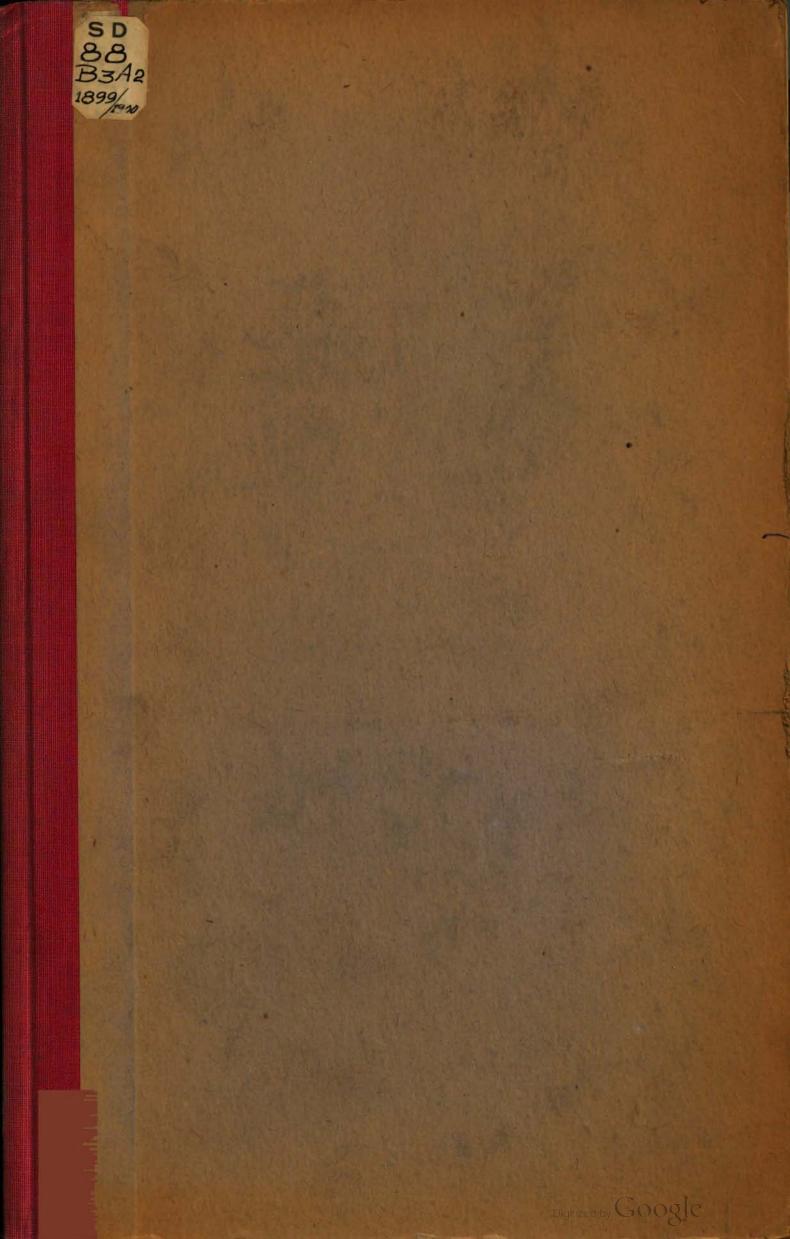
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Annual PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

LOWER PROVINCES OF BENGAL

FOR THE YEAR

1899-1900.

A. E. WILD, Conserbator of forests, Bengal.

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Calcutta: BENGAL SECRETARIAT PRESS. 1900.

[Price-Indian, Re. 1-8; English, 2s. 3d.]

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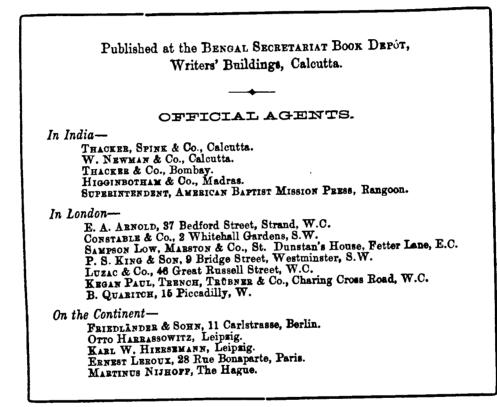
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HENRY MORSE STEPHENE

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No. 266.

FROM A. E. WILD, Esq.,

Conservator of Forests, Bengal,

TO THE SECRETARY TO THE GOVERNMENT OF BENGAL, REVENUE DEPARTMENT (FORESTS).

Dated Darjeeling, the 26th November 1900.

SIR,

I HAVE the honour to submit the Administration Report of the Bengal Forest Department for the year 1899-1900. 2. I regret time has not admitted of my shortening the report more than I have done, but I may mention that the report for the North-Western Provinces and Oudh for 1898-99 ran up to 73 pages. 3. The delay in submitting the report is partly due to the very late receipt of the report for the Darjeeling Division.

I have the honour to be,

SIR,

Your most obedient servant,

A. E. WILD,

Conservator of Forests, Bengal.

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PROGRESS REPORT

07

FOREST ADMINISTRATION IN BENGAL

For the year 1899-1900.

CHAPTER I.-EXTENSION AND CONSTITUTION OF STATE FORESTS.

1.—ALTERATION OF AREAS.

THE only alteration has been the exclusion of 141 square miles from the Changes during the year. Protected Forests. The following is a summary of Changes during the year. the areas:-

		1			PERCEN	TAGB-
CLASS OF FOREST	Area at commence- ment of the year.	Added.	Exoluded.	Area at close of the year.	Of total forest are a.	Of the area of the provinces (156,571 square miles).
ì	8	8	4	5	6	7
	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.		
Reserved Protected Unclassed	. 8,+16	 		5,881 3,675 4,033	43 27 30	3*76 2*35 2*58
Total .	. 13,790	••••	141	13,589	•	8.69

(a) Reserved Forests.

2. No actual changes have occurred in the area of the Reserved Forests.

Changes in Reserved Forests. of the Dumsong Forest in the Tista Division to the Cinchona Department for extension of cinchona cultivation, while several small areas, aggregating one acre, have been made over to the Department of Public Works and the Police Department in the Darjeeling Division for the erection of buildings in place of those washed away in the flood of September 1899, but the area is not to be excluded from the category of Reserved Forests. The recent land settlement of Killa Khurda shows the area of the Reserved Forests of the Puri Division to be 72,546 acres, or 1,833 acres in excess of the area shown in Form No. 46, but no alteration has been made pending enquiry into the reason of the difference.

(b) Protected Forests.

The large area of 90,199 acres, or 141 square miles, has been transferred 3. Changes in Protected Forests. Beyond this, no alteration has taken place. The transfer of the Saoria tract of the Sonthal Parganas, mentioned in the previous year's report, did not take place during the year, but is expected to be accomplished shortly. As in the case of the Reserved Forests, the land settlement of Killa Khurda records a far greater area of Protected Forest in Puri than is entered in Form 46-238,177 acres, compared with 186, 452; but as the reason for this large increase is not apparent, it is not as yet taken into account.

The changes probable in Palamau and Singhbhum, consequent on the completion of the land settlement, mentioned in the last report, have not yet taken place.

2.—FOREST SETTLEMENTS.

But little progress has apparently been made in bringing the forest 4. settlement operations in the Chittagong Division to Areas undergoing settlement. completion. This is again to be regretted; the

blame is attributable, in some measure, to the Settlement Department, which, while undertaking to decide several pending matters, neglected to do so and mislaid the papers, but it is evident that the officers appointed Forest Settlement Officers are not adepts in the work. Since the close of the year the Conservator has personally visited Chittagong to see into this matter, and it is hoped the reservation will be an accomplished fact before the close of another year.

Orders were passed regarding the fuel and fodder reserves pro-5.

posed in the Jalpaiguri district in Government No. 4325 For., dated the 7th December 1899, to the Fuel and fodder reserves. Board of Revenue. In continuation of the remarks made in 1896-97, the 843 blocks set aside for this purpose at the last settlement have dwindled down to 42, out of which 23 have been settled as jotes, 6 are to be let out for cultivation, and 1 is to be reserved for building sites, while 12 were recommended to be made Protected Forests, and placed in charge of the civil authorities. It is not known in this Department what further action has been taken in the matter.

3.—DEMARCATION.

The total length of boundaries has been increased by two miles owing 6. to an error last year in the return for the Darjeeling

General. Division, and now stands at 5,186 miles, excluding those boundaries of the Protected Forests which are still undefined.

Of this length, 1,771 miles are natural boundaries, there having been an addition during the year of three miles owing to the transfer of that length from the category of "natural" to that of "artificial" and vice versà in the Jalpaiguri and Singhbhum reserves. The total length of artificially-marked boundaries has increased from 3,300 miles to 3,344 miles, consequent on 42 out of the 116 miles still to be demarcated at the commencement of the year having been completed during the year and the small changes noticed above. Thus the balance remaining to be taken in hand at the close of the year is 71 miles. Repairs were undertaken over 2,985 miles, compared with 2,257 during 1898-99, while the total cost rose from Rs. 8,686 to Rs. 9,677; the average per mile being Rs. 3.24 against Rs. 3.84.

The Singhbhum Division, in which 41 miles of new boundaries were demarcated, and 1,251 miles of existing boundaries were repaired, is the only Division that requires special mention.

7. The very necessary work of inspection of boundaries has again been dealt with in too brief a manner in all divisions Inspection of boundaries.

except Singhbhum; no mention at all of the subject having been made in the reports of the Tista, Sonthal Parganas, Direction, Angul, and Chittagong Divisions. In other divisions a certain amount of inspection has been done, chiefly by subordinates, but no division except Singhbhum gives much detail.

4.—SURVEYS.

The chief feature of the year has been the advent of the Imperial General. 8.

Forest Surveys, Bengal Presidency, and under the charge of Mr. T. S. Marten, Extra Assistant Superintendent, commenced operations in the Singhbhum Division on the 5th December 1899. Surveys in other divisions were all of a petty nature, carried out by the local officers. In Darjeeling such surveys comprised the completion of the Tista Valley Forests, which apparently were not fully finished in 1898-99 as reported, a re-survey of the boundary along the Bara Rangit and Tista Rivers occasioned through the abnormal floods of the 24th September 1899, and the survey of coupes, paths and roads, the whole costing Rs. 1,410, of which only Rs. 432 appear under AVIII(c), the balance being charged to B.—Establishment. The area of the Tista Valley Forests, viz., 12 square miles, has this year been shown in Form No. 49 together with the cost of this and the previous year.

In the Sonthal Parganas a traverse survey for land settlement purposes was commenced during the year by the Survey of India, which, when mapped, will show boundaries of Protected Forest.

In Angul $40\frac{1}{2}$ miles of the boundary of the Tikarpara range were surveyed at a cost of Rs. 48-12.

9. As mentioned above, the Imperial Forest Survey Party began work on Operations of the Imperial the 5th December 1899, and by May 1900 the Forest Survey in Singhbhum. following work had been completed, as reported by the Superintendent :---

Triangulation	•••	•••	150 square m	
Levelling		•••	35 linear	"
Detail survey on	4 scale		 185 square	37

For the area surveyed a record was prepared showing the distribution of forests, and 12 linear miles of check-surveys were carried out in addition to running instrumental contours at 250 feet vertical intervals. The drawing of fair maps as well as the computation and deduction of areas are in progress, but the cost of this part of the work cannot be given until the close of the survey year ending the 30th September next. A tracing from the plane-table sheet of the Saitba block has been received for Working Plan purposes, and one of the Leda block is under preparation. The total cost during the year has been Rs. 12,313.

Mr. Reynolds reports that the party suffered very severely from malarial fever, and that the surveyors worked under trying circumstances owing to there being a great scarcity of water in the forests.

In view of the early preparation of the Working Plan, it is satisfactory to learn that there will be two parties at work during the coming season.

CHAPTER II.--MANAGEMENT OF STATE FORESTS.

I.-BEGULATION OF MANAGEMENT.

(a) WORKING-PLANS AND THEIR CONTROL.

10. Form No. 50 shows the progress of the year and the position of the Circle as regards this important branch of Working-plans in general.

ng-plans in general. the administration. One hundred and eighty-three

square miles—the whole of the forests of the Jalpaiguri Division, practically completed last year—have been added to the area for which working-plans have been sanctioned, while an additional area of 731 square miles—the whole of the reserved forests of the Singhbhum district—was taken in hand during the year, thus bringing the totals of these areas up to 4,479 square miles and 841 square miles, respectively, and reducing the areas for which working-plans have still to be taken in hand from 9,000 square miles to 8,269 square miles. The progress too would have been greater and would doubtless have included the area of 110 square miles—the whole of the reserved forests of the Puri Division—had it not been for the unfortunate and serious illness of Mr. Hatt which compelled him to leave the work when almost complete and to go on furlough. The above was the state of affairs at the close of the year, and before leaving the subject a few observations on the remarks made in the reviews of both the Government of India and the Local Government on the position at the close of the preceding year will not be out of place. First as to the area for which plans are required. This, in form No. 50, was shown

в 2

to be 9,000 square miles; but the form does not show the urgency for working-plans and arrives at the figure by deducting the area under sanctioned regulated management from the total area of the forests. If a reference be made to the annual Administration Report for 1892-93, paragraph 39, it will be observed that, for a large portion of this area, there is no immediate necessity for working-plans.

Then as regards the means at disposal for carrying out the work. The Government of India has now recognised that, so far back as the last reorganisation in 1891, the scale allotted was inadequate, while a new Division was formed in 1895 for which no extra appointment was given. This has now been remedied, but still no provision for working-plans has been made and the work that has to be done must still be done by Divisional Officers whose hands are already completely full, though at the same time no opportunity will be lost of securing the services of special officers for this work alone. The importance and necessity of the work has not been under-estimated and will not be overlooked. In the neighbouring provinces, it is true, much greater progress has been achieved, but the comparison below will show that Bengal has not had the opportunities those provinces have had :---

	Total area	No. of			STAFF.				WOLVING-DIPUPUP	Percentage of total area
PROVINCE.	in square miles.	separate divisions.	Conser- vatora,	Deputy Conser- vators.	As-istant Conser- vators.	Supernu- meraries.	Provin- cial Service.	Total.	prepared and sanctioned up to 30th June 1899.	under sanc- tioned work- ing-plans.
1	8	8	6	5	6	7	8	9	10	11
Bengal North-Western Provinces and Oudh.	13,7 3 0 4,078	13(a) 16(b)	1 8	9	57	3	7 9	24 28	4,437 3,358	32 82
Central Provinces	19,115	19(c)	2	10	7		9	28	6,920	36

(a) Includes 1, (b) 3, and (c) 2 Direction divisions.

Touching the simplicity of the Bengal plans, while possibly there is no more complicated plan in the whole of India than that for the Darjeeling forests, there could be no more simple plan than that for the Sundarbans or even that for the Tista forests.

11. The progress made during the year in the compilation of the workingplans, of which a commencement has already been Working-plans under preparation. made, is as follows :-

The Singhbhum Working-plan.—This plan is in charge of Mr. Haines, Deputy Conser-vator of Forests, who on the return to the Circle of Mr. Chester in January 1900, was placed on special duty for that purpose. Shortly after, in March 1900, Mr. Chester was, however, obliged to take furlough, and since that time Mr. Haines has had to carry on the work in addition to the charge of the Division. The essential field work was delayed until the encourage of the first of the survey shorts when during May and Lung fur the appearance of the first of the survey sheets, when, during May and June, four working circles were constituted in the Saitba forest and 16 coupes, with an aggre-gate area of 5,358 acres, were surveyed and laid off. Prior to this the time could only be occupied in the examination of blocks and in the carrying out of valuation surveys. The latter extended over 531 acres, of which as much as 172 acres had to be gone over twice owing to the unsatisfactory work of the temporary amins employed. Much of Part I of the plan has been written and a list of the trees, shrubs and economic plants drawn up. The cost during the year has been Rs. 365 spent on surveys.

The Pure Working-plan.-Under the circumstances explained above, this plan must now wait until Mr. Hatt's return. The information necessary for its completion was collected during the year.

12. In the Kurseong Division all the sal trees of over 5 feet in girth have been Work of the year anticipatory of the preparation of regular working-plans. utilized for the framing of the annual plan of operations. In Angul the Divisional Officer has norleated to meand the prepared. but it is not the

In Angul the Divisional Officer has here to be the existing working-plans have to be provisions of provisions of exist. 13. The provisions of the existing working-plans have

The Darjeeling Forests.—The Tasiding and Nagri fellings have now been practically brought up to date, and it is anticipated that by the end of 1900-1901 all the working-circles, so far as the well-stocked areas are concerned, will be in agreement with the plan.

The Tista Valley Forests.—The general provisions of the plan have been carried out. The demand for both timber and firewood from these forests has considerably increased since the plan was framed; it is, however, unfortunately unequally distributed, and while blocks VI—X of the Rangit working-circle are worked to their full extent, blocks I to V fall below their capability as regards fuel, owing to their greater distance from the existing markets. Again, in the Tista working-circle the demand falls upon those portions only of the blocks within carrying distance of the adjacent tea-gardens, and probably in the near future, a revision of the boundaries of the blocks of this working-circle will be necessitated. At present blocks I to IV are worked below their capability as regards inferior species.

At present blocks I to IV are worked below their capability as regards inferior species. The Tista Forests.—The report of Mr. Grieve, the Divisional Officer, is very confused, but, according to Form No. 2, the work is a good deal in arrears, notwithstanding the introduction during the year of departmental operations. The Jalpaiguri Forests.—The Divisional Officer, Mr. Farrington, makes proposals for the

The Jalpaiguri Forests.—The Divisional Officer, Mr. Farrington, makes proposals for the better laying out of coupes, but is silent as to fhe manner in which the prescriptions are being followed. From Form No. 2, it is, however, gathered that considerable areas prescribed have not been worked.

The Sundarbane Forests.—The prescriptions of the plan were strictly adhered to by the Divisional Officer and his subordinates. The control of the fellings in the interior of the forests—a question of some moment—is receiving attention from the Divisional Officer, Mr. Fordyce, who, however, considers himself helpless without further establishment.

14. Forms Nos. 2 and 3 for the above plans are submitted by Divisional Control of working plans. Control of working plans. Officers to the Conservator, who forwards abstracts of them to the Inspector-General of Forests for

examination. The forms are, however, very irregularly received by the Conservator except in the case of the Sundarbans, and far more punctuality is called for in this respect.

15. The measurements taken during the year under report and in Calculation of the rate of growth. It is satisfactory to be able to state that Divisional

Officers have acted on the remarks made in last report and have carefully considered the figures now recorded. It is reported that the year-ring countings in the Darjeeling forests have been discontinued; no reason for this has been given and orders have issued to resume them. Three sample plots in the Tista Valley forests were laid out some two years ago, the statistics regarding which will be incorporated next year.

(b) ANNUAL PLANS OF OPERATIONS.

16. Annual plans of operations were duly prepared by all Divisional Officers and submitted for the approval of District

Annual plans of operations. Officers and the Conservator. These plans are framed for the forest year which is inconvenient as regards the provision of funds for the works proposed. In most instances the projects approved of were duly carried out, the chief deviations being the non-commencement of the Jalpaiguri head-quarters house and the non-completion of the Singhbhum divisional bungalow, the former owing to revision of the budget estimates, and the latter to the delay of the contractor entrusted with the work.

II .-- WORKING OF THE YEAR.

(a) COMMUNICATIONS AND BUILDINGS.

17. Form No. 51 supplies the details of Communications and Buildings in the newly prescribed form. The total expenditure amounted to Rs. 51,820 as compared with

Rs. 54,969 during the year previous, and was thus Rs. 3,149 less. 18. On buildings the total cost was Rs. 28,156-

Buildings. against Rs. 34,579, or Rs. 6,423 less, the detail

-					erence.
		1899-1900.	1898- 99.	' +	· - `
		Rs.	Rs.		Rs.
New works	 	18,252	23,433		5,181
Repairs	 	9,904	13,146	***	1,242

being :-

The decrease is mainly accounted for owing to the non-reconstruction of the head-quarter house at Jalpaiguri, the funds provided having had to be expunged from the budget, and to the delay of the contractor in the re-erection of the head-quarter house at Chaibassa. The chief new buildings were the Sonthal Parganas head-quarters house, which was completed, and three station-houses in the Sundarbans.

			1999-1900	T080-88.	Ŧ	
			Rs.	Rs.		Rs.
New works	•••	•••	14,895	10,205	4,690	
Repairs	•••	•••	7,358	8,902		1,544
		-		-		

The total length of roads and paths constructed was 84 miles, being 27 miles in excess of the work of 1898-99, while repairs were carried out along 787 miles as against 842 miles.

It is to be regretted that the wire rope-way erected in the Tista Division proved disappointing. The curves could not be successfully managed, and the line will have to be re-erected on the usual plan of straight lengths. No advance in the construction of a mono-rail has been made, and it is not improbable that after all the light tramway will be found more suitable.

The unprecedented storm, which visited the Darjeeling district on the 24th and 25th September 1899, caused very serious damage to roads and paths within, as well as in connection with, the forests. The thorough repair of forest roads and paths alone will, it is estimated, cost Rs. 10,000. Of the three cart roads in the Darjeeling Division maintained by the Public Works Department, two were blocked for some months, that on the western side escaping practically altogether. Eventually these roads were put in order, but they again suffered severely from the heavy rain of the earlier part of the season of 1900, and both now have gaps effectually obstructing cart traffic.

The following statement shows the relative importance of the roads constructed during the year:---

DIVISION		LENGTH OF PUBPOSE F DESIG	OR WHICH	Relative importance.	Remarks.
21110101		To facilitate export.	For inspection.		
1		2	3	4	5
Darjeeling Tista Kurseong Jalpaiguri Buxa Singhbhum Angul Puri		Miles. 5 1 1 2 12 11 3	Miles. 35 1 8 6 	Primary Secondary Primary Ditto Ditto Do Considerable Great. Do. Minor. Considerable	Path 3 feet to 5 feet broad. Wire rope-way. Also serves for inspection. Also facilitates export. Ditto. 20 feet broad. Also facilitates export. Also serves for inspection.
Total	•••	35	49 84		

Details by Divisions.

20. The following are the divisional details it is advisable to record :---

Darjesling.—More bridle paths were laid out, but less repairs were done. Funds were not available to carry out anything like what has to be done to restore communications in this Division to their state previous to the storm of September 1899. The new diversion from the 3rd to the 6th mile of the Pashok Cart road mentioned last year was completed, but shortly afterwards was hopelessly blocked by the storm. The lessening of the traffic along this road, alluded to in last report, has, in a measure, been effected by the opening out of fuel depôts at Jorebungalow and Batasidhara capable of holding 10,000 maunds each. Tista.—A new rest-house at Pankasari was commenced and a few quarters for sub-

Tista.—A new rest-house at Pankasari was commenced and a few quarters for subordinates erected, but the ill-health of the Divisional Officer during the greater part of the working season considerably interfered with progress. As stated above it was not possible to bring the wire rope-way into working order owing to the curves. The line will be taken down and re-erected on a simpler method.

Rurseong.—The work was chiefly confined to repairs, only Rs. 543 being spent on new constructions.

Jalpaiguri.—Works were generally of a petty nature. New rangers' quarters were completed at Ramshahi hât and those at Apalchand and Dhubjhora made good progress. Buza.—The inspection bungalow at Chilapatha was completed, the total cost being Rs. 527. New range head-quarters were built at Chilapatha and Rangamatti, costing De 400 and De 250 constraints, while 6 miles of new roads were constructed upon which Rs. 499 and Rs. 250 respectively, while 6 miles of new roads were constructed, upon which Rs. 1,188 were spent.

Sonthal Paryanas .- The divisional head-quarters bungalow at Dumka was completed for Rs 2,500, the total cost of the building being Rs. 8,918, including Rs. 1,418 compensation for land.

Singhbhum.-Considerable activity has been shown in this Division, the works under both moads and buildings as regards new constructions as well as repairs having exceeded those of the previous year. The principal new buildings were the divisional head-quarters bungalow (not complete) and rest-houses at Anjitbhera (nearly complete), Samta (half finished), and Andaganda (begun). Eighteen miles of new roads were constructed compared with 14 in the preceding year, of which no less than 11 were aligned by the Divisional Officer himself. The chief roads now under construction are :---

- (1) Kendbai-Banki.-Connecting the Latua forest with the Goilkera railway station.
- (2) Samta Hendakuli-Ratamatia.-Connecting the Samta, Tirilposi and Tholokabad blocks with the Jeraikhela railway station.
- (3) Kolbonga Ponga.-Oonnecting the further side of the Ankua forest with the Manharpur railway station.

Communications and buildings are badly wanted in the Singhbhum forests, and great oredit is due to Mr. Haines, the Divisional Officer, for the progress made during the year.

Augul.—The Raigoda rest-house was completed, the total cost being Rs. 1,328, of which Rs. 974 were spent during the year. Eleven miles of new roads were constructed, while all necessary repairs were carried out.

Puri.-The Bagura-Rajin road has now been finished as far as Sibida, 81 miles, of which 31 miles, costing Rs. 813, were completed during the year. A new room was also added to the Divisional office at a cost of Rs. 1,018.

Sundarbaas.—The following revenue-station houses were reconstructed :—Khulna, Shella and Chandpie, costing, respectively, Rs. 1,236, Rs. 1,054 and Rs. 1000. Repairs to steamers, &c., cost Rs. 9,602, the expenditure on which is, however, shown under head A II.

Chittagong.-Petty works only were carried out, the total cost amounting to Rs. 1,548.

The expenditure of the year on other works amounted to Rs. 1,773 21.

compared with Rs. 2,798 in 1898-99. Nothing was

cattle sheds in the Darjeeling forests and the fencing of the Singhbhum headquarters compound.

(b) PROTECTION OF FORESTS FROM INJURY.

(1) General Protection and Breaches of Forest Law.

22. Full details of forest offences are given in Form No. 52, from which

Number and classification of new cases of the year.

Other works.

the following table (ordered by the Government of India) showing the number and classification of the new cases of the year is abstracted :-

	CASE	S TAKEN		IRT.	C.	ases Com	POUNDED.		C	ASES UNI	ETECTED.			TOTAL (Cases.		
DIVIBION.		rized fe riation nor fore	Grazing without permis- ation or in tracts in which grazing is prohi- bited.	Other offences.	Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest pro- duce.	Grazing without permis- sion or in tracts in which grazing is prohibited.	Other offences.	Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest pro- duce.	Grazing without permis- sion or in tracts in which grazing is prohibited.	Other offences.	Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest pro- duce.	Grazing without permis- aion or in tracts in which grazing is prohibited.	Other offences.	Grand total of cases.
1	2	8	4	5	6	7	8	9	10	11	12	18	14	15	16	17	18
Buxa Boxa Soathal Parganas Direction Palamau Singhbhum Puri Sundarbans Chittagong	1 	$ \begin{array}{c} 2\\\\ 4\\ 1\\ 42\\ 7\\ 7\\ 41\\ 1\\ 53\\ 20\\ 22\\ 200 \end{array} $	$ \begin{array}{c} 1 \\ \dots \\ 1 \\ 1 \\ 1 \\ 1 \\ \dots \\ 7 \\ 2 \\ \dots \\ 6 \\ \hline 21 \end{array} $	1 3 1 11 2 17 1 18 25 5 84	···· ··· ··· ··· ··· ··· ··· ··	196 148 38 35 2250 29 3 108 8 240 151 10 1,213	219 210 18 46 200 8 6 7 7 11 19 10 576	26 10 7 29 2 2 2 4 5 129 2 2 16	 1 12 6 8 70 8 4 1 105	···· ··· ··· ··· ··· ··· ··· ··· ··· ·		···· ··· ··· ··· ··· ··· ···	1 4 13 7 12 98 13 5 8 156	198 143 38 39 3 292 36 10 149 9 297 178 32 1,424	220 210 18 47 27 4 6 14 9 11 21 21 603	27 10 7 32 8 13 9 9 21 1 23 154 7 800	446 863 63 122 46 316 44 36 277 34 846 332 58 2,483
Total for 1898-99	19	204	18	66	1	1,333	620	121	80	23	1	1.	100	1,560	639	188	2,487

The total number of cases of the year of all kinds amounted to 2,483, being four less than in the previous year. There were, however, 56 'fire' cases more and 112 'others,' while those of 'unauthorized felling, &c.' and of 'grazing' were less by 136 and 36, respectively. The percentage of 'undetected cases' was 4.9.

In the Puri Division a large number of petty cases against the rules for the protected forests, chiefly for illicit *toila*, are dealt with direct by the Subdivisional Officer of Khurda, who, in the opinion of the Collector, should be vested with powers under section 67 of the Forest Act. These cases do not appear in the forest returns and the matter is under discussion.

23. The cases taken into Court numbered 355, against 307 in 1898-99, Cases taken into Court. showing an increase of 48, of which 31 were on

cases taken into Court. account of injury to the forests by fire, there being a total of 50 cases of this nature against only 19 in the previous year. Other offences also increased by 18. The following is the usual table of these cases:—

NATURE OF OFFENCE.	Nu	MBYR.	INCREASE.	DECREASE
	1898-99.	1899-1900.	In 169	9-1900.
1	2	3	4	5
Injury to forests by fire	19	50	31]
Unauthorized fellings, etc	204	200	•••	•
Grazing without permission ,	18	21	8	
Other offences	66	84	18	
Total	. 307	353	48	

Of the total number of cases before the Courts, viz., 355 of the year and 39 brought forward from last year, 301 involving 747 persons were successfully carried through, 42 and 231 persons were acquitted, while 51 cases remained undecided. Thus the percentage of convictions was 88 compared with 90 and 89 for the two previous years. In Darjeeling and Jalpaiguri, where the cases were few, convictions were obtained in every instance, while in Singhbhum, Puri, Sonthal Parganas and Sundarbans, in which divisions the number decided was 81, 68, 58 and 42, respectively, the convictions were 96, 84, 92 and 93 per cent. In Buxa three cases were prosecuted, of which two resulted in acquittals, while in Angul the convictions reached only 37 per cent.; these two divisions considerably reducing the average for the Circle. Among 'other offences', of which there were 84 (18 more than last year), one for impersonating a forest officer and another for prevention of seizure of property, both in the Sonthal Parganas Division, met with exemplary punishment. Fire cases will be specially alluded to under the next following sub-head.

24. Of the 2,105 cases dealt with direct by Divisional Officers under the Cases disposed of under section 67 of the Indian Forest Act. Dealed for Rs. 12,176, giving an average of

Rs. 6-4-1 per case and Rs. 3-1-2 per person, while 158 were pending payment of compensation at the close of the year. The figures for the previous year were 2,057 cases and 4,018 persons, Rs. 6-4-1 and Rs. 3-3-3 compensation respectively and 99 cases pending. Thus there have been 111 fewer cases of this nature and 56 persons less dealt with than in the preceding year. Generally speaking, the sentences have been adequate, and thus the Courts have materially assisted in the difficult work of protection, but in two or three instances there have been lamentable failures.

8-2

					1898-99.		1899-1900.	-	AVBB	AGE-
	D1v11	non.			Number of offences.	Number of offences.	Number of persons,	Total compen- sation received.	For each case.	For each person.
		1			8	3	4	5	6	7
								Re.	B.a., A. P.	Rs. A. P.
Darjeeling	•••	•••	•••	•••	587	461	623	1,256	2 13 7	\$ 0 8
Tista	•••		•••	•••	3 89	341	453	934	211 4	\$ 8 2
Kurseong			•••	••	54	67	88	411	734	4 10 9
Jalpa iguri		•••		•••	50	110	258	1,598	14 8 5	656
Buza		•••	•••		55	25	56	405	16 3 2	739
Sonthal Par	FEDAL	•••	•••	•••	228	2 23	882	1,932	870	330
Direction	•••	•••			51	33	123	169	4 13 3	1 0 0
Palamau			•••		13	10	15	71	7 1 7	4 11 9
linghbhum			•••		1 3 3	1 2 0	4 02	216	1 12 10	0 8 7
Angul		•••	•••		10	19	89	104	577	\$ 10 S
Puri	•••	•••	•••		126	257	51 4	1,127	4 6 2	\$ 3 1
Sundarbans					347	280	4 90	3,796	18 8 11	7 11 11
Ohittagong	•••		•••		14	2 2	45	167	796	3 11 5
		л	otal		2,057	1,946	8,962	12,176	6 4 1	319

The following is the usual divisional detail:-

The chief differences of the year occur in the Darjeeling, Sundarbans, Buxa, Jalpaiguri, Angul and Puri Divisions. In the first three there were considerably less cases, and in the rest more.

In the Sundarbans the compensation accepted is usually high, as the cases are mostly of a more serious nature than in other Divisions. Omitting this Division it ranges between Rs. 0-8-7 in the Singhbhum Division and Rs. 7-3-9 in the Buxa Division. The variation in the different Divisions is mainly due to the number of more serious cases compounded, two or three, among say a hundred, at once bringing up the average.

25. The cases in which no offenders were traced numbered 122, against 105 in 1898-99. Of these no less than 105 were fire

Undetected cases. often very difficult, if not altogether impossible, to trace the culprits. Of the latter 70 occurred in the Singhbhum Division.

(2) Protection from fire.

26. Though the season was, on the whole, favourable for fires, *i.e.*, unfavourable to protection, mainly owing to the early

year compare most favourably with preceding seasons. A far larger area was, however, burnt over than during the previous year, but it is satisfactory to be able to say that the extensive disasters, which chronicled the years 1897-98, 1895-96, 1893-94, 1891-92, were not even approached. Appendix D of last year's report will show this in a graphic manner if the year's results are added to it. The accustomed alternation of good and bad years, which has been the rule since 1890-91, has been broken, and if the season of 1900-01 reverts to it, the forests will have enjoyed three successive good years. Great credit is due to Mr. Haines and his a sistant, Mr. Slane, for the zealous manner in which they personally engaged in the difficult operation of combatting with the numerous

С

fires in that hot-bed of fires—the Singhbhum district—and to the staff of the Jalpaiguri and Buxa Divisions through whose exertions the spread of fire was considerably checked.

The following are the usual statements showing the disasters and successes of the year:---

Abstract showing area (in acres) burnt and unburnt.

(Excluding unclassed forests.)

	Reserved foresta,	Protected forests,	Total.	Percentage of area involved.	Percentage of entire area of reserved and protected forests.
1	8	8	4	5	6
	Acres.	Acres,	Астев.		
Areas of which protection was sttempted, but which were burnt (Form No. 53) Other areas burnt Ditto departmentally	124,345 148 23,548	75,447 	194,345 75,595 93,548	9-19 } 2:38{	2*03 1*24 0*39
Total areas burnt	148,041	75,447	223,498		8.66
Areas successfully protected (Form No. 53) Other areas which escaped burning	1,228,395 2,387,465	1,778,768	1,228,395 4,161,227	90°81 97°68	20*08 68*04
Total areas unburnt	8,615,860	1,773,762	5,389,622	·	88.13
Areas concerning which information is want- ing or doubtful		509,700	502,700		8-22
Grand total area of reserved and pro- tected forests (Form No. 46)	3,763,901	2,351,909*	6,115,810		100

* Excludes the unknown areas of Ranchi and Manbhum.

Number of fires and areas burnt in each Division.

				BROF			ABRAS BUR	NT IN ACBRS.		
D I	¥1810¥.					1898-99.			1899-1900.	
			1898-99.	1899- 1900.	Bpecially protected (Form No. 53).	Other areas.	Total.	Bpecially protected (Form No. 53).	Other areas	Total.
	1		2	8	4	5	6	7	8	9
Darjeeling Tista Kurseong Jalpaiguri Bula Nonthal Par Qimotion Palamau Singhbhum Angul Bundarbeus Uhittagong	ganas	···· ··· ··· ··· ··· ··· ···	1 3 13 8 9 13 47 16 41 3 143	1 18 8 15 90 13 27 8 185	1 3,462 6,420 10,420 1,763 1,763 1,558 20 23,756	 94,110 6,890 4,629 7,470 21,303 10,000 74,293	1 10,352 4,620 51,623 1,768 11,558 90 98,049	4 383 10,588 8,730 85,870 18,270 489 1 124,345	 22,778 918 2,58i 3,168 61,945(<i>a</i>) 8,050 90,143	 58,171 11,508 2,381 11,898 147,718 18,270 8,589 1 923,488
nnknown. Fi	udes 54,60 res in spe , in oth	ci ally er are	protecte as	d areas	••• •	d Foresta.	Total		cerning this burning 124, ,, 75,0 ,, 199,1 23,5 223,4	345 acres, 95

(Excluding unclassed forests.)

Two new areas—the Dhumpara reserved forest in the Buxa Division (area 7,526 acres) and the Sitapahar reserved forest in the Chittagong Division (area 7,020 acres)—have been brought under systematic protective measures during the year, while 1,322 acres of savannahs hitherto burnt departmentally in the Jalpaiguri Division have been included in the specially protected area. Thus the area attempted to be protected has been increased by 15,868 acres and reduced by 236 acres cultivated area thrown out in the Darjeeling Division and now stands at 1,352,740 acres, or 2,114 square miles, compared with 1,337,108 acres, or 2,089 squares miles in the previous year.

(10)

One hundred and eighty-two distinct fires occurred covering 199,940 acres, of which 129 extending over 124,345 acres happened in the areas under protective measures (the reserved forests). The failures were therefore 124,345 acres representing 9.19 per cent., against 23,756 acres, or 1.77 per cent., in 1898-99.

The hill forests practically escaped fires altogether, the disasters being confined to the plains forests.

Some praise is due to the officers of the Department for this gratifying issue of the year's operations; it cannot, as was the case last year, be attributed in the main to favourable rainfall, though welcome showers in the latter half of April rendered considerable assistance in that most notorious of all districts— Singhbhum.

No rainfall tables are this year appended to the report, but the above remarks are borne out by the records of the Meteorological Department.

Speaking of the specially protected areas, the Singhbhum district again heads the list with 80 fires spreading over 85,870 acres, followed by Angul with 13 fires covering 18,270 acres, and Buxa with 16 fires burning 10,588 acres. In Palamau there were 7 fires consuming 8,730 acres; other Divisions were almost free from fires. In Singhbhum it is said that the fires in 1899-1900 were worse than in 1898-99 in consequence of the small area burnt in 1898-99, while in Buxa 8,023 acres of the area involved consisted of open sissu forest most difficult to protect.

The following shows the proportion of failures to area taken in hand :-

Singhbhum	***	•••	•••	18.32	per cent.
Angul Palamau	•••	***	•••	11.37	73
Buxa	***	***		7·25 6·35	**
DUIA			•••	0.90	**

The system of protection pursued has been the same as last year. The remarks of the Government of India in paragraph 4 of their review of the last report on this subject are not applicable to Singhbhum, seeing that cover overhead is unfortunately an impossibility in forests of so hot and dry a nature. The trees left on the lines drop their leaves through February and March, if not removed, and render repeated burnings necessary, while a heavy growth of grass can be got rid of in one cutting and burning.

The total expenditure incurred on protective measures and the arrest of fires amounted to Rs. 13,577 as against Rs. 12,781 in 1898-99, of which Rs. 154 were spent on new areas. The average cost per square mile of area attempted was thus Rs. 642 compared with Rs. 616. The expenses were higher in all Divisions except Angul, Jalpaiguri and Darjeeling, but chiefly so in Singhbhum and Buxa.

Causes of the fires.

BY INTERVIORL FILME Directed to the point of the point o	R FIRE-TRACED AREA.	C. RESERVE OR	THE	ING INSIDE	BURNING	FIRES								
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4 A free burnt in acree. 5 15 15 15 15 16 15 16 15 16 15 16 15 16 16 17 16 16 17 16 <t< th=""><th>In order to turn out game or to reduce cover.</th><th>In order to oblain new grass.</th><th>By light- ning or fire-balloous.</th><th>By railway engines.</th><th></th><th>By villagers, pravellers, dec., passing through the forests.</th><th>the B</th><th></th><th>workme ployed i forests, purchase forest pr ce, and b c-cutters</th><th>By workmen employed in the forests, by the purchasers of forest pro- duce, and by ya-cutters.</th><th>tering sta ly exterior nes.</th><th>B. Fires entering the forests hy crossing exterior fire-lines.</th><th>aed by B. to or Fries entering arcleese the forests by urning crossing exterior accessing exterior accessing exterior</th><th>B. Fires entering the forests hy crossing exterior fire-lines.</th></t<>	In order to turn out game or to reduce cover.	In order to oblain new grass.	By light- ning or fire-balloous.	By railway engines.		By villagers, pravellers, dec., passing through the forests.	the B		workme ployed i forests, purchase forest pr ce, and b c-cutters	By workmen employed in the forests, by the purchasers of forest pro- duce, and by ya-cutters.	tering sta ly exterior nes.	B. Fires entering the forests hy crossing exterior fire-lines.	aed by B. to or Fries entering arcleese the forests by urning crossing exterior accessing exterior accessing exterior	B. Fires entering the forests hy crossing exterior fire-lines.
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Area barat in acres. 	·		Атев ритпț іп астея.	Number of fires.	Агея рагат і актер.	Number of flies.		Агея burnt in астез.	Number of fires. Area burnt in acres.	 Иитрет оf йтев.	Ατεα burntin acres. Νumber of fires.	Number of fires. Атея burnthn acres. Number of fires.	Ατes burnt in scres. Number of fires. Ατes burntin acres.
$AREAS.$ $T_{7,790$ T_{11} T_{12}	17 18			п 1	10	6	80		4	6 2	 9	6	ه ا الم	8 4 5 6
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8 173 6 1,468 41 72,681 58 34 \$1,210 21 19,462 10 10,297 92 1,01,365 53 79,704,182		·		1,280 	: : : : 64 ; :		* : " : : : :				 2	8 1,4400	20 1,4400	1 1 20 2 1,440
34 81,210 21 19,462 10 10,297 92 1,01,366 53 79,704188				1,280	8							1,440	5 1,440	5 1,440
	21 19,462 10			1,280	8	39,066	2		19	2 61	04	14,294 2	20 14,294 2	4,576 20 14,294 2
19,660 14 15,647 5	14 15,647 5 22	14 19,669		:	:	4,872	*		335	5 335	 20	6,197 6	22 5,197 5	8,364 22 5,197 5

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(a) Includes 64,603 acres found burnt in the Protected Foresta. The number of free which burnt this area is not known.

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Of the 129 fires in the fire-traced areas, 15 extending over 4,556 acres

were due to accident in burning the traces, 15 covering 12,854 acres came from without, while 87 burning 99,912 acres were set alight inside the reserve. Of the latter, again, 23 spreading over 39,065 acres arose out of carelessness on the part of villagers and others passing through the forests, and 62 damaging 60,786 acres are said to have been ignited intentionally, viz:---

31 burning 31,037 acres to obtain new grass.

19,452 10,297 " to turn out game. 21 57

10 " maliciously. "

Thus again the chief disasters must be attributed to the desire of the neighbouring villagers to procure an early supply of new succulent grass and to their propensity for game, the former, however, being this year more prominent than the latter.

28. Form No. 52 shows there to have been 156 cases of injury to forests by fire against 100 during 1898-99, of which num-Prosecutions for offences by fire.

ber 105 or 67 per cent. remained undetected, 1 was by mistake compounded, and 50 were taken before the Courts. Of the undetected cases, 70 belong to the Singhbhum Division and 12 to Buxa. The following table gives a full and comprehensive detail of the prosecutions, including two cases brought forward from last year :---

	Ī		<u>.</u>	DETAILS O	PROSECUTION FO	OR OFFENCES BY FIRE.	· · · · · · · · · · · · · · · · · · ·	
DIVISION.		Serial number of tire.	Areas burnt (acres).	Character of offence (whether careless or intentional).	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	RSMARES.
1		2	3	4	5	6	7	8
Darjeeling	•		Nil	Careless	Convicted	Section 25(b), Indian Forest Act.	Five weeks' rigorous imprisonment.	Setting fire to cultivation near the reserve and allowing the fire to cross the boundary line, 0 21 * cres burnt.
Jal _l aiguri		2 3 6	50 100 20	Intentional, bot not malicious. Ditto Malicious	Convicted Ditto Ditto	Section 25(b), Indian Forest Act. Ditto Ditto	One month's rigorous imprisonment. Fined Rs. 100 and to pay Rs. 25 as compensation for damage done. Three months' rigorous imprisonment and fine of Rs. 20.	Sentence upheld by the Deputy Commissioner on appeal.
Total	.	3	170					
Sonthal Pargan	a.	***	1	Careloss				Pending. A child cooking. Case since withdrawn and compounded.
Palamau		4 6 13 14 15	2,560 640 960 195 200 160 Nil	Careless Intentional Ditto Ditto Ditto Intentional	Convicted Acquitted Convicted Ditto	Section 25(b), Indian Forest Act. Section 32(d), Indian Forest Act. Ditto Section 25 (b), and (c),	Rs. 5. Ten offenders Two offenders Two offenders. Fine of Rs. 8 each. One offender. One month's rigorous im- prisonment and fine of Rs. 10.	Kindling fire in protect- ed forest.
		····	Nil Nil	Ditto Ditto	Ditto	Indian Forest Act. Section 25(b), Indian Forest Act. Ditto	month's rigorous im- prisonment each,	
T.tal .	••	9	4,715				*** ***	

• • •				Det	▲II Ş	OF PROSEC	UTION	FOR OFFENC	RS BY FI	IR.E.		
DIVISION.	nu	arial mber fire, (Areas burnt acrea.)	Characte offence (wh careless intention	or	Whet acquit convi	ted or	Section of which c	law und		ighment	REMARKS,
1	1	2	8	4		5			6	7		8.
		se of (1,280)	Careless	A1.	Convictor	а	Section 32(Forest A		an One offender. Rs. 25.	Fine o	which spread to the
	J D	itto	<i></i>	Ditto	•••	Ditto	••	. Section 25(Forest A		In Two offender months' rigor prisonment es	ous im	
		9 16	820 16	Intentional	, 44 , 1	Convictor	i	. Section 25(Forest A	(b), India ct.	_		Pending. Offender found to be in same and sent to lunation
, · ·		17	<u>2,</u> 560	Doubtful	, n.	Acqui <u>tte</u> c	1		•••			asylum. Four offenders. Acquit ted of the charge under section 25 (c), but con- victed under section 25 (q) of theft of bamboos.
		23	1	Intentional		Convicted		Section 25(Forest Ac	c), India 15.	n One offender. months' rigor prisonment.	Two ous im-	ting a light to the Forest, but the Court held that the fire was kindled for smoking and that there was no
		25	150	Careless		Ditte	•••	Rules under 75, Indian Act.	I Fores	t weeks' rigoro	Two us im-	and allowing it to cross the boundary line
			,44 0	Ditto		Ditto	***	Section 25(c Forest Act	t,	n One offender. months' rigoro		Kindling fire for cooking.
		56 65 2	120 .560	Ditto Ditto	~~	Ditto Ditto	•••	Section 25(6 Forest Act Section 25(c	i.	month's rigoro	One im- Three	Ditto for smoking. Ditto for cooking
	66 &			Intentional	~	Ditto	***	Forest Act. Section 25(6)	•	prisonment.	us im-	fruits. Believed to be malicious,
1						2100	•••	Forest Act.		week's rigorou prisonment.	us im-	but evidence of lighting a fire for cooking only obtainable.
nghibhum				Careless	•	Ditto		Ditto		One offender. months' rigorou prisonment.		Lighting a fire for roasting fruits and left it burning.
				Doubtful Serelces		Ditto Ditto	•••	Section 25(c) Forest Act. Ditto	, Indian	prisonment eacl	Three	Convicted of earrying fire into the reserve; no proof of originating the fire. Convicted of smok.ng.
	7	1	480	Ditte		Ditto		Ditto	•••	months' rigorou prisonment. One offender. months' rigorou	Four	Kindling fire for mok-
	7	9 2,5	240	Ditto		Ditto		Ditto	•••	prisonment. One offender. days' rigorous		Kindling fire for cooking.
	8	0	80	Ditto		Ditto		Ditto	•••	prisonment. One offender. months' rigorou prisonment.	Three is im-	Setting fire to dry leaves under a mahua tree.
	8	2 2,1	580			* * * * * * *		••• •••	•	birmonniente.		Pending. Three men set fire to the forest to facilitate searching for lost cattle.
	8	1,2 -	280 Ci	areless .	Co	nvicted		Section 25(c), Forest Act.	Indian	One offender. months' rigorous prisonment.	1	Kindling fire to roast birds he had shot.
		N				Ditto	•••	Ditto		One offender. days' rigorous prisonment.	im-	Cooking fish and leaving fre burning.
1		N				Ditto	-	Ditto		One offender. monthe rigorou prisonment.	im.	Cooking fish.
		Ni Ni		Ditto . Ditto .	. ,	Ditto Ditto		Section $25(b)$, Indian Fores Section $25(c)$,	at Act.	Ditto Ditto	••• '	Litto for smoking
	•••	Ni	1	-80				Forest Act.		*****		by rubbing sticks together. ending. Kindling fire for cooking by two sabai- grass cutters. Since
	•••	ŊI	Ca	reless .,	. Co	prioted		eotion 32(d), Forest Act.	Indian	Oue offender, month's rigorous	One E	absconded. Kindling fire in protect- ed forest, endangering
	 	Nil Nil Nil Nil	I	Ditto Ditto Ditto Ditto		144 -	 	Ditto Ditto Ditto Ditto	 	prisonment. Ditto Ditto Ditto Ditto		the reserve. Ditto ditto. Ditto ditto. Ditto ditto. Cinding fire for cooking
l		Nil		Ditto	1			Ditto		Ditto		fruit. Ditto ditto.
Total	80	31,86	7	•••••		····	_ _	·	-	·····	•	

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			Deta	ILS C	F PROSECUT	ION F	OR OFFENCES BY FIRE	.	
DIVISION.	Serial number of fire.			Whether acquitted or convicted.		Section of law unde which_convicted.	Amount of punishment.	REMERKS.	
1	2	8	4		5		8	7	8
f	8	400	Carelom	**	Acquitted			Two offenders	Setting fire to jungle and allowing it to cross the
	4	10,240	Ditto.		· ••••				boundary line. Pending. Shooting deer. The case has since the close of the year been
Angul	5	2,240	Intentional		A oquitted	•••		50 ee <u>t</u> -	disposed of and the of- fonder acquitted. Maliciously setting fire. Acquitted of the offence, but punished for theft of forest pro-
	7	• 12	Careless	-	Convicted	N92.	Section 25(c), Indian Forest Act.	One offender. Two months' rigorous im- prisonment.	duce. Shooting deer.
ι	10	240	Intentional	•••	Acquitted			One offender	Prosecuted on suspicion.
Total	5	13,132	••••••				•••••	******	
Pari		Nil.	Careless		Convicted		Section 25(c), Indian Forest Act.	One offender. One week's rigorous im- prisonment.	Carrying fire through the reserve.
Chittagong {		1	Intentional		Convicted		Section 25(c), Indian Forest Act.	Two offenders: one fine of Rs. 5, and the	Setting fire by graziers.
(••••	Careless,	•••	Ditto,		Ditto 🐭	other 15 stripes. Three offenders. Fine of Rs. 2 each.	Burning 'jhum,' and al- lowing the fire to enter the reserve.
Total	2	1			***				
BRAND TOTAL	52	49,886				-	*****	atte / 60	

Of the 52 prosecutions, seven were undecided at the close of the year, five were acquitted, and 40, or 89 per cent., resulted in convictions. Rigorous imprisonment, ranging from one week to six months, was awarded in 32 of the latter, while seven met with fines of Rs. 2 to Rs. 100.

The Singhbhum Division is the only Division that sent up any large number of cases, and in regard to it the improvement upon last year's results is most gratifying. Out of 27 cases prosecuted, imprisonment was awarded in 24 and fine in one, there being only one acquittal, while one accused was declared insane and sent to the asylum. It is to be regretted such good results cannot be recorded in the case of Angul, where, out of four cases decided, punishment was given in one only.

It is satisfactory that the sentences awarded have been of a much more deterrent nature than was the case during the previous year, though there are still one or two instances where the punishment meted out was lamentably insufficient. For instance, in Palamau for carelessly using fire in the collection of honey which caused the burning of 2,560 acres, a paltry fine of Rs. 5 is considered sufficient, while, in Singhbhum, under similar circumstances 15 days' jail is held to be adequate for the burning of 2,240 acres.

Considering the difficulty in most fire cases of procuring any evidence at all whenever convictions are obtained, the punishment ought, in all cases, to be exemplary, and it is satisfactory to know that the attention of the Deputy Commissioner has been specially called by Government to the last case above mentioned.

It may, in concluding this important subject, be further mentioned that, in consequence of the many and severe fires in the early part of the season in the Saitba block of the Singhbhum Division which is burdened with concessions, Government has agreed to the Department closing to the enjoyment of these privileges, at once and at its discretion, such portions of the forest as may be burnt over. In addition proposals have also been made at the instance of the Government of India to alter the existing law and to make villagers jointly responsible for fires. These endeavours should bear good fruit.

16)

(3) Regulation of Grazing and Protection from Cattle.

2 9.		ole shows the area in square miles closed and oper	
Areas closed	and open to grazing.	to grazing compared with that of the previous year; the details are exhibited in Form No. 54 :	8

Year.			RESERVED	FORESTS.		PROTECTED FOREsts.				
		Total area.	Area closed to all animals.	Area closed to browsers only.	Area open to all animals.	Tutal area.	Area closed to all animals.	Area closed to browsers only.	Area open to all animals.	
1		8	8	4	5	6	7	8	9	
1899-1900 1898-99		Square miles. 5,881 5,881	5,443 5,468	<u><u><u></u></u> <u>20</u></u>	417 393	3,678 3,816	1,942 2,083	11	1,72 2 1,728	
Difference			- 25	+ 1	+ 24	- 141	- 141			

	UNCLASSED	FORESTS.		TOTAL.					
Total area,	Area closed to all animals.	Area olosed to browsers only.	Area open to all animals.	Total area.	Area closed to all animals.	Area closed to browsers.	Area oper to all animals.		
1	2	3	•	5	6	7	8		
4,033			4,033	13,589	7,385	32	6,172		
4,033			4,033	18,730	7,551	31	6,148		
				- 141	- 166	+ 1	+ 24		

The change in the total area is due to the exclusion of 141 square miles already mentioned in paragraph 3. The other changes occurred as follows :-Darjeeling Division.—Of 10 square miles previously closed, 9 were thrown open to all animals and 1 was closed to browsers.

Kurseong Division.-15 square miles closed were opened.

In continuation of the remarks made in paragraph 34 of the last report Mr. Keventer is almost ready with his dairy farm at Senchal, the fence around the Darjeeling water supply catchment area has been erected, to the cost of which the Department contributed Rs. 1,700, three bathans have been paved and one gowala has been given $\frac{1}{4}$ acre of land for a vegetable garden.

30. No arrangements have been possible in the matter of regulating grazing in the protected forests, and the matter has for the present been accepted by Government as Regulation of grazing. · impracticable.

31. The following table, abstracted from Forms Nos. 54 and 55 (excluding the unclassed forests), exhibits the area grazed over Extent and value of grazing. and the value of the grazing fees contrasted with the previous year :--

	led over.	AT F BAT			BIVILEGI BATES.	BD	BY RIGHT BETTLE		FREE D PLEA O GOVERI	SURE P	Тот	AL.
YEAR.	a gran		d.		Fei	38.	_	8 5 4		, bt		ti i
	Square miles grazed	Total cattle.	Fees received.	Total cattle.	Received.	Value at full rates.	Total cattle.	Value of fees full rates.	Total cattle.	Value of fees full rates.	Cattle.	Value of fees full rates.
1	8	8	4	5	6	7	8	9	10	11	12	13
			Rs.		Rs.	Rs.		Rs.		Rs.		Be.
				RESER	VED FOR	ESTS.						
1899-1900 1898-99	417 393	5,643 5,799	15,308 15,725	39,905 39,565	(a)1,669 (a)1,563			6 4 4 	512 491	969 988	46,060 45,855	81,170 81,417
Difference in 1899-1900	+ 24	- 156	417	+340	+ 106	+ 139			+21	+31	+ 205	- 247
]		PROTEC	TED FO	e ests.						
1899-1900 1898-99	1,722 1,722	15,818 12,209	4,3 59 3,4 40	167,500 167,500	(b) (b)	44,000 44,000	250,017 250,017	38,582 36,582	•••	••• •••	433,335 42 9,726	84,941 84,022
Difference in 1899-1900		+8,609	+ 919		•••						+3,609	+ 919

a) This does not include fees realised under the commutation system and credited to "Blig," the apportionment of which is not practicable.
(b) Gredited to "Blig" apportionment not practicable.

The total area grazed over extended to 2,139 square miles and was 24 square miles in excess of the area so utilized last year, while the number of cattle that resorted to this area amounted to 479,395, and the total value of fees at full rates to Rs. 1,16,111 compared with 475,581 and Rs. 1,15,439 in 1898-99. The increase was thus 3,814 head of cattle and Rs. 672 in fees. The figures over which the Department practically has alone control, are those dealing with full rates; for the reserved forests these were slightly in decline, and for the protected forests somewhat in excess of those of last year, the latter owing to better collections in the Puri Division. No returns have been received for the Angul protected forests which are under the management of the Deputy Commissioner.

32. Five hundred and ninety-seven cases of illicit grazing were detected, Protection from cattle. The subjoined statement shows the cattle impounded:—

			NUMBER OF CATTLE IMPOUNDED.									
DIVISION.		loes.	Bullocks	Goats and	Other	Total for	Total for	Difference.				
			Buffaloes.	cows.	sheep.	animals.	1899-1900.	1898 99.	Increase.	Decrease		
1		2	3	4	5	6	7	8	9			
RESERVED	FORES	STS.					<u></u>	 	<u> </u>			
Darjeeling Jalpaiguri Palamau Singhbhum Puri Chittagong	•••• ••• ••• •••	•••• ••• ••• •••	984 47 134	105 871 30 408 27	8 	5 5 	118 1,860 30 47 542 27	282 3,255 66 455 40	 47 87 	164 1,395 36 13		
	Total	•••	1,165	1,441	8	10	2,624	4,098		1,474		
PROTECTEI) FORE	STS.										
Palamau Puri	•••	••• •••		 	•••		57	1,154	 	1,154		
	Total		51	3			67	1,154		1,097		
GEAND	Total		1,219	1,444	8	10	2,681	5,252		2,571		

Only half the number of cattle were sent to the pound, as were so treated last year. The chief differences occur in the Jalpaiguri Division in the reserved forests and in the Puri Division in the protected forests, but in neither instance has any explanation been given by the Divisional Officers concerned.

(c) IMPROVEMENT OF FOREST GROWTH.

(1) Natural reproduction.

33. Natural reproduction was treated of in considerable detail in the last

General remarks. report; it will therefore suffice this year to mention merely the most prominent particulars. In a province like Bengal, where its 13,589 square miles of forests are distributed over an area of 156,571 square miles, there must be considerable local peculiarities, and it is difficult to generalize and to bring a subject of such wide scope as natural reproduction into a few brief words. It may, however, be said that, on the whole, the year was a fairly normal one for seed, while seedlings of most species were observed. Though in Jalpaiguri damage to the sal foliage, caused by caterpillars said to belong to Dasychira Thwaitesii, is said to have prevented the production of seed, in Singhbhum the extreme dryness of the soil hindered the germination of such sál seeds as were produced, and in Buxa similar results were ascribed to a dense undergrowth. In the Sonthal Parganas,

D

it is said, some 80 per cent. of the sal seed crop is blown down before it is ripe and lost. In the Singhbhum Division the attempt to procure natural seedlings from the forests for the forest garden at Chaibassa discovered the fact that seedlings of several species, other than sál, die down in a hot season and shoot out again on the advent of the rains.

The sample areas selected and counted in 1897-98, to test the ability of sál seedlings to maintain themselves, show that 47 per cent. have died. As instances of what a judicious preparation of the soil to receive the seed

might effect, it may be remarked that, in the Singalila forests of the Darjeeling Division, the hoeing up of the ground around a *buk* and a *champ* tree resulted in a dense cover of young seedlings which have been fenced in in order to watch the progress of the experiment, while the new embankment on the railway that now runs through the Buxa forests is in places nearly covered with sál seedlings. Closely connected with this it is satisfactory to observe that the fresh landslips in the Takdah Range of the Darjeeling Division are being self-sown with *utis* (*Alnus nepalensis*), and that the areas devastated by the cyclone of 1897 in the Chittagong Division are being naturally reclothed. Teak reproduces itself from seed profusely at Dumka.

Bamboos .- The flowering of the following species has to be recorded :-

Arundinaria aristata (Rato nigala) in Singalila.

falconeri (Singhane or Maling) in Singalila, Goompahar, and Senchal. Bambusa arundinacea continued to seed in Angul.

Undetermined species in Tista and in Tasiding.

Coppice-Sál is said to be progressing favourably in Jalpaiguri and teak in Sitapahar.

(2) Artificial reproduction.

Form No. 56 gives the details of artificial reproduction. Three 34. hundred and four acres have been added during the General.

General. year, compared with 277 in 1898-99, bringing the total area now under plantations to 6,684 acres, as against 6,380 acres. The total cost amounted to Rs. 12,714 and compares as follows with that of the previous year :--

1	899-1900.	189 8-99.	+	—
	Rs.	Rs.	Rs.	Rs.
•••	2,443	2,459		16
•••	8,385	3,646	4,739	
•••	1,886	2 ,263	•••	37 7
	12,714	8,368	4,346	
	••• ••• •••	Rs. 2,443 8,385 1,886	2,443 2,459 8,385 3,646 1,886 2,263 12,714 8,268	Rs. Rs. Rs. Rs. 2,443 2,459 8,385 3,646 4,739 1,886 2,263

35. No addition has been made to regular plantations, the area of which Regular plantations. Begular plantations. Regular plantations. Begular plantat the trees thus removed brought in a revenue of Rs. 5,100.

Three hundred and four acres have been planted out during the year 36.

at an expenditure of Rs. 2,443 compared with 227

Cultural operations. acres costing Rs. 2,459 in 1898-99, thus the total area on which cultural operations have been carried out now stands at 3,812 acres as against 3,508 acres. The entire cost, including up-keep and nurseries, amounted to Rs. 8,646 compared with Rs. 7,736 during the previous year.

The chief work was the planting of the regeneration coupes of the Darjeeling forests.

The following are the divisional details :---

Darjeeling.—Two hundred and seventy acres were added against 245 acres in 1898, the total expenditure rising from Rs. 6,639 to Rs. 7,199. Of the latter, Rs. 1,906 were spent in the clearing of old lines, Rs. 2,049 in filling up vacancies, and Rs. 1,614 (including Rs. 188, the cost of collecting 344 maunds of seeds) on nurseries. The coupe planting extended over 244 acres, while 26 acres were sown in the Tista Valley forests.

Kurseong.-Vacancies in the Paglajhora area were planted up with 6,886 tun, 2,258 champ, 70 saj and 80 kabashi at a cost of Rs. 54. The total expenditure, including the pay of two malis, was Rs. 437. The average girths of the principal trees in the Dhobijhora plantation were as follows :--

		÷	rst measure- ment, June 1894.	Measurement in May 1900.	Increase in six years.
Cypress	 		46	48.73	2.73
Cryptomeria	 		39	43.35	4.35
Biota	 		33	35.82	2.82

Jalpaiguri .-- The usual sowings in conjunction with cultivation and the planting of bam-

 Japaiguri.— The usual sowings in conjunction with cultivation and the planting of bamboos comprised 7 acres, on which an expenditure of Rs. 302 was incurred. Last year's operations have turned out fairly successful; those of the season under report are still doubtful.
 Palamau.—Seven acres were added at a cost of Rs. 209.
 Puri.—Sixteen acres were planted in lines with 2,193 teak and 3,383 Pterocarpus
 Marsupium and Dalbergia lanceolaria, also 4 acres of blanks with 1,995 of the latter species.
 The work cost Rs. 105 and is expected to be successful. Rupees 111 were spent on clearing 4 miles of lines for forward work 4 miles of lines for forward work.

(3) Early thinnings.

The Poomong and Dooteria plantations in the Darjeeling Division were thinned at a cost of Rs. 379, also compart-37. General.

ment Va of the Bamonpokri teak plantation. The usual clearing of the coupes in the blocks under regeneration preparatory to planting them up was undertaken over 320 acres, the expenditure amounting to Rs. 501.

(4) Other operations for the improvement of the growing stock.

The following statement exhibits the area over which the cutting of 38. creepers was carried out :---Creeper cutting.

DIVISION.	Area in acres.	Cost.	Average cost per acre.		
1		2	3	4	
			Rs.	Annas.	
Darjeeling		6,431	611	1.52	
Tista		2,120	166	1.25	
Kurseong		8,130	618	1.21	
Jalpaiguri		6,430	534	1 32	
Palamau		3,560	47	0.21	
Puri		1,724	161	1.49	
Total		28,395	2,137	1.20	
Total for 1898-99		24,609	2,147	1.40	

The area gone over amounted to 28,395 acres, or 3,786 acres in excess of that done last year, while the cost reached only Rs. 2,137, or Rs. 10 less. This aggregate result, both as regards area and average cost, is mainly owing to the operations in Palamau which hitherto have not taken place. Differences occurred in all divisions, but notably in Jalpaiguri and Puri.

(5) Experiments.

39. In addition to describing new experiments worthy of note made during the year under report, it is necessary in some cases to continue remarks previously made This section of the report is, therefore, longer than General.

on former experiments. it otherwise would be if confined merely to the work of the year. With few exceptions the officers of the Department do not evince much zeal in this direction, and consequently experiments are not many, and what have been taken up have mostly been initiated by the Conservator.

The clearing of the ground under and around seed bearers in the 40. Senchal regeneration coupe has been discontinued,

Clearance of the ground under as the subsequent felling in the coupe did away with parent trees.

all the advantages it was hoped would have resulted.

The reason scarcely seems sound in view of the reported success of a similar experiment alluded to in paragraph 33.

PREVIOUS EXPERIMENTS.

Exotics.

41. Kashmir Walnuts.-Three-fourths of the 2,000 seedlings planted out at Rangirum are doing well.

Spanish chestnuts .-- One hundred seedlings have been successfully put out from the Rangirum nursery into the forest around. One of the four plants at Kalimpong has died. Quercus serrata.—This species promises to do well at Darjeeling and the 1,200 seedlings

reported alive last year have been transplanted out into the poorly-stocked coupe of 1897-98. Others have also been tried in the Seem block of the Tista Valley forests.

Horse chestnuts.—Twenty are still alive. English oak.—Are not thriving at Kalimpong. Chinese oak.—Two hundred of the seedlings noticed last year have been put out near Rangirum and are doing well.

Camphor.-Five trees transplanted into the forest all died; five are still in the nursery; and one at Tista Bridge It is clear bad work was the cause of death of the transplants.

Eriodendron anfractuosum.—At Lopchu they have all died, but are progressing favourably at Jalpaiguri. At Gorumara the hot weather killed all but two. This species produces the kapok of commerce.

Caesa/pinia coriaria.-Divi-divi is not a success at Sukna-it is too wet. Twenty-nine plants that remained from last year's sowings are from three to six feet high, but appear sickly. In the Santhal Parganas the introduction is accomplished; 930 plants were transplanted during the year, of which over 50 per cent. lived.

EXPERIMENTS OF THE YEAR.

Phænix rupicola.-Two and a half pounds of seed were sown at Sukna, resulting in 248 seedlings, or 10 per cent.; germination is still going on. Ischamum angustifolium.—A few seeds of Sabai or Bhabur grass from Singhbhum sown

at Sukna did not germinate freely; only four plants remain, and they are not healthy. The place seems too wet. Six thousand and five hundred square feet were planted at Katikund during the rains at 18 inches apart, with a view to calculate the yield. The first year's growth was insignificant and not ascertained. At the close of the year the plants were about two feet high.

Ochlandra travancorica.-Out of nine ounces of seed of the Travancore bamboo sown at Kalimpong only a few plants came up.

Castanospermum australe.—Forty-five plants of the Moreton Bay chestnut were received from Ootacamund and planted out at Bamonpokri on the 31st July 1900. Agave sisalana.—Old plants of sisal hemp at Katikund are doing well; 26 new suckers

were transplanted.

Eucalyptus sp.—Six plants have been planted out at Koderma and are doing well. Dendrocalamus strictus.—Has done fairly well in Tista; 40 per cent. succeeded at Dumka. At Chaibassa sowings of last year are now 2½ feet high where watered, but where left to themselves only 6 inches.

A forest garden has been established at Chaibassa.

42. Ficus elastica.—One hundred and twenty-four cuttings at Tashiding now average 30 feet high and are throwing out aerial roots. Sixty-four have been transplanted into Extension of rubber-producing trees.

Mangbur, 12 in the forest around the nursery, and 6 at Kalimpong. Seed sown in Chel and Gorubathan nurseries has germinated Nine seers of seed procured from Assam were sown in carefully prepared well. nurseries at Sukna, at Gulma and at the ninth mile on the Tista Valley road; the result was unsatisfactory; at Gulma the seed did not germinate at all, while at Sukna 66 and at the 9th mile only 10 seedlings came up. Fifteen pounds of seed sown in pots at Kaptai produced 700 seedlings, of which, however, only 187 seem to have survived. These have been pricked out into nursery beds and are doing extremely well. Fifty-seven cuttings have produced fine, healthy plants. One hundred and fifty seedlings produced in the Tista Valley from local seed and from seed from Assam have been planted out in Mangwa block. Fresh seed sown during the rains of 1899 germinated, but all the seedlings died in the cold weather.

Manihot Glaziovii (Ceara rubber) .--- At Buxa these did not germinate, while Tista has not reported the result of the seed sown last year.

Hevea brasiliensis (Para rubber).—The 3,150 seeds received last year were distributed as follows:—

Kurseong 1,000; Jalpaiguri 650; Buxa 1,500. In Kurseong (at Sukna) 651 produced plants, but only 273 survived and are strong and healthy, being 17 inches to 42 inches high. In Jalpaiguri and Buxa they were not a success. In all cases the seed did not arrive till the end of October and many had germinated during transit. A fresh consignment of 6,000 seeds was received during September 1900 and it is hoped this batch will be more successful.

Kickxia africana and *Castilloa elastica* (The new West African and Central American rubber trees).—Forty-five and 110 young plants were obtained from Ootacamund since the close of the year (31st July 1900) and have been planted out at Sukna.

43. The preparation of tannin extract from the bark of the Ceriops candolleans was continued, and four maunds of the extract cant to the Kongeter on Fernancia Breducts.

to the Government of India. Fifty maunds of the bark were forwarded to the Imperial Forest School at Dehra Dun.

A sample (277 maunds) of Gewa wood (*Excœcaria agallocha*) was given to the Bally Paper Mills to test its properties as a paper making material, but no report has yet been received.

Further specimens of *aconites* were forwarded to the Reporter on Economic Products, also tubers and bulbs of *Dioscoreas*, the latter at the request of the Director of Agriculture, Bengal.

(d) EXPLOITATION OF MAJOR FOREST PRODUCE.

(1) Clear or regeneration fellings.

44. Re-generation fellings are confined to the Darjeeling forests. The working-plan prescribes 317 acres to be treated under this method; the following was accomplished:—

					-	Acres.	
	Arrear coupes	•••	•••	•••	***	35 2 ·6	
-	Coupes of the year	•••		•••		179	
	Advance coupes	•••	•••	•••	•••	18	
				Total	•••	549.6	

(2) Selection fellings.

45. The following is an abstract of the selection fellings undertaken Selection fellings. so far as reported :---

	-		4	
Forest.		Area in acres.	Material removed.	Exploitation.
Darjeeling forests		1,429	32 trees=2,105 c. ft. solid	I As per working-plan.
Singalila	***	P {	65 green trees 258 dead ,,	} Selection over 10,170 acres.
Tista Valley	•••	₽ {	115 sal trees=11,657 c ft. s 24 other trees=1,554 c.ft. s	olid } As per working-plan.
Tista division	•••	2	135 sal trees	Ditto.
Kurscong division	•••	₽ {	14,185 c. ft. timter 612 branches	} Hollow and unsound trees.
Jalpaiguri ditto	•••	P {	125,050 c. ft. fuel 54,751 c. ft. timber	} As per working-plan.
Buxa ditto Sonthal Parganas divi	ion "	P	P	According to demand; over whole area, except closed portions.
Pa'amau division	•••	. P	5 sal trees=250 c. ft. Trees.	P
Singhbham reserves	•••		Green, 1,655=125.256 c. ft. Dry, 3,027= 66,709 c. ft. Poles.	
Singhbhum protected	forest s	P	Green, 50= 87 o. ft. Dry, 5,252= 42,335 o. ft. Trees. Dry, 2,197= 56,400 o. ft. Poles.	Dead trees.
		(Dry, 1,983= 18,776 c. ft. 211 green sal trees	p
Angul Division	•••	P }	5 ,, 2 88n 39	
Pari "	***	р (4 others. 4 trees.	?

(22)

3.—Improvement fellings.

46. The e Improvement fe	extent	of the improvement fellings carried out, including the amelioration fellings in Darjeeling, was as under:
Darjeeling		
Tista Vall Tista	do.	1,555 acres, giving 130,887 cubic feet stacked firewood. No detail given.
Kurseong	do.	672 poles. 237,050 cubic feet firewood stacked.
Buxa	do.	439 trees.
Puri	do.	1,767 acres, yielding 1,722 cubic feet logs and poles and 37,328
		oubic feet fuel, also 389 cubic feet poles and 66,740 cubic feet fuel from last year's coupes.
Sundarha	ng đo.	988 160 gares, giving 9 942 509 autic fast

Sundarbans do. 988,160 acres, giving 9,942,509 cubic feet.

The Sundarbans and the Darjeeling forests are the chief areas worked under this system.

4.—Coppice fellings.

Coppice fellings.

47. No *pure* coppice fellings obtain. 'Stored coppice' was worked as follows:---

Jalpaiguri.— Four hundred and twenty-nine acres, of which 410 were sal forest; the outturn was 1,142,397 cubic feet, of which 1,068,413 cubic feet was fuel. There is a good deal of back way to be made up before the areas prescribed by the working-plan are fully worked. Sonthal Parganas.—Three hundred acres of the 'old reserve.'

5.- Unregulated fellings.

48. Owing to the exploitation during the year of a portion of the material Unregulated fellings. rendered available by the violent gale of the 6th April 1899 in the Tista Valley and by the cyclone of 1897 in Chittagong, the extent of the fellings of this category has been considerably increased, no less than 23,023 cubic feet having been extracted from Tista and 25,000 cubic feet from Chittagong on this account alone. The usual fellings in other divisions gave—

Darjeeling	•••	48,403	cubic feet	
Jalpaiguri	•••	558,018		
Palamau		2,617	87	
Singhbhum		39,393	,,	(reserved forests).
Ditto	•••	42,936	,,	(protected forests).
Puri		33,965	,, ,,	
Sundarbans	•••	9,871,099	**	(Satkhira Circle and protected forest).

In the Sonthal Parganas free removals by the villagers under concessions are classed under this system.

(e) EXTRACTION AND TRANSPORT OF MAJOR FOREST-PRODUCE BY LAND AND WATER.

49. No improvements in the matter of extraction and transport have to General. be chronicled. The wire rope-way, as already

General. General. General. General. Jet control of the control

A noticeable departure this year is the use of the Darjeeling-Himalayan Railway by Government as well as by private purchasers.

Transport by water is still the rule in the Sundarbans and Chittagong and will remain so, while the Mahanadi is used for produce from the Angul forests. Roads and paths have been extended, but land carriage was for some time impeded in the hills by landslips, the result of the heavy storm of the 24th-25th September 1899, and in places is still impossible except to coolies.

(f) Exploitation of Minor Forest Produce.

(1).—Extraction of fodder.

50. The removals of fodder amounted to 264,753 maunds, valued at Rs. 3,383, compared with 237,014 maunds and

Removals of fodder. Rs. 3,205 in 1898-99. There has been a falling off in the Darjeeling Division, the chief division supplying fodder, the figures being 138,785 maunds realizing Rs. 1,658, against 145,363 maunds and Rs. 1,980. No explanation has been given.

(2) Grazing.

51. The details concerning grazing have already been given under Grazing. paragraph 31, and there seems nothing further to add here. No change has been made in the method or system of exploitation, while the extent to which it is practised is only small and is shown in Forms Nos. 54 and 55.

(3) Miscellaneous produce.

52. A step in the right direction has been made by the introduction of departmental operations in the matter of the collec-

In the Kurseong Division, instead of leasing out the collection of India-rubber as usual at a rate of Rs. 17 per maund, the trees available were tapped departmentally and a quantity of $2\frac{3}{4}$ maunds crude rubber obtained, which was sold at Calcutta for the high price of Rs. 160 a maund. The total expenses were Rs. 71, or Rs. 26 per maund, thus the Department has this year made a net profit of Rs. 134 per maund. Only a few years ago it was satisfied with Rs. 10 per maund.

Some few myrabolams were collected by Government agency in almost every division by way of experiment, but in Singhbhum operations were carried on on an extensive scale, and 2,157 maunds were obtained at a total cost, including bags, of Rs. 969, or Rs. 0-7-2 per maund. Of these, 967 maunds were Bahera (*Terminalia belerica*), a kind almost unknown in Calcutta, and for which a market is being found in Europe. The rest, 1,190 maunds (*hurra*, *T. Chebula*) were despatched to Calcutta, the railway freight coming to Rs. 499, or say Rs. 0-6-9 per maund, and are now under sale. The net profit from this, the first year's transactions, may not be much, probably not over Rs. 1,000, but the way has been shown and experience has been gained which will serve the Department well in future years. Such a source of revenue was not thought of in former times, and whatever income there is will be clear gain, for hitherto the myrabolams have either rotted on the ground or have been stolen. The Conservator had no little trouble in starting these supplies, but once begun there need be no end, and the future will show the wisdom of the policy inaugurated.

Another successful and profitable introduction of the year has been the utilisation of the fruit of the Strychnos Nux-vomica, which is found abundantly in the Puri Division, and which hitherto has likewise been allowed to perish. At the instance of the Conservator a commencement was made in this direction also, and the results fully prove the commercial soundness of the undertaking. Altogether 64 maunds were collected and despatched to Calcutta at a total cost of Rs. 103-9-0. These were sold for Rs. 182-4-0, bringing in a net profit of Rs. 78-11-0, while up to the present we have been satisfied with petty sales to purchasers at a net profit of eight annas per cart-load. The lease of the right to cut sabai grass in the Singhbhum reserves, entered into by the Conservator in 1897 for three years, at a total rent of Rs. 30,000, came on for resettlement, and was very successfully concluded by him in April last for a further term of three years for a sum of Rs. 1,26,000. In 1894, when the Conservator first came to Bengal, this identical lease realised only Rs. 1,500 a year !

A further feature of the year was the introduction of direct agency in the disposal of bamboos from the Sonthal Parganas, which resulted in better returns, while the imposition of a royalty on sabai grass exported from the Sonthal Parganas, mentioned in paragraph 63 of last report, which was first levied from the 20th October 1899, brought in a hitherto neglected income of Rs. 16,558.

The departmental cultivation of lac in the Palmau forests has so far not been a success, mainly, the Conservator believes, owing to want of zeal.

The royalty on mica is now being paid in, but it is impossible to exercise much departmental check on the data on which the same is calculated without a large increase of establishment. A revision of the mica-mining rules has been proposed since the close of the year.

Form No. 58 shows the quantities of miscellaneous produce removed, the value thereof, and the agency of exploitation.

CHAPTER III.—GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

SUMMARY OF PRODUCE REMOVED FROM THE FORESTS.

53. The following table, which is an abstract of forms Nos. 57 and 58, Summary of removals. exhibits the outturn of the several classes of forests according to the agency of exploitation, and compares the same with the removals during the previous year:—

	Reserved	i forests.	Protected forests.		Unclassed forests.		Total.		
AGENCY OF EXPLOITATION.	1898-99.	1899-1900.	1898-99.	1899-1900.	1898-99.	1699-1900.	1898-99.	1899-1900.	
1	2	3	4	5	6	7	8	9	
	0. ft.	0. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	
Government Purchasers Free grantees Right-holders	80,964 4,882,829 88,330	186,799 5,669,564 11,14S	26,957 629,697 2,681 231,749	88,536 699,078 1,624 230,665	47,682 479,477 790	21,290 480,232 491 	155,753 5,991,003 41,801 231,749	246,625 6,849,774 13,258 230,665	
Total	5,002,123	5,867,506	890,084	970,803	528,099	502,013	6,420,306	7,340,323	
Difference in 1899-1900	+ 86	+ 865,388		+80,719		-26,088		+ 920,016	
	C. ft.	C. it.	(b) Fuel c. n.	C. ft.	C. It.	0. ft.	C. ft.	0. ft.	
Government	81,597 13,248,288 131,773	155,740 15,194,638 22,038	3,775 3,011,044 126	3,981 8,835,694 729	7,857 68,095	1,369 60,642	93,229 16,327,427 131,899	161,090 19,090,974 22,767	

(a) Timber.

				(0)) Bamboo)8.				
Difference in 1899		lotal 	14,777,203	16,282,573	17, 395,78 0 + 82	18,281,239	<u>75,952</u> -13,1	<u>62,011</u> 941	32,248,935 +2,31	34,565,828 6,888
Government Purchasers Free grantees Bight-holders	••• ••• •••	••• •••	81,597 13,248,288 131,773 1,315,545	22,038	3,775 3,011,044 128 14,350,835	3,981 8,835,694 729 14,3 80,6 3 5	7,857 68,095 	1,389 60,642	93,229 16,327,427 131,899 15,696,380	161,090 19,090,974 22,767 15,290,998

			No.	No.	No.	No.	No.	No.	No.	No.
Purchasers	••••••••	•••• •••• •••	7,158 9,219,414 1,650 774,000	17,148 9,769,908 966,400	5,080 535,087 1, 3 00 4,000,000	539,441 101,090 2,3-0 4,000,000	3,228 6,195,903 2 ,000	25,960 5,611,886 1,500	15,440 15,950,404 4,950 4,774,000	58 2,549 15,482,884 3,800 4,966,400
_	Total 0	•	10,002,210	10,753,456	4,541,44 7 +10	4,642,831	6,201,131	5,639,348	20,744,794	21,035,633 90,839
	Total	• •••	774,000	966,400 10,753,456	4,541,447	4,642,831	6,201,131	5,639,346	20,744,794	21,035,68

		Rs.	Re.	Be.	Rs,	Rs.	Rs.	Rs.	Rs.
Government Purchasers Freegrantees Right-holders	••••	105 1,16,004 949 9,837	2,682 1,24,875 1,363 12,312	2 31,047 10 1, 2 3,424	1,701 47,777 2 1,23,874	8,637* 1	8,657†	107 1,55,688 960 1,33,261	4,386 1,81,309 1,868 1,35,686
Total		1,26,895	1,41,232	1,54,483	1,72,654	8,638	8,660	2,90,016	3,22,740
Difference in 1899-1900		+14	,837	+ 18,	371	+21		+ 32,	730

(d) Grasing and fodder grass and other minor produce.

Includes Rs. 982 collected from Hill Tippers. ,, ,, 2,108 ,, ,, (for two years). The total outturn of timber and fuel amounted to 41,906,145 cubic feet as compared with 38,669,241 cubic feet in 1898-99, or 3,236,904 cubic feet more.

In timber the total yield was 7,340,322 cubic feet against 6,420,306, or 920,016 cubic feet more. The excess removals occurred in Sundarbans, Singhbhum, Darjeeling, Tista, Buxa, Jalpaiguri, and Sonthal Parganas, but mainly in the first two, where they amounted to 693,867 cubic feet and 99,206 cubic feet, respectively. Angul, Kurseong, Chittagong, and Puri showed slightly less removals. The better results were due in the Sundarbans, it is said, to the energy and interest shown in their work by the departmental officers, combined with the thriving and prosperous condition of the surrounding population, and in Singhbhum to better arrangements for disposal and a brisk demand.

In fuel the outturn was 34,565,823 cubic feet compared with 32,218,935 cubic feet, or 2,316,888 cubic feet more. Here again Sundarbans gives the largest increase, amounting to 2,266,018 cubic feet, followed by Tista with 310,770, Jalpaiguri with 222,807, and Chittagong with 104,249 cubic feet. Kurseong, Darjeeling and Palamau also secured somewhat better results, but Singhbhum, Angul, Buxa, Puri and Sonthal Parganas were behind last year's exploitations, the first two by as much as 510,862 and 109,695 cubic feet, respectively. The causes of these differences will be explained further on.

In bamboos the improved outturn of 290,839 was mainly due to larger removals from *Chittagong*, Sonthal Parganas, and Darjeeling; Angul and Palamau were considerably behindhand.

Minor produce, including grazing.—Here again there was a satisfactory rise of Rs. 32,730, the value of the year's outturn amounting to Rs. 3,22,746 against Rs. 2,90,016. Last year the increase was Rs. 15,410. The steady rise shown, Rs. 31,880 of which is on account of minor produce other than grazing and fodder grass, is most gratifying to the Conservator, who spent a considerable amount of his spare time in the improvement of this branch of the administration. During the year all divisions excepting Jalpaiguri, Darjeeling, and Palamau succeeded better than in 1898-99. This was due to increased exertions of the several divisional officers, and to the royalty on sabai grass from the Sonthal Parganas and on mica from Kodarma.

Last year the gross yield and outturn was reported as eminently satisfactory; this year it is still better.

Removals from areas not on the books of the Department.

54. The following statement exhibits and compares removals from outside the forests credited to the Department:—

		1898-89.			1899-19^0.			Difference in 1899-1900.	
	Timber.	Fuel.	Total.	Timber.	Fuel.	Total.	More.	Less.	
1	3	3	•	6	6	7	8	9	
	O. ft. solid.	C. ft. solid.	C. ft. solid.	C. ft. solid.	C. ft. solid.	C. ft. solid,	C. ft. solid.	C. ft. solid	
Sundarbans leased lands Gandak drift	42 ,795 4 ,179	2,193,027 5,539	2,235,822 9,718	37,468 4,309	1,775, 46 8 6,627	1,812,934 10,936	ï,218	422,888	
Total	46,974	2,198,566	3,245,540	41,777	1,782,093	1,823,870			

The smaller removals from the lands (formerly protected forests) leased out for cultivation in the Sundarbans are accounted for by the earlier extensions being now in a great measure cleared of timber.

(1) DEPARTMENTAL OPERATIONS.

55. Timber and fuel, exploited directly by the Department, amounted to 407,715 cubic feet, while in the previous year only agency. 248,982 cubic feet were thus removed. The in-

crease in timber was 90,872 cubic feet and in fuel 67,861. Owing to the policy approved by the Local and Supreme Governments, of favouring the extraction of forest produce by private agency (vide

the review of the latter of the Report for 1892-93), this branch of the administration has not hitherto been specially pushed by the Conservator, but as the remarks made in paragraph 13 of the resolution of the Local Government on the last report imply a change of this policy on its part, endeavours to improve the supply by direct agency have been made and will be persevered in, although hitherto no opportunity has been lost. The more important departmental works undertaken during the year were:-

- (1) The supply of fuel to the Commissariat Department at Darjeeling.
- (2) The re-stocking of the Darjeeling Fuel Depôt with charcoal.
- (3) The formation of a fuel depôt at Batasidhara destined to supply the Commissariat Department and the station of Darjeeling (if necessary) with a view to discontinue traffic on the metalled roads of the Public Works Department during the rains.
- (4) The extraction of produce prescribed to be felled by the Tista Working Plan owing to the absence of demand and with a view to working up to the provisions of the plan.
- (5) The conversion of the unusual amount of windfalls in the Tista Division caused by the storm of the 6th April 1899.
- (6) The supply of sleepers from the Jalpaiguri forests to the Bengal-Duars Railway.
- (7) The same to the Cooch Behar extension of the Eastern Bengal State Railway from the Buxa forests.
- (8) The supply of sal poles to the general public from the Sonthal Parganas forests.
- (9) The utilization of the large amount of young teak trees blown down by the cyclone of 1897 in the Chittagong plantations.

The increased outturn of the year is due to the carrying out of the above operations which yielded :---

- 39,168 maunds representing 68,544 cubic feet solid.
 4,441 bags equalling 31,087 cubic feet solid of firewood.
- (3) 25,306 cubic feet stacked, giving 17,299 cubic feet solid.
- (4) & (5) 37,667 cubic feet, comprising the preparation of 15,069 M. G. sleepers.
- (6) 1,718 cubic feet (694 M. G. sleepers).
 (7) 19,885 cubic feet (7,542 M. G. sleepers).
 (8) 35,028 cubic feet (chiefly sal poles).
 (9) 25,000 cubic feet (2,030 teak logs).

In accordance with the orders of the Local Government conveyed in paragraph 5 of its resolution on the report for 1898-99 under Working Plans it is here stated :-

- (1) Sleepers were not hitherto given to the Cooch Behar line as trees were being supplied.
- (2) The Barun-Daltonganj line was not supplied, because that branch procured its sleepers elsewhere, and this Department had no forests capable of giving sleepers within a direct distance of 200 miles from Barun.
- (3) The Department readily disposed of the few sal timber-trees available under the provisions of the working plan for supply to the Bengal Duars extension from the Jalpaiguri forests at remunerative rates.

Bamboos.—The introduction of the supply to the general public from the Sonthal Parganas and the larger number of drift bamboos in Chittagong accounted for 555,563 of the total increase in the outturn of 567,109. Of the increase Sonthal Parganas contributed 532,881 and Chittagong 22,682. Usual operations were less in Palamau.

Other minor produce showed an increase of Rs. 4,279 owing to the departmental collection of India-rubber and the seed of the Phœnix rupicola in Kurseong, myrabolams in Singhbhum, and Strychnos Nux-vomica in Pari.

(2) REMOVAL OF PRODUCE BY PURCHASERS.

(a) Timber.

56. The comparison above shows 858,771 cubic feet more to have been removed than in 1898-99, for which the Sundarbans Removal of timber.

Removal of timber. and Singhbhum Divisions are mainly accountable, the excess in the former being 719,955 cubic feet, and in the latter 96,862 cubic feet. Darjeeling, Tista, and Jalpaiguri also show higher figures of 30,413, 12,612, and 12,189 cubic feet, while Kurseong, Sonthal Parganas, Buxa, and Puri are below those of the previous year—Kurseong by 11,738 cubic feet. These differences are said to be due in Sundarbans and in Singhbhum as stated under paragraph 53; in Darjeeling to the large demand for poles from the neighbouring tea concerns to rebuild coolie lines destroyed in September's storm; and in Tista to the great demand for tea-box planking and the large amount of drift brought down by September's floods. In Jalpaiguri no explanation has been given nor yet in Kurseong. The differences in the other divisions are only small.

(b) Fuel.

57. There has again been a large increase. Last year the removals exceeded Bemoval of fuel. Bemoval of fuel. Last year by 2,107,412 cubic feet; this year they are 2,763,547 cubic feet above those

The chief increment being, as then, in the Sundarbans, of the preceding year. where the general prosperity caused an excess of 2,260,624 cubic feet. In Tista, Jalpaiguri, Kurseong, Kodarma, and Singhbhum there were by no means small advances: 308,986; 222,807; 73,157; 39,104 and 10,862 cubic feet, mostly due to better markets, but Darjeeling and Buxa were respectively 63,783 and 53,892 cubic feet behind their previous figures, while Puri, Sonthal Parganas, and Chittagong also showed smaller removals, aggregating 35,247 cubic feet. In Tista 66,000 cubic feet of the increase was due to the enormous quantity of drift brought down by the unusually heavy floods of September 1899, while the demand for fuel for tea concerns on the eastern side is greatly increasing owing to the forests on their grants becoming exhausted; in Jalpaiguri no explanation has been given; in Kurseong the large amount of drift swelled the outturn; in Kodarma the requirements of mica-miners increased, and in Singhbhum more fuel was taken by the stations of Chaibassa and Chakardharpur. In Darjeeling the damage to transport roads was accountable for the falling off, and in Buxa the large order for firewood received last year from the Assam-Duars Tea Company was not repeated.

(c) Bamboos.

58. In the aggregate 467,520 bamboos less were exploited than in 1898-99. Most divisions improved, notably Chittagong and

Darjeeling, where, respectively, 150,571 and 134,337 more were removed : in the former owing to larger exports from the reserved forests, and in the latter to a rise in the mat-making trade and a larger demand for rebuilding the houses destroyed by the storm of September 1899. The successes of these divisions were, however, marred by far greater deficiencies in Angul, Sonthal Parganas, and Palamau. In Angul they amounted to 383,755, in Sonthal Parganas to 334,437, and in Palamau to 143,840, in the first and last, owing to deficient rains preventing floating, and in Sonthal Parganas to the substitution of departmental works.

(d) Minor Produce.

59. Omitting bamboos the receipts increased by Rs. 25,621, of which Removals of minor produce. Rs. 16,558 were owing to the imposition of a royalty

of one anna per maund on 264,922 maunds of sabai grass exported from Sahibganj—the protected forests of the Sonthal Parganas to Calcutta for the manufacture of paper The income from grazing fees and fodder grass was respectively Rs. 938 and Rs. 178 higher, and the net aggregate of the remaining products, including the sabai grass noted above, Rs. 24,505; better receipts from golpatta in the Sundarbans, from mica in Kodarma, and from stone-quarries in the Sonthal Parganas accounting for Rs. 4,725, Rs. 5,067, and Rs. 1,613, respectively. The receipts increased under all classes of produce of any moment except under *hantal* and cane, where they fell by Rs. 2,017 and Rs. 1,535, respectively. Thus the satisfactory improvement noticed last year has been more than maintained. No central depôt has yet been formed at Calcutta, the services of a native broker having been for the present employed instead—so far a cheaper arrangement.

The following statement compares the operations of the year with those of the previous year:---

DESCRIPTION OF	Reserved forests.		Protecte d forests.		Unclassed forests		Total.		Difference in 1899-1900.	
PBODUCE.	1898-99.	1899-1900.	1898-99.	1899-1900.	1898-99.	1899-1900.	1 8 98-9 9 .	1899-1900.	More.	Less.
1	2	3	4	в	6	7	8	9	10	11
	Re.	Bs.	Rs.	Rs.	Ba.	Rs.	Rs.	Rs.	Bs.	Rs.
Grazing	20.877	20,898	5,440	4,359	•••		24,317	25,255	938	••
Fodder grass	3,205	3,383			•••		3,205	3,383	178	•••
Babai grass	10,440	11,271	1,851	17,254	•••	***	12,391	28,525	16,234	
Golpata (Nipa	57.517	61,917	1,735	2,060			59,252	63,977	4,725	
fincticans)		- , - ,	•	-						
Hantal (Phænix)	51	243	8,387	6,178	•••		8,438	6,421		3,01
paludosa),	••		-,	-,						
TT	2,661	2,931	4.520	4,711			7,181	7.642	461	•••
11/ [*]	1.025	1.045	1,565	1.645	•••		2.590	2,690	100	
With a little state of the stat	8,740	13,489	2,000	2,318	***		10,740	15,807	5.067	
		3,377	15	15	6,772	7,167	10.427	10.559	132	
Thatching grass	3,640		15				58			
Myrabolams	***	•••	90	•••	•••	•••	240			24
Phœnix rupicola	240		***	/	•••		240	•••		27
seed. Kochila (Strych- nos Nuz-vomi- ca.)	•	75	•••	127	•••	• •••	•••	202	202	•61
India mabhan	205	1 [•••		295			20
	20	- т в	110	*** 172	•••		130	177	47	
0	3.871	2,738			1.682	1,280	6,553	4.018		1.53
Shalls /limes	1,813	1,588	1.81 1	1.638	• -		3,624	3,226	•••	39
		1,917	5,555	7,300	183		7.347	9,427	2,080	
Miscellaneous	1,609	1,917	0,000	7,300	100		1,091			
Total	1,16,004	1,24,875	\$1,047	47,777	8,637	8,657	1,55,688*	1,81,309†	30,164	4,54
DIFFEBENCE IN 1899-1900.	+ 8	,871	+ 1	6,730	+	80	+ 25	,621		***

Includes Rs. 982 estimated value of produce removed from Hill Tippers.
 t. Rs. 2,108 ditto ditto ditto.

(3.) FREE GRANTS OF FOREST-PRODUCE.

60. As will be seen from the statement in paragraph 53 above, there has been a satisfactory decline in the outturn under all classes :--

In timber, eliminating the abnormal quantities of 26,206 cubic feet used by the Angul Khedda party and 11,549 cubic feet given to the Political Officer, Sikkim, during the previous year, the free grants were in excess by 9,212 cubic feet. This amount includes 4,800 cubic feet, valued at Rs. 1,313, given to Mr. Keventer to construct his dairy buildings, 1,796 cubic feet to the Darjeeling District Road Cess Committee from the Darjeeling and Kurseong forests, 2,376 cubic feet in Buxa to induce the villagers to work for the Department, and 1,851 cubic feet for bridges in the Singhbhum district.

In fuel the gifts fell by 109,132 cubic feet entirely owing to no material being this year used by the Angul Kheddas, the stockade having been built in the Protected forests.

In minor produce they included 38,914 cubic feet of building stone given to Mr. Keventer, valued at Rs. 145.

(4). PRODUCE REMOVED BY RIGHT-HOLDERS AND UNDER PRIVILEGES.

61. These are practically the same as last year except as regards fuel and bamboos, of which the removals were 405,388 under privileges. cubic feet less and 192,400 in number more; the

to reduced estimates in the Singhbhum Division of 521,663 cubic feet and increased removals in Chittagong of 116,275, and the latter entirely to better supervision over the privilege-holders in the Chittagong Division. There was a decrease of Rs. 297 in grazing and an increase of Rs. 2,722 in other minor products, the latter in the Singhbhum Division consequent on more correct estimates.

CHAPTER IV.—FINANCIAL RESULTS.

62. The financial results of the year, as shown by Form No. 61, Financial results. were-

				Rs.		
Receipts	•••	•••	•••	11,61,175		
Charges	•••	•••	•••	5 ,55 ,464		
	8	Surplus	•••	6,05,711		

and compare with those of the preceding five years as follows:-

]	Financial year.	•	Forest year.			
	Receipts.	Charges.	Surplus.	Receipts.	Charges.	Surplus.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1894-95	 7,95,673	3,98,6 01	3,97 ,0 72	8,25,669	4,09,552	4.16.117	
1895-96	 9,18,709	4,66,068	4,52,641	9,35,680	4.75.601	4.60.079	
1896-97	 13,70,849	6,90,042	6,80,807	13,45,982	6,96,378	6,49,604	
1897-98	 11,89,285	6,53,437	5,35,848	12.20.617	6.55,251	5,65,366	
1898-99	 9,72,313	4,86,319	4,85,994	10.07.254	4,88,694	5,20,560	
1899-1900	 11,38,912	5,45,205	5,93,707	11,61,175	5,55,464	6,05,711	

The gross receipts and charges, as well as the surplus, are far in excess of the previous years', and, eliminating the exceptional years 1896-98, are again the highest on record since the formation of the Department.

The gross revenue was greater than that of the previous year by Rs. 1,53,921 and the surplus by Rs. 85,151; while the expenditure rose by Rs. 68,770. These better results are mostly due to improved removals, both by purchasers and by Government, of timber, firewood, minor products and bamboos, mainly from the Sundarbans and the Sonthal Parganas, full explanation of which has already been given in Chapter III.

The proportion of surplus to gross revenue was 52.16 per cent., as compared with 51.68 per cent. in the previous year and 45.06 per cent. in 1897.98. The ratio of expenditure to gross revenue was 47.84 per cent. and the net revenue per square mile Rs. 44-9-2, against 48.38 per cent. and Rs. 38 in 1898-99.

The value, at half purchasers' rates-the rates fixed by Governmentof the produce granted free or removed at reduced rates, is given in Appendix B; the loss sustained by Government amounted to Rs. 2,55,164.

The following table shows the surplus obtained since 1873-74 by decades :-

				Rs.
1873-74 to 1882-83		•••	•••	13,79,465
1883-84 to 1892-93	•••	• • •		29, 05 ,556
1893-94 to date (7 years)	•••	•••		35,91,411

These results have not been attained without a large amount of over-work, while the time of the Conservator has been spent entirely on the development of the Provincial Department to the exclusion of Imperial considerations in the furtherance of science. To thoroughly understand the importance of the year's results financially, it is necessary to note :---

				Rs.
Cash su	rplus	•••	•••	6,05,711
Value o	f increased stock in hand			53,151
Ditto	ditto outstandings			3, 64 5
Ditto	free grants and reduced rates	•••	•••	2,55,164
		Total		9,17,671

	63.	The	revenue	from	the	different	sources
vas	:						
			T		1		

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				FOREST	YEAR.	Increase.	Decrease,	
s	OURC	E5.		1899-1900.	1898-99.	Increase.	Decrease,	
	1			2	3	4	б	
0				Rs.	Rs.	Rs.	Rs.	
Timber				 5,46,029	4,71,574	74,455		
Fuel				 3,18,767	2,74,626	44,141		
Bamboos				 58,108	51,873	6,735		
Grazing and f	odder			 25,500	23,753	1,747		
Minor produce				 1,51,810	1,25,802	26,008		
Other items				 14,249	14,185	64		
Drift and cont	iscate	ed pro	oduce	 9,984	10,177		193	
Miscellaneous				 86,728	35,764	964		
		ŋ	fotal	 11,61,175	10,07,254	1,53,921		

Every source except drift shows a considerable increase, the explanation of which will be understood from the remarks already given in Chapter III.

Comparison	of	expenditure.
	-	

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64. The expenditure was:-

	FOREST	YEAR.		
BUDGET HEADS.	1899-1900.	1898-99.	Increase.	Decrease
1	3	3	4	5
A Conservancy and Works.	-Rs.	Rs.	Rs.	Rs.
ITimber, etc., by Government agency	12 0.02	14,773	27,188	
II Ditto by purchasers	58,091	56,346	1,745	
IIIDrift and waif wood, etc	. 2,237	1,908	329	
VILive and dead stock	. 20,313	13,835	6,478	
VIICommunications and buildings	. 53,593	67,767		4,174
VIIIOrganization, etc	56,445	35,529	20,916	
IXMiscellaneous	15,095	5,803	9,292	
Total A Conservancy and Works	9,47,785	1,85,961	61,774	
- 5 e - 6		_		
B.—Establishments.				
I.—Salaries	2,49,082	2,44,410	4,672	•••••
IITravelling allowances	43,253	42,157	1,096	
111Contingoncies	15,394	14,166	1,228	
Total BEstablishments	3,07,729	3,00,733	6,996	•••••
GRAND TOTAL EXPENDITURE	5,55,464	4,86,694	68,770	

An increase of revenue naturally causes an increase of expenditure under heads AI to VI. Thus only Rs. 35,740 were spent in excess of last year's figures on the production of revenue, and on the works mentioned in paragraph 55, of which Rs. 10,973 under AVI were consequent on the part cost of the new steam-launch, the *Helen Grey*, for the Chittagong Division. Communications and buildings showed a smaller cost by Rs. 4,174 owing to all the works intended not being carried out, while upon organization, improvement, &c., of the forests, a sum of Rs. 20,916 more was spent, chiefly (Rs. 12,113) on surveys in the Singhbhum Division. On miscellaneous items, there was also a larger outlay of Rs. 9,292, mainly occasioned by the Department having to pay Rs. 8,294—costs in the Baikantpur or Jalpaiguri Division drift timber case which was finally decided upon appeal by Her Majesty's Privy Council on the 6th February 1897.

Under B-Establishments-the additional expenditure of Rs. 6,996 was mainly in salaries, while there was also naturally a small rise in the cost of allowances for travelling and contingencies.

Financial position of divisions. 65. The financial position of each division was:-

DIVISION.		Rece	ceipts. Charges		rges. Surplus.		Deficit.		RESULTS OF THE YEAR 1899-1900, COM- PARED WITH THOSE OF 1898-99.		
		1899-1900.	1898-99.	1899-1900.	1898-99.	1899-1900.	1898-99.	1899-1900.	1898-99,	In favour of the year.	Against the year.
1		2	3	4	5	6	7	8	9	10	11
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs,	Rs.	Rs.	Rs.
Direction Darjeeling		3,519 78,087 30,205	10,442 81,566 23,716	44,466 71,018 33,881	39,969 61,928 25,174	7,069	19,638	40,947	29,527		11,420
Lista Lurseong Lalpaiguri		44,360 56,780	40,735	32,288 34,378	33,622 24,131	12,072 22,402	7,113 30,427	3,676	1,459	4,959	2,218
Bura Sonthal Parganas Hazaribagh		28,826 49,786 19,055	17,553 22,578 4,930	33,683 25,920 3,932	23,315 23,670 661	23,866 15,123	4.269	4,857	5,863 1,092	1,006. 24,958 10,854	
alamau inghbhum		2,374 67,729 5,279	3,362 47,567 4,002	12,480 74,029 13,628	12,657 48,010 15,019			10,106 6,300 8,349	9,295 443 11,017		81
Puri Sundarbans		31,371 6,34,644 1,09,160	25,841 5,69,313 1,01,192	25,324 95,401 55,036	26,718 1,06,217 45,603	6,047 5,39,243 54,124	4,63,096		877	6,924 76,147	
Chittagong Total		1,09,160	10,07,254	5,55,464	4,86,694	6,79,946	5,80,132	74,235	59,572	1,27,516	1,463
Net surplus						6,05,711	5,20,560			85,151	

NOTE .- Last year Hazaribagh was included in Direction.

The statement is again disappointing and it is hoped that, during the current year, those Divisional Officers especially, who are in charge of divisions that have worked at a loss will, for the future, act up to the remarks in this connection made by His Honour the Lieutenant-Governor of the Province and by the Government of India on the statement of the previous year. Sundarbans and Sonthal Parganas have done remarkably well and considerable improvement has been made in Puri, the figures for all three divisions being the highest on In the Sundarbans the gross receipts amounted to the unprecedented record. sum of Rs. 6,34,644, while the surplus was Rs. 76,147 above that of 1898-99a record year. Great credit is due to the officers in charge for this result. The results in the Darjeeling division are not encouraging though they have been influenced to the extent of Rs. 11,241 in sales of timber and fuel owing to the interruptions caused by the storm of September 1899, while there is Rs. 2,109 worth of stock more on hand. In Singhbhum the deficit of Rs. 6,300 would have been a surplus of Rs. 5,813, had not so large a sum as Rs. 12,113 been spent on 'capital account,' viz., surveys; there was a satisfactory in-crease of Rs. 20,945 under sales of timber. Tista also would have been to the good by some Rs. 24,000 had not the breaks in the Tista Valley road prevented the disposal of the 15,069 sleepers prepared. The expenditure in Jalpaiguri included the unusual payment of Rs. 8,294 above mentioned, otherwise the surplus would have risen to Rs. 30,696. That Buxa did not convert its deficit into a surplus is entirely owing to the difficulty of obtaining reliable workmen in a climate with such a bad reputation; this desired result is, however, confidently expected next year. Improvement will also be made in Angul, In Chittagong the position has been maintained, while the gross receipts are the highest for the past 15 years.

It is noteworthy that the figures for the new Sonthal Parganas Division under the management of Mr. French altogether dispel the fears of the Secretary of State, and more than justify the estimates made by the Conservator on the occasion of his application for an additional officer for this charge which was so long denied him.

The following is the order in which the divisions stand :--

		Position in						
		G	897-98.	1898-99.	1899-1900.			
Direction			13*	13•	14*			
Darjeeling			9*	4	7			
Tista			10*	8#	9 #			
Kurseong		•••	6	5	6			
Jalpaiguri		•••	4	3	4			
Buxa			8	10*	10*			
Sonthal Pargan	as		7	8*	3			
Hazaribagh (D	irection)			•••	5			
Palamau	•••		12*	11*	13*			
Singhbhum	***		2	6*	11*			
Angul	•••		11#	12*	12*			
Pari	•••	•••	6	-7*				
Sundarbans			1	i	ĩ			
Chittagong		•••	3	2	2			

Divisions marked * showed a deficit.

In conformity with the orders conveyed in Government letter No. 402. dated the 23rd January 1900, it is remarked that no individual officers have as yet shown much special aptitude for commercial undertakings; that the Department has a commercial as well as a scientific side is, however, the Conservator thinks, now recognised. Most officers have willingly assisted in opening out new markets for our products, and it is confidently hoped that a certain zeal in this direction has now been aroused, which will bear fruit in the future.

The difference in the value of timber and 66. Value of live and dead stock other produce and of live and dead stock at the (Forms Nos. 60A and 60B). close of the year was:---

				•
			Timber, etc.	Live and dead stock.
			Rs.	Rs.
Value on 1st July 1899	•••	•••	16,870	3,52,547
" 30th June 1900	•••	•••	42,297	3,80,271
Diffe	erence		+ 25,427	+ 27,724
Net	difference	in favou	r of the year	53,151

The increased value of timber, &c., on hand is mainly due to the inability to dispose of the sleepers prepared in the Tista Division, and to the stock of myrabolams and Phœnix rupicola seeds remaining unsold; that of dead stock is owing to the steam launch for the Chittagong Division and the new residences at Dumka and Chaibassa.

67. The outstandings on account of revenue at the .close of the year were Rs. 18,520 as compared with Rs. 14,875 of the previous year. Of this sum Rs. 5,121 were due in Darjeeling from the Commissariat and Public Outstandings on s revenue (Form No. 63). account of Works Departments, Rs. 2,498 in Hazaribagh for arrears of rent of mica mines, and Rs. 8,100 in Puri, representing grazing fees uncollected.

The outstandings in the Darjeeling Division should have been recovered

No. 64).

during the year. 68. The outstandings on account of contractors and disbursers at the close of the year were Rs. 10,506 as compared with Rs. 7,001 at its commencement. The large Outstandings on account of contractors and disbursers (Form sum due in the Darjeeling Division should have been adjusted, at least to some extent.

69. Net results of the year.

The value of the year's transactions is :---

						Rs.
Cash surplus	•••	•••	•••	•••	•••	6,05,711
Add-						
Increased o	utstanding re	venue (For	m No. 63)	***	•••	3,645
, , V	alue of stock	(Form Nos	. 60A and	6 0B)	•••	59,151
						6,62,507
Deduct-						0,02,001
Revenue	received for	produce uns	upplied	•••	•••	7,709
		Total in f	avour of th		•	A 54 709
				o your	•••	6,54,798

CHAPTER'V.-FOREST ADMINISTRATION.

70. The charge of the Circle was held by Officers in charge. Mr. A. E. Wild, throughout the year.

The usual list of divisional charges is not given this year; it is trusted its omission will be approved.

The office of the Personal Assistant to the Conservator was filled by Mr. F. Trafford, Officiating Deputy Conservator, in addition to his charge of the Direction Division.

Mr. H. H. Haines, F.C.H., Deputy Conservator, was placed on special duty, in connection with the working-plan for the forests of the Singhbhum Division, from the 9th January till the 26th March 1900, when he resumed charge of that Division.

71. Officers were attached to the more important Divisions for general duty, viz., to the Darjeeling Division one, to Singhbhum three, and to Sundarbans (for a part Officers attached to Divisions for general duty. of the year) two.

In addition the following officers were employed as below :---

Mr. E. G. Chester, Deputy Conservator, continued to officiate as Conservator of the Assam Circle, up to the 28rd December 1899.
F. B. Manson, Deputy Conservator, retained his post as Officiating Conservator of the Tenasserim Circle, throughout the year. He was also on special duty for a time, in connection with the Paris Exhibition.
C. G. D. Fordyce, Deputy Conservator, continued to officiate as Conservator of the Central Circle, North-Western Provinces and Oudh, up to the 19th October 1899.
R. L. Heinig, Deputy Conservator, was in charge of the Andamans Forests.
C. G. Rogers, F.C.H., Deputy Conservator, was on special duty under the Government of India, from 28th June to 5th October 1899, to complete his work on Forest Engineering.
E. P. Stebbing, Officiating Deputy Conservator, was also on special duty under the Government of India, from 6th November 1899 to 31st January 1900, in connection with the Paris Exhibition.

Exhibition

The changes in the different charges were far too many. Out 72. of thirteen divisions, only four remained undis-Changes in charges. turbed.

Five officers of the controlling staff and three Extra Assistant 73. Conservators were absent on leave during portions Officers on leave.

Officers on leave. of the year. In consequence the Department lost the services of one Imperial officer for the whole year and of a second for $6\frac{1}{2}$ months, while a Provincial officer was away continuously for 9 months.

74. Since the close of the year, three new appointments have been sanctioned by Her Majesty's Secretary of State, Additions to the Imperial staff. Additions to the Imperial staff. viz., one Deputy Conservator, 1st and 3rd grades respectively, and one Assistant Conservator, 2nd grade.

75. Mr. R. Quinnell, Extra Assistant Conservator, who had been absent from duty since the 15th of June 1897, resigned Resignation of officers. the service from the 24th June 1900.

F

Examination of officers.

Mr. T. H. Monteath, Assistant Conservator-Forest Law, Land Rovenue and Procedure and Accounts.

76. Officers passed departmental examinations

- E. R. Stevens, Assistant Conservator-Land Revenue, Procedure and Accounts and Hindustani, Lower and Higher Standards.
 - , P. J. Draper, Forest Ranger-Hindustani by the Higher Standard.

Babu Guru Das Chatterjee, Extra Assistant Conservator-Land Revenue.

as follows :-

- Lalit Mohun Sen, Forest Ranger-Forest Law and Procedure and Accounts (the latter with honours).
- Ashutosh Chuckerbutty, Forest Ranger-Land Revenue and Procedure and Accounts.

77. Divisional officers were away from head-quarters on inspection duty for a period averaging 197 days. Usual tours were Tours of inspection. made, and there is no remissness in this respect

to notice.

The Conservator visited the Darjeeling, Kurseong, Jalpaiguri, Sonthal Parganas and Sundarbans Divisions, as well as the forests of the Hazaribagh district, and inspected the offices of those Divisions (except Sonthal Parganas), being absent from head-quarters for 167 days.

The non-receipt of orders on the proposed increase of the office estab-78.

lishment is keenly felt. On the whole, the clerks Office establishment. performed their duties satisfactorily. Commendatory remarks have been entered in the confidential reports of those to whom praise is due.

The subordinate forest establishment has, generally speaking, worked **79.**

to the satisfaction of the divisional officers concern-Efficiency of the subordinate ed, though in some cases there has been a want of forest staff. zeal and energy; the usual annual record has been

made in the case of each subordinate. The case of the Chittagong staff implicated in the frauds perpetrated by the

Head Clerk, Soshi Kumar Sen, has been reconsidered by Government and. the punishment reduced in some instances.

One Forester and 14 guards were dismissed, the former for theft of Govern-ment money from the S. S. "Swan" in the Sundarbans Division.

One Forest Ranger (Babu Harigopal De Biswas), 3 Foresters and 7 guards resigned.

Forester Ramjan Ali in Palamau was unsuccessfully prosecuted under sections 161 and 384 of the Indian Penal Code for accepting illegal gratification.

An office peon in Singhbhum was sentenced to four months' rigorous imprisonment for theft of Government money.

Moharrir Gokul Singh, Temporary establishment, in charge of the Darjeeling Fuel Depôt, was sentenced to four years' rigorous imprisonment for embezzlement, the sentence being, however, reduced to 18 months on appeal; his peon, charged with aiding and abetting, was sentenced to one year's imprisonment, but was acquitted on appeal. The moharrir has now taken his case to the High Court.

A villager, named Joseph, was prosecuted for personating a forest guard in Singhbhum and punished with four years' rigorous imprisonment for extortion under that guise.

The health of the establishment was not satisfactory, though there 80.

were fewer deaths than in the previous year. Six guards—one in Tista, four in Kurseong, and Health of establishment. one in Jalpaiguri-and one forester-Babu Kisory Mohan Dass, in Chittagong

-died. Probationer Rai Mohan Chuckerbutty, referred to in paragraph 91 81.

Forest School men.

of the last report, passed out of the Dehra-Dun Forest School with a Ranger's certificate, in April

1900, and one student, Narayan Chandra Banerjee, was sent to the school on a stipend. One Government student, Deputy Ranger Priya Nath Sirkar, also entered the school on 6th April 1900. Rules regarding the grant of stipends were passed by Government-vide, Notification dated 30th July 1900.

GENERAL REMARKS.

82. The District of Darjeeling was visited by a storm of unprecedented violence on the 24th September 1899, which Storms. culminated on the early morning of the 25th with

a tremendous downpour causing enormous damage, chiefly in the form of landslips, and also serious loss of life. The storm has been separately reported on by a Committee which sat in Darjeeling under the orders of Government shortly after the occurrence, whose meetings were attended by the Conservator; it was the subject of special notice in all the newspapers at the time. It may be interesting to place on record in the annals of the Forest Department the abnormal rainfall as registered by the Conservator :--

Date.	Time of day.	Gauge reading.	Amount of fall.
23r d	8 л.м.	111.39	
24th	{ 10-45 A.M. 11-45 A.M. 8 P.M.	120°31 121°04	8·92 0·73
		127.30	6.26
2 5th	8 A.M.	140 76	13.46
			29 37

The storm ceased about 5 A.M. on the 25th. Thus during the last nine hours there was a fall of 13.46 inches.

The damage done to the forests was considerable, but markedly less than in the unwooded areas; it was confined mainly to the forests around Darjeeling, and the chief disaster was a most formidable landslip in the Setikhola jhora, which has subsequently extended up to the top of the Senchal hill. In the Tista river and its tributaries, the Rungnu and the Bara Rangit, the excessive rain caused roaring torrents, which brought down large deposits of silt, often 20 to 40 feet deep, and destroyed or entirely washed away low-lying strips of forest on their immediate banks, while the beds of most streams were much scoured out and widened. Even so low down as the Jalpaiguri Division, a bed of silt was formed in the Apalchand Forest. It is estimated that 463 acres of forest in the Darjeeling Division, and some 450 out of 600 acres in the acres of forest in the Darjeeling Division, and some 450 out of 600 acres in the bed of the Balasun river in the Kurseong Division have been lost, but it is satisfactory to be able to state that the Setikhola and the Runguu slips are the only ones likely to extend. These heavy floods brought down an un-precedented quantity of drift-wood, notably in the Tista and the several rivers in the Terai, the bulk of which lodged in that portion of the Tista over which the Rani of Bykantpur has the right of *jalkar*, though a very large amount stranded in the Terai, the revenue from which was a slight set off against the damage done. The damage to roads and paths was, of course, extensive in the three hill divisions of Darjeeling, Kurseong and Tista. Allusion has already been made to the former in paragraph 19, while in Kurseong and Tista the export of produce by the Tista Valley Road has been entirely prevented. Another storm, accompanied by a severe fall of hail and entirely prevented. Another storm, accompanied by a severe fall of hail and strong wind, occurred on the 9th April 1900, and extended into the Jalpaiguri district. Not much harm was done in the forests around Darjeeling, but as the storm swept down the Mangwa ridge into the Tista Valley, it uprooted or snapped off 352 trees of 4 to 5 feet in girth, of which 157 were sal.

83. Khedda operations on a small scale were undertaken by the Civil

Department in the forests of the Jalpaiguri, Buxa Khedda operations. and Angul Divisions. Some six or seven elephants were caught in the two former, but none in the latter.

Twenty-nine men were killed by tigers in the Sundarbans, whilst the 84.

Tigers.

85.

number of tigers killed was 13, including three cubs, for which a total sum of Rs. 410 was paid in rewards. In the previous year 28 persons and 12 tigers were killed.

By Notification No. 843T.R., dated the 13th October 1899, the killing of rhinoceros in the reserved forests of the

Rhinoceros. Darjeeling and Jalpaiguri districts was made penal. As requested by Government, it is reported that no further measures for the preservation of this animal are at present called for.

86. Forest products were exhibited, as heretofore, at the *méla* held at Kalimpong *méla*. Kalimpong *méla*.

prize for the best collection of minor economic products made by subordinates or others at the next mela.

87. Specimens of forest products, photographs, &c., were collected in the Paris Exhibition of 1900. Paris Exhibition of 1900. Inspector-General of Forests for transmission to

the Exhibition, the services of Mr. Stebbing, Officiating Deputy Conservator of Forests, being lent for the space of two and-a-half months for the purpose of assisting in the cataloguing and despatch. No award was given to Bengal specially, but the Indian Forest Department obtained the Grand Prix for collective exhibit in Class 54—Forest Products.

88. The Darjeeling Divisional Officer had, as usual, the charge of the Birch Hill Park, the Lebong Forest, and several

Work outside the Department. small plots within the station of Darjeeling, while as a working member of the Darjeeling Improvement Committee his services were in great request to carry out works of improvement, &c. The business, however, seriously interfered with the efficient management of his Division, and was, in consequence, handed over on the 20th May to the Personal Assistant to the Conservator.

89. A steam-launch, the *Helen Grey*, of 17.3 tons, with a length of $55\frac{1}{2}$ feet and a breadth of $10\frac{1}{2}$ feet, drawing forward

Steam-launch. 2' 9'' and aft 4' 8'', was completed by the Royal Indian Marine Department at the Kidderpore Docks in November 1899 at a total cost of Rs. 16,179 for the use of the Chittagong Divisional Officer.

DARJEELING;

The 27th October 1900.

A. E. WILD,

Conservator of Forests, Bengal.

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FORM No. 46.

FOREST DEPARTMENT, BENGAL.

Area of Reserved Forests, 1899-1900.

DIVISION		RANGE.	Civil district.	NAME OF FOREST.	AREA C JULY		ADDED DURING THE YEAR.	EXCLUDED OR TRANS- FERRED TO OTHER HEADS.	AREA O JUNE		No. and date of notification of addition or	REMARKS.
					Acres.	Equiva- lent in square miles.	Acres.	Acres.	Acres.	Equiva- lent in square miles.	transfer, etc.	NEMARKU.
3	1	2	3	4	5	6	7	8	9	10	11	13
Darjeeling					73,498	114			73,498	114		409 acres made over to the charge of other Departments, of which one acre was transfer-
Tista			Darjeel-{ ing.		135,316	212			135,316	212		red during the year. 300 acres in charge of Civil Department. 850 acres leased for coal mining.
Kurseong Jalpaiguri Buxa Direction			J Jalpaiguri Hazaribagh Palamau		70,081 116,865 197,659 36,392	109 183 309 57			70,081 116,865 197,659 36,392	109 183 309 57		Silis acres in charge of Civil Department. 44 acres leased to tea estates.
Palamau Singhbhum		·····	Singhbhum Ranchi	}	120,389 468,842	188 733 251			120,389 468,842	188 733	•••••	Includes 160 acres made over to Babu Jsgomohan Singh (vids Govern- ment order No. 1090, dated 14th March 1898).
Angul Puri Sun darb ans			Angul Puri Khulna Chittagong Hill Tracts.	1	160,644 70,713 1,338,880	251 110 2,092			160,644 70,713 1,338,880	251 110 2,092		Land Settlement Report of 1897-98 recently is- sued shows 72,546 acres
Chittagong		•	Chittagong Collectorate. Noakhali	}	974,622	1,523			974,622	1,523		or a larger area of 1,833 acres. Reason for dif- ference under enquiry.
				Total	3,763,901	5,881			3,763,901	5,881		
				TOTAL FOR 1898-99	3,763,378	5,880	523		3,763,901	5,881		

FORM No. 46A.

FOREST DEPARTMENT, BENGAL.

Area of Protected Forests, 1899-1900.

	RANGE.	Civil district.	NAME OF FOREST.	AREA O JULY		ADDED DURING THE YEAR.	EXCLUDED OR TRANS- FERRED TO OTHER HEADS.	AREA O JUNE		No. and date of notification	REMARKS.
DIVISION.		- *		Acres.	Equiva- lent in square miles.	Acres.	Acres.	Acres.	Equiva- lent in square miles.	of addition or transfer, etc.	
1	2	3	4	5	6	7	8	9	10	11	19
Sonthal Pargauas.		Sonthal Par- ganas.		278,400	435			278,400	\$35		Area estimated. Saoria tract, over 113 square miles, ordered to be transferred to the man agement of the Deputy Commissioner not yet
Direction Palamau	=	Hazaribagh Palamau		20,780 52,032	33 81		=	20,780 52,032	33 81		made over. Roughly estimated. Area of the blocks the department will prob-
		Ranchi									ably only retain. Area unknown.
Singh- bhum.		Singhbhum Manbhum		320,000 9,788	500 15			329,788	515		Area estimated.
Angul	•••	Angul		242,032	378			242,032	378		Under the management of the Deputy Commis
Puri		Puri		186,452	291			186,452	291		sioner. Land Sattlement Report of 1897-98 recently issued shows 238,177 acres, or a larger area of 51,721 acres. Reason for dif
Sundar- bans.		24-Parganas	Baruipur Basirhat		2,083		{ 60,132 14,970 15,097}	1,242,425	1,942	3433 For., dated 20th September 1899, 3596 For., dated 3rd October 1899, 279 For. to 291 For., dated 16th Janu- ary 1900, 1272 T. R., dated 5th July 1900.	ference under enquiry. Retransferred to the jurisdiction of the Sun darbans Commissioner for leasing out.
			Total	2,442,108	3,816		90,199	2,351,909	3,675	2412 For., dated 16th July 1900.	8
			TOTAL FOR 1898-99	2,214,478	3,460	242,734	15,104	2,442,108	3,816		

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FORM NO. 46B.

FOREST DEPARTMENT, BENGAL.

Area of Unclassed Forests, 1899-1900.

-		Civil district.	NAME OF FOREST.	Arra July	on 181 1899.	ADDBD DURING THB YEAB.	BACLUDED OR TEANS- FERRED TO OTHEE HEADS.	ABRA OI JUNB	N 907H 1900.	No. and date of notification	REMARKS.
Division.	RANGE.			Acres.	Equiva- lent in square miles.	Acres.	∆cres.	Acres.	Equiva- lent in square miles.	of addition or transfer, &c.	
1	2	3	4	5	6	7	8	9	10	11	i2
Chittagong	*1*	Chittagong Bill Tracts.		2,581,420	4,033	***		2,581,420	4,033		
			Total	2,581,420	4,033	 	••••	2,591,480	4,033		
			TOTAL POB 1895-99	2,581,783	4,034		363	2,581,420	4,033		

FORM No. 47.

FOREST DEPARTMENT, BENGAL.

Statement showing the Progress made in, and the Expenditure incurred on, Forest Sittlements during 1899-1900.

			ÅBBA	8 PINAL	LY SBITI	ED DUB	ING THE	YFAR.	ABEA	S UNDER	GOING SET	TLEMBN	r.		
Name of Forest Division.	Name of Civil District or territory.	Area already settled at com- mence- ment	No. and date of Govern- ment order according	Name of Forest	Area in square	ture red d the on		Entire cost per square mile of areas finally	At commencen of the year.		Taken i durin yee	g the	incu durir year o under	diture arred ag the on areas rgoing ment.	Remarks.
		of the year.	final sanction to the settle- ment.	settled.	miles.	In Forest ac- counts.	In other sc- counts.	settled during the year.	Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In Forest sc- counts,	In other ac- counts.	
.1	8	8	4	5	6	7	8	9	10	11	12	13	14	15	16
		8q. m.				Re.	Re.	Rs.					Re.	Rs.	
Darjeeling		114							******						
Tista		212							******			•••	•••		: i
Lurseong		109	•						***						
Jalpaiguri		183							***						
Buxa		809							444	•••		•••			
Direction		57							••••••						
Palaman		188	•••		1				•••••	·	•••				
Singh- bhum.		733				•••			•••••		•••			•••	
Angul		251	•••				•••				•••				
Puri 🔐		110	•••	•••			•				•••	•••	•••		
Sundarbans	•••	8,092				•••			*****						
						÷		ſ	1. Southern Sita- kund. 2. Deang	88	•••]
		1							3. Jaldi 4. Patia and South	75 90	•••	•••		•••	1
									Rangunia. 5. Raojan	60					1
									6. Chakuria Bun- darbans.	30	 				
hittagong	Chittagong Collector- ate.	1,523						.,,	7. Harbang and Chunati jun- gles.	3 9					Notification 1 449For., da 23rd Janu 1844, under s
					1				8. Ringbhang 9. Gorjania Khan-	12 102					tion 4.
								11	takhali. 10. Teknaí	272				1	
								l	11. Nal Sundar- bans.	70					j
	Total	5,851			 					842					
												¦			
1	Total for 1898 99.	5,881	•••						*****	849					

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FORM No. 48.

FOREST DEPARTMENT, BENGAL.

Record of Demarcation and Maintenance of Boundaries, 1899-1900.

DIVISI	10.1		Length of boundaries artificially	Length of previously existing	Length of previously existing	Total length of artificially marked	Length of boundaries still to be demarcated	Length of natural boundaries not	Total length of boundaries	EXPENDI DEMAR DURING 1	CATION	REMARKS.
21110			demarcated during the year.	boundaries repaired.	boundaries not repaired.	boundaries at the close of the year.	at the close of the year.	requiring artificial marks.	at the close of the year.	On new work.	On re- pairs,	
1			2	3	4	5	6	7	8	9	10	11
	_	1	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Rs.	Rs.	
8).					RES	SERVED FOR	ESTS.					
Darjeeling				109	47	156(a)	***	74	230		473	(a) Erreneously shown as 154 miles in last return.
Tista Kurseong				169 109	7(b)	176 109		71 132	247 241		776 442	(b) Maintained by civil authorities.
Jalpaiguri Buxa			1	93 106	15	109 106		106 149	$215 \\ 255$	9	827 1,012	
Direction				53		53		6	59		111	1.00
Palsman Singhbhum				153 705	6	159 707		81 120	240 828	23	47 1,812	4 miles transferred from column 6 to
Angul Puri				272 223	4 6	276 229		16 3	298 232		969 783	column 7 as not requiring demarca- tion.
Sundarbans				9		9		230	239		72	0. 6
Chittagong				142	37	179		472	651		1,906	
т	lotal	•••	3	2,143	122	2,268	1	1,460	3,729	31	9,660	
					PR	OTECTED FO	REST.					
Sonthal Parg	anas											Boundaries undefined.
Direction		•••		296		296			347			Ditto ditto.
Palamau		***		200		200		01	011			
Singhbhum			39	546	175	760	70		830		17	
Angul						 						Ditto ditto.
Puri Sundarbans						20		260	280			Ditto ditto. Artificial boundaries are demarcated
Suluareans					20	20		200	200			and maintained under the orders and supervision of the Commissioner in the Sundartans by the lesses of the adjacent lots of waste lands in accord ance with the terms of their leases.
т	Total		39	842	195	1,076	70	311	1,457		17	
GRAND TO	TAL		42	2,985	317	3,344	71	1,771	5,186	31	9,677	
TOTAL FOR	1898-	66	667	2,257	376	3,300	116	1,768	5,184	304	8,686	1

N.B.-Boundaries include, besides the outer perimeter, the limits of enclosures of private or other lands within the forests, but not the limits of sub-divisions, such as blocks, compartments, coupes.

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(40)

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FORM

FOREST DEPART

Statement of Forest areas surveyed and under survey

										AREA	S SURV	EYEDA	ND UN	DER SI	JRVEY	DURIN	G THI
		SPECI	AL SURVI INDIA I	EYS-MA DEPARTM	PS ON 4" LENT OR	SCALE O	E OVER, SURVEY	BY SUR BRANCH	VEY OF		ORDIN	ARY, IN	CLUDED	IN DIST	RICT SUI	IVEYS.	
DIVI	NOT		With i	nterior o	letails.		Bour	ndary sur	veys.		With	interior	details.		Boun	dary sur	veys.
2111			letails of g stock.	of gr	t details owing ck.	Total cost.	Previ-	Of the year.	Total cost.		etails of g stock.	of gr	t details owing ck.	Total cost.	Previ-	Of the year.	Total cost.
		Previ- ous.	Of the year.	Previ- ous.	Of the year.	0050	ous.	Jear.	cost.	Previ- ous.	Of the year.	Previ- ous,	Of the year	0050.	ous.	year.	CUSI.
1		2	8	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		Sq. M	Sq. M.	Sq. м.	Sq. M.	Rs.	Sq. M.	Sq. M.	Rs.	Sq. M.	Sq. M.	Sq. M.	Sq. м.	Rs.	Sq. м.	Sq. M. RES	Rs. ERVE
Darjeeling	100			100													
Tista		 															
Kurseong Jalpaiguri		 		183		(6)	5										
Buxa		 		309	}	57,663	٤									***	
Direction Palamau		 															
Singhbhum		 			185		532*		3,233								
Angul Puri Sundarbans Chittagong		 		251† 		(ø) 				=		2,092		 (e) 	110 <i>(f</i>)		(e)
Total Rese	rved	 		743	185	57,663	532		3,233			2,092			110		
																PROT	ECTEI
Sonthal Parg Hazaribagh	anas	 															
Palamau	•••	 															
Singhbhum Angul	:::	 						=	::				:		::	::	:::
Puri		 													291(f)		(e)
Sundarbans		 										1,942 (j)		(e)			
Total Pro												1,942			291		
																UNCL	ASSEI
Ohittagong		 															
GRAND TO	TAL	 		743	185	57,663	532		3,233			4,034			401		
	898-99	 		713		57,663	532		3,233			4,175			401		***

• Linear † Of this area 215

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No. 49.

MENT, BENGAL.

during the year 1899-1900.

			D COMPAS		ER SURVEY	8					COST.	1	
	With i	nterior det				dary surve	eys.	Areas re- maining	Total for- est area				Deven
	ch or er.	Uno 4-ju	ler nch.	Tatal	Beaul	Of the	Tetal	to be taken under survey.	at end of the year, as per Form No. 46.	Dent	0101-	Entire cost of	REMARKS.
Previ-	Of the year.	Previ-	Of the year.	Total cost.	Previ- ous.	year.	Total cost.		1.01 101	Previ- ous.	Of the year.	all sur- veys to end of the year.	
18	- 19	20	21	22	23	24	25	26	27	28	29	30	. 31
Sq. M. ORESTS	Sq. м.	Sq. м.	Sq. M.	Rs.	Sq. M.	Sq. M.	Rs.	Sq. м.	Sq. м.	Rs.	Rs.	Rs.	
					 188	12(a) 	1,877 225	114 212 109 57 188	114 212 109 183 309 57 188	 } 57,663 	1,877 	1,877 57,663 225	 (a) Surveyed mainly in 1898-99, but not shown; completed during 1899-1900. (b) Cost calculated at Rs. 129 per square mile as given in 1m spector-General co Forest Administra- tion in British India
		-					* 	548(c)	733	3,233	(d) 12,313	15,546	for 1801-92. (c) Under survey by the Imperial Forest Survey Branch. 18% square miles out of 733 in hand complet- ed during year. (d) This includes tri angulation and level
					 1,518		 968	110 1,523	$251 \\ 110 \\ 2,092 \\ 1,523$	 (e) 968		(e) (e) (e) 968	 ling. (e) Cost nuknown. 4 miles of boundar, were surveyed during the year at a cost o Rs. 49. (f) Survey done by Sur vey of India Depart ment in connection with the Settlement of
					1,706	12	3,070	2,861	5,881	62,089	14,190	76,279	the Khurda Govern ment estate at n cost to the Fores Department.
FOREST	s.												
								435(g) 33	435 33				(g) Area uncertain.
					81(h)			81	81				(h) Surveyed roughl by the Land Revenu Settlement Depar
		2			212(h)		=	515(<i>i</i>) 378	515 378			=	ment. Not printed. (i) The Imperial For est Survey Branc will shortly take the
								291	291				in hand.
•••									1,942				(j) Last year's figure reduced by 141 owin
					293			1,733	3,675				to exclusions.
FOREST								4.005	4.099	-			
					1,999	12	3,070	4,033	4,033	62,089	14,190	76,279	
					1,009	12	4,070	0,027	10,000	02,089	19,180	62,089	

miles. •quare miles on 2" scale. (41)

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(42)

FORM No. 50.

FOREST DEPARTMENT, BENGAL.

Progress made in Working-Plans, 1899-1900.

	18103			A REAS FO WORKING-P BEEN SANC LOCAL GOV	LANS HAVE		G-PLANS COMPILED.	Areas for which Working- Plans have	Total Forest area as in	Entire cost, per square mile, of	BIMARIS.
214	10102	•	:	At com- mence- ment of the year.	During the year.	At com- mence- ment of the year.	Taken in hand during the year.	still to be taken in hand.	Form No. 46,	Working- Plans com- pleted,	
	1			2	8	4	5	6	7	8	9
				8q. x.	8q. M .	Sq. M.	8q. M .	Sq. M.	8q. m.	Bs.	
			-			RESERVE	FORESTS.				
Darjeeling	•••		•••2	6 0(a)	•••			64	314	547(b)	 (a) {Working-Plan for the forests near (a) {Darjeeling, 38, square miles. (b) Working-Plan for the Tists Valley (c) Undeterminable for Darjeeling Plan (b) Undeterminable for Darjeeling Plan
ista			•••	\$1\$(c)		•••			212	(đ)	 Ba. 547 for Tists Valley Plan. (c) Working-Plan for the Forests of the Tista Division. (d) Prepared by Divisional Officer; an extra expenditure incurred.
Lurseong	***		***					109	109		
Jalpaiguri		•••	••••	•••	183(e)	*** •			183	40	(*) Working-Plan for the Forests of the Jalpaiguri Division. Sanctioned in Bengal Government No. 4330, date 5th December 1899.
Buxa		***				•••		809	309		Con December 1000,
Direction	•••	•••	•••]				57 188	57 188		ł
Palamau linghbhum	***	•••			•••		731(<i>f</i>)	2(g)	783		 (f) Preliminary report manctioned by th Inspector-General of Foresta Nos. 189W.P., and 16 W.P., data 14th December 1893 and 13th Feb ruary 1896, respectively. (g) Horkap Forest, Ranchi district.
Angal Puri	•••	••• •••	•••		 	ïï0(\$)	 	251	251 110		(A) Preliminary report sanctioned by th Inspector-General of Forests, No. 6 W.P., dated Rad March 1899.
Jundarbans		•••	•••	2,095				1.523	3,093	0.28	
hittagong	***	•••	•••		<u></u>	·		1,525	1,523		•
lotal for Re	erved	Fore	sts	2,364	183	110	731	2,503	5,681	<u> </u>	
						PROTECTE	FORESTS.				
onthal Par		•••	••••			•••		435	435 83		
Direction Palaman	•••	***	•••		***	•••	•••	81	81		
Singhbhum	•••	•••				•••		515(j)	515		(j) Includes 15 square miles in Manbhun
Ingul						***		376 291	878 291		district.
ruri Sundarbans	 894	•••	•••	1,942(k)	•••	•••			1,942		(k) 141 square miles deducted from las
Cotal for Pro	tected	Fore	sts -	1,942				1,783	3,675		year's figures-see Form No. 46A.
						UNCLASSE	D FORESTS.				
Chittagong		•••	_					4,033	4,033		
GRAF	D TOT	AL	•••	4,296(2)	183	110	731	8,209	13,589		
							·			(T Contraction of the second seco

RM No.	1	6	-
RM	-		5
		Man	

FOREST DEPARTMENT, BENGAL.

*

Communications and Buildings during 1899-1900.

	REMARKS.		14	Unapportioned expenditure :- Buildings : Temporary R4, establishments 238 Rouds : ditto 20		(a) Wire-ropeway. Buildings: Temporar 7 estabiishments 144				Buildings : Temporary establishments 112		Buildings : Temporary establishment 84	
	Total av	penditure on repairs.	13	Rs.	2,693		1,700		2,390	-	1,356		1,918
		Expendi- ture incurred.	12	Rs. 10 1,529	1,539	278 395 97	220	283 1,145 2	1,430	859 6	865	301 363	664
AR.	paths.	Length repaired.	11	Miles.	86	11 84 4	96	12 131	143	104 1	105	10	63
THE YE	Roads and paths.	ź		: :		111		111		11		11	
ORING	Ron	f repai				111 1_1	I	-111 1_1		::		11	
REPAIRS EXECUTED DURING THE YEAR.		Nature of repairs.	10	Cart-roads Bridle paths		Cart-roads Bridle paths Others	•	Cart-roads Bridle paths Others	:	Cart-roads Bridle paths	;	Cart-roads Others	
REPAIRS		Expendi- ture incurred.	6	Re. 40 865 118	128	324 271 326 9	930	162 416 103 279	960	98 80 80	491	285 477 169 328	1.259
	Buildings.	Nature of repairs.	80	Head-quarter houses Rest-houses Houses for subordinate	Others	Head-quarter houses Rest-houses Houses for subordinate Others		Head-quarter houses Rest-houses Houses for subordinate establishments.	1	Head-quarter houses Rest-houses		Head-quarter houses Rest-houses	
	Total ex-		1	Ra.	5,508		1,220	ł	543		1,718		2.868
		Expendi- ture incurred.	9	Rs. 464 4,804	5,358	636	636	212	213	215	215	462 726	1.188
TEAR.	paths.	Length of road or path.	2	Miles. 5 35	95	ı	1	07	61	69	8	61 🗢	
SHT BY	Roads and paths.	oject		11		:		1		I			
NEW WORK UNDERTAKEN DURING THE YEAR.	Roa	Road or path and object of the same.	*	Cart-roads Bridle paths		Others (a)		Bridle paths		Cart-roads		Cart-roads	
NEW WORK		Expendi- ture incurred.	8	Rs. 89 61	150	223 246 115	584	10 53 232 36	331	332 1,171	1,503	423 441 780 27	1,680
2	Buildings.	Description of building.	63	Houses for subordinate establishments,	Total	Rest-houses undinate Houses for subordinate establishments	Total	Head-quarter houses Rest-houses uhordinate establishments	Total	Head-quarter houses Houses for subordinate establishments.	Total	Head-quarter houses Rest-houses	Total
	DIVISION.		1	Darjeeling		Tista	2	Kurseong		Jalpaigurt		Mag G 2	

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FORM No. 51-concluded.

FOREST DEPARTMENT, BENGAL.

Communications and Buildings during 1899-1900-concluded.

	BAATRAS	AND ADDRESS	14			Gandak drift, Rs. 20.				34 miles are 'Sagar' (native cart) roads, Buildings: Temporary Rs. 80	:	Buildings : Temporary Buildings : Temporary Inte of explosives for 75 road works in hand,	
		Total ex- penditure on repairs.	13	Rs.	8		320		913		1,095		700
		Expendi- ture incurred.	12	Rs.	:	200	200	308	308	236	237	400	110
EAR.	paths.	Length repaired.	11	Miles.		55	35	37	37	3	62	57	02
REPAIRS EXECUTED DURING THE YEAR.	Roads and paths.	Nature of repairs,	10			Cart-roads	1	Cart-roads		Cart-roads Bridle paths		Cart-roads Bridle paths	
REPAIRS		Expendi- ture incurred.	6	Rs.	88	8 <mark>8</mark> 8	120	251 238 238	545	345 355 353 55	858	41 88 35 153	010
	Buildings.	Nature of repairs.	ø	Houses for subordinate establishments.	1	Rest-houses		Head-quarter houses Rest-houses Houses for subordinate establishments.	1	Head-quarter houses Rest-houses Houses for subordinate establishments.		Head-quarter houses	
	Total ex-	penditure on new work.	7	Rs.	2,500		103		94		10,923		1 070
	1	Expendi- ture incurred.	9	Rs.	:		:			5,043 765	5,808	665	RAN
THE YEAR.	paths.	Length of road or path.	22	Miles.	1				1	12	18	п	11
NEW WORK UNDERTAKEN DURING THE YEAR.	Roads and paths.	Road or path and object of the same.	*		I	а 				Cart-roads Bridle paths		Cart-roads	Constant Constant
NEW WO		Expendi- ture incurred.	83	Rs. 2,500	2,500	103	103	5	8	3,383 1,017 705 10	5,115	974 8 25	1.007
	Buildings.	Description of building.	63-	Head-quarter houses	Total	Houses for subordinate establishments.	Total	Houses for subordinate establishments,	Total	Head-quarter houses Reat-bouses and thouses for subordinate establishments	Total	Rest-houses Houses for establishment Others	Total
	DIVISION.		1	Southal Par- ganas,		Direction		nuntra Digitized	by G	singhhum		Angul	

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(44)

						(45)
Bulldinga : Temporary establishments 360								
	1,764		066		1,389	••••	17,262	20,048
9 1	44	4		83	433	88.88 5528 2334	7,368	8,902
x 	8			\$	3	878 352 67	787	89
Cart-roada	 		:	Bridle paths		Cart-roads Bridle patha Others	:	•
84 84 84 84 84 84 84 84 84 84 84 84 84 8	1,305	308 495 187	980	83 618 855	956	2,088 3,146 3,311 1,359	1 904	11,146
Head-quarter houses		Head-quarter houses Houses for sul ordinate estublishmonts		Rest-houses unbordinate Houses for subordinate establishmenta	:	Hrad-quarter houses Hest-houws Hest-houws for subordinate establishments		
	1,946		3, 893		159	:::	33,147	83,638
818	813		:		:	7,863 6.697 636	14,895	10,205
r)			:			98 1 1	2	61
1.018 Cart-roads	<u>}</u>					Cart-roads Bridle patha		
1,018 50 65	1,133	3,290 603	8,883	130 29	169	7,688 2,708 6,967 971	18,252	23,453
Head-quarter houses	Total	Houses for subordinate establishments. Others	Total	Houses for subordinate establishments	Total	Head-quarter houses Reschouses	GRAND TOTAL	TOTAL FOR 1898-89
Pari		Вплdатраля		Chittagong	-	Total		1

Abstract.

		-	
	Buildings.	bridges.	Total.
1	8	8	+
	Be.	Ba	Be.
New works Bejaura	18,252	. 14,895 7,358	33,147 17,263
Total	28,156 1,147	22,258 264	50,409 1,411
Total as per Form No. 61	29,303	28,517	61.820

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FORM No. 52.

FOREST DEPARTMENT, BENGAL.

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Register of Breaches of Forest Rules during 1899-1900.

				N	EW CAS	58 OF TH	B TBA	B.		Disp	08BD 0	P DUR	ING TH	IE YEA	AR.	year.	
			86-86		ood uce.	mis-		the		Convi	ctions.	Acqui	ttals.	Tot	al.	8	
Porza	T DIVISION.	•	Cases pending from 1898-99.	Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permis- sion, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of year.	Total cases.	Cases.	Persons.	Chues.	Persons.	Causes.	Persons.	Cases pending at close	Remares.
	1		8	8	4	5	6	7	8	9	10	11	12	13	14	15	16
Darjeeling		{ <u>A</u> B	• ·	1 	9 196 	1 219 	1 26 	441 	5 441 	5 441 	6 623 	••• •••	 	441	6 623 	 	•
	Total			1	198	2 20	27	44 6	446	416	629			416	629		
fista	••• ··•	{^ B C			"143 	210 	ï0 		406 	341 	433	(a)1	 	\$42 	436 		(a) This case was con doned.
	Total	 (A	43	<u> </u>	143	210	10		406	841	433	1		342	436	64	
Kurseong	*** ***	{B C				 	7	6 3		 57			 	 	* 8 8 		
•	Total				3 8 4	18	7	<u>63</u> 11	63	<u>57</u> 11				57 11	88 32	6	
Jalpaiguri	***	{A B U		₁		4 6	2 9 	110	11 110 1	110 	232 		 	110	252 	••• •••	
	Total			4	30	47	32	129	122	121	284		 	121	284	 8	•
Bura		{Å	2 	1 12	8 	20 6	2 	25 18	5 25 18	1 25 	5 6	2 		25 	4 56 		
	Total		2	13	8	27		46	48	26	57	3	3	28	60	3	Of the 11 cases show
Sonthal Parg	11 88	{A B C	10 32 	1	42 250	1 3 	11 2 	55 255 6	65 287 6	53 229 	106 882 	5 	4 1 	58 229	147 852 	7 58 	as pending in 1898-9 one has been with drawn, hence 10 case
	Total	•••	42	7	292	4	13	316	3 58	282	958	5	41	287	1,029	65	only are curried for ward.
Direction	•••	{A B C	 	 	7 20 	···· 6	3 	9 35	9 85 	7 35	13 123	2 	3 	9 35	15 123		
	Total		<u> </u>		36	6	2	44	* *	42	136	2	2	44	138		
Palamau	••• •••	{ Å B C	1 	9 5	7 3	77	 	23 10 3	24 10 3	17 10	31 15 	2 	13 	19 10	44 15	5 	
	Total			12	10	14		36	37	27	46	2	13	29	59	5	22 24
S inghbhum	••• •••	{A B C	3 7	28 70	41 108	27	17 4	88 119 70	91 126 70	78 120	220 402	3 	19 	81 120	239 402	1 0 6	
	Tota)		10	98	149	9	21	277	287	198	622	3	19	201	641	16	
≰nguì	••• •••	{	2	5 ₈	.1		1	7 19 8	9 19 8	3 19	5 39		11 	8 19	16 3 9	1	
	Total			13		11		34		22		5	11	 27	55		
Pari		{ A B C	9 17 	1	53 240 4	2 19 	18 5 	74 264 8	83 281 8	57 257 	173 514		44 	69 257 	917 514	15 84	Of the 10 cases show as pending in 1898-9 one has been wit drawn: the openin
	Total	•••	26	5	297	81	23	346	372	314	687	11	44	825	731	39	balance has, therefor been entered as 9.
Sundarbens		{			20 151 7		25 129	45 280 7	51 280 7	39 280	78 490	3	45	42 280	123 400	9	
	Total	•••	6		178		154	332	338	319	568	8	45	322	613	9	•
Chittagong	••• •••	{ A	6 	2 1	22 10	10 	5 9 	35 22 1	41 22 1	30 22	82 45		53 	39 22	135 45		
	Tota)	•••	6	3	38	16	7	58	61	52	127	9	53	61	180	2	•
Gea	ND TOTAL	{A B C	89 99	50 1 105	200 1,213 11	21 576 6	84 216 	855 2,006 122	394 2,105 122	301 1,946	747 3,962	42 1	231 8	843 1,947	979 3,965	51 188	
	Total for 189		1 3 8(a	156	1,424	603	300	2,483	2,621	8,247	4,709	43	234	2,290	4,943	209	(a) Closing balane 1898-99 was 140; se above for explanatio
	TOURI 101 199	·····	118	100	1,560	639	188	2,487	2,605	2,330	4,751	20	126	2,359	4,877	140	of difference.

N.B.— A means cases taken into Court. B means cases disposed of under section67 of Idian Forest Act, 1878. C unmeans detected cases.

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(47)

FORM No. 53.

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FOREST DEPARTMENT, BENGAL.

Area of Forest Tracts protected from fire during 1899-1900.

Division.	FOREST TRACTS.	Year in which protection commen- ced.	Area protected during 1898-99.	Area attempted to be protected.	Failures.	Area actually protect- ed.	Cost.		REMARKS.	
1	2	3	4	5	6	7	8		9	
			Acres.	Acres.	Acres.	Acres.	Rs.		Percentage of column 5 to total area of reserved forest,	Nature of protective measures adopted.
Darjeeling {	Tista Valley { Singalila	1881-82 1885-86 1891-92	4,579 2,935 29,909	3,646 3,632 29,910	(a)	3,646 3,632 29,910	41 41 30	Rupees 27 spent on unpro- tected areas. (a) 0'21 acres burnt.		Fire-watchers.
	Total		37,423	37,188		37,188	112			
Tis.a{	Tista (part) { Jaldaka (part) Chel	1879-80 1885-86 1881-82 1879-80	5,287 7,350 37,021 30,618	5,287 7,350 37,021 30,618		5,287 7,350 37,021 30,618	37 37 73 105	Rupees 5 spent on unprotec- ted areas.	59-3	Ditto and the burning of lines in the plains.
	Total		80,276	80,276		80,273	252			
Kurseong {	Eastern Western{	1876-77 1876-77 1878-79 1879-80 1882-83 1884-85	22,363 6,399 8,420 4,002 2,476 2,102	22,363 6,399 8,420 4,002 2,476 2,102		22,363 6,399 8,420 4,002 2,476 2,098	\$12 219 222 } 165	Rupees 2 spent on unprotec- ted areas.	65-3	Fire-watchers and fire-lines.
	Total		45,762	45,762	4	45,758	918			
Jalpaiguri {	Apalchand} Tondu} Muraghat	1878-79 1872-73 1879-80	{ 15,805 44,947 8,458 3,\$39	16,766 45,167 8,803 3,739	268 25 100	16,498 45,142 8,803 3,639 676	361 582 320 83		64-3	Ditto and the burning of 22 778 acres in addition.
	Total	1881-82	670 73,719	676	393	74,758	1,346			
	Buxa (part)	1876-77	81,792	81,792		81,792	1,194	Sal forest. Hill portion not		
Burs	Borojhar{	1879-80 1883-84 1888-89 1890-91 1895-96	18,248 1,243 3,418 } 23,501	18,248 1,243 3,750 5,520 21,111	5 1,920 2,583	18,248 1,238 1,830 5,520 18,528	*803 91 130 }	specially pretected. Sál forest. Sissu forest. The sum of Rs. 803 includes cost of protec-		Ditto and 770 acres o savannah.
ł	Haldibari	1878-79 1882-83 1895-96 1899-1900	9,797 8,958 7,704	9,797 8,958 7,704 7,526	5,440 640	9,797 8,958 2,264 6,886	171 } 218 117	tion of 5,520 acres and 18,528 a Sál forest. Sissu "	cres.	
	Total		154,661	165,649	10,588	155,061	2,724			
Direction	Koderma {	1879-80 1893-94	29,764 6,625	29,767 6,625		29,767 6,625	387 45		100	File-watchers and file-lines.
	Total		36,389	36,392		36,392	432			
	Northern{ Southern	1879-80 1885-86 1879-80	61,217 2,201 50,551	61,217 2,221 56,951	6,320 1,280 1,130	54,897 941 55,821	425 51 280	e	100	ditto,
	Total		113,969	120,389	8,730	111,659	756			
Singhbhum	Chaibassa } Kolhan } Porahat Koins Samta Horhap	1884-85 1890-91 1891-92	$\begin{cases} 61,886\\ 69,056\\ 130,074\\ 70,718\\ 125,430\\ 1,098 \end{cases}$	64,640 69,057 132,257 70,800 130,530 1,098	20,942 13,670 13,418 25,680 11,520 640	43,698 55.387 118,839 45,120 119,310 458	568 640 1,122 898 1,000 22	Rupee 1 spent on unpro- tected area. Includes Rs. 40 deducted from the expenditure of the yea by the Comptroller-Genera (Forests) pertaining to th	n r d	ditto,
C	Total		458,262	468,682	85,870	382,812	4,250	j accounts of 1898-99.		
Angul {	Tikarpara Bagmunda} Durgapur}	1884-85	92,887 38,976 27,019 27 0	94,490 39,054 27,100	44 12,480 5,746	94,446 26,574 21,354	574 280 357	0	100	ditto.
	Total		158,882	160,644	18,270	142,374	1,211			
Purj{	Northern}	1885-86	$\left\{\begin{array}{c} 25,123\\ 10,2:6\\ 33,816\end{array}\right.$	25,299 10,313 35,101	19 470	25,280 10,313 34,631	463 249 627		100	ditto,
	Total		69,155	70,713	489	70,224	1,339			
Chittagong	Ramgarh-Sita- kund Sitapahar	1898-99 1899-1900	84,854 	84,874 7,020	1	84,873 7,020	200 37		9.4	Watchers only,
	Total		84,854	91,894	1	91,893	237	To	tal 35'9	
	GRAND TOTAL		1,313,352	1,352,740	124,345	1,228,395	13,577	A VIIIf. Form No. 61 = Rs. 13,572, viz., Rs. 13,577 +		
	Total for 1808-99		911,222	1,337,108	23,756	1,313,352	12,781	Rs. 35 spent on other areas - Rs. 40 deducted from the expenditure in Singhbhum.		

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FORM No. 54.

FOREST DEPARTMENT, BENGAL.

Area closed and open to Grazing during 1899-1900.

					AREA IN	SQUARE I	MILES,		
DIVIS	ION.			to all mals.	(camel	browsers s, goats heep).	Open to all animals.	Total area.	REMARKS.
			Whole year.	Part of year.	Whole year.	Part of year.	Whole year.		
1			2	3	4	5	6	7	. 8
		ĺ		R	ESERVE	D FORES	rs.		
Darieeling			29		21	1	66 1	114	
Tista			83				129	212	
Kurseong			83				26	109	
Jalpaiguri			152				31	183	
Buxa			309				***	309	Thirteen square miles open to Commis-
-									sariat elephants and cantonment cattle.
Direction			57				***	57	
Palamau	***		188		***		29	188 733	3
Singhbhum			251	•••				251	
Angul Puri	•••		110					110	
Sundarbans			2,092					2,092	Grazing impossible owing to absence of
The second s	***								pasture.
Chittagong			1,385				138	1,523	
т	otal		5,443		21		417	5,881	
				PI	OTECTE	D FORES	т8.		
Sonthal Parga	anas						435	435	The pasturing of goats and sheep per-
							-	-	mitted only in areas set apart for that purpose.
Direction							33	33) Sheep and goats can only be pastured
Palamau							81	81	{ within such areas as may be allotted
Singhbhum							515	515) by the Deputy Commissioner.
Angul							378	378	The pasturing of goats and sheep prohi-
									bited if separate areas are available and can be allotted.
Puri					11		280	291	Goats and sheep can only graze in loca-
Sundarbans			1,948					1,942	lities set aside by the Collector. Grazing impossible owing to absence of pasture. Last year's area reduced by
T	otal		1,942		. 11		1,722	- 3,675	141 square miles gazetted out.
1	O'Less		1,010					3,070	
Chittenan						D FORES		4 0.02	
Chittageng							4,033	4,033	
GRAND TOT	TAL		7,385		22		6,172	13,589	
Total for 1898									

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FORM No. 55.

FOREST DEPARTMENT, BENGAL.

Return of Grasing in the State Forests during 1899-1900.



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FOREST DEPART

Return of Grazing in the State

					GRAZ	ING ON PA	YMENT.	NUMBER O	OF ANIMAL	.8.			
•			AT PUL	L PATES.					AT PR	IVILEGED	BATES.		
DIVISION.		Cows			Other	Fees	}	Cows and	Goats and		Other	Fees re	ceived.
·	Buffalo	s. and bullocks.	Goats and sheep.	Camels.	animals.	received.	Buffaloes.	bullocks.	sheep.	Camels,	animals,	Actual,	Value at. full rates,
1	2	8	•	5	6	7	8	9	10	11	12	13	14
						Bs.						R s. 1	R. Reserved
Darjeeling Tista Kurseong	105	1,477 105	650 3	 		5,148 2,724 854		8,534	\$1 	····		1,689	6,583
Jalpaiguri		268			5	4,767 68 3						•••	
Palaman			•••		"		•••		(1)	•••	••• ···	•••	•••
Singhbhum Chittagong		58			••• •••	i,137		(b)3,041 (b)28,992	(ð)4,891 		··· ···	(a) (a)	2,057 7,946
Total	2,167	2,798	658		25	15,308	372	34,567	4,922		44	1,669	14,895
			i									IIP	BOTECTE
Sonthal Parganas Hazaribagh (Direc	4					1						•••	
tion).	• •••					•••				•••	•••	***	•••
Palamau [*]		•••				***				 		•••	•••
Angul*	1 1 210		8,511			4,358	(ð)8,500	(ð)146,000	(8)12,500		(õ) 500	 (a)	44,000
Total	1,622	10,685	8,511			4,359	8,500	146,000	12,500		500	***	66,00 0
												IIIT	NOLASSE
Chittagong*)
GRAND TOTAL	3,789	18,483	4,164		25	19,667	8,872	180,567	17,422		544	(c)1,009	58,893
Total, 1898-99	8,848	10,381	3,817		28	19,165	8,798	178,434	19,286		547	1,563	58,754

Actual fees realized included in commutation fees
 (a) Actual fees realized included in commutation fees
 (b) Estimated number grazed by privileged villagers
 (c) Excluding fees credited under ElIg.

Abstract.

Value of fodder grass	•••		***	
Total "R Hd" as per	Form N	io, 61		

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No. 55.

MENT, BENGAL.

Forests during 1899-1900.

				GRA	LING FREE	. NUMBE	B OF ANIM	ALS.				l	
	Br	RIGHT UNDE	IR SETTLEM	BNT.		DURING P	LEASURE OI	GOVERNME SETTLE	MENT, OR OTI	HERWISE TH	IAN UNDER	Total	Grand total
Buffalces.	Cows and bullocks.	Goats and sheep.	Camels.	Other animals.	Value of fees at full rates.	Buffalces.	Cows and bullocks.	Goats and sheep.	Camela.	Other animals.	Value of fees at full rates.	value of fees at full rates.	of value at full rates,
15	16	17	18	19	20	21	22	23	24	25	26	27	28
··		1		[Bs.	[1	[1	Rs.	Ba.	Ba.
OBESTS.				ł									
						67		,110		···· _			5,143
•••						67	328			7	808	803	9,251 854
			1										4,787
•••			•••										683
•••										1			2,057
•••								1					8,385
<u> </u>		· · · · · · · · · · · · · · · · · · ·				67	328	110		7	969	969	\$1,170
FORESTS.)									· · · · · · · · · · · · · · · · · · ·	-		
46.585	139,755	46,585	[1	32,027				1	1 .	[32,027	32,028
2,356	12,280	2,450			4,555							4,055	4,535
	1		í				I.			1		1	
•••					•••								
•••													
		}											46,358
48,941	152,035	49,041	•••		36,582	•••		***				36,582	84,941
FORESTS.													
•••	1												
48,941	152,035	49,041			36,582	67	328	110		7	969	37,551	1,16,111
48,941	152.035	49.041		•	36,582	67	307	110		7	938	\$7,520	1,15,439

not available. and credited under BIIg. on commutation fees. Revenue credited under BIIg.

R.,	Ba .	R s. 1,16,111
•••	7,221	
***	146	7,367
•••	•••	1,23,478
57,234	6,586	
\$7,551	94,775	1.01,361
		22,117
***	•••	3,383
•••		25,500

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(52)

FORM No. 56.

FOREST DEPARTMENT, BENGAL.

			AREA 1	N ACRES.		RECEIPTS.	CHARGES.	
DIVISION.	Kind of Plantation.	On 1st July 1899.	Added during the year.	Excluded during the year.	Area on S0th June 1900.	of the	year.	RBMARES
1	8	3	4	5	6		7	8
						Rs.	Rs.	
Darjceling Kurseong Jalpaigurl Puri Chittagong	Regular plantations	1,306 564 3 336 663	···· ··· ···	···· ··· ···	1,306 504 3 338 063	9 76 5,100	 28 4,040	
	Total	2,872			2,872	5,185	4,068	
Darjeeling Tarscong tarscong tarscong bura Bura Direction Palamau riughbhum ngul Parl Dhittagong	Cultural operations	1,868 827 21 619 16 80 77 	270 7 7 7 20 		2,138 827 28 619 	···· ··· ··· ··· ···	7,199 39 437 302 99 69 209 76 	
	Total	. 3 ,508	304		3,812		8,646	
	GRAND TOTAL	. 6,380	304		6,684	5,185	12,714	
	Total for:1898-99	6,103	277		6,380	43	8,368	

.

Area of Plantations, 1899-1900.

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*

FOREST DEPARTMENT, BENGAL.

Outturn (in cubic feet, solid) of Timber and Fuel during the year 1899-1900 and Agency of Exploitation.

TOTAL.	Outturn.	27	C. ft.	1,217,429 774,971 562,265 2,565,410 136,410 108,687	258 722,900 17,591 118,538 15,598,073 556,184	22,150,079	2,346,624 302,379 2,359 143,612 12,181,633 4,2181,633	19,192,042	564,02	41,906,145	38,609,241	
	.fatoT	26	C. ft.	955,882 595,904 595,904 304,845 304,845 3345,204 38,811 38,811 96,887	449,379 449,379 453 453 111,836 10,945,109 10,945,109 1	16,282,573 2	2,248,138 215,134 1,035 1,035 12,019,637 13,672,162		62,011	34,565,823	32,248,933	
	Right-bolders.	25	c. tt.		385,712 	910,157	2,183,662 197,173 12,000,000	14,380,835	;	15,290,992 3	15,696,350	
FUEL.	Pree grantees.	24	C. ft.	20,778 1,260 	111111	22,038	439	729	:	22,767	131,699	
FU	Ригеряяетя	53	C. ft.	788,063 592,484 394,670 2,166,254 96,857 96,857	63,660 63,660 453 453 453 10,935,753 3,168	15,194,638	59,788 17,961 17,961 19,667 3,672,153	3,835,694	60,642	19,090,974	16,327,427	
	ботегитель.	52	C. ft.	147,042 2,160 175 	6,356	155,740	3,959 8 9	3,981	1,369	161,090	93,229	
	.[atoT	21	c. ft.	1,080 53 576	9,458	11,167		11	350,330	361,558	271,959	
08.	Right-holders.	20	C. ft.			:		:	:	:	differe solid.	936
LANBO	Free grantees.	19	C.ft.	111111	1 I I I I	250		:	1	250		10,936
MISCELLANBOUS	Purchasers.	18	0. ft.	1,080 53 576	0,208	10,917		63	335,156	345,075	260,002 g to fact t solid ac 5.36 cubi 1.75 0 to 40 se uel. ft.	6,627
-	Government.	17	C. ft.	11111	111111	:		8	15,224 3	15,233 3	11,957 260,0 according to subic feet soli = 6878 c = 20 to Fuel.	
	.IatoT	16	C. ft.	63 63	1,838	1,842	g ! : : : : :	1	8	23,177	39,901 t solid, r ed into c Timber, C, ft,	4,309
IMBEB	Right-holders.	15	C. ft.		111111		FORESTS		ORES	:		::
ARED T	Pree grantees.	14	C. ft.		111111	1			SED I	:		er le
DR BQU	Purchasers.	13	0. ft.		1,838 	1,840	-PROTECTED	:	UNCLAS	23,075	38,651 als. of poles lie loads	uk river
SAWN OR SQUARED TIMBER.	Government.	12	C. ft. C. ft. C. ft. C. ft.			5	IIP	:	IIIUNCLASSED FORESTS. 100 21,235 21,3	102 2	1,250 3 ire actua number o ods, cooli ed	m Ganda
	.latoT	n	C. ft.	148,005 13,445 65,180 66,671 45,434 11,700	50,062 1,903 4,053 2,152,534 1,071	2,560,148	86,432 87,240 1,144 21,074 21,074 531,913	885,669	31,214	3,480,031	5,816 28,745 231,749 2,822,467 1,230 38,651 39,901 11,957 260,002 271,930 The figures of columns 6, 16, and 21 are actuals. Column 11 arrived at by converting number of poles into cubic feet solid, according to factors for different aizes, i mund to interve i and intervention into the solid, according to factors for different aizes, i mund to intervent intervention into the solid, according to factors for different aizes, i coolie load	in drift from Gandak river
H; POLES	Riwht-holders.	10	C. ft.		11111	1	70,665	230,665	:	230,665	231,740 [231,740] olumns 6, red at by 6 ic feet sin 1 maun 1 coolie	
IE ROUGH	Free grantees.	6	0. ft.	20 320 	1,601	4,317	1,479 	1,479	:	5,790	28,745	
TIMBER IN THE ROUGH ; POLES.	Purchasers.	80	C. ft.	77,485 12,330 62,944 65,944 62,908 11,650	$47,889\\1,903\\4,053\\4,053\\2,146,587\\1,071$	2,475,242	57,189 16,325 20,077 1,860 531,869	627,346	31,038	3,133,626	2,615,816 The fig Colum Colum	
TIN	.4пэшпээтоД	7	C. ft.	70,590 195 2,236 2,236 150 150	572 5,947	80,589 2	26,764 250 1.124 997	29,179	176	109,944 8	56,157	
	Total.	9	C. ft.	113,452 164,540 132,185 73,485 73,485 52,443	212,172 15,235 2,649 2,649 27,500	3,294,349	13,059 13,059 57,484 11,460	82,123	99,084	3,475,556 1	3,175,979	
T; Log	.sreblod-rdaiß	10	. R .		of			:		:	•• :	
R ROUGI	Ргее grantees.	4	0. ft. C.	5,6u0 926 		6,576	Så : : : : :	145	401	7,212	13,056	
TIMBER IN THE ROUGH; LOGS.	Ригећазета.	ø	C. ft. (107,586 113,256 130,118 63,263 32,528	212,121 15,100 2,496.411 2,496.411	3,181,565	4,650 120 56,400 11,400	72,630	92,803	3,346,998	3,076,534	
TIM	Government.	63	C. ft.	216 51,284 1,141 4,222 19,915		106,208 3	8,264 1,084 	P,848	5,790	121,346	86,389	
	DIVISION.	1		Darjeeling Tursta Jalpaiguri Bura Hazribagh (Direc-	attanta a	Total 1	Sonthal Farganas Hazaribagh	Total	Chittagong	GRAND TOTAL 1	DOD Total for 1898-90	

(53)

(54)

· FORM No. 58.

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1899-1900.

			PI	IODUCE I	EMOVED	OB UTII	LIZED.				
DESCRIPTION OF PRODUCE.	By Go ment ag		By purcha	sers.	By free p	rants.	By right holder		Total	•	REMARKS.
	Quantity.	Value.	Quantity.	Value	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
1	2	8	4	5	6	7	8	9	10	11	12
		Rs.	I I	Rs.		Rs.		Rs.		Rs.	
			1.	-RESEI	RVED FO	RESTS.					
Samboos No. Frazing	17,148	146 	9,769,908 2,64,753 79,337	30,007 20,896 3,383 11,271			966,400	2,416 9,305	10,753,456 2,64,753 79,337	32,569 31,170 3,383 11,271	The note at foo of Code form No. 58 wa overlooke
John grass (Ischemum angusti- folium). Jolpatta (Nipa fructicans) Iantal (Phænix paludosa)	40 1	1	39,62,675 15,575 2,931	61,917 243 2,931					39,62,724 15,575 2,932	61,918 243 2,932	until too lat to compl with. Co umns 2, 3, 5, and 7 ar
Honey </td <td>513 202</td> <td></td> <td>365 4,367 1,20,426</td> <td>11,045 13,489 3,377</td> <td></td> <td></td> <td></td> <td></td> <td>365 4,367 1,81,722 202</td> <td>1,045 13,489 5,235 331</td> <td>actuals. Co umn 4 actual and estimate</td>	513 202		365 4,367 1,20,426	11,045 13,489 3,377					365 4,367 1,81,722 202	1,045 13,489 5,235 331	actuals. Co umn 4 actual and estimate
Jyrabolaus	12	1,440	150	75			-		12 150 3 18	1,440 75 450 111	Columns 8 an 9 are est mates.
Lao	14 66 			5 2,738 1,588 1,917	45			1,254	24,101 1,01,625	2,805 1,588 3,746	
Total		2,828		1,54,882		1,36	3	14,728		1,73,801	
				IL-	PROTECI	ED FO	RESTS.				
Ramhoos No	. 539,44	9,06	3 1,01,090	1,008				0 (5,208		15,305	8
Sabaj grass (Ischæmum angusti- Mds	. 539,44 e s	L 9,06	2,70,430	1,008 4,359 17,254	2,300) 	3 4,000,000	80,582	2,70,432	84,941 17,254	х.
abai grass (Ischæmum angusti- Ma Jolum). Solpatta (Nipa fructicans) u Hantal (Phænix paludosa) u	s		2,70,430 1,31,850 3,95,400	1,008 4,359 17,254 2,060 6,178 4,711	2,300 		3 4,000,000	80,582	2,70,432 1,31,850 3,95,400 4,711	84,941 17,254 2,060 6,178 4,711	8
Sabai grass (Ischæmum angusti- Ma folium). Golpatta (Nipa fructicans) Hantal (Phœnix paludosa) Honey	s		2,70,430 1,31,850 3,95,400 4,711 548 1,767	1,008 4,359 17,254 9,060 6,177 4,711 1,643 2,318	8 2,300 8 8 5 8		3 4,000,000	80,582 	2,70,432 1,31,850 3,95,400 4,711 548 1,767	84,941 17,254 2,060 6,178 4,711 1,645 2,318	
Sabai grass (Ischæmum angusti- Ma folium). Golpatta (Nipa fructicans) Hantal (Phœnix paludosa) Honey Wax Mica Thatching grass	s 1,98	 5 1,51	2,70,430 1,31,850 3,95,400 4,711 548 1,767 571 0	1,008 4,359 17,254 9,060 6,177 4,711 1,643 2,318 10	3 2,300 5 1 5 5 5		3 4,000,000	80,582	2,70,432 1,31,850 3,95,400 4,711 548 1,767 571 1,985	84,941 17,254 2,060 6,178 4,711 1,645 2,318 15 1,519	
Sabai grass (Ischæmum angusti- Ma folium). Golpatta (Nipa fructicans) Hantal (Phænix paludosa) Wax	s 1,98 6	 5 1,51 4 18	2,70,430 1,31,850 3,95,400 4,711 5,48 1,767 571 571 2 268 286	1,008 4,359 17,254 8,060 6,179 4,711 1,643 2,319 1,3 1,1 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2	3 2,300 0 0 1 5 7 8		3 4,000,000	80,582 	2,70,432 1,31,850 3,95,400 4,711 548 1,767 571 1,985 332 286	84,941 17,254 2,060 6,178 4,711 1,645 2,318 15 1,519 309 172 1,638	
Sabai grass (Ischamum angusti- Ma folium). Golpatta (Nipa fructicans) Hantal (Phanix paludosa) Wax Mica Thatching grass Myrabolams Kochla (Strychnos Nuz-comica) Lac	s 1,98 6 	5 1,51 4 18	2,70,430 1,31,850 3,95,400 4,711 548 1,767 571 28 286 1,04,825 	1,008 4,355 17,254 9,066 6,177 4,711 1,644 2,318 11 12, 1,633 7,300	3 2,300 4 0 1 5 7 8 9 9 9 10 11 12 13 14 15 10 10		2	80,582	2,70,432 1,31,850 3,95,400 3,95,400 3,95,400 548 1,767 571 1,985 332 286 1,04,825 2 2	84,941 17,254 2,060 6,178 4,711 1,645 2,318 15 1,510 309 172 1,638 50,094	_
Sabai grass (Ischæmum angusti- Ma folium). Golpatta (Nipa fructicans)	s 1,98 6 	5 1,51: 4 18	2,70,430 1,31,850 3,95,400 4,711 548 1,767 571 28 286 1,04,825 	1,008 4,359 17,254 9,060 6,175 4,711 1,643 2,319 13 12 177 1,633	3 2,300 4 0 1 5 7 8 9 9 9 10 11 12 13 14 15 10 10		3 4,000,000	80,582	2,70,432 1,31,850 3,95,400 3,95,400 3,95,400 548 1,767 571 1,985 332 286 1,04,825 2 2	84,941 17,254 2,060 6,178 4,711 1,645 2,318 15 1,519 309 172 1,638	_
Sabai grass (Iachamum angusti- Ma folium). Golpatta (Nipa fructicans)	s 1,98 6 	5 1,51 4 18	2,70,430 1,31,850 3,95,400 4,711 548 1,767 571 28 286 1,04,825 	1,005 4,356 17,254 9,066 6,177 4,711 1,643 2,316 1,1 6 3,316 1,633 7,330 48,783	3 2,300 4 0 1 5 7 8 9 9 9 10 11 12 13 14 15 10 10		3 4,000,000	80,582	2,70,432 1,31,850 3,95,400 3,95,400 3,95,400 548 1,767 571 1,985 332 286 1,04,825 2 2	84,941 17,254 2,060 6,178 4,711 1,645 2,318 15 1,510 309 172 1,638 50,094	_
Sabai grass (Iachamum angusti- Ma folium). Mai Golpatta (Nipa fructicans)	s 	5 1,51 1 10,76	2,70,430 1,31,850 3,95,400 4,711 548 1,767 571 28 286 1,04,825 	1,009 4,356 17,264 9,066 6,177 4,711 1,643 2,316 1,1 1,633 7,300 489,783 1111 21,355 7,16	3 2,300 0 0 0 0 0 0 0 0 0 0 5 5 5 0 0 0 0 0 0 0 0 0 0 0	2 ED FOI	3 4,000,000	80,582	2,70,432 1,31,850 3,95,400 3,95,400 3,95,400 548 1,767 571 1,985 332 286 1,04,825 2 2	84,941 17,254 2,060 6,178 4,711 1,645 2,318 1,519 309 172 1,638 50,094 1,88,159 6 21,383 7 7,160 5 1,283 214	3910
Sabai grass (Iachamum angusti- Mathemathic folium). Golpatta (Nipa fructicans)	s 1,98 6 	5 1,51 4 18 10,76 0 2 2	2,70,430 1,31,850 3,95,400 4,711 548 1,767 671 2 286 1,04,825 7 4 5,611,886 1,07,211 1 14,603	1,008 4,356 17,254 9,066 6,178 4,711 1,644 2,319 177 1,633 7,300 48,780 111	8 2,300 9 0 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 7 5 6 77 1,50 30	2 ED FOI	3 4,000,000	80,552	2 2	84,941 17,254 2,060 6,178 4,711 1,645 2,318 15 1,519 309 172 1,638 50,094 1,88,159 4,98,159 6 21,383 7 7,166 5 1,283	5 9 1 0
Bamboos	s 1,98 6 	5 1,51 4 18 10,76 0 2 2	2,70,430 1,31,850 3,95,400 4,711 548 1,767 671 2 268 2,86 1,04,825 7 4 5,611,886 1,07,211 1,07	1,009 4,356 17,254 8,066 6,177 4,711 1,644 2,318 12 177 1,633 7,300 48,783 111	8 2,300 9 0 1 5 7 5 5 5 5 5 5 5 5 5 60 77 1,50 10 14	2 ED FOI	3 4,000,000	80,552	2 2	84,941 17,254 2,060 6,178 4,711 1,645 2,318 1,519 309 172 1,638 50,094 1,98,159 1,98,159 6 21,383 7,166 5 1,283 21,	

(55)

FORM No. 58-concluded.

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1899-1900-concluded.

agency. By purchasers. By free grants. holders. Total. Quantity. Value. Quantity. Value. Quantity. Value. Quantity. Value.				PRODUCE	REMOVED	OR UTI	LIZED.				
1 2 3 4 5 0 7 8 9 10 11 12 amboos Rs. Rs. <th></th> <th></th> <th>nent By</th> <th>y purchasers.</th> <th>By free g</th> <th>rants.</th> <th></th> <th></th> <th>Tota</th> <th>l.</th> <th>REMARKS.</th>			nent By	y purchasers.	By free g	rants.			Tota	l.	REMARKS.
Rs. Rs. <thrs.< th=""> <thrs.< th=""> <thrs.< th=""></thrs.<></thrs.<></thrs.<>	Quan	uantity. Val	alue. Quant	atity. Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
amboos No. 528,569 9,533 14,682,584 20,772 3,500 909 4,909,609 7,684 21,503,683 1,60,037 and off ar max <td< th=""><th></th><th>2 3</th><th>3 4</th><th>4 5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>19</th></td<>		2 3	3 4	4 5	6	7	8	9	10	11	19
amboo		. R	Rs.	Rs.		Rs.		Rs.		Rs.	
matrix matrix<					SUMM	ARY.					
colder grass 2.44,735 3.333 2.44,735 3.333 2.44,735 3.333 2.44,735 3.333 2.44,735 3.333 4.00,757 6.421 4.00,757 6.421 4.00,757 6.421 4.00,757 6.421 4.00,757 6.421 4.00,757 6.421 4.00,757 6.421 4.00,757 6.421 4.00,757 6.421 4.00,757 6.421 4.00,757 6.421 6.421 6.421 6.421 6.421 6.421 6.421 6.421 6.421 6.421 6.421 6.421 6.421 6.421 6.421 6.421 6.421		and the second	and the second						21,035,633		
Barbain full Composition of the second	Mds		2,6	64,753 3,383						3,383	
Barting and the second of the secon	ticans) 1	49	1 40,9	94,525 63,977					40,94,574	63,978	
Art	ludosa) n .	1	1 4,1	7,642 7,643		***	2020		7,643	7,643	
hatching grass			***	6,134 15,807			***		6,134	15,807	
formit myleola seed m 12 1,463 1,403 1,503 1,103		519 2.187 1,	1,850		***	1.000		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	2,187	1,850	
Base mm <	d	12 1, 64	1,440 182	418 "202			1.2	a second s	12	1,440	
and and the second lands and additional additional second lands </td <td></td> <td>3</td> <td>450 ···</td> <td> 290</td> <td>7</td> <td>***</td> <td></td> <td></td> <td>3 304</td> <td>450</td> <td></td>		3	450 ···	290	7	***			3 304	450	
Base diamons Image diamons <thimage diamons<="" th=""> <thimage diamons<="" td="" th<=""><td></td><td>68</td><td>56 8</td><td>.06.450 3,226</td><td>45</td><td>12</td><td>1</td><td></td><td>35,796</td><td>4,086</td><td></td></thimage></thimage>		68	56 8	.06.450 3,226	45	12	1		35,796	4,086	
Lots m 201 208 140,404 0.00000 Idd- Total of Form No. 58 3.02,003 Brought forward 0.00000 Idd- Total of Form No. 58 3.02,003 Difference between the actual grazing fees and there refure the actual grazing fees and there actual grazend from the accurate theremoval strontheremothere actu			266	9,427		311		44,046			
Re. Base 3.02.003 Base Midd- Re. Direction Division-Value of seeds of Phenix 150 Sundarbans Division-Value of minor produce 255 Russeng Division-Readjustment of tres paid to sardarkars during 185-90 by credit to 'Rild' 5 Pur Division-Readjustment of the year- Contistancing at commandement of the year- Contistancing at come of produce transferred from Kurseong Division manual yitten off- Res Contact meter transferred from Kurseong Division manual yitten off- Res Contact meter transferred from Kurseong Division manual yitten off- Res Contact meter transferred from Res Contact meter transferred from Res Contact meter transferred from Res Contact meter transferred from Res Contact meter transferred from Res Standarbans y, manual yitten off- Res Contact meter transferred from Res Standarbans y, manual yitten off- Res Standarbans y, manual yitten off- Res Standarbans y, manual yitten off- Res Standarbans y, manual yitten off- Res Standarbans y, manual yitten	Total									3,92,003	
IndexTotal of Form No. 583,92,003Bread-tom Division—Value of seeds of Phomix Sundarbans Invision—Estimated value of mone produce from leased landsBrought forwardBrought forward160Deflect-Brought forwardSundarbans Division—Estimated value of Udal and debit of value.5Difference between the actual grazing fees and the full value thereofBrought forwardOutstanding at commencement of the year— commencement of the year—<	fotal, 1898-99		291	2,08,472		988		1,40,404		8,50,155	
	on-Estimated value of eadjustment of fees p ring 1898-99 by credit to 11."	e of Udal es paid to to "RIId" year- Rs.		556	Ti Ku Hi Pa	sta urseong azaribag lamau nghbhur	h ",		···· ··· 5 ··· ·· 6 ··· ·· 87 ··· 10		
Total4,04,003Outstanding written off Hazaribagh Division1,494 (1,683)Portion of removal by right-holders not credited in the accounts, viz., Rs. 1,43,510 less receipts under "IIg," Rs. 14,2491,683Portion of removal by right-holders not credited in the accounts, viz., Rs. 1,4291,29,061Outstanding at close of the yearRs. Sonthal Parganas Division1,29,061Jalpaiguri Division1,29,061Outstanding at close of the yearRs. Sonthal Parganas Division1,29,061Dustanding at close of the yearRs. Sonthal Parganas Division1,29,061Ustanding at close of the yearRs. Sonthal Parganas Division1,29,061Dustanding at close of the year1,29,061Dustanding at close of the year1,29,061Dustanding at close of the year1,29,061Dustanding at close of the year <t< td=""><td>vision "</td><td> 7,921 1,127 g unsold at Rs. 5</td><td></td><td></td><td>Value cred Estim Kur Value Kur Pali</td><td>of estim lited to r rseong to of prod rseong L amau</td><td>ated remov the Mahara lue of pro Direction uce writter Division</td><td>mals from jah duce tra Division n off—</td><td>Hill Tipper</td><td>3 - <u>181</u> </td><td>5,454</td></t<>	vision "	7,921 1,127 g unsold at Rs. 5			Value cred Estim Kur Value Kur Pali	of estim lited to r rseong to of prod rseong L amau	ated remov the Mahara lue of pro Direction uce writter Division	mals from jah duce tra Division n off—	Hill Tipper	3 - <u>181</u> 	5,454
Portion of removal by right-holders not credited in the accounts, viz., Rs. 1,43,510 less receipts under "II," Rs. 14,249	vision "	7,921 1,127 g unsold at Rs. 5	. 7	12,344 12,000	Au Value cred Estim Kur Value Kur Palı Sun	of estim lited to p ated va rseong to of prod rseong L amau adarbans	ated remove the Mahara lue of pro- Direction uce writter Division	vals from jah duce tra Division 1 off—	Hill Tippera	3 0 181 a 0 5. 44 1	5,454
Jalpaiguri Division Rs, Sonthal Parganas Division 25 Huzaribagh Division 2498 Chittagong 962 Puri 6,586 Puri Estimated value of produce remaining unsold Rs, Kurseong Division 12 Hazaribagh 12 Hazaribagh 12 Hazaribagh 14 Chittagong 14	vision ", of produce remaining un of the year— sion "	7,921 1,127 g unsold at Rs. 5 2	- <u>7</u> <u>12,</u>	12,900	Au Value cred Estim Kur Value Pal Sun Outst	of estim lited to the recong to of prod recong L amau adarbany anding	ated remov the Mahara lue of pro- Direction uce writter Pivision	vals from jah duce tra Division 1 off-	Hill Tippera	8 181 181 	5 ,454 99
Puri ,,	vision ", of produce remaining un of the year— sion "	7,921 1,127 g unsold at Rs. 5 2	- <u>7</u> <u>12,</u>	12,900	Ar Value cred Estim Kur Value Sun Outst Has Portid ditt rece	of estim lited to the rescong to of produces anau adarbant anding to zaribagh on of r ed in the eipts un	ated removies Mahara lue of pro- o Direction uce writter Pivision written off- Division emoval by e accounts der "IIa."	vals from jah Division 1 off- 	Hill Tipper Hill Tipper 	3 0 1 1 1 1 1 1 1 1 1 4 4 4 1 1 1 3 9 1,494 6 6 5 8 1 1 1 4 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5,454 95 1,683
Estimated value of produce remaining unsold Rs. Kurseong Division 1,434 Palamau 12 Hazaribagh 38 Singhbhum 1,825 Angul 1	vision ", of produce remaining un of the year— sion "	7,921 1,127 g unsold at Rs. 5 2	- <u>7</u> <u>12,</u>	12,900	Au Value cred Estim Kur Value Kur Pali Sun Outst Hau Outst Hau Outst Jal Sor Jal	of estim lited to i and a variable of product research of product amau darbans anding v zaribagh on of r ed in the cipts un tanding i palguri thal Pa zaribagh ittagong	ated removies the Mahara lue of provide the providence of provide the providence of the providence of the providence of the provided th	vals from jah duce tra Division 1 off- 	Hill Tipper msferred from 	3 0 181 4 	5,454 95 1,683
Kurseong Division 1,434 Palamau 12 Hazaribagh 38 Singhbhum 1,825 Angul 1 Palamau Hazaribagh Singhbhum Angul 1	vision ", of produce remaining un of the year— sion "	7,921 1,127 g unsold at Rs. 5 2	- <u>7</u> <u>12,</u>	12,900	Au Value cred Estim Kur Value Kur Pali Sun Outst Hau Outst Hau Outst Jal Sor Jal	of estim lited to i and a variable of product research of product amau darbans anding v zaribagh on of r ed in the cipts un tanding i palguri thal Pa zaribagh ittagong	ated removies Mahara lue of proto Jorection	vals from jah duce tra Division 1 off- 	Hill Tipper Hill Tipper 	3 0 181 1 1 1 1 1 1 1 1 1 1 1 1 1	5,454 95 1,683
	vision "	7,921 1,127 g unsold at Rs. 5 2	- <u>7</u> <u>12,</u>	12,900	An Value cred Estim Kur Value Estim Pal Sun Outst Has Outst Has Porti, dite rece Outst Tal Son Has Chi Pun	of estim lited to p anted va rescong L amau darbans anding v zaribagh on of r red in the cipts un tanding v paiguri thal Pa zaribagh ri	ated removies Mahara lue of pro- o Direction ucce writter Pivision "," written off- Division emoval by e accounts der "II <i>g</i> ," at close of t Division rganas Divi a Division ","	vals from jah duce tra Division 1 off- 	Hill Tipper Hill Tipper 	3 3 3 4 4 4 4 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5	5,454 95 1,683
Difference between the value of bamboos at close of 1898-99 and that actually realized during 1899-1900	vision "	7,921 1,127 g unsold at Rs. 5 2	- <u>7</u> <u>12,</u>	12,900	An Value cred Estim Kur Value Sun Outst Has Outst Has Porti- dite rec: Outst Tal Son Has Chi Pur Estin Ku Par Has Son Has An Chi Pur	of estim lited to i inted variante of products of products of products and in the international of the caribagh on of r red in the ipts un tanding i paiguri thal Pa zaribagh ittagong ri nated va rseong I lamau uzaribagh	ated removies Mahara lue of proto Joirection ''''''''''''''''''''''''''''''''''	vals from jah duce tra Division 1 off - right-boo , viz., R: Rs. 14,2 the year- sion ace rema 	Hill Tipper Hill Tipper nsferred from R: 	3 3 3 4 4 4 1 5 5 5 5 5 5 5 5 5 5 5 5 5	5,454 95 1,683

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FORM No. 59.

FOREST DEPARTMENT, BENGAL.

Account of	Timber	and ot	he r p roduce	cut	or	collected	by	Government	Agency	and	brought	to
		depôts,	sold locally	, o r	oth	erwise disj	008 00	l of during th	e year.			
							•					

	NAM	B OF	DIVIBIO	ON.			Balance at commence- ment of the year in forests and sale depôts.	Becaived during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forests and sale depôts.	Remarks
·			1				3	3	4	5	6	7
							TIMBI	S R— (Cubi	c feet).			
Direction			•		····		1,815	4,309	5,594	4,554	· 970	
Darjeeling Tista	•••	•••		•••	•••	•••	1,281 78	70,993	72,273 74,114	71,000 51,500	1,273 23,614	
Kurseong								4,180	4,188	4,122	64	
Jalpaiguri Buxa		***	•••	•••	•••	•••	1,510	6,943 31,813	8,452 31,813	5,972 30,665	2,480 1,148	
Santhal Par	ganas							35,028	35,028	35,008	20	
Hazaribagh Palamau		•••		•••	•••	•••	•••	300 1,148	800 1,148	288 1,133	18 15	
Singhbhum	•••	···· ···	•••		···· ···	•••	500	3,44 7 (8,947	2,999	946	
Angul Puri	•••	•••		•••	•••	•••	45	180	825 7	163	78	
Sundarbans	•••	•••	···•		•••	•••	1,862	10,010	11,872	10,365	1,507	
Chittagong	•••	•••	•••	•••		•••	6,279	46,508	52,787	51,673	1,814	
			Tote	al Tir	nber	•••	12,770	288,906	301,676	289,839	32,837	
					==			-(Cubic fee		}		
Direction Darjeeling	····	•••	·••	•••	•••	 	102 74,787	6,627 153,163	6,729 217,950	6,561 139,844	168 88,706	
fista			•••			•••		2,160	2,160	2,160		
Kurseong Santhal Pars	***		•••	•••		•••		175 3,959	175	175 3,959		
Palamau "		•••		···· ···	•••	•••		8	8	3		
Singhbhum Sundarbans			•••	•••	•••	•···	8 43	17 6,365	19 6,408	19	15	
Chittagong	•••	•••		•••	•••	•••	786	1,369	8,155	6,393 3,155		
			T	otal	Fuel		75,720	173,888	\$49,558	160,669	88,889	
					 •		, ,			<u> </u>	L (
		<u> </u>					BAMB	008—(Nt	umber),	<u> </u>		
fista			•···		•••	•••		700	700	700		
Eurseong Santhal Parg	anas	····	•••	•••	•••	•••		950 537,941	950 537,941	950 537,941		
Hazaribagh	•••		•••	•••	•••			2,250	9,250	1,550	700	
Palamau Singhbhum	•••	•••	•••	 	•••	 		3,843 1,105	3,843 1,105	3,843 1,105		
ingul	•••			•••		•••	l [9,800	9,800	9,800		
hittagong	•••			•••	•••	•••	878	25,960	26,838		300	
			Total	Bam	boos		878	582,549	588,427	582,427	1,000	
•					Ŋ	4 1N	OR FOR	EST PRO	DUCE-	-(Value).		
			<u></u>				Bs.	Rs.	Rs,	Re.	Ra.	
Darjeeling Kurseong			•••		•••	•••		5	5	5		
alpaiguri	•••	•••	•••	•••	•••	.		2,154	2,154 50	720 50	1,484	
	•••		•••		•••	•••		81	31		81	
	•••	•••		•••	•••	•••	5	107 1,825	112 1,825	100	19 1,825	
Hazaribagh Palamau Singhbhum						•••		328	82	30	1,020	
Palamau Binghbhum Aogul		•••				•••		188	182	183	· ··· ·]	
Palamau Singhbhum Angul Pari	•••		•••									
Palamau Binghbhum Aogul	•••		•••• •••• •••					3	2 8	2 3		
alamau inghbhum logul Pari andarbana	•••	 		 	•••		1 1					

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FORM No. 60A.

FOREST DEPARTMENT, BENGAL

Abstract showing the value of Timber and other produce at Sale Depôts for the year 1899-1900.

DESCRIPTION ON TIMBER AND	ON HAND	AT COMMINTER	BNCEMENT R.		AND AT CL		DIFFER	ENCE IN UE.	•
otuer produce.	No.	Cubic feet.	Value.	No.	Ouhio feet.	Value.	In favour of the year.	Against the year.	REMARKS
1	3	. 8	•	5	6	7	8	9	30
Timber,			Rs.			Re.	Re.	Re.	
Logs	189	7,404 18	496 3	200 16,532	\$,380 \$4,734	771 19,417			
cantlings	3,384	2,°63 837	3, 190 63	8,048 46	2,74) 131	8,874			
Posta	10	14	3	47	181	11			
Boats	9	745	90	9	1,030	90			
lhingles	2,000 716	21 1,379	18 824		1,130	i 1 38	·		
Tctal Timber	5,459	12,770	3,687	20,351	32,837	23,7:0	20,033		
FIREWOOD AND CHARCOAL.	•								
Firewood Mds. Darcoal Bags	15,491 6,944	27,112 48.008	5,561 7,615	14,302 9,105	23,154 63,735	5.254 9.961			
Total Fuel	22,435	75,729	13,176	83,467	83,589	15,265	3,089	***	
lez boos "	878		· 1	1,000		8	6		
MINOR PRODUCE.									
ao Mda.	1 1		5			18	, •••		
iyrabolams			•••	J,188 14		1,850			
		•••		17		246			
Rephant tusks No,						•••			
Total Minor Produce			5			3,804	3,299		
GRAND TOTAL VALUE			16.870			43,297	25.427		

FORM NO. 60B.

FOREST DEPARTMENT, BENGAL.

Abstract showing the value of live and dead stock for the year 1899-1900.

DESCRIPTION OF LT		On hand menceme ye	nt of the	On hand of the		Difference	in value.	ETWARTE
AND DEAD BROCK.		Number.	Value.	Number.	Value.	in favour of the year.	Against the year.	
1		8	8	•	5	•	7	•
Live stock.			Re.		Re.	Rs.	Re.	
llephante	•••	9	15,500	9	14,820		••• ′	
Total live stock	•••	9	15,500	9	14,820		680	
Dead stock. mildings	···· ··· •··	827 686 64 3,3 28 54 75	1,48,528 4,968 840 14,118 4,845 18,354	865 721 84 56 75 76	1,65,681 5,341 795 14,639 4,831 18,391	19,155 873 516 87 6,476		
teamers team-cutters arge tiscellaneous	•••• •••	8 8 1 8,213	95,172 14,533 5,525 32,17 2	8 1 6,135	1,1,648 13,807 5,250 36,079	0,476 2,907	728 275	
Total dead stock		9,234	3,37,047	10,380	3,65,461	28,404		
GRAND TOTAL	•••	9,943	3,52,547	10,389	3,80,271	87,724		
Brand total for 1808-99		8,840	3,39,262	9,343	3.58.547	18,295		

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FORM No. 61.

FOREST DEPARTMENT, BENGAL.

Summary of Revenue of the different Divisions during 1899-1900.

1 3 3 4 Ravzzuwa. Ra. Ra. Ra. Ra. Timber and other pro- duce removed from the forents by Government access by Government access by Government (a) Timber (b) Firewood and char. 23,931 (a) Timber forents by Covernment access by Covernment (b) Firewood and char. 23,931 (a) Timber for and a bud other minor produce. 24,931 (b) Grass and other minor produce. -Timber and other minor produce. -Timber and other foreste by consumers or foreste by consumers or				-				_					
Ra. Ra. Ra. Ra. Ra. 134						•	01		13	13	ł	8	91
Timber and other pro- duce removed from the dreads by Government dereds by Government def Timber (a) Timber (b) Firewood and char- (c) Bandal-wood minor produce. (c) Bandal-wood minor produce. Total I 150 25,905 Total I 150 cm duce removed from the furces by consumers or	<u> </u>	÷		z	봂	ä	ä	Ŕ	ä	ä	ä	2	B.
(a) Pirewood and char- (b) Firewood and char- (c) Bamboos 25,933 (c) Bamda-wood (c) Banda-wood (c) Banda-wood (c) Grass and other minor produce Total I 150 25,906 Total I 150 25,906	8 8	4		<u> </u>									
(c) hambood	3 8	ا ،	222	835	101	:	:	8		:	6	6,207	1,854 18,78 18
(d) Sandal-wood	8		,		5	:	<u></u>	:	:	:		 ,	a DRS
Total I 150 Total I 150 Trober and other pro- duce removed from the		111 111 111	 		 	:::	1		- 	183	-		38
-Timber and other pro- duce removed from the nurses by consumers or	<u> </u>	4		13.865	17.421		8	3	04	189	1,123	62.3	64.35T
roreste by constancers or		<u> </u>	1_	_	 			İ					
(a) Timber 20,664 11,789 (b) Firewood and char. 21 21 7 607		38,975 112 1 297 1	27,410 11 11	11,701	5,170 600	\$	R *	63,169 2,135	8. 8. 9. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.	975 8.270	3,13,996	35,520 431	5,18,175 8.02.511
528 528 66801			<u>.</u>		1,006		1.943	89	1,045	1,657		30,615 1.157	880,84 860,84
379			, 802		202,62	16,863	8	11,549	99 6	1,615	84,796	11,565	1,50,965
(A) Porcets tamps		••••				, ::::			:::	10,307	: 1 :	3,024	
49,417		88	 _	1	88,989	18,885	2,098	67,817	4,804	28,065	6,88,817	91,809	10,50,126
If L.—Drift and waif wood and 1,831 673 2,391 conflacated forest pro- duce.	 	1,603	1,281	793		:	-	:	:	8	:	1,877	980'6
Total III 1,331 673 2,391		1,603 1,	1,281	703			-			3		1,877	1,984
IVBoverance from forests not managed by Govera- ment-			 										
(a) Duty on foreign				• 		: ;	:	:	i	1	ł	1	1
(b) Revenue from		: • •	<u> </u>		: . 	:	:	1		:	:	:	I
Total IV								:	1		:	:	1
Y = Miscellancous (a) Fines and forfaitures (b) Rehnads 2,038 1,964 (c) Other sources 2,038 1,964 1,467			65 21 1,731	530 630 1	: 9978 8	۴ ۱	\$8 II	: :	. : 85 85 85	1,770 1,770 1,388	8,602	2,4 58 7,737	1,835 2,534 33,359
Total V 2,0888 1,971 1,467		1,329 1,	1,817	926	2,876	5	8	\$	478	3,101	8,604	10,175	36,728
GRAND TOTAL BEVERIUM 3,519 78,097 30,205		44,360 56,	56,780 \$6	98,88	40,786	19,066	2,574	61,790	6,279	81,571	6,34,044	1,09,160	11,11,175

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Asst. Comptroller-General (Forcests).

FORM NO. 61.

FOREST DEPARTMENT, BENGAL.

Summary of Expenditure of the different Divisions during 1899-1900.

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FORM No. 61. FOREST DEPARTMENT, BENGAL.

luring 1899-1900.
Divisions d
different
of the
Expenditure q
5
Bummary

Втрект Налв.	Direction.	Darjeeling Division.	Tista Division.	Kurseong Division.	Jalpaiguri Division.	Bura Division.	Sonthal Parganas Division.	Hazaribagh Division.	Palamau Division.	Singhbhum Division.	Angul Division.	Puri Division.	Sundarbans Division.	Chittagong Division.	Total.
1	64	ø	*	ø	9	7	80	6	10	п	18	13	14	15	16
АСомвителест амр Works. ITimber and other produce removed from the foreis by Government	Rs.	Rs.	Rs.	Rs. '	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Ra.	Ra.	Rs.	Ba.
Timbe Firewo Bambo	113	18,982	9,428 3	819	623	5,069	1,538 3,620	зIJ		•			385	50 E2	17,178 19,792 3,632
or produc		11	: :	110	24	::	11	13	183		11	11			1,359
Total AI	174	18,982	9,455	429	647	6,069	5,158	12	193	973		775	87	22	41,961
IITimber and other produce removed from the forests by consumers or	122	1,146	383	282	371	375	409	326	126	744	216	1,134	48,583	3,629	58,091
purchasers. Total AII	122	1,146	383	527	371	375	409	326	126	744	216	1,134	48,583	3,629	160,83
III Drift and waif wood and confiscated Forest produce.	937	10	165	i	449	39	1	I	1	:	:	:	:	637	2,237
Total AIII	937	10	165	1	449	68	1	:	:	:	:	:	:	637	2,237
IVRevenue from forests not managed by Government- (a) Duty on foreign timber and	1	1	1	I	1		. 1	:	:	:				:	1
(b) Revenue from shared and pri-	:	1			1		:	:	-	1	1	:	i	:	I
Vate lorests. Total AIV			:	:	:	:			:	;	1	÷	:	:	:
VRent of leased forests and payments to shareholders in forests managed by	1	:	:	:	:	1	:	1	1	1	 :	:			1
Total AV	***	:			:	-	:	:				:		:	:
VLLive stock, stores, tools and plant- (a) Purchase of catile (b) Feed and keep of catile (c) Purchase of stores, tools and	308 354	: ::		401	 1,291 224	1,668 868	 59 295	18	1		461 			 11,633	4,433
Total AVI	662	668	218	544	1,515	2,426	354	16	56	1,389	191	254	370	11,533	20,313
VIICommunications and buildings- (a) Buods and bridges (b) Buildings (c) Other works	1 20	7,096 1,542 287	1,406 1,668 68	1,642 1,291 155	1,080 2,106 65	1,842 3,023 194	2,623 160	200 233 6	888 888 888 888 888 888 888 888 888 88	6,045 6,062 96	1,153 1,490 1,21	1,262 2,798 182	4,883	483 1,115 175	22,517 29,303 1,773
Total AVII	20	8,915	3,130	3,088	3,251	5,059	2,683	429	1,075	12,203	2,994	4,243	5,081	1,723	63,593

(60)

	73 1,906 9,706	30 12,903 05 12,903 244 2,110 1,356 3,110 1,356 12,714 1,258 5,333 1,263 5,438	2,982 0.100 6,183 56,445	157 144 8,643 108 2,105143 8,643	325 2,249 143 15,095	9,712 56,420 23,905 2,47,735	4,501 10,790 6,191 1,672 94,963 7,085 19,963	1,048 3,365 1,874 24,263 575 35,528	374 150	13,367 35,065 22,195 2,49,052		36 67 249 1,563	1,711 1,828 6,281 43,258	4 4 8 2 145 65 13 8 8 2 341 481 52 1,719 2 3,841 481 52 1,719 2 3,640 243 657	534 2,088 2,655 15,344	15,612 38,981 31,131 3,07,729	25,324 95,401 55,036 5,55,464	+6,047 +5,39,243 +54,124 +6,05,711	t 1
	606	49 	2,229	376	386	6,728		721 573	i	6,559	898 189 399	35	1,025	: 1 153 153 153	1 323	7,906	13,628	-8,349	
1-1-1-1-1	1,851	12,813 1,697 4,211 8,211 2	20,050	364	354	35,713	18,238	2,130 266	843	32,044	3,028 2,090	52	5,170	11 146 146 95 333 498	1,102	38,316	74,029	-6,300	
1000	G :	1 209 758 47	1,489	202	72	3,049	3,600	528	i	8,214	552 539 339	14	905	88 1 1 19 19	312	9,431	12,450	-10,106	
Y	н	: : 888 888 888 888 1	616		105	1,579		11	1	1,716	: 1 ⁵⁹	:	451	14 28 86	186	2,353	3,932	+15,123	
	: 1	1111	1	3 726	729	9,333	8,169 8,395	116	494	13,036	1,590	20	2,336	6 174 298 179 508	1,165	16,587	25,920	+23,866	
	1,013	63 	3,937	146	146	17,051	7,730	893	469	14,157	1,413 631	43	2,087	140 8 167 74	388	16,632	33,683	-4,857	
	888		3,390	8,234	8,774	18,397	5,625 5,488	106	331	12,251		30	2,507	4 177 153 153 068	1,223	15,981	34,3;8	+22,402	
	31	4 437 920 619	2,422	105	407	7,417	617,6 577,6	1,152	583	18,912	2,675	242	5,450	101 50 175 178	609	24,871	32,288	+12,072	-
1.12	716	8 39 257 166	1,246	350	350	14,047	7,034	1,151	424	14,406	1,849	54	3,554	14 411 157 157 892	974	18,934	35,881	-3,676	
1	ę ,	432 156 7,199 139 8,371	11,800	- 605 - 605	537	42,056	10,727 7,533	1,739	169	20,938	4,678 1,855	38	6,571	14 26/2 537 313 327	1,458	28,963	71,018	+7,069	
1	11	ทำเ	-	518	518	2,434	17,972 6,964	7,777	2,029 1,480	36,222	2,378 296 	663	3,327	54 581 681 1,320	2,483	42,032	44,466	-40,947	
VIII - Consistent in income and atten- ((a) Demarcation	(c) Surveys (d) Working-plans (d) Working-plans (d) Protection from free		IXMiscellaneous (a) Law charges		TOTAL ACONSERVANCY AND WORKS	BESTABLISHMENTS. IBalaries- (a) Conservators (b) Superior ollocets (c) Superior ollocets and depot	establishments. (d) Office establishments (e) Deputation and special allow-		ance. Total BI	IITravelling allowances- (a) Convervator's (b) Superior officers (c) Superior officers and depot	(d) Office establishments	Total BII	IIIContingencies- (a) Stationery (b) Carriage of tents and records (c) Rents, rates, and mases (d) Pay of police guards (c) Official postage	Total BIII	TOTAL BESTABLISHMENTS	GRAND TOTAL OF EXPENDITURE	SURPLUS OR DEFICIT	

(61)

(62)

FORM No. 62.

FOREST DEPARTMENT, BENGAL.

Account Current for the year 1899-1900.

Dr.

Rs. A. P. Rs. A. P. Rs. A. P. Rs. A. P. 963 10 11 14,494 5 3 3,675 9 2 5,55,463 13 9 16 8 0 2,96,733 5 11 3,576 1 8 -----11,61,174 15 9 _____ Savings Bank Deposits— Bank Account— Forest Officers' Provident Fund 2,93,223 1 10 3,356 11 9 Cash Remittances-Local-Forest Remit-..... ances. Remittances to Treasuries Unpaid cheques written back Inter-divisional Transfers 11,19,204 9 11 100 0 0 6,385 14 0 11,25,690 7 11 General Family Fensor Forest Re tances. Forest cheques drawn Revenue Remittances written back Inter-divisional Transfers 5,45,082 8 0 1,918 15 4 6,381 10 0 5,53,383 1 4 Bxchange Account with other Governments-Account between India and Bengal. I.- Forest Remittances from Bengal to 14,096 4 1 1,039 8 8 III.-Items adjustable by India... Account current with Foreign States-Her Majesty's Colonial Government, Ceylon 15,135 12 9 29 14 11 22,966 10 2 2,239 8 0 1,176 7 5 1,586 8 11 26,362 9 7 4.467 10 1 5.579 6 1 1.208 8 9 1.903 8 9 76 18 9 ----Inter-Departmental Transfers-Public Works Department, Ordinary Branches Public, Works Department, Bailway Inter-Departmental Transfers-Public Works Department, Ordinary 8,856 14 10 Branches Public Works Department, Bailway Branch Military Department, Bengal Command ... Marine Department Civil Departments Public Works Department, Ordinary Branches Public, Works Department, Bailway 14,923 5 0 18,101 6 11 937 7 0 1,674 3 4 11 0 0 -21,988 6 0 1,593 3 11 8.993 4 1 23,692 9 11 Oash balance ... 210 15 9 ----GRAND TOTAL 90,67,054 15 0 GRAND TOTAL 90,67,054 15 0 •••

P. G. JACOB,

Assistant Comptroller-General (Forests).

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(63)

FORM No. 63.

FOREST DEPARTMENT, BENGAL.

Revenue received and outstandings on account of revenue during 1899-1900.

DIAIRIO	м.	PARTICULARS.		Outstand- ings at commence- ment of year.	Value of sales and other revenue dur- ing year.	Total.	Amount realized dur- ing year,	Balance due to the Depart- ment at end of year.	REMARKS.
. 1		2		3	4	5	6	7	8
Direction Directing Tists	 nas	Timber and other produce Ditto ditto Ditto ditto	e	Rs. A. P. 13 4 0 97 0 0 3,988 10 9 392 11 3 9,256 8 1 1,127 2 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rs. A. P. 3,519 11 5 83,207 11 0 30,205 0 1 45,473 5 11 56,829 13 5 23,947 7 8 49,810 14 3 23,046 13 9 2,374 0 0 68,267 14 11 5,278 11 2 39,470 14 9 6,34,644 6 11 1,10,112 5 3	Rs. A. P. 3,519 7 5 78,086 9 4 80,204 15 1 44,339 7 1 46,780 5 5 25,826 7 8 49,785 14 3 20,548 12 0 ⁶ 2,374 0.0 67,728 8 10 5,278 11 2 31,371 2 8 6,34,644 6 11 1,09,160 1 6	$\begin{array}{c} 1,113 \ 14 \\ 49 \ 8 \\ 121 \ 0 \\ 25 \ 0 \end{array}$	• Includes Es. 1,493-14-5 written off.
		Total		14,875 5 (3 11,66,313 13 0	11,81,189 2 6	11,62,668 14 24	18,520 4	# Form No. 61 11,61,174 15 6 Add * 1,493 14 5 Total, column 6 11,62,668 14 2

FORM No. 64.

FOREST DEPARTMENT, BENGAL.

Outstandings and Liabilities on account of Contractors and Disbursers for 1899-1900.

	DEP	ARTMENT DEBTO)R.	DEP	ARTMENT CREDIT	FOR.	BALAN	CE DUE.
DIVISION.	At commence- ment of year,	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commence- ment of year.	Payments made during year.	At close of year.	To Department (outstandings).	By Department (liabilities).
1.1	2	3	4	5	6	7	8	9
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Direction Darjeeling Fista Kurseong Buta Sonthal Parganas Hasaribagh Palamau Singhbhum Angul Pari Sundarbans Dhittagong	597	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 2,298 & 0 & 0 \\ 56,951 & 10 & 2 \\ 15,666 & 7 & 10 \\ 18,623 & 7 & 6 \\ 18,495 & 11 & 10 \\ 25,293 & 12 & 4 \\ 11,730 & 7 & 11 \\ 3,717 & 1 & 6 \\ 8,009 & 7 & 7 \\ 39,222 & 14 & 11 \\ 9,243 & 3 & 11 \\ 14,111 & 5 & 0 \\ 51,542 & 10 & 7 \\ 21,827 & 0 & 10 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Total	 597	2,93,223 1 10	2,93,228 11 5	7,601 1 6	2,96,733 5 11	3,03,734 7 5	10,505 12 0	

P. G. JACOB,

Asst. Comptroller-General (Forests).

(64)

. Fobm No. 65.

FOREST DEPARTMENT, BENGAL.

Financial results of the year 1899-1900.

Div	ISION	•		PRODUCE FROM THE S GOVER	ND OTHER REMOVED FORESTS BY NMENT SCT.	OTELE 1	evesue.	FORMATION, PROTECTION, AND IMPROVE- MENT OF PORRETS.	Tor	FAI.	REMARKS
				Receipts.	Charges.	Beceipts.	Oharges.	Charges.	Receipts.	Charges.	
;	l			2	8	4	5	6	7	8	9
				Rø.	Bs.	Re.	Rø.	Re.	Re.	Rs.	
Darjeellag Pista			•••	25,966 80	\$0,430 9,455	57,181 30,185	19, 260 9,405	31,338 15,091	78,067 30,205	71,018 88,681	
Lurseong	•••		•••	440	429	43,920	14,398	17,461	44,360	81,288	
alpaiguri					647	\$7,103	19,967	13,764	56,780	84,878	
Bura				13,885	5,069	14,941	12,619	15,995	28,826	83,683	•
onthal Part				17,421	11,943	32,365	7,193	6,785	40,786	25.920	
Direction		•••		1,481	1,111	2,038	1,701	41,654	3,519	44,466	
lazaribagh	•••				11	19,055	1,867	2,053	19,055	3,933	
alamau				89	193	3,255	5,498	6,789	2,874	12,480	
inghbham			•••	\$3	978	67,707	26,875	46,181	67,729	74.029	•
ngul	•••	•••		9		5,277	4,781	8,847	5,279	13,698	
ari			•••	182	775	81,189	8,163	16,387	81,371	6. 25,384	
undarbans		•••		1,123	37	6,33,521	87,615	7,749	6,34,644	95,401	
hittagong	•••	•••	•••	7,176	9,061	1,01,984	25,679	306	1,09,1 6 0	55,036	
	Tal	•1		67,545	60,124	10,93,630	3,45,020	8,50,330	11,61,175	5,55,46	

APPENDIX.

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Paragraph 15.

APPENDIX A.

FOREST DEPARTMENT, BENGAL.

Abstract record of the growth of certain species of trees.

11													Number of trees measured.	Average annual increase.	Number of trees measured.	Average annual increase.	Number of trees measured.	Average annual increase.
16	ISION.		Tamna, 1894-95.		es measured.	61-63-0	213		1	¥L.	5.1	15.	40	82.	40	87.	20	02.
15	PURI FOREST DIVISION.		Haripur, 1894-95.	Sal.	Acres and number of trees measured.	0-23-43	187		1	Z2.	នុ	36.	33	31.	33 + 17	-45	40	Sł.
14	PURI P		Joymangal, 1893-94.		Acres and r	0.23-49	213		:	-75	30	61.	49	87.	40	.00	48	12.
13			Plot No. XI, 1894-95.	Gengwa.		100			1	:	-33	91.	100	12.	. 65	20.	23	11.
12			Plot No. X, 1894-95.	Goran.		100			I	58	•23	91.	90	. 18.	55	20.	38	11.
11			Plot No. IX, 1894-95.	Keora.		100		n inches.	1	5-29	12.1	1.62	96	1.60	84	12.1	88	1.54
10		BSERVATION.	Plot No. VIII, 1895-96.			20		girth per tree i	:	:	61.	• 63	47	gI.	47	91.	45	91.*
6	ISION.	AND YEAR OF FIRST OBSERVATION.	Plot No. VII, P	Amur.	ed.	120	0) r 7.47	Average annual increase in girth per tree in inches.	:	15.	80.	20.	10	51.	68	20.	89	12
80	SUNDARBANS FOREST DIVISION.	PLOTS AND Y	Plot No. VI, 1895-96.		Number of trees measured.	21	Area not given.	Average a	3	1	<u>9</u> 7.	18.	46	99.	46	52.	46	89.
2	UNDARBANS		Plot No. Va. 1896-97.	Pussur.	Numbe	49	V		1	:	3	84	48	ŝ	47	-53	47	05.
¥	20		Plot No. V. 1894-95.	-		64			1	¥2.	(a)	1	:	:	:	;		1
ŝ			Plot No. IV. 1893-94.			130	×		84.	91.	30	g1.	130	11.	129	II.	129	¥8.
+			Plot No. III, 1893-94.	Sundri.		220			18.	81.	87.	21.	220	181.	219	81.	213	9 I.
8			Plot No. II, 1803-94.	00		345			16.	13.	13.	60.	345	21.	343	II.	342	31
0 3			Plot No. I.			305			Ħ.	67.	89.	81.	305	.13	304	-13	302	88.
1				Bpecies of trees.			Average number of trees per acre.	Year.	1893-94	 969661					gl	L Estror	}	5

(a) Trees cut down in 1895-96 and plot abandoned.

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			TIMBER.			FUEL.		BA	BAMBOOS.	-	MINOR PRODUCE.	CODUCE.	GRAZING.	ING.			1.1.E		
Agency by which produce was removed.	69	Quantity.	y. Full value.	Amount actually real- ized.	ly Quantity	Full value.	Amount actually real- ized.	Number.	Full value.	Amount actually real- ized.	Full value.	Amount actually real- ized.	Full value.	Amount actually real- ized.	Total fuil value.	Total amount actually realized.	Jound loss to Govern- ment,	R.RMARS.	
1		03	80	*	10	9	2	s	6	10	n	12	13	14	15	16	17	18	
		C. ft.	. Rs.	Rs.	C. ft.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Bs.	Rs.		
				_				RESERVED FORESTS.	ED FOR	ESTS.		0							
Right-holders	:		:	:	:	:	:	:	:	:	:	;	:	:	:	:	:	(a) Credited as follows : D.	
Privileged villagers on commutation tees.	mutati		Ŧ		910,157	7,462	(a)	966,400	4,473	(a)	3,007	(a)	7,248	(a)	22,190	(a)3,965	18,225	IIb 3,852 IIg 3,852	
At reduced rates	:	1	:	1	:	3	:	i	:	:	:	:	5,588	1,669	5,588	1,669	3,919	Total	
Free grantees	:	11,143	13 2,185	:	22,038	348	;	1	;	:	394	:	696	;	3,896	:	3,896		
To	Total	11,143	43 2,185		932,195	7,810	:	966,400	4,473	:	3,401	1	13,805		31,674	5,634	26,040		
								PROTECTED FORESTS	ED FOI	RESTS.									
Right-holders	:	70,665	65 1,578	:	2,380,835	47,053	:	:	:	:	125	:	36,582		85,338	;	85,338	(b) Credited as follows : B.	
Privileged villagers on comn fees.	commutation	010 160,000	00 2,000	(9) 00	12,000,000	56,250	(9)	4,000,000	5,208	(9)	42,667	(9)	44,000	(9)	1,53,125 ((0)14,550	1,38,575	115 4,153 11g 10,397	
At reduced rates	:	60,005	05 9,740	4,870		1	;	:	:	:	:	:	:	:	9,740	4,870	4.870	Totai 14,550	
Free grantees	:	1,624	24 260		729	16	1	2,300	23	:	67	:	1	1	301	:	301		
Tot	Total	292,294	16,578		14,381,564	1,03,319	:	4,002,300	5,231	:	42,794	:	80,582	:	2,48,504	19,420	2,29,084		
			_					UNCLASSED FORESTS	ED FOB	CESTS.									
Right-holders	:	:	I	:	:	1	:			:	:	:	;	:	:	E	1		
Privileged villagers on commutation fees.	nutatio		1	:	:	:	:	:	:	:	÷	:	i)	;	ł	:	ł		
At reduced rates	:	:	:	:	:	1	;	;	:	:	:	:	:	:	1	:	:		
Free grantees	:	165	1 35	:	:	:	:	1,500	10	;	:	:	-	:	40	:	40		
Total		401	1 35	:		:	:	1,500	10	:	:	•	:	:	40	:	40		
GRAND TOTAL		303,928	8 18,798	:	15,313,759	1,11,129	:	4,970,200	9,709	:	46,195	:	94,387	:	2,80,218	25,054	2,55,164		
Total, 1898-99		335 405	5 91 144				Ī			İ									

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W. H. McG.-Reg. No. 3862J-400-24-11-1900.

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Paragraph 62.

FOREST DEPARTMENT, BENGAL.

APPENDIX B.

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ERRATUM.

PLEASE make the following corrections in this Government Resolution No. 128For., dated the 5th January 1901, on the Progress Report of the Forest Administration for 1899-1900:---

- (1) For the figures "92" and "62" in line 1 of paragraph 8, substitute "65" and

- (1) For the figures "92" and "62" in line 1 of paragraph 8, substitute "65" and "33," respectively.
 (2) For "101,865" and "40,545" in lines 2 and 3 of the same paragraph, substituts "60,959" and "35,338," respectively.
 (3) In column 4 of the tabular statement in paragraph 10, against the entry "purchaser" under head "Protected," for "4,435,672" read "4,535,672."
 (4) In line 6 of the sub-paragraph immediately following the tabular statement in paragraph 10, for "2,316,888," read "2,266,018."

The 22nd July 1901.

F. A. SLACKE, Secy. to the Govt. of Bengal.

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W. M. D'C .- Reg. No. 27610-460-28.7.190).

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REVENUE DEPARTMENT.

FORESTS.

CALCUTTA, THE 5TH JANUARY 1901.

RESOLUTION No. 128For.

Read-

The Progress Report of Forest Administration in the Lower Provinces of Bengal for the year 1899-1900.

Read again-

The Progress Report of Forest Administration in the Lower Provinces of Bengal for the year 1898-99 and Government Resolution thereon.

Mr. A. E. Wild, who was in charge of the Bengal Forest Circle throughout the year, submitted his Report on the 10th November 1900, more than a month late.

The following statement shows the area of each class of forest in the eircle:---

					PERCEN	TAGE—
CLASS OF FOREST	Area at commence- ment of the year.	∆ dded.	Excluded.	Arca at close of the year,	Of total forest area.	Of the area of the provinces (155,571 square miles).
1	2	3	4	5	6	7
Protected	Sq. miles. 5,881 3,816 4,033	··· ···	Sq. miles. 141	8q. miles. 5,891 3,675 4,033	43 27 30	3.76 2.35 2.58
Total .	13,730		141	13,589		8.69

2. No actual changes in the area of reserved forests were made during the year. The recent land revenue resettlement of the Khurda Government Estate shows an excess of 1,833 acres, and of 51,725 acres in the area of the reserved and protected forests, respectively, of the Puri Division, but the reasons for this not having been given, no actual alteration has yet been made in the figures. In the Sundarbans 141 square miles of protected forests were transferred to be converted into cultivation. The transfer of the Saoria tract of the Sonthal Parganas under the Deputy Commissioner will shortly be effected.

3. Settlement.—The Lieutenant-Governor notices with regret, since the reasons given for the delay are not satisfactory, that the settlement of the area in the Chittagong Forest Division has not yet been completed. The work was started as far back as 1897-98, and he trusts that it will be ready for notification within the current year.

The recent proposals of the Board of Revenue that certain blocks should be set aside as fuel and fodder reserves in the Jalpaiguri district as protected forests, and placed under the control of the civil authorities, are under consideration of Government. According to the approved programme of operations spread over a period of ten years, the Imperial Forest Survey Branch began work in December in the Singhbhum Division. In future reports the Conservator should state what was the programme for the year and, in case it was not worked up to, what were the reasons for the deficiency. It is reported that the progress made so far was not very encouraging, as there are to be two parties at work during the coming season, more check and supervision are required.

The total length of boundaries as yet defined stands at 5,186 miles. The Lieutenant-Governor trusts that during the ensuing year forest officials will bear in mind the importance of carefully inspecting forest boundaries, a duty which appears to have been overlooked in many divisions.

Working-plans .--- Of the total forest area in Bengal, viz., 13,589 square 4. miles, working-plans for 5,320 square miles have been either completed or are being compiled, and 8,269 square miles still remain to be dealt with. The latter area includes 4,033 square miles of unclassed forest of Chittagong. Owing to the unfortunate illness of Mr. Hatt, who had nearly finished the working-plans for the Puri Division (110 square miles), and of the tardy progress made by the Forest Survey Party in Singhbhum, which delayed Mr. Haines, who had in hand the working-plan (731 square miles) of that Division, no plans were com-pleted during the year. Here also the Lieutenant-Governor would request that in future years details be given showing what was the programme for the year and to what extent it was worked up to with reasons for any short-comings. The table showing the comparative strength of the staff. The table showing the comparative strength of the staff, area and comings. percentage under working-plans for the three provinces of Bengal, North-Western Provinces, and Central Provinces, submitted by the Conservator, is interesting; but the figures for the areas under working-plans in the Central Provinces do not tally with those given last year. Speaking generally, the comparison as to strength of establishment is not very disadvantageous to Bengal, and the Lieutenant-Governor is compelled to repeat that Bengal has hitherto failed to realise the great value of working-plans. It is so far satisfactory, however, to see that the importance and necessity of the work are now fully understood, for there is no part of the Forest Officer's duties of greater importance than the preparation of working-plans for the forests in their charge. Without them a new Forest Officer is helpless in his charge; and Government has no check on the proper working of any forest.

But it does not appear that the Conservator's arrangements for carrying out these operations are as yet properly organized, since they seem to rest on the chance of securing the services of special officers for this work alone. The matter will be dealt with when orders are passed on the report which has lately been called for giving, in the order of urgency, the Forest Divisions, for which working-plans or revision of existing working-plans are required during the next five years. The Conservator has now had a material addition made to his superior staff, and the work must be taken energetically in hand.

		BUILDING	3.	Roan	DS AND BRIJ	og RS.		Τοται.	
DESCRIPTION OF WORK.	Actuals of 1895-99,	Budget estimates of 1839-1900.	Actuals of 1899-1900,	Actuals of 1895-99.	Budget estimates of 1899-1900.	Actuals of 1890-1900,	Actuals of 1898-99.	Budget estimates of 1899-1900.	Actuals of 1899-1900.
1	2	3	4	5	6	7	8	9	10
New construction Repairs Unapportioned	. 11,116	Rs. 28,480 12,547 1,080	Rs. 18,252 9,994 1,147	R*. 10,205 8,902 123	Rs. 24,127 10,367 320	Rs. 14,805 7,358 264	Rs, 33,639 20,048 1,253	Rs. 52,600 22,900 1,409	R9. 83,147 17,262 1,411
Total	. 35,739	42,100	29,303	19,230	34,800	22,517	51,969	76,900	51,820

5. Buildings and Communications.—The following statement shows the expenditure on roads and buildings in 1898-99 and 1899-1900 and the budget estimates for the latter year:—

The budget estimates were not worked up to, partly owing to several works not having been taken up and partly to the diversion of the allotment to other purposes.

The chief new buildings constructed during the year were the Sonthal Parganas head-quarters house and three revenue station-houses in the Sundarbans.

Eighty-four miles of new roads and paths were made during the year as against 57 in the previous year, and repairs were carried out along 787 miles of road, the corresponding figures for 1898-99 being 842. Of the new roads, 35 miles were for facilitating export and 49 miles were for inspection purposes. The experiment of erecting a wire rope-way in the Tista Division was a failure owing to the curves encountered, and the line will have to be re-erected on the usual plan of straight lengths.

6. Breaches of Forest Law.—Three hundred and fifty-five cases were taken into Court during the year under report as against 307 in 1898-99. This increase occurred mainly under "fire cases" in the Singhbhum Division and under "other offences." Of the cases disposed of, 88 per cent. ended in conviction as against 90 in the previous year. Prosecutions were instituted in 50 cases for offences with regard to fire, of which 38, involving 45 persons, ended in conviction, and 5, involving 18 persons, resulted in acquittal. The remainder were pending at the end of the year. Of the total cases of this kind, 28 occurred in Singhbhum, 9 in Palamau, 5 in Angul, 3 in Jalpaiguri, 2 in Chittagong, 1 in Darjeeling, 1 in Puri, and 1 in the Sonthal Parganas.

The sentences awarded in fire cases have been generally of a much more deterrent nature than was the case during the previous year, and the Lieutenant-Governor agrees with Mr. Wild that, "considering the difficulty in most fire cases of procuring any evidence at all, whenever convictions are obtained, the punishment ought in all cases to be exemplary." The Lieutenant-Governor looks to the Conservator to bring promptly to the notice of Government any case in which, in his opinion, the punishment awarded has been inadequate. The Government of India, as noted in last year's Resolution, asked if amendments were not required in the Indian Forest Act for the better protection of forests from fires and the punishment of incendiarism; proposals have accordingly been submitted by the Conservator to alter the existing law and to make villagers jointly responsible for fires.

The number of cases compounded by Forest Officers amounted to 1,946, involving 3,962 persons as against 2,057 cases, involving 4,018 persons in the previous year. The amount received as compensation was Rs. 12,176, Rs. 791 less than the amount in the previous year. In the Sundarbans, the compensation accepted is usually high, as the cases are mostly of a more serious nature than in other Divisions, for the offenders carry off the wood in boat-loads, whereas elsewhere the thefts are chiefly confined to the quantity that can be carried on a man's head. Omitting this Division, the compensation received for each person involved varied between 8 annas 7 pies in Singhbhum and Rs. 7-3-9 in Buxa. The total number of offences decreased from 2,487 to 2,483, and of these, the Darjeeling Division contributed 446 cases, while the Tista, Sonthal Parganas, Puri, and the Sundarbans Divisions contributed over 300 cases each.

7. Forest fires.—Protective measures against fire were taken for 2,114 square miles, of which 194 square miles, or 9 per cent. of the entire protected area, were burnt, as against 2 per cent. in 1898-99 and 27 in 1897-98. This increase was, to some extent, to be expected owing to the early setting in of the hot weather.

Although a far larger area was burnt than during the previous year, yet, looking at past results, the general result of the year under report was fairly satisfactory, and the Conservator points out that the accustomed alternation of good and bad years, which has been the rule since 1890-91, has been broken. The Lieutenant-Governor agrees with the Conservator that some praise is due to the officers of the Department for this improvement.

Singhbhum again heads the record, having had 134 square miles burnt, and the fires there in 1899-1900 were worse than in 1898-99. In consequence of the many and severe fires in the early part of the season in the Saitba block of this Division, the burnt areas in that block were closed to grazing for three years as a punishment for malicious and careless firing.

8. It would appear that for the Circle 92 fires as against 62 in the previous year were intentionally fired, damage being done to 101,365 acres as against 40,545 in 1898-99. Prosecutions were instituted in 14 of these cases, of which 10 ended in conviction, 2 resulted in acquittal, and 2 were pending at the close of the year.

9. Grazing.—Four hundred and seventeen square miles of reserved forests were open to all animals, as against 393 square miles in the previous year, the increase of 24 square miles being due to areas previously closed in the Darjeeling and Kurseong Divisions being thrown open during the year under report. As in the previous year, 1,722 square miles of protected forests remained open during 1809-1900. The average area per head of cattle grazed in the reserved forests was 5.7 acres as compared with 5.5 acres in the year before. In the protected forests, excluding Angul, which is under the management

of the Deputy Commissioner, and for which no returns have been furnished, the acreage per head (2.5) was practically unchanged, though the revenue increased by Rs. 919 to Rs. 84,941 owing to better collections in the Puri With regard to grazing, no change has been made in the method Division. or system.

10. Yield and outturn of forest produce.—The following statement gives details of the forest outturn of the year:—

Class of forest and agency by which prod was removed.	luce	Timber.	Fuel.	Total wood.	Bamboos.	Minor produce
1		2	8	4	5	6
Reserved.		C. ft.	C. ft.	C. ft.	0. ft.	Rs.
Government Purchasers Free-grantees Right-holders		186,799 5,669,564 11,143	155,740 15,194,638 22,038 910,157	\$42,539 20,864,202 33,181 910,157	17,148 9,769,908 966,400	2,682 1,24,875 1,363 12,312
Total		5,867,506	16,282,573	22,150,079	10,753,456	1,41,232
Protected.						
Government Purchasers Free-grantces Right-holders Total	•••• ••• •••	38,636 699,978 1,624 230,665 970,803	3,981 3,835,694 729 14,380,835 18,221,239	42,517 4,435,672 2,353 14,611,500 19,192,042	539,441 101,090 2,300 4,000,000 4,642,831	1,701 47,777 2 1,23,374 1,72,164
Unclassed.						•
Government Purchasers Free-grantees Right-holders	 	21,290 480,232 491 	1,369 60,642	22,659 540,874 491 	25,96 0 5,6 11,*86 1,5(0	\$ 8,657*
Total		502,013	62,011	564,024	5,639,346	8,660
Grand total in 1899-19	00 -	7,340,322	34,565,823	41,906,145	21,035,633	3,22,746
Ditto in 1898-99	· -	6,420,306	32,248,985	38,669,241	20,744,794	2,90,016
Difference in 1899-190) -	+ 920,016	+ 2,316,898	+ 3,236,904	+ 290,839	+92,790

* Includes Rs. 2,108 collected from Hill Tippera (for two years).

The gross outturn under all heads was much greater than in the previous year, and considering that the gross yield of the year 1898-99 itself had been considerably larger than in 1897-98, this result is very satis-factory. The Sundarbans Division gave the largest increase, the timber and fuel there exceeding those of the previous year by 693,867 cubic feet and 2,316,888 cubic feet, respectively, and the Departmental Officers are reported to have shown much energy in exploiting the produce of this Division and taking advantage of a brisk demand.

Singhbhum also showed a considerable improvement in its yield of timber, but fell off considerably in its fuel outturn, as also did Angul. 11. Financial Results.—The following statement shows the financial results

during each of the last six official years:-

Financial year.			Receipts. Rs.	Charges. Rs.	Net revenue. Rs.
1894-95	•••		7,95,673	8,98,601	3,97,072
1895-96			9 ,18,709	4,66,058	4,52,641
1896-97		•••	13,70,849	6,90,042	6,80,807
1897-98	•••		11,89,285	6,53,437	5,35,848
1898-99	•••		9,72,313	4,86,319	4,85,994
1899-19 00	•••	•••	11,38,912	5,45,205	5,98,707

For the purposes of comparison the Conservator eliminatest he years 1896 -98 as exceptional owing to the extensive sleeper operations in Singhbhum, but this the Lieutenant-Governor cannot agree to, since in his opinion there must yearly be a large demand for sleepers on the part of the railway companies, which it is the duty of the Forest Department to meet or to explain to the satisfaction of Government their inability so to do.

12. The following table shows the result of the last two financial years, division by division :--

_				RECE	IPTS.	. Сил	RGES.	SURI	LUS.	DEFI	CIT.
Dr	V18101	¥.		1899-1900.	1898-99.	1899-1900.	1898-99.	1899-1900.	1898-99.	1899-1900.	1898-99.
	1			2	3	4	5	6	7	8	9
Direction Darjeeling Tista Kurseong Jalpaiguri Buxa Sonthal Pargani Hazaribagh Palamau Singbibhum Angul Puri Sundarbans Chittagong	 	····	···· ··· ··· ···	Rs. 3,573 79,003 28,704 42,958 55,722 26,742 43,262 19,105 2,775 62,660 4,922 32,246 6,30,639 1,06,381	Rs. 13,506 79,969 22,828 39,021 49,127 16,441 22,760 3,429 40,745 3,912 25,034 5,57,120 98,371	Rs. 43,879 70,571 31,066 31,275 34,301 30,515 30,415 3,730 12,828 67,949 13,694 26,550 96,675 51,753	Rs. 39,660 69,617 23,075 33,796 23,752 17,364 11,890 45,812 15,286 26,093 1,0,480 45,375	Rs. 8,522 11,633 21,421 12,847 15,465 5,30,060 54,32,960 54,628	Rs. 10,322 5,225 25,668 5,396 4,46,640 52,996	Rs. 4C306 2,362 3,733 10,053 5,289 8,772 	Rs. 26,154 7,311 8,461 5,097 11,374 1,009
Net surplus		Total 	 	11,38,912 	9,72,313	5,4 5,205	4,86,319	6,64,222 5,93,707	5,46,247 4,85,994	70,515	60,253

The Lieutenant-Governor regrets to find that no improvement was made in the Tista, Buxa, Palamau, Singhbhum, and Angul Divisions, which again worked at a loss during the year under report. It is explained that in Singhbhum there would have been a small surplus, but for the expenditure of Rs. 12,113 on surveys, and that the deficit in Tista was due to the inability to dispose of the sleepers prepared there, in consequence of the breaks in the Tista Valley road. In the Buxa Division operations, it is said, are retarded owing to the climate, which prevents the Department from securing rehable workmen, but the Conservator thinks that there will be a profit in the coming year. Improvement in Angul is also promised though for what reason is not stated. In reviewing the report of the previous year, the Government of India expressed the opinion that no forest division in Bengal, except the Direction Division, should show a deficit, and they agreed with the Lieutenant-Governor in considering that more energy was required on the part of Divisional Forest Officers in seeking and developing markets for the many products of the Bengal forests.

The Conservator reports that a certain zeal in the direction of opening out new markets has now been aroused among the officers of the Department, but that none have shown any special aptitude for commercial undertakings. His Honour desires that the Conservator will impress upon all officers that unless they eagerly seek every chance of exploiting the forest produce and bringing the products to the knowledge of purchasers, instead of waiting for purchasers to approach them, they have failed in one of the essential duties of a forest officer.

The answers given by the Conservator with reference to the questions asked concerning the supply of sleepers to the Cooch Bihar, Barun-Daltonganj and Bengal-Duars Railways do not show that it was impossible for the Department to furnish the necessary timber.

The Lieutenant-Governor is glad to notice the successful and profitable introduction of Departmental operations in the matter of the collection and disposal of certain minor products, viz., India-rubber in the Kurseong Division, myrabolams in the Singhbhum Division, and the fruit of the *strychnos nux vomica* in the Puri Division; and he is obliged to Mr. Wild for the trouble he has taken in the improvement of this branch of the administration. That the departmental

cultivation of lac in the Palamau forests has, owing to want of zeal, been so far a failure, is most regrettable, and the Lieutenant-Governor trusts that the Conservator will see that this want of energy on the part of local officers is promptly remedied: there would appear to be no reason why this cultivation should not be as successful as others, and it is trusted that next year's report will show better results. It is satisfactory also to note that the right to cut sabai grass in the Singhbhum reserves, which had been leased for three years in 1897 at a total rent of Rs. 30,000, was resettled in April 1900, for a further term of three years for a sum of Rs. 1,26,000.

The state of the mica industry in Hazaribagh continues to be disappointing, and the Conservator thinks that it is impossible to exercise much departmental check of the data on which the royalty on mica is calculated without a large increase of establishment. A revision of the mica mining rules is now under the consideration of Government.

13. Miscellaneous.—Since the close of the year three new appointments have been sanctioned by Her Majesty's Secretary of State, viz., one Deputy Conservator, first grade, another of the third grade, and one Assistant Conservator, second grade.

Considerable damage was done to the forests around Darjeeling by the unusully heavy storm and rainfall of the 24th and 25th September 1899. There was a formidable landslip on the Setikhola Jhora, and the torrents in the Tista river and its tributaries, the Rangit and the Bara Rangit, brought down large deposits of silt and washed away low-lying strips of forest on their immediate banks, and a bed of silt was formed in the Apalchand forest in Jalpaiguri. It is estimated that 463 acres of forest in the Darjeeling Division, and some 450 out of 600 acres in the bed of the Balasun river have been lost. The damage to roads and paths was extensive in the three hill Divisions of Darjeeling, Kurseong, and Tista.

The present report is full and in view of the remarks passed last year by the Government of India, it should if possible have been curtailed. This subject, however. is now under consideration, and the Lieutenant-Governor is awaiting the opinion of the Conservator on the suggestion made by the Government of India in their Circular No. 7F., dated the 18th September 1900, for the shortening of the Report.

14. In thanking Mr. Wild for his administration generally and for the large increase he and his officers have obtained in the departmental surplus, the Lieutenant-Governor desires that two points may be very closely kept in view during the ensuing year: the vital importance of pushing on the preparation of working-plans and the keen exploitation of forest products.

By order of the Lieutenant-Governor of Bengal,

F A. SLACKE,

Secretary to the Government of Bengal.

No. 178For.

COPY forwarded to the Conservator of Forests, Bengal, for information and guidance.

Nos. 179-184For.

Copy forwarded to the Commissioner of the Presidency Bhasalpur Choir Nagour Orissa

formation.

By order of the Lieutenant-Governor of Bengal,

L. E. B. COBDEN-RAMSAY,

Chittagong

Offg. Under-Secy. to the Govt. of Bengal.

CALCUTTA, The 9th January 1901.

T. A - Reg. No 5075C- 603-10-1-1901.

From-J. B. FULLER, Esq., I.C.S., C.I.E., Offg. Secretary to the Government of India, Department of Revenue and Agriculture, Serial No. 2.

To-The Secretary to the Government of Bengal, Revenue Department.

I AM directed to acknowledge receipt of the Forest Administration Report of the Lower Provinces of Bengal for the year 1899-1900, together with a copy of the Lieutenant-Governor's Resolution thereon.

2. The working of the year was marked by a satisfactory increase in the net revenue. It is observed, however, that certain divisions were still worked at a loss, and the Government of India trust that the remarks made in paragraph 12 of the Resolution will lead to greater attention on the part of Forest officers to the commercial side of their duties. The Governor General in Council is in cordial agreement with His Honour the Lieutenant-Governor as to the need of actively exploiting the forests up to the limit of their possible annual yield and, in particular, of securing if possible a regular demand for railway sleepers, and I am to express a hope that care will be taken to avoid the loss of sleeper contracts by the demand by the Forest Department of too high a price for its timber. The Government of India, in Circular No. 8-F., dated the 21st May 1895, have already conceded to Railway interests a share in the increased value of timber which results from the construction of a railway; and, generally, it may be accepted that where a contract renders it possible to sell produce which is otherwise unsaleable, the Department should be satisfied if it obtains a good profit on the outlay incurred in extraction and supply.

3. The Government of India are gratified to observe that the preparation of working-plans continues to receive special attention, and they consider that there should be no difficulty now in the prosecution of this important branch of Forest Administration, if proper advantage is taken of the recent additions to the Imperial Forest Service in Bengal, and if charges of minor control which do not require a large amount of technical knowledge are entrusted to members of the Provincial Service holding other than transferred appointments. With reference to existing working-plans, the unpunctuality which is stated to generally occur in the receipt of the control returns by the Conservator is not creditable to the officers responsible for their submission, and it is understood that the control forms of the Darjeeling and Tista valley working-circles for the year 1898-99 have not even yet reached the Inspector-General of Forests, although their submission by the Conservator to that officer was due on the 1st November 1899. The object of these returns is in a great measure lost if they are not punctually submitted, and I am to ask that punctual submission may be insisted upon.

4. Good progress was made in the erection of rest-houses and quarters for the establishment, and in the construction of roads to facilitate the export of produce from the forests. It is to be regretted that the wire rope-way in the Tista Division should have failed through faulty construction and that it should have been necessary to spend money in re-erecting it.

5. There was a considerable increase both in the number of forest fires and in the area burnt, chiefly in the Singhbhum Division, but the results of fireprotective measures were on the whole decidedly more satisfactory than in recent dry years. Of the area attempted, 91 per cent. was protected at a cost of 21 pies per acre. Of the 156 cases of fire in which offences had been committed, 105 remained undetected; but it is satisfactory to note that convictions were obtained in 40 (or 89 per cent.) out of the 45 cases decided by the Courts during the year, and that the punishments were generally adequate. It is hoped that the closure to grazing of areas burnt in the Singhbhum forests will have the desired effect of impressing on the people the need of co-operating with Government in Forest protection.

6. The gross outturn of the forests shows a large increase under all the main heads as compared with that of the previous year; in the case of timber and fuel the increase amounts to nearly $3\frac{1}{4}$ millions cubic feet, and to this the

Sundarbans division as usual was the chief contributor. The financial results of the year show a surplus of Rs. 6,05,711, or 52'2 per cent. of the gross receipts.

7. The Government of India observe with pleasure that the Conservator and his staff earned the Lieutenant-Governor's commendation.

No. 681-F.

COPY forwarded to the Inspector General of Forests, for information, with reference to paragraph 3.

By order,

R. E. V. ARBUTHNOT,

Under-Secretary to the Government of India.

G. C. Press, Simla-No. 447 R. & A. D. - 13-7-1901.-420

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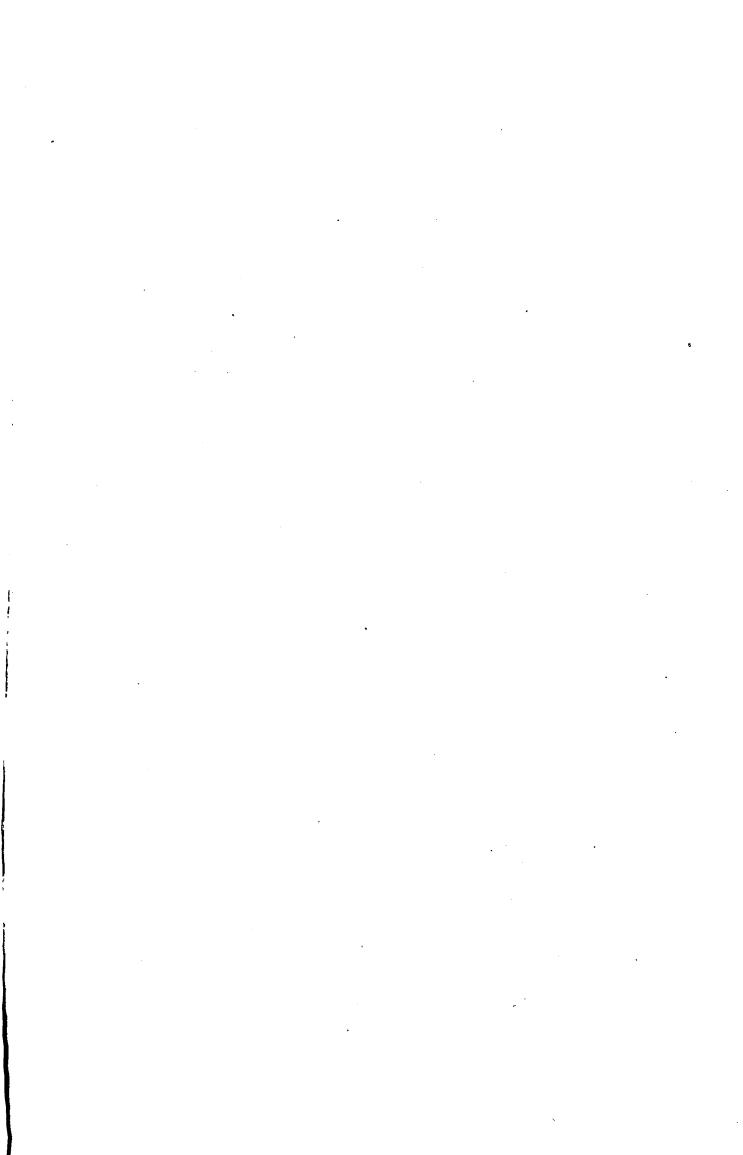
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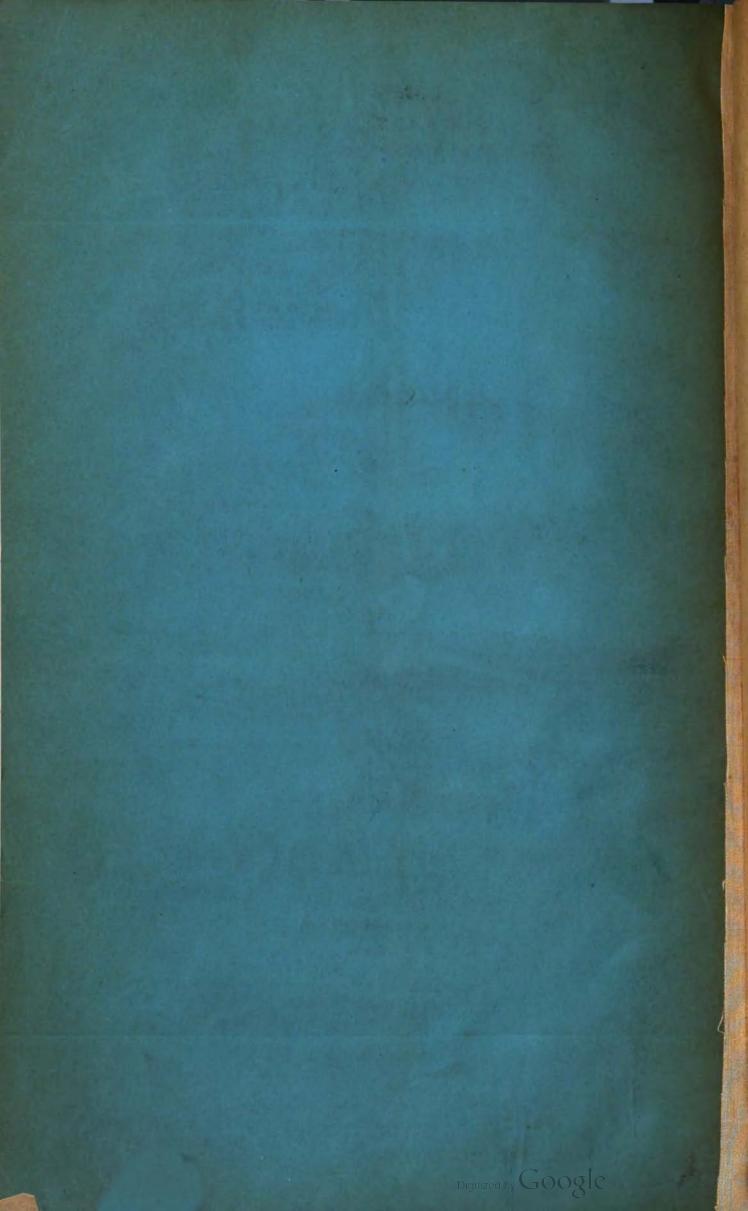
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