

13
REPORT

ON THE

REVENUE SURVEY OPERATIONS

OF

RESTRICTED



LOWER PROVINCES

FROM

1st October 1866 to 30th September 1867.



Calcutta:

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1867.

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No. 8.

FROM

MAJOR J. MACDONALD,

Officiating Supdt. of Revenue Surveys, Lower Circle,

TO

THE SECRETARY TO THE BOARD OF REVENUE,

LOWER PROVINCES.

DEPUTY SURVEYOR GENERAL'S OFFICE,

Calcutta, 2nd December 1867.

SIR,

I HAVE the honor to forward the following Report on the operations of the Lower Provinces, Survey Establishments, noted in the margin,* during the Survey year 1866-67, terminating on the 30th September 1867, for the information and orders of His Honor the Lieutenant-Governor of Bengal. Tabular Statements for each Division are appended.

* 1st Division, Lower Provinces.
2nd Ditto ditto.
3rd Ditto ditto.
4th Ditto ditto.
5th Ditto ditto.
6th Ditto ditto.
Darjeeling Revenue and Topographical Survey.
Upper Assam or Seebaugor.

2. Lieutenant-Colonel D. C. Vanrenen, R. A., proceeded to England on the 9th July 1867, having obtained a Medical Certificate under orders† of Government, quoted in the margin, I received charge of his Office from the above-mentioned date.

3. During the past season an area of 4,523 square miles was surveyed in Districts Kamroop, Luckimpore, Seebaugor, the Western Doors of Assam, in Cachar, Districts Maunbhoom and Palamow of Chota-Nagpore, and in the Dearch, or river-villages of Districts Bhaugulpore, Maldah and Purneah; also in Darjeeling, which District was completed.

4. The total expenditure including all contingent expenses has been Rupees 3,87,852, which gives an average of Rupees 85-12-0 per square mile. This unprecedented cost has been chiefly caused by the expense in examining the condemned work by Major Thompson in Hazareebaugh, which brought the rates of the sixth Division up to 240 Rupees a mile, and by Lieutenant Barron, second Division, working in Assam with a reduced establishment. This work costs 172 Rupees a mile. The rate of the work in Cachar under Mr. N. T. Davey has also been excessive being 176 Rupees a mile. Every Survey in the Lower Province Circle is working in dense jungle where the highest rates of daily pay are required to attract a sufficient supply of labor to clear the lines or induce the Surveyors to remain with their surveys. This difficulty is especially felt in Upper

Assam, I will here mention that, as the Bengal Government have ruled it is not necessary to insist on the fulfilment of the clearance conditions on which lands have been let in lease in the Tea Districts under the rules of October 23rd, 1854; it is highly probable that alterations of former boundaries will be made hereafter.

5. The chief object at present is to secure a good traverse survey of large blocks, showing all the present cultivation and demarcation with well-defined tri-junction platforms wherever three survey polygons meet. On such a map it will be easy to identify the direction of any future changes in boundary.

6. Compared with results of last year, the following table shews an unfavorable difference in area and cost :

Survey Division.	District in which employed.	No. of Villages or Waste Land blocks.	Square Miles.	Expenditure.	REMARKS.
1st Division ...	Kamroop ...	961	858	55,587 13 10	Monzahur Area ... 2,814 Topographical ... 1,709
2nd Ditto ...	Maunbhoom ...	69	303	67,657 11 1	
	Luckimpore ...	40	267		
3rd Ditto ...	Cachar ...	150	313	55,041 15 4	
4th Ditto* ...	River Ganges ...	903	857	47,127 11 0	
5th Ditto ...	West Dooars ...	97	1,036	57,621 9 11	
6th Ditto ...	Lohardugga, Hazareebagh ...	103	216	51,810 15 1	
1st or Darjeeling Waste Land Party ...	Waste Land Party	295	26,789 1 1	Include arrears of pay on introduction of re-organization scheme between 1st April up to 30th September 1866, amounting to Rupees 7,680-6-2.
2nd or Sebsaugor ...	Sebsaugor ...	48	378	24,230 14 5	
	Total	4,523	3,95,867 11 9	
	Mehalwarry charges ...	.....	.....	1,984 11 7
	Grand Total for 1866-67 ...	.....	.....	3,87,852 7 4
	" for 1865-66 ...	.....	6,110	3,47,156 13 4
	Difference less ...	.....	1,587	40,695 10 0

* This Survey has also done the survey of the Damini-koh Boundary.

7. The very high rate for the work especially in Cachar and Assam has been already mentioned. Measures have been adopted which I hope will render the Professional Surveyor able to work unchecked by too close adherence to a system suited only to the Regulation Provinces or where rich lands and general cultivation over a well inhabited country renders the work of identifying and recording boundaries continuously easy. A liberal measure on the part of His Honor the Lieutenant-Governor in granting free passages on the river to natives employed in the Assam Surveys when going on and returning from leave, asked for in my No. 467 of the 13th August to your address, will doubtless opera

favorably next season, and may be of considerable aid this year to Lieutenant Barron whose reduced establishment is, at this present moment, almost useless for want of Lascars. With regard to a sufficient number of elephants, I regret to state, that the Assam Surveys are still inefficient, and since I wrote to you in August, the deaths of four animals have been reported, I think that the cause of the numerous casualties which occur amongst our survey elephants is chiefly due to their not being properly fed when in work. I recommend that measures be taken to place ten elephants with each survey, and with this view I have made a large demand for the purchase of elephants in my budget for the next year. All who know Assam report on the difficulty of obtaining carriage, and the unwillingness of the Assamese to work; it is, therefore, manifest, that the better the equipment of the Assam Surveys in point of transport, the fewer will be their demands on the people for carriage or coolies, and the popularity of each establishment will increase in like ratio.

With regard to my remarks on feeding elephants, I propose ordering that, for the future, the daily allowance be increased to a scale allowing each animal $1\frac{1}{2}$ seers of cleaned rice for every foot of its height.

8. By No. 6235, of the 25th ultimo, received on this date, I have been authorised to purchase fifteen elephants at an average price of Rupees 1,500 per each animal. Next year the Assam Surveys will be properly equipped for their peculiar work.

9. During the past Field Season Captain Sconce was employed in revising Circuits 11 to 18 of Major Thompson's work in Season 1862-63. The re-survey was very searching and only obtained at an extravagant rate. The question of the re-survey of Hazareebagh is now before the Government. It appears to me that a tract of country, in which coal and minerals have been found, moreover, favored with such facilities in railway transport to the sea for its produce, is destined to a future of great prosperity which will amply repay a liberal village survey on a large scale. The Revenue Survey Establishment as handled by Captain Sconce, or by any other of our Officers now in charge, is quite capable to complete the survey of Hazareebagh, on any scale or in any manner that may be decided upon, and it is certain that eventually a village survey on a large scale will be required by Government.

10. Mr. Johnson, lately in charge of the Darjeeling survey, has been deputed to survey Military Cantonments in the North-Western Provinces, in furtherance of the orders by the Right Honorable the Secretary of State. I trust that Mr. Johnson will be at my disposal for field work in the Season of 1868-69. He deserves especial praise for the fine style of drawing exhibited in his map of Darjeeling, which abundantly proves that a Revenue Survey Party can survey any ground however difficult it may be.

11. Throughout the Department the improvement in the preparation of the maps is marked and constant. All the surveys are carrying out the system of filling up their large scale maps to margin, within certain determined dimensions. These maps are especially suitable for reduction, as well as reproduction by photography; to which end our Surveyors are making their best endeavours in the preparation of their manuscript maps.

12. I have detailed the work of the Boundary Commissioner's Office in the accompanying letter.

13. The Districts of Maunbhoom and Darjeeling have been completed during the past season; the following Statement furnishes the necessary information of our results.

DISTRICT.	SURVEY.		By whom surveyed.	AREA IN		Cost inclusive of contingent expense.	Rate per mile.		
	Commenced.	Finished.		Acres.	Square miles.				
Maunbhoom...	1861-62.	1866-67.	Captains J. L. Sherwill, and D. Macdonald.	35,57,487	5,559	2,44,024-3-7	43	14	4
Darjeeling ...	Ditto...	Ditto ...	E. T. S. Johnson, Esquire.	7,89,760	1,234	1,13,810-3-1	92	3	8

14. In conclusion I have great pleasure in bearing testimony to the efficiency of Messrs. J. P. Adels and A. C. Cunningham in the Register and Account Departments, also of Mr. F. Kelly, Assistant in charge of the Drawing Department, all of whom have worked well. The general attendance at the Office has been steady.

I have the honor to be,

SIR,

Your most obedient Servant,

(Sd) J. Macdonald Major,

Officiating Supdt. of Revenue Surveys, Lower Circle.