lands which being formed one year and perhaps reformed of

materially altered another by the action of the Berhampooter, are a fruitful source of litigation to the proprietors of the neighboring high lauds. The people of Cooch Behar were at first unwilling to allow any boundary to be laid down, except that which they themselves indicated. Subsequently, however, towards the end of the field season, an Officer appointed by the Cooch Behar Government appeared, to decide, in concert with the Deputy Collector, all disputed questions regarding the frontier line. When field operations closed, only six of such cases remained pending. Mr. Ryland, as will be seen from the statement in para. 2 of this letter, performed a large amount of work during the year. His circuit extended from the River Kurruteea on the Western boundary of Rungpore to the River Teesta on the East, and a proof of his able and active superintendence is found in the fact, that of three Ameens discovered by him practising extortion, two were convicted and punished by the Magistrate, and a third absconded, while three other Ameens were dismissed for fraudulent entries of lands in their maps and papers. All the maps connected with the past season's operations, with the exception of a few,\* which, when too late in

\* 49 the year to be remedied, were found incorrect or incomplete, have been made over to the Revenue Surveyor. I have also assigned to that Officer for triangulation 1,166 Mehalwaree maps.

5. The aggregate expenditure of the year in this Division amounts to Rupees 67,198-5-1½. This, however, is independent of the sum of Rupees 2,567-12-8 expended on account of the arrears of Rajshahye and Pubna.

6. The Assistant Superintendent, Mr. Money, joined the Division at Berhampore at too late a period to assist in the Rungpore demarcations. I therefore entrusted to him the preparation of the Registers of three Pergunnahs of Zillah Pubna, and in this respect much progress has been effected in his Office.

7. The tenor of this Report is, I think, favorable to the three Deputy Collectors who are at present subordinate to me. I consider it my duty, however, to say with reference to Baboo Hurro Chunder Ghose, that although he has exhibited much zeal in the performance of his demarcation duties, and has had to deal with a great number of difficult boundary disputes, yet, in the disposal of these latter, his proceedings have appeared to me too much characterized by hastiness and want of judgment, so that I have been compelled in several instances to reverse his decision and to return the case for re-investigation and trial. This opinion I find confirmed in a statement left on record by my predecessor, Mr. Birch, on his quitting the office. I think it would be invidious to distinguish between the merits of Baboo Issen Chunder Dutt and Mr. Ryland; both these Officers have given me much satisfaction, and have upheld the high character they maintained last year. I would strongly recommend their promotion to a higher grade in the list of subordinate Executive Officers.

8. In conclusion, I beg to state, that my field establishment has already started for Rungpore, and their different circuits have been assigned to the Assistant Superintendents, Baboo Hurro Chunder Ghose and Mr. Ryland. I am in hopes that their demarcations will be conducted this year on such a system, that the completion of the Registers of the District may be coeval with its demarcation.

I have, &c.,  
 (Signed) G. G. MORRIS,  
*Superintendent of Survey, 1st Division.*

FROM

THE SUPERINTENDENT OF SURVEY,  
2ND OR SOUTHERN DIVISION,

TO

THE SECRETARY TO THE  
BOARD OF REVENUE, LOWER PROVINCES,  
FORT WILLIAM.

*Dated Burdwan, the 6th December 1856.*

SIR,

I HAVE the honor to submit a Report on the proceedings of the 2nd Division civil branch of the Survey, together with the usual Annual Statements Nos. 1, 2 and 3.

2. To make the season's proceedings clearly understood, it will be necessary to recapitulate some portion of that of the past season of 1855-56.

3. In the 3rd para. of my Report, (*vide* my letter No. 18, dated 10th December 1855, to the Secretary, Board of Revenue,) I stated that the demarcation of the Burdwan District commenced in January 1855, but that in consequence of the Peshkars and Ameens joining from the Bancoorah District on various dates after the demarcations had commenced, that the actual time expended on work in the Burdwan District up to 30th September 1855 was six and a half months, and that during that period (para. 4) ten Pergunnahs had been entirely demarcated, and three partly so—the number of villages being 2,033, comprised in 1,336 hulkas; the area estimated at 1,000 square miles, (since found to be 960 square miles); and the total expenditure (para. 8) Rupees 28,561-0-10. Of this work, 346 hulkas, comprising 629 villages, were left incomplete of internal demarcations.

4. This amount of work was insufficient to meet the wants of the professional survey for the whole season on the increased maximum establishment. In the month of December, I deputed the Deputy Collectors, with their establishments, to continue their demarcations, as shown in the accompanying map, *viz.* Baboo Doorgapersaud Ghose to Pergunnahs Shahabad, Burdwan, Baghah, and Chumpanugree, and Baboo Tarachand Ghose to Pergunnahs Auzmutsahee, Gopebhoom, Seinpaharee, Selampoor, and Shairghur; each Deputy Collector apportioning Ameens towards bringing up the internal demarcations of the 629 villages left incomplete the previous season. The above-named Pergunnahs comprised the whole of the District situated between the Damoodah and Adjye Rivers, with a few villages on the left bank of the latter.

5. Of this large extent of country, extending from East to West 80 miles, with an average breadth of 20 miles, Pergunnahs Auzmutsahee, Shahabad, Burdwan, and Baghah were in a sufficiently advanced state to enable the professional survey to take them up during the months of March, April, and May. These four Pergunnahs comprised 640 square miles.

6. This was effected, but with very great inconvenience, and I may say, confusion to the Deputy Collector's work, in consequence of the Ameens not having had a fair start of a whole season the previous year in the District. By the end of February the

professional department had completed 800 square miles of the 960 demarcated, and was urgent for more work, and which, owing to the heavy internal measurements, I was unable to furnish. To prevent, however, the professional department being impeded, I ordered the Deputy Collectors to furnish the Surveyor with copies of the external boundaries of such hulkas as were externally demarcated, and to continue so supplying them till further orders, and which would enable him to progress with his work, retaining the original thakbusts with the Ameens to continue their internal measurements. The copying of these thakbusts in the middle of the field season caused much delay and confusion, but there was but the alternative of so doing, or checking the progress of the professional survey.

7. I beg to notice this as one advantage in combining professional and civil under one Officer, that, in this dilemma, I was enabled to make one department subservient to the other, and so prevent any heavy check in both.

8. Anticipating this crisis, I called on the Board, in February 1856, for further assistance in field establishment to the extent of 40 Ameens for a period of four months, which was granted, and afterwards sanctioned by the Government, in their letter No. 555, dated 26th July 1856, from the Secretary to the Government of Bengal to the Officiating Secretary to the Board of Revenue. This assistance was necessary to ensure the completion of the heavy mehalwar work in hand, and also a fair field of operations for the present season.

9. The result has been satisfactory in that the object aimed at has been obtained, the demarcations of the season presenting an area of 640 square miles actually surveyed, and 800 square miles prepared work for the ensuing season of 1856-57, making a total of 1,440 square miles; and the amount of labor and difficulty with which this has been effected may be judged of by the circumstance of there being no less than 108,150 chucks of mehalwar land scattered over this area, of which 55,769 fell to the lot of Baboo Doorgapersaud Ghose, and 50,502, with 1,879 daghs of field measurement, to Baboo Tarachand Ghose.

10. When this District was made over to the professional survey Officer, combining the duties of the civil department with those of the professional, with a view to decrease the heavy expense of the demarcation duties, it was under the impression that the estates composing it were much less intricate than in other Districts, and that it afforded a favorable opportunity of making the experiment of combining both duties under one head. The demarcation of the District, however, has up to this time proved it to be one of the most laborious, if not the most difficult of all that have hitherto been completed in this Division. The Collector's Towjee List shows upwards of 5,000 mehals, of which more than 4,000 are below the jumma of Rupees 50. In excess of the usual duties of demarcating and measuring the mehals, the demarcation and measurement of the chowkeedaree chakran lands has taken up nearly half the time of the Ameens. Inclusive of the chucks measured in season 1854-55, amounting to 32,028, the total number of chucks of land measured up to 30th September 1856 is 140,178. Of these, 55,160 have been calculated in the Surveyor's office, of which 23,206 chucks, in area 37,098 beegahs, consist of chowkeedaree lands, averaging but a trifle more than 1½ beegahs each. In the remaining 85,018 chucks still for calculation, should the chowkeedaree lands exist in the same proportion, as I have no reason to believe otherwise, these lands in amount of chucks will equal those of the mehals, or in other words the demarcation and measurement of them will have doubled the duties of the field establishments.

11. In addition to the duties performed in the Burdwan District, and agreeably to the instructions received, the necessary assistance was furnished to the Bancoorah

Survey to renew such *dhooees* as might be missing on the professional survey taking the field. I deputed 1 Peshkar and 20 Ameen, who were employed for about three months on the duty, having effected all that was necessary to the satisfaction of the Revenue Surveyor, Captain Gastrell: Deputy Collector Doorgapersaud Ghose went over to Bancoorah also for a fortnight, whilst the Ameen were there.

12. The detail of the duties performed comprise 783 boundary disputes, of which 722 have been disposed of; 804 izad and adumnishan cases, of which 751 have been disposed of; 1,199 miscellaneous cases, of which 1,116 have been disposed of. There are 933 duplicates of maps still pending, but this work has been thrown somewhat in arrears, in consequence of the Ameen being kept in the field until nearly the end of September.

Eight appeals in five cases under Act XX. of 1848 have been brought before me, three of which are pending.

13. The total cost of the work for the twelve months is here detailed, amounting to Rupees 46,902-8-2, viz. :—

Deputy Collectors' Salaries .....	13,200	0	0
Ditto Establishments .....	1,200	0	0
Ditto Field Establishments .....	19,735	14	11
Superintendent's Office Establishment ...	2,536	10	3
Total .....	36,672	9	2
Amount allowed in Government letter No. 390, } dated 23rd June 1855 .....	37,164	0	0
Savings .....	491	6	10

Extra expenditure has been incurred as follows :—

Superintendent's Salary, as per Government letter } No. 2621, dated 14th July 1855 .....	2,400	0	0
Office Rent.....	600	0	0
Contingencies, as detailed in Statement No. 3 .....	2,697	3	0
Extra Establishment of 40 Ameen, as sanctioned by } Government letter No. 555, dated 23rd July 1856 }	2,525	1	7
Regular Establishment .....	36,672	9	2
Mr. H. M. Reid's Ministerial Establishment .....	2,007	10	5
Grand Total .....	46,902	8	2

In this expenditure is included the sum of Rupees 309-4-3 for renewing *dhooees* in the Bancoorah District, as per Board of Revenue's letter No. 352, dated 20th August 1856, but as it is of small amount, I have not thought it worth disturbing the general average for it. The sum of Rupees 225-11-0 has been realized on account of Ameen's fees, as per Board's letter No. 218, dated 4th June 1856. Of this sum, Rupees 196-1-9 has been forwarded to the Collector of the District, to be carried to the credit of the demarcation establishment, and Rupees 29-9-3 has been accounted for in my Supplementary Bill for June 1856.

14. The cost per square mile for the twelve months under review is reckoned on 1,440 square miles of work, viz. :—

- 640 demarcated and actually surveyed, and
- 800 ditto for survey this next season.

Total 1,440

and which, on an expenditure of Rupees 46,902-8-2, gives Rupees 32-9-1 per square mile. To judge of the cost of the work by what has been actually effected in the District since



the demarcations were commenced, the amount expended and area effected since the commencement must both be taken, and which is as follows :—

		Area.			Expenditure.	
		Square Miles.				
1854-55	...	960	...	...	28,561	0 10
1855-56	...	1,440	...	...	46,902	8 2
		<u>2,400</u>			<u>75,463</u>	<u>9 0</u>

or Rupees 31-7-0 per square mile. Taking into consideration the amount of internal demarcations effected in this area of 2,400 square miles, comprising 140,178 chucks of land, and averaging 55½ chucks per hulka or thakbust missil, I trust the results will be considered satisfactory. Had the average number of chucks in each hulka been what they were in District Nuddea, or even in any other District, the whole of this District would have now been demarcated and ready for survey this next season, and the general cost reduced to about Rupees 25 on the square mile. I beg here to subjoin a Statement showing a mean taken from the actual costs and results of a season's work in the 2nd, 3rd, and 4th Divisions for 1852-53, together with the cost of professional work, which will enable the Board and the Government, from practical results, to form an opinion as to the advantages or otherwise of combining the two operations under one head. It will be observed, that the Burdwan District work is less by Rupees 18-5-0 on the square mile and Rupees 24-7-0 on the circuit or hulka, than the mean given, notwithstanding that the internal sub-division of estates of hulkas is two-thirds more, the average size of the hulkas being 83 acres less.

No. of Division.	No. of hulkas demarcated.	No. of square miles.	No. of chucks of Mehalwar.	No. of acres per hulka.	No. of chucks per hulka.	CIVIL. Cost in Rupees.	PROFES- SIONAL. Cost in Rupees.	Total cost.	Total cost per hulka in Rupees.	Total cost per square mile in Rupees.	REMARKS.
2nd Division, Nuddea } Dist.—Season 1852-53	1448	2037	23732	896	16.4	52637	58929	111566	77.0	54.7	Professional cost for 1853-54 and 1854-55, the area having taken two seasons to survey professionally.
3rd Division—Season } 1852-53 ..	890	864	10394	627	11.8	48631	29772	78409	89.1	90.7	
4th Division—Season } 1852-53 ..	1349	1161	42000	550	31.1	58712	29533	88245	65.4	76.0	
Mean ..	1229	1354	25375	691	19.7	53327	39411	92738	77.2	73.8	
2nd Division, 1854-55...	1336	960	32028	459	23.9	28561	Surveyed in 1855-56. 34285	28501	0	0 6½	months' work.
2nd Division, 1855-56. .	1187	1440	108150	774	91.9	46902	22868	104043	0	0 12	months' work.
							57141				
2nd Division, 1854-55 } and 1855-56 ..	2523	2400	140178	608	55.5	75463	57141	132604	52.5	55.3	Total expenditure and cost since commencement to 30th September 1856, inclusive of an estimate of Rupees 22,856, for professional survey of 800 square miles already demarcated for season 1856-57.
Difference ..	...	...	...	83	+ 35.8	..	..	..	24.7	18.5	

A further comparison of a series of years will show still more favorably :—

	Hulkas surveyed.	Square miles.	Cost of demarcation.	Cost of professional survey.	Total cost.	Cost per hulka.	Cost per square mile.	REMARKS.
1851-52	21,339	17,600	9,67,878	5,47,820	15,15,698	71.03	86.12	Cost of the four Divisions, for professional and civil, for four years.
1852-53								
1853-54								
1854-55								

or a saving in general cost of professional and civil, of per hulka Rupees 18-5-0, per square mile Rupees 30-8-0, and this with at least one-third more of internal demarcations on the four successive years.

15. As regards the quality of the work, I have had the same materials to work with that my predecessor had. I have introduced various checks into the work, with a view to the greater accuracy of their internal measurements, and the Ameens having been taught to prepare the professional survey stations, and show them on their thakbusts, has been a great check on their external hulka measurements. These have been, with some exceptions, very correct, and from the data so given by the Ameens, I have been enabled to reduce every boundary over the whole work of the season, and apply them to the professional data, so avoiding the necessity of a double measurement of the actual village boundary. This plan of reduction is feasible, but in practice, I have found that nothing is gained by adopting this system, which was only done on trial by me. I find that as much, if not *more*, time is taken up in reducing the boundaries on the large scale of the thakbust to the scale of the professional maps, than they could be actually professionally laid down in the field. Owing to the constant references required to the Ameens, and the large size of the thakbust missils, which is next to a complete bar to the operation, I commenced on it, and carried it through during the season, rather than cause any confusion in the work by a change to the old system during the field season; but I could have got through just as much area, had I surveyed all the village boundaries in the usual manner, by offsets by the professional establishment. It is not therefore desirable to carry out this system during the ensuing season.

16. There remains for demarcation in the District that portion situated south of the Damoodah River and marked A. in Map which accompanies this Report. I have had a rough sketch made of this tract, it contains 350 square miles and about 400 hulkas. Deputy Collector Baboo Doorgapersaud's field establishment is deputed for this purpose, and it will be ready for survey by February next, so completing the District. An establishment of 4 Peshkars and 40 Ameens is ordered for Dinagepore, who will be placed under the orders of Baboo Mohindranath Bose, appointed by the Board in their letter No. 497, dated 20th November 1856, and in March 1857 Baboo Doorgapersaud's field establishment will also be available, a part being retained here for the purpose of bringing up any arrears of internal measurements, Board's copies of thakbust maps, or other work. The Board have, by their letter No. 473, dated 5th November 1856, transferred Baboo Tarachand Ghose to Midnapore on special duty, and he proceeded there on the 20th November 1856.

17. I close this Report with a few remarks on the advantages and disadvantages of the combined system.

The Surveyor superintending both offices is enabled to regulate the demarcations, so as to dovetail them into his own professional operations. Knowing exactly how and where the body of Ameens is working, how their work is progressing, and the probabilities of out-turn, he can increase or decrease the progress of demarcation in any particular direction, so as to meet the immediate wants of the professional survey. From collecting information and compiling maps from various data obtainable from other Surveyors, or from the head office in Calcutta, he can determine exactly where to send his Ameens to prepare the work for ensuing seasons. He can check their work in the field at the time of survey, he can teach and improve them in the method of working, he has all under his eye, and can regulate the professional and civil portions of his establishment, so as to prevent inconvenience or delay to either. The records of the last few years of the Bengal Surveys will show, that the chief cause of delay to the professional survey, and consequent expense of the work, has been the want of a sufficient tract of country demarcated ahead, and if demarcated, still the Surveyor delayed in consequence of disputed boundaries, or want of thaks in the field, or the want of the thakbusts themselves, retained in the Superintendents' offices for some causes or other. Thakbusts perhaps furnished to the Surveyor, but all in detached parts of the work to be surveyed, and thus useless for professional purposes, delays of referring every thing to another office, and thence perhaps to the head office in Calcutta, to settle any difference between Surveyor and Superintendent—all this is avoided on the combined system. The combined head knows his wants in all directions, and can so order and regulate his work, that no differences occur, and no references are necessary, and if any method exists in his office, the whole proceeds like clock work. On the separate system, or the system still carried on in the other Divisions, there always has been, and always will be, some wheel in the machinery to keep the rest from proper motion. The Surveyor Superintendent is the main spring of the whole, on the combined system, and he only requires to wind himself up to the duty before him to ensure success in it. Local difficulties may interfere with general progress, but they cannot be more than have existed in the District now under trial on the combined system, wherein the internal demarcation of hulkas (which is the real heavy work of the civil office) is in excess of the demarcations, and the expense on the square mile is increased or diminished accordingly.

The disadvantages are chiefly, that the duties are too much for one head, and the time and attention of the Surveyor is taken away from his own legitimate duties. He is prevented moving about in his District, as the usage of Surveyors is to visit his several camps. He must be always at the head office to give orders on urzees, &c., and the numerous other papers that daily must come before him, connected with the civil branch, and which, if once allowed to fall in arrears, checks the work. He is too much tied down. This difficulty could be overcome by allowing the Superintendent an European Assistant in this Department, to hear, read, and give orders in these several urzees. They are all much of the same tenor, being chiefly references from Ameens and Peshkars, and also from land-holders connected with the demarcations. No difficulty exists in giving the orders, but much time is taken up. An Assistant could do all this and refer to the Superintendent for his orders any cases in which doubt existed. It would be necessary that he should have a good knowledge of Bengalee and also of the Revenue Regulations connected with Survey matters in general. In this way the Surveyor

Superintendent would be freed from the intricate details of the office, and could move about without the fear of a heap of arrears awaiting his return to the head office. I know of no other disadvantage to the combined system, which, with a little tact, should work well in any Surveyor's hands, and no method is better adapted to increase progress and decrease expense.

18. I beg to bring to the notice of the Board of Revenue the indefatigable exertions of both Deputy Collectors, Doorgapersaud Ghose and Tarachand Ghose, whose endeavours to complete, under great local difficulties, the large area effected, is most praiseworthy, and I beg strongly to recommend them for promotion to the next higher grade.

I have, &c.,

(Signed) R. SMYTH, Major,  
*Superintendent of Survey, 2nd Division.*

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No. 277.

FROM

THE OFFICIATING COLLECTOR OF BURDWAN,

To

THE SECRETARY TO THE BOARD OF REVENUE,

FORT WILLIAM.

SIR,

I HAVE the honor to forward herewith Annual Statements Nos. I. and III. (Statement No. II. being blank) for that portion of the survey work of the 2nd or Southern Division, which has continued under my immediate superintendence during the survey year ending the 30th September last.

2. The duty in question has consisted—*1st*, in clearing off what remained to be done in Bancoorah, preparatory to the compilation of the Survey Registers of that District; *2ndly*, in the trial of appeals from the decisions of the Deputy Collectors in boundary dispute cases in Burdwan; *3rdly*, in bringing up the outstanding Survey Registers of the Nuddea District. The executive control of the whole of the demarcation establishments having remained under the sole charge of Major Smyth, the Revenue Surveyor and Superintendent of Survey of the Division, it will not be necessary for me to advert to them particularly in this Report, but merely to notice briefly the different headings enumerated above.

3. It will be observed from Statement No. I., that the work which remained to be done in Bancoorah has, with the exception of the preparation of the Registers of that District, been virtually completed. The Registers, four in number, and comprising 4,631 villages, have been advanced as far as the data in hand permitted, but none of them can be completed until the lists prescribed by the Board as proper to be furnished with the Surveyor's block maps reach me from Captain Gastrell, the Revenue Surveyor of the 4th Division.

4. The nine boundary disputes entered in Statement No. I. are cases connected with the Bancoorah District, and of the number of appeals preferred from the decisions of the Deputy Collectors, 12½ are Bancoorah and 95 *only* are Burdwan cases. The orders

of the Deputy Collectors, Baboo Doorgapersaud Ghose and Tarachand Ghose, in the cases decided by me in appeal within the year, have been amended in the proportion of about 13 and 11 per cent. for those Officers respectively. The comparatively small number of appeals, which have been preferred to me in boundary dispute cases of the Burdwan District, is a point deserving of notice, and one which speaks favorably for the progress of the survey operations.

5. The boundary disputes in Burdwan have also, I believe, been comparatively few in number and trifling in respect to the areas litigated—results which, considering the very numerous plots of estate lands which have had to be traced out and to be separately measured and mapped, may I think be deemed very satisfactory. These results have probably been in part brought about by the Board's late orders, under which a survey boundary dispute has become a more expensive process than it was before, and, as the expense falls on the losing party, false and litigious claims are now less frequently set up. The paucity of boundary disputes may also, in part, be attributed to the land being almost wholly cultivated, and to each landholder's possessions being well known and well defined. Credit is also due to the demarcation Officers, whose skilful and patient performance of their duties has no doubt contributed, as heretofore, to the amicable adjustment of a great many of these cases.

6. The Registers of the remaining eleven Pergunnahs of Zillah Nuddea, comprising 1,908 villages, were completed and forwarded to the Collector within the year. None of the Bancoorah Registers can as yet be completed, as explained in para. 3, and those of Burdwan are not in a position to be commenced on at present.

7. The particulars of the expenses which have been incurred in supporting the ministerial establishment of the survey department of my office, and which aggregate Rupees 2,007-10-5, including contingent and stationery charges, have been duly communicated to Major Smyth, with a view to their amount being included in the gross Annual Statement of expenses chargeable to the Burdwan District. There has been a further small item of Rupees 271 expended in preparing duplicate copies of some of the Bancoorah Mehalwaree maps, which being chargeable to old work, has not been included in the above amount.

8. In conclusion, it will not, I trust, be considered out of place to mention that the joint work of demarcating and surveying the District has been progressing satisfactorily, under the able management of my late colleague, Major Smyth, to whose excellent and systematic arrangements, aided by the continued zeal and ability of Deputy Collectors Doorgapersaud Ghose and Tarachand Ghose, and of their subordinate Peshkars and Ameens, the success of the experiment is, in my opinion, to be mainly attributed.

I have, &c.,

(Signed) H. M. REID,  
*Officiating Collector.*

COLLECTOR'S OFFICE, BURDWAN, }  
*The 24th November 1856.* }

FROM

HENRY MUSPRATT, ESQUIRE,

*Superintendent of Survey, 3rd Division.*

TO

THE SECRETARY TO THE  
BOARD OF REVENUE, LOWER PROVINCES,

FORT WILLIAM.

*Dated Dacca, the 11th November 1856.*

SIR,

I HAVE the honor herewith to submit the general Returns of the 3rd Division of Survey for the year 1855-56, ending the 30th September 1856.

2. The following Memorandum exhibits the nature and extent of the work performed by the Officers attached to this Division during the period under review :—

Names and designation of Officers.	Villages demarcated in advance of survey.	Boundary dispute cases.	Enquiries regarding excess and missing lands.	Other miscellaneous cases.	Appeals.	Registers, Monzahware and Mehahware, completed.	Duplicate copies of Maps.
Mr. H. Muspratt, Superintendent, from 1st October 1855 to 30th September 1856	0	14	1,283	158	402	0	261
Baboo Prankishen Roy, Uncovenanted Deputy Collector, from 21st November to 30th September 1856	221	787	0	90	0	0	0
Baboo Joychunder Moojoomdar, Uncovenanted Deputy Collector, from 1st October to September 1856	1,100	658	102	260	0	0	0
Baboo Brijsoonder Mitter, Uncovenanted Deputy Collector, from 1st October to September 1856	776	315	932	487	0	0	0
Total .. ..	2,106	1,774	2,317	995	402	0	261

3. The demarcations were commenced in Pergunnah Shoosung, (which is situated to the North-east of Zillah Mymensing,) by Baboos Joychunder Moojoomdar and Brijsoonder Mitter, and by the end of January, I was enabled to make over to the Revenue Surveyor 593 villages in that Pergunnah, containing an area of about 400 square miles. This tract the Revenue Surveyor required in excess of the area demarcated the previous season.

4. The tract of country demarcated this year contains 2,106 villages comprised in 1,799 hulkas, (including 221 villages left incomplete the preceding year), and covers an estimated area of about 1,480 square miles, exclusive of the area of the 221 villages. Of this area, 400 square miles have already, as mentioned above, been made over to the Revenue Surveyor. The remaining 1,080 square miles, together with the hilly tract to the North of Pergunnahs Shoosung and Sherepore, should be quite sufficient to employ the Revenue Surveyor's field parties during the ensuing season.

5. The internal measurement amounts to 27,020 chucks, of which 9,515 chucks were plottings in the 221 villages left incomplete the previous year. No villages were found to require the simple khusreh or field by field measurement, as I had anticipated.

6. The demarcations of Zillah Mymensing have now been completed as far as the work of the Ameens is concerned. There is still a hilly tract comprising an area of not less than 300 and perhaps 1,000 square miles to the North of Zillah Mymensing remaining undemarcated, but as it is all hills and thick jungles, this portion only requires professional survey.

7. In the new demarcations, the boundary disputes have not been so numerous as in previous years, though the number instituted may still be considered excessive. Owing to the numbers of boundary disputes instituted in this Division, the field operations are much retarded, and great delay must occur in making the copies of maps for the Collector and the Board, and for this reason also, the preparation of the Pergunnah Registers cannot be completed until all the cases are finally disposed of.

8. During the field season, many of the Ameens suffered from the fever prevalent near the Garrow Hills. One Peshkar and the 10 Ameens employed under him were all so prostrated with fever, that I was obliged to remove them from their chuck to a more healthy part of the District.

9. In estimating the cost per square mile for the season, the pay and allowances of Baboo Frankishen Roy, 2 Peshkars, and 20 Ameens, should be deducted from the total sum drawn, as they were solely employed in clearing off the arrears of last season, and the work this year has been entirely completed, as far as the external and internal demarcations are concerned. There are only 76 dispute cases remaining to be investigated in the ensuing field season. The total amount expended this year is Rupees 61,498-10-3; of this sum Rupees 3,125 was the price of the six elephants purchased for the use of this Division. Deducting, therefore, the expenses of Baboo Frankishen Roy and the men employed under him, viz. Rupees 10,477-8-2, and the amount carried to the credit of Government on account of the time and expenses of Ameens employed in making maps of disputed lands, viz. Rupees 928-11-8, leaves Rupees 50,092-6-5 as the expense of the new demarcations. The cost per square mile is therefore Rupees 33-13-6½, and per hulka on the old and new work collectively Rupees 33-10-8¾ nearly.

10. The number of appeals on the file during the year was 744. Of the 402 decided by me, in 341 cases the orders of the lower Court were upheld, 13 were reversed, 5 were modified, and 43 restored to the file or returned for revision. The number restored to the file is chiefly owing to the investigations on the spot having been made by Officers making investigations in cases exceeding their powers; of the cases still pending, 221 were instituted between the 1st July and 30th September.

11. The number of boundary disputes disposed of were 1,774, and the number of cases pending amounts to 137; at the close of the years 1853-54 and 1854-55, there were respectively 1,086 and 537 cases pending.

12. During the year investigation has been made in 2,317 cases regarding excess and missing villages. I have devoted much time to the preparation of the Registers of Pergunnah Attia, which was demarcated in the years 1849-50-51-52. The mehal-milanees

had been prepared piecemeal and incompletely. By despatching 1 Peshkar and 10 Ameens into the Pergunnah in March, I was enabled, by September, to have all necessary enquiries made from the land-holders themselves. The land-holders claimed share in many villages demarcated in Zillah Rajshahye, which villages had not been received from the Superintendent of that Division. I was therefore, when I heard of the claims of the Zemindars (in September), obliged to apply for information regarding these villages, and the Superintendent in reply informs me that the Attia land-holders have no share in these villages. The Registers of Pergunnah Attia are being hastened, and I trust now, a commencement having been made, that the Registers of all the Mymensing Pergunnahs will in due course be completed. In former years, owing to the time of the Deputy Collectors being entirely taken up during the recess with the disposing of boundary dispute cases, they have been unable to assist in the preparation of the Registers; and I fear that, if the land-holders of Zillah Dacca are as litigious as those of Mymensing, without the aid of another Deputy Collector, great delay will occur in the preparation of the Registers of Zillah Dacca. Besides Pergunnah Attia, the Registers of Pergunnahs Burbazoo, Runhbowal, Cagmaree, Jaffershie, and Nusserojial have been taken in hand.

13. For the approaching field season, I have made the following arrangements. Baboo Frankishen Roy, with 1 Peshkar and 10 Ameens, will take up the outstanding boundary dispute cases in Zillah Mymensing, and afterwards will fix his head-quarters in Pergunnah Pookureah, in order to prepare that Pergunnah for registry. Pergunnah Pookureah contains 1,348 villages, and I anticipate that the Baboo will be fully employed during the field season in performing this duty. Baboos Joychunder and Brijsoonder (and also the 4th Deputy Collector if one be appointed) will commence the new demarcations in Zillah Dacca, and I trust to be able to furnish the Revenue Surveyor, in the following year, with a sufficient area, as clear of pending boundary disputes as any of the other Divisions.

14. A great inconvenience to both departments of the Survey in this Division has existed for the last two or three years, *viz.* the number of disputes remaining unsettled at the time of the professional survey. This may be attributed to the civil department not being one clear year's work in advance of the professional department. During the field season of 1854-55, all the Civil Officers were employed during the first two months, and two Deputy Collectors the whole field season, in clearing off the outstanding disputes of the preceding year; and besides this inconvenience, extra area had to be made over to the Revenue Surveyor. In this extra tract of country, there were many disputes, so that all the copy maps had to be recalled from the Revenue Surveyor, after his field parties had returned to head-quarters, for corrections. Again, in 1855-56, extra area to the extent of 400 square miles was required by the Revenue Surveyor, though the demarcations of the preceding year were incomplete. Luckily, the average number of cases instituted in Pergunnah Shoosung was much less than in the other Pergunnahs of Zillah Mymensing, so that I was enabled to make over that Pergunnah with only a few undecided dispute cases to the Revenue Surveyor. As there is a full season's work remaining in Zillah Mymensing for the professional survey during the year 1856-57, this inconvenience, hitherto experienced by the Revenue Surveyor (in having to correct boundaries after his maps have been completed,) will in future be avoided.

15. With reference to the hilly tract undemarcated in the north of Zillah Mymensing, it is not yet known how far northward it extends. Very little information



still less from the Magistrate of that District. The Ameens who wished to make enquiries on this point in Pergunnah Sherepore were unable to do so, as the agents of the land-holders refused to enter the hills. No Bengalee living near the hills ever ventures within them.

The only people who will venture are the Hajuns, a tribe who live at the foot of, and on the small hills along the whole of the north of Mymensing, and it is to these people alone, on the part of the Mymensing land-holders, that we can look for any assistance in ascertaining the northern boundary. Two of Mr. Wyatt the Revenue Surveyor's Assistants proceeded up the Rivers Nitai, Goneshuree, and Sumeshuree. They were accompanied at starting by people from the plains, but all of these people left them and returned before they had proceeded 10 miles. Since writing the above, I have received the orders of the Government of Bengal and the Board of Revenue, and shall use my best endeavours, during the approaching cold season, to point out the northern boundary of Zillah Mymensing to the Revenue Surveyor and his field party, by the aid of the Hajuns and the hill people bordering on the northern boundary.

The Deputy Collectors Baboo Joychunder Moojoomdar and Brijosoonder Mitter have both worked with great zeal and assiduity during the whole year.

Baboo Brijosoonder was attacked with severe fever in Pergunnah Shoosung, after completing the work made over to him in that Pergunnah, and after recovering from the fever, he suffered much from spleen, and in March he had an attack of cholera. Notwithstanding his illness (he is only now recovering from the weakness caused by the fever), he continued at his post and performed all the active duties required by him, and investigated all the boundary disputes (except one) which were instituted in his chuck. He is a valuable Officer. He has been in Government employ as an Abkarry Superintendent and Deputy Collector eight years, and is well deserving of promotion to a higher grade.

Baboo Joychunder is a most efficient Officer and truly deserves promotion. He has performed his arduous duties to my entire satisfaction, and though not enjoying good health for some time past, yet he is always ready to perform with alacrity any duty assigned to him. His chuck would have been as clear of unsettled disputes as that of Baboo Brijosoonder, had I not ordered him in March to Pergunnah Nusserojjal, in Baboo Prankishen's chuck, to look after the work in that quarter. (A land-holder had refused to point out his lands and had also been the cause of preventing several other parties pointing out their lands, the work was in consequence at a stand still, and it was probable, had the work not been completed at that time, it would, owing to the land lying very low, have remained incomplete till next field season.) This duty was most efficiently performed by the Deputy Collector. Baboo Joychunder has now been employed since February 1853 as a Deputy Collector in this Division of Survey, and considering the arduous duty in this Department, he is in my opinion fully entitled to his promotion to the 4th Class of Deputy Collectors as soon as a vacancy may occur.

Baboo Prankishen Roy joined this Division on the 27th November last. He has succeeded in disposing of 787 boundary dispute cases, 44 cases remain uninvestigated. These latter will be taken up and disposed of next field season. Baboo Prankishen Roy has always given great satisfaction in the regular duties of a Deputy Collector's office and has been rewarded by Government for his services, but I hardly think him

suites to the harassing and arduous duties of a Survey Deputy Collector. I have made over to him the registry of Pergunnah Pookureah, and shall continue to employ him in the registry work, until the arrears in Zillah Mymensing have been brought up. The preparation of the Registers will be a responsible duty, but I have no doubt that Baboo Frankishen Roy will be able to do the work very efficiently, and will greatly assist me in collecting information and preparing the Pergunnah Registers.

Should a fourth Deputy Collector be attached to this Division, I trust that a young, active and intelligent man may be selected, one who has his name to make, and is anxious to perform good service in order to obtain speedy promotion.

I have, &c.,

(Signed) H. MUSPRATT,

*Superintendent of Survey, 3rd Division.*

No. 314.

To

THE OFFICIATING SECRETARY TO THE  
BOARD OF REVENUE, LOWER PROVINCES,  
FORT WILLIAM.

*Dated Berhampore, 15th November 1856.*

SIR,

I HAVE the honor to submit the general Returns of the 4th or Western Division for the year 1855-56, ending 30th September last, and with reference thereto, to remark, as briefly as possible, upon the progress effected by my subordinates and myself.

2. The following Statement exhibits the nature and extent of the work effected during the period under review :—

Names and designation of Officers.	Hulkas demarcated and rendered ready for survey.	Boundary disputes decided.	Enquiries regarding excess and missing lands.	Miscellaneous cases decided.	Appeal cases decided.	Duplicate copies of Maps.	Registers, Mehalwar and Mouzahwar, disposed of.
Mr. J. Watson, Superintendent .....	0	0	140	317	97	0	5
Mr. W. Waterfield, Assistant Superintendent, from 1st February 1856 .. }	101	36	114	83	0	145	0
Baboo Tarucknath Ghose, Deputy Collector .....	1,264	222	4	457	0	2,086	3
Moulvee Ahsan Amed Khan, Deputy Collector .....	1,097	158	39	518	0	1,992	7

3. The demarcations in the Jessore District were recommenced during the latter part of November, under the management, as heretofore, of the Deputy Collectors, and were carried on until the beginning of July. I visited the District myself, and remained there in camp four and a half months, controlling and supervising operations. The tract of country demarcated by the field establishment (10 Peshkars and 100 Ameen's) contains 2,462 hulkas, and covers an estimated area of 1,900 square miles, the largest area, I believe, that has ever been effected under the new system in one season in any Division. This, with the 100 square miles left of last season's work, gives in round number 2,000 square miles, which will afford ample occupation for the professional survey next season, though working at full strength. The annexed rough sketch shows the tract of country in question.

4. The internal plotting, (as I remarked in my last year's Report), although not so excessive as that experienced in the Moorshedabad District, (where the intermixture of property exceeds that of any other District yet brought under survey,) is still very considerable. On referring to the Statements, it will be observed, that of the 2,462 hulkas demarcated, 1,567, comprising 1,746 villages, have been measured mehalwaree by scale and compass, and that the plots or blocks of land are 46,684. Five hulkas were subjected to a field by field measurement, the number of fields amounting to 8,692, with an area of 9,954 beegahs, the remaining hulkas (890) were simply demarcated externally. A comparison of the number of villages measured mehalwaree, and the amounts of plots contained therein, not only indicates the intermixture of property in any District, but shows the difficulties the demarcating party have met, and affords, if consideration be given to the number of Controlling Officers, a fair test for estimating their diligence and that of their field staff.

5. The plans of 2,358 hulkas were made over to the Revenue Surveyor for the use of his office during the month of September, and I have since furnished him with a few more; the remainder, about 85, will be supplied as soon as the boundary disputes connected therewith are decided. I have made arrangements for disposing of these boundary disputes at the earliest possible period.

6. During the year 446 boundary disputes were on the file, 416 have been decided, 30 were pending at the close of the year. They were instituted just as my field parties were breaking up to return to head-quarters at the commencement of the rains, and therefore could not then be investigated.

7. The number of appeals preferred to me from the decision of the Deputy Collectors was 122; in 80 cases (of the 97 decided by me up to the close of the year) the orders of the lower Court were confirmed, 3 were reversed, 1 was modified, and 13 were returned for revision.

8. Fifteen appeals have been preferred to the Commissioner from my orders during the year; 5 of these were from orders passed previous to the commencement of this year, and 10 from orders of the current year. The Commissioner has, in 8 cases, confirmed my decision, 1 case has been returned for revision, and 6 remain undecided.

9. Mr. Waterfield, the Assistant Superintendent, decided 36 boundary disputes. That Officer having judicial powers co-ordinate with my own, appeals from his decisions lie to the Commissioner. Of 11 cases of appeal, the Commissioner has upheld his orders in 5; of the remainder, 4 have been returned for revision, and 2 are still pending.

10. The total sum drawn for meeting the expenses of this office during the year has been Company's Rupees 65,884-1-2 ; but as this includes a charge of Company's Rupees 804-5-1, incurred by the Superintendent of Survey 2nd Division, for re-erecting land-marks in the District of Bancoorah, and charged to this Division by order of the Board of Revenue, the actual amount may be fairly considered as Rupees 65,079-12-1.

11. The savings at credit to this Division amounted at the end of the year to

\* The Board of Revenue, in their Office Memo. to my address, No. 218, dated 4th June, were pleased to direct that sums realized on account of payment to Ameen's, in boundary dispute cases, should be carried to credit of savings of the demarcation establishment.

Rupees 1,366-2-0, viz. from the field establishment, Rupees 874-0-11, and from Ameen's\* fees in boundary dispute cases, Rupees 492-1-1.

12. The Mehalwar and Mouzahwar Registers in English and Bengalee of 16

\* This Pergunnah Bhaugulpore, Zillah Bhaugulpore, was pending from last year's statement.

Pergunnahs have been completed during the period under review. Of these, the Registers of 15 Pergunnahs have been forwarded to the Collectorates, viz.\* 1 to that of Bhaugulpore, and 14 to that of Moorshedabad.

13. For the current field season, I have made the following arrangements. Deputy Collector Baboo Tarucknath Ghose will complete the demarcation of the Jessore District, i. e. the tract lying to the South between Koolnah and the Soonderbuns, about 350 or 400 square miles. This part of the country is unhealthy, and in itself unfavorable to field operations. I have impressed upon the Deputy Collector to be careful, and to dispose his men in such numbers, that the task shall be accomplished, if possible, without sickness or loss of life. I am sure the Deputy Collector will do his best to fulfil this obligation. Deputy Collector Moulvee Ahsan Ahmed will commence the survey of Furreedpore or

\* Vide Board's letter to my address, No. 106, dated 19th March 1856.

Dacca Jellalpoore,\* South of the Ganges. I shall visit the Camps of the Deputy Collectors in Jessore and Furreedpore and supervise their field operations.

14. I am particularly anxious to expedite the preparation of the Moorshedabad Registers. This District comprises 64 Pergunnahs—32 Pergunnah Registers have been transmitted to the Collector's office, 32 are still in hand. Instead of employing Mr. Waterfield in field work as last year, I propose leaving him at Berhampore with his own establishment and a portion of mine ; he should make considerable progress towards clearing them off.

15. Mr. Waterfield joined this Division, as Assistant Superintendent, on 31st January. Shortly after his joining my camp, I made over to him for demarcation about 150 square miles in Jessore, which he accomplished successfully, returning to head-quarters on the 12th June. He has since then been occupied in preparing his duplicate maps, and in examining and correcting Mehalwar and Mouzahwar Registers. He has thus become practically acquainted with every portion of survey duties. He now, I think, understands the work, and certainly takes an interest in it. He has great mental acquirements, is peculiarly accurate and painstaking in whatever is entrusted to him, but I could wish he had more confidence in his own power, as the want of it may detract from his efficiency as a public Officer.

16. Baboo Tarucknath Ghose, as heretofore, has done well, and continues to merit my approbation. I beg to repeat the recommendation I have made in my two last yearly Reports, that he be promoted to a higher grade.

17. Moulvee Ahsan Ahmed Khan, appointed a Deputy Collector of the 6th class on the 1st of June 1855, has since been promoted to the 5th grade. He is an excellent officer. I have heard indirectly, from several sources, that his conduct in the investigation of boundary disputes has given general satisfaction to those with whom he has thus been officially brought into contact.

I have, &c.,

(Signed) J. WATSON,

*Superintendent of Survey, 4th or Western Division.*

(True Copies)

(Signed) E. H. LUSHINGTON,

*Junior Secretary.*

BOARD OF REVENUE, L. P. ; }  
Fort William, }  
The 21st April 1857. }

