REVIEW

OF

FOREST ADMINISTRATION

IN

BRITISH INDIA

FOR THE YEAR

1906-1907

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REVIEW

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FOREST ADMINISTRATION IN BRITISH INDIA

1906-07.

CHAPTER I.

CONSTITUTION OF STATE FORESTS.

1.-ALTERATION IN AREA.

[Vide Appendices I and IJ.]

The area of lands under the control of the Forest Department increased during the year under review by 6,487 square miles, thus bringing up the aggregate to 240,139 square miles of all classes of forests, representing 24.3 per cent. of the area of British India.

2. The main alterations in the area of each class of State Forests were as follows :---

(i) Reserved and Leased Forests.

The area of Reserved Forests at the commencement of the year stood at 92,485 square miles; additions and exclusions aggregating 2,941 and 1,389 square miles, respectively, resulted in a net total of 94,037 square miles at its close. The most important changes in the several provinces were as follows :--

In the *Punjab* 2S square miles were added (mainly owing to corrections after survey) and 48 square miles were excluded, chiefly by transfer to the Canal and Irrigation Department.

The largest additions were made in *Burma* where they totalled 1,792 square miles. Extensive reservations were accomplished but a part of this total is due to correction of areas by recomputation after survey. For this reason exclusions of 751 square miles were also effected.

In Eastern Bengal and Assam new reservations and corrections by survey accounted for an increase of 253 square miles, while six miles were excluded.

In Madras, transfer from Reserved Lands to Reserved Forests accounted for an increase of 302 square miles, 49 square miles being excluded.

Areas totalling 234 square miles were added in *Bombay*, chiefly in the Southern Circle, and 36 square miles were excluded.

With the exception of an addition of 16 square miles to the Reserved area in *Baluchistan*, there were no changes of importance in the area of Reserved Forests in other provinces.

The area of *leased* forests decreased by 11 square miles, the total being 899 square miles at the close of the year.

(ii) Protected Forests.

The area of this class decreased by 550 square miles during the year, leaving a balance of 9,468 square miles at its close. To the extensive disforestations in the Sunderbans Division of Bengal in favour of cultivation may principally be attributed the decrease in area.

(iii) Unclassed State Forests and Public Forest Lands.

The area at the close of the year was 136,633 square miles or 5,496 square miles more than at its commencement. The increase is almost entirely due to rectification of areas in the Arakan Division of Burma. The area of this class of forests is but roughly estimated and is therefore liable to considerable fluctuation. It does not always represent wooded area, as, for instance, in Assam, where it comprises all unoccupied waste.

3. The area of the different classes of forests under the control of the Department at the end of the last two years is compared in the following tabular statement :---

Class of Forests.	1905-06.	1906-07.	Difference.
Reserved Forests	91,586	93,138	+ 1,552
Leased ,,	910	899	-11
Protected "	10,018	9,468 .	
Unclassed State Forests and Public Forest Lands.	181,187	136,633	+ 5,496
	233,651	240,138	+ 6,487

2.-FOREST SETTLEMENTS,

[Vide Appendix III.]

4. There was a gratifying increase in this most important work compared with the previous year's results. The area finally settled rose from 707 to 1,812 square miles, while that taken up for settlement during the year was 2,979 against 454 square miles in 1905-06. The approximate cost of settlement operations was R25,108 compared with R29,771 incurred in 1905-06. Of the total area of reserved and protected forests, 4,840 and 3,179 square miles respectively still awaited settlement at the close of the year. The principal balances as regards the former class are in the Central Provinces and Berar, Madras and Bombay; and in Bengal, Punjab and Bombay as regards the latter.

3.—DEMARCATION.

i ng s

[Vide Appendix IV.]

5. The total length of boundaries, both natural and artificial, increased during the year from 169,693 to 171,375 miles. The length of artificial boundary demarcated was 143,256 miles, the undemarcated boundary amounting to 11,869 miles against 12,385 miles at the close of the preceding year. The length of natural boundaries remained unchanged so that the year's work may be recorded as representing a very slow advance in the important task of demarcating the State forests. The largest balance of work outstanding is recorded against *Bombay* which showed a length of 6,359 miles undemarcated, 4,539 of which are in the Central Circle. In the *Punjab* there remained 3,555 miles to be demarcated, while *Madras* and *Burma* showed balances of 889 and 721 miles respectively. In other provinces the balances to be dealt with were unimportant. New boundary work was completed over 2,611 miles, or 708 miles less than in the previous year, the cost falling from R44,482 to R33,562. The maintenance of existing boundaries appears also to have fallen into arrear, 83,026 miles remaining unrepaired against 76,705 miles in 1905-06, the cost of repairs falling from R79.967 to R70.311. It seems probable that an ever increasing quantity of work in other directions and an undermanned staff have led to these somewhat unsatisfactory results, but the demarcation of State forests, as one of the initial means of providing for their constitution and protection from encroachment, is of the greatest importance, and particularly so in those provinces where the State forests occur in small blocks intimately mixed up with agricultural land, or where the demands of agriculture are likely to cause pressure on the forest area.

4.-FOREST SURVEYS.*

[Vide Appendices V and VI.]

6. At the commencement of the year the Forest Survey Branch ceased to exist as a separate branch of the Survey of India, and the Survey Parties of which it was composed were transferred to the control of other administrative officers.

The Government of India decided that in future all reserved forests shall, as a general rule, be surveyed on the scale of two inches to the mile, and that the surveys shall be carried out in the course of the general programme of the Survey of India, no charge being made to the Forest Department. In cases where surveys on a larger scale are required, or when surveys on the two-inch scale are wanted apart from the regular programme of the Survey of India, the whole cost will be debitable to the Forest Department. Boundaries of forests surveyed on the two-inch scale will be surveyed on the four-inch scale, if required, free of charge.

In accordance with the recommendations of the Survey Committee, arrangements were made for the reception in the Forest Survey Office, Dehra Dun, of the large stock of forest maps and records hitherto kept in the Calcutta Survey Office for stock and issue to the public. Most of the Calcutta stock has already been transferred, and the distribution of forest maps and the custody of all field sections and other original forest records will in future devolve upon the Dehra office.

PRESIDENCY.	2"=1 mile.	4″=1 mile.	Ťotal.
Bengal	1,648	138.5	1,786.5
Madras	•••	378	378
Bombay	• • • •	62	62
Total .	1,648	578 5	2,226.5

. 7. The following forest areas were topographically surveyed during the year :--

The total cost of forest surveys debitable to Forests amounted to R95,319. The total cost debited to the Forest Department in 1905-06 amounted to R3,02,078, and the decrease is principally due to the cost of twoinch surveys being now debitable to the Survey of India.

8. During the year 233 maps were published by the Forest Survey Office, including five working-plans and nine other special small scale maps.

· Contributed by the Superintendent of Forest Surveys.

<u>a</u> 2

The number of printed copies of maps distributed was 11,100, of which 6,450 were coloured. R1,750 was realised by the sale of maps to the public as against R858 realised last year.

9. Details of surveys carried out in the various provinces are given in the following paragraphs :---

Bengal.—A sum of R518 was expended in the publication of Angul maps of which R366 is debitable to the Forest Department.

The survey of the Sunderbans Reserved Forests was commenced by No. 6 Party of the Survey of India. An area of 1,050 square miles was surveyed on the two-inch scale, the cost of which is borne by the Survey of India.

Eastern Bengal and Assam.—A small detachment from the Forest Survey Office was deputed to survey the Sitakund Forest Reserve in the district of Chittagong. An area of 24 square miles of detail survey on the four-inch scale was completed. A sum of R5,542 was expended during the year on the completion of the drawing and publication of the four-inch maps of the surveys carried out by Forest Survey Branch. The amount debitable to the Forest Department is R3,453.

No. 20 Party (Burma) of the Survey of India triangulated an area of 4,000 square miles in the Sylhet Division, in anticipation of the detail survey which will be commenced in 1907-08 on the two-inch scale.

United Provinces.—An area of 63½ square miles of detail survey on the four-inch scale was completed by the detachment from the Forest Survey Office in the Surai-Bannbasa Forests, Pilibhit Division, and at Amargarh, Kheri Division.

Seven shooting maps and three maps of the second edition of Kumaon and Garhwal have been published during the year and twenty-one sheets are in the Press.

A sum of R5,018 was expended of which R4,574 is debitable to the Forest Department.

Punjab and North-West Frontier Province.—No forest survey operations were carried on during the year in these provinces. R2,767 and R529 were expended in the Punjab and North-West Frontier Province respectively of which R2,462 and R375 are debitable to the Forest Department. Eleven maps were published. Eleven more are in the Press, and eighty sheets are awaiting publication.

Central Provinces, Berar Circle. No. 2 Party, Survey of India, surveyed an area of 22 square miles of Forest lands on the two-inch scale in the Amraoti, Akola and Yeotmal districts. All State forests falling within the area taken up were surveyed on this scale. 132 57 linear miles of houndaries of A and B class State forests were surveyed on the fourinch scale. No special triangulation and traversing for Forest Surveys was carried out.

The total cost is debitable to the Survey of India.

Buima.-No. 20 Party, Survey of India, was employed on the Burma Forests and the following areas were surveyed :--

Northern Circle, Mu Division, 125.29 square miles, on two-inch scale.

Southern Circle, Yaw Division, 450.84 square miles, on two-inch scale.

- Tenasserim Circle, Thaungyin Division, 51.25 square miles, on four-inch scale.
- A sum of R58,236 was expended, including mapping and publishing charges in the Forest Survey Office, of which R14,612 is debitable to the Forest Department.

One hundred and one four-inch standard sheets and two working-plan maps were published during the year.

Madras.—No. 19 Party, Survey of India, surveyed 378 square miles of Forests in Ganjam and North Coimbatore on the four-inch scale. Three hundred and eleven linear miles of forest boundary were also traversed by theodolite in Ganjam, Malabar and Trichinopoly.

The expenditure amounted to R34,205, of which R23,944 is debitable to the Forest Department.

Seventy-eight sheets were published during the year.

Bombay.—No. 17 Party, Survey of India, which had been hitherto 'employed exclusively on forest surveys, commenced general topographical survey operations this season on the fourinch scale in the West Khandesh District, where an area of 62.4 square miles of forests to four-inch scale was completed, and in addition a skeleton survey of 140 linear miles of forest boundary on the same scale was also carried out.

A sum of R19,079 was expended, of which R13,511 is debitable to the Forest Department.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

1.-- REGULATION OF MANAGEMENT.

Working-Plans.*

[Vide Appendices VII, VIII, and IX].

10. During the year under review, only 882 square miles were added to the area to be treated under regular Working-Plans, and to this addition the Bengal, Madras and Bombay Presidencies contributed 197, 602 and 83 square miles, respectively. The paucity of officers accounted apparently for the insufficient progress made. The areas under regular Working-Plans now stand as follows:—

		••••	At commencement of the year. Square miles.	Added during the year. Square miles.	Total. Square mile
•••	Bengal . Madras . Bomb ay .		80,019 6,050 5,517	197 602 83	30,216 6,652 5,600
•	Total in 1906-0 ,, ,, 1905-0		41,596 87,551		42,468 39,992

The areas for which Working-Plans were under preparation during the year amounted to 11,062 square miles, of which 5,677 square miles were in the Bengal Presidency, 4,051 square miles in the Madras Presidency, and 1,334 square miles in the Bombay Presidency.

At the close of the year, the area remaining to be brought under Working-Plans stood at 184,852 square miles. To this total, Bengal, Madras and Bombay Presidencies contributed 169,550, 8,917 and 6,385. square miles, respectively. It may, however, be remarked that no Working-Plans will be required for some time to come for the large areas of unclassed State forests in various Provinces.

11. The progress made during the year in the preparation of Working-Plans in the various Provinces was as follows :---

Bengal.—A Working-Plan for the Angul forests (229 square miles) was prepared during the year, but submission was deferred pending the preparation of the necessary map. The revised Working-Plan for the Darjeeling forests (39 square miles) and that for the Puri Reserved forests (113 square miles) and the third plan for the Sunderbaus forests (3,814 square miles) were sanctioned during the year. The preparation of a second plan for the Reserved forests of the Tista Division (225 square miles) was completed during the year, and a second plan for the Tista Valley forests of 'the Darjeeling Division (12 square miles) was sanctioned on the recommendation of the Inspector General of Forests as a plan of operations. Efforts were made during the year to regulate the fellings in the Reserved forests of the Hazaribagh District, Palamau Division (57 square miles), in the Reserved forests of the Sambalpur Division (134 square miles) and in the Protected forests known as the Old Reserve of the Sonthal Parganas Division (38 square miles) without the aid of sanctioned Working-Plans but no Preliminary Working-Plan Report was submitted during the year.

United Provinces.--In the Western Circle, the Working-Plan for the Naini Tal Municipal forests prescribing selection fellings over an area of 2.2 square miles, the Working-Plan for the Chakrata Cantonment forests laying down the system of improvement fellings over an area of 3.4 square miles were sanctioned during the year. In addition to these the revised Working-Plan for the Saharanpur forests of the Siwalik Division (294 square miles) and a scheme for the systematic removal of the dead and dying material in the periodic blocks of the Tehri-Garhwal Leased Chir forests Working-Plan were sanctioned during the year. The Working-Plan for the Tehri-Garhwal Leased Deodar forests (78 square miles) received the sanction of the Local Government shortly after the close of the year and that for the Musoorie Municipal and Landour Cantonment forests (4 square miles) remained in abeyance No Preliminary Working-Plan Reports were in the absence of final demarcation. submitted. In the Eastern Circle, no new Working-Plans were sanctioned during the year, but new Working-Plans for the Reserved forests of the Bahraich Division (334 square miles), for the Nawabganj Sál forests of the Gonda Division (21 square miles) and for the Pilibhit Closed forests (71 square miles), as well as the revised Working-Plans for both the Cis-Sarda and Trans-Sarda forests of the Kheri Division, including an area of 34 square miles not yet brought under Working-Plans were under preparation, while Preliminary Working-Plan Reports were under preparation for the Banda Range in Bundelkhand, for the Kumaun Division, and for the Sal bearing area of the Domakhand reserve in the Gorakhpur Division.

Punjab.-No Working-Plan or Preliminary Reports for State or Leased forests were either submitted or sanctioned during the year. With a view to revising the existing Working-Plan for the Kulu Forests, the enumeration of *Pinus excelsa* and *Pinus longifolia* was commenced and the compilation of plans for several Cantonment forests and Municipal forests were ordered but their preparation was not taken in hand during the year. In the forests of the Simla Hill States plans were completed for Kumharsain and Bhajji, and for Dhami was revised.

Burma .- In the Pegu Circle, the Working-Plan for the East Yoma, Satsuwa and Tindaw reserves (118 square miles) was sanctioned during the year, but no Preliminary Working-Plan Reports were received. From the Tenasserim Circle, no Working-Plan or Preliminary Reports were submitted, and the Working-Plans for the Nyaunglebin Working Circle, and the Tonkan reserves, Shewegyin Division, though completed in manuscript, were not sanctioned during the year. In the Northern Circle, the Working-Plans for the Labin, Kyaukka, Tan, Indaung and Newa reserves (184 square miles) and for the Bon, Matu and Waye reserves, Myittha Division (223 square miles), were sent to Press. The Working-Plan for the Mawku Working Circle in the Upper Chindwin Division (309 square miles) was in course of preparation. Preliminary Working-Plan Reports were sanctioned for the Ahlaw Working Circle in the Upper Chindwin Division (188 square miles) and for the Taungdwin Working Circle, Myittha Division (255 square miles). In the Southern Circle no regular Working-Plans were sanctioned during the year. A. rough Working-Plan for the padauk forests of the Shweli Range in the Ruby Mies District, which forms an addendum to that for the Thabeitkyin Range, received sanction, as well as Working-Plans to regulate the planting up of roadside trees in the Minbu and Ruby Mines districts. Data were collected for a Working-Plan for the Hintha-Ondok block of reserves in the latter (198 square miles) ; and a Working-Plan for the Taungdwingy forests (398.8 square miles) was submitted for sanction after the close of the year. The Working-Plan for the Maingtha-Namme block of reserves was also under preparation. Preliminary Working-Plan Beports for the Madaya forests (381 square miles) and for the Yaw reserves (934 square miles) were sanctioned during the year.

Eastern Bengal and Assam. The Working-Plan for the Sál forests (3 square miles) in the Darrang Division, though submitted during the year, did not receive the sanction of the Local Government till after its close. A working scheme for an area of 2 square miles of Reserved forests and 4 square miles of Unclassed forests around Shillong in the Khasi and Jaintia Hills Division and a Preliminary Working-Plan Report for the reserves in the Nowgong Division (158 square miles) were submitted to the Inspector General of Forests and passed after the close of the year and the field work in connection with the revision of the Working-Plan for the Sál forests of the Goalpara Division was completed.

Central Provinces.—From the Northern Circle, no new Working-Plaus or Preliminary Reports were submitted during the year and the Working-Plaus for the Saugor forests and for the Motinala Range in the Mandla Division were still in the Press at its close. In the Southern Circle, no new Working-Plan was sanctioned but proposals were submitted for the revision of the Working-Plane relating to the Sál forests of the Raigarh and Baibar, and the Pandratola forests (16'3 square miles) in the Balaghat Division and to the five sanctioned plans (454 square miles) in force in the Bhandara Division. The proposals for the revision of the Working-Plan for the Lormi Range of the Bilaspur Division are still under consideration. From the Berar Circle, no new Working-Plan or Preliminary Reports were submitted but a three years' felling scheme for all A class Reserved forests in the Nimar Division was sanctioned. North West Frontier.—The Working-Plans for the Dungagali and Taudiani Range forests (61.2 square miles) and the Khanpur Range forests (31.6 square miles) were submitted and received sanction after the close of the year. The revision of the boundaries of the Agror forests not having been completed, the preparation of a Preliminary Report for these forests was deferred.

Andamans.---A Working-Plan covering an area of 317 square miles for the North Andaman Island was compiled during the year, but has not, however, yet come into force.

Coorg, Ajmer, Raluchistan.-No Working-Plans or Preliminary Reports were compiled during the year for these provinces.

Madras.—During the year Working-Plans for 602 square miles were sanctioned and plans for 1,041 square miles were under preparation. In the Northern Circle, the preparation of a Preliminary Working-Plan Report for the Polavaram range commenced in 1905-06 was not completed and a report for the Kothapatam casuarina areas in Guntur was merged in the proposals for the whole delta tract. In the Central Circle, Preliminary Working-Plans were under preparation in respect of certain Working Circles of the Proddatur, Cuddapah and Rayachoti ranges of North Cuddapah District. In the Southern Circle, a Preliminary Working-Plan was prepared for some of the reserves included in the closed Working Circles and for others not included in any of the Working Circles of the South Canara District, but remained under consideration. Preliminary Working-Plans for the Mudumalai, Beune and Kumbarakolu forests in the Nilgiri District and for fuel fellings in Sattyamangalam Range in the North Coimbatore Division were also prepared during the year.

Bombay.—In the Northern Circle, the revised Working-Plan for the Halol Range, the Mandir Working-Plan and the Working-Plan for the Kolaba Division and the Bandh reserves of the Ratnagiri District were prepared during the year, but awaited the sanction of the Local Government. No Preliminary Working-Plan Report was drawn up. (In the Central Circle, a provisional Working-Plan for the Babul reserves of the Jamner, Bhusaval and Edalabad ranges of the East Khandesh Division was sanctioned; a Working-Plan for the fuel supply of the Lonavla and Khandala Sanitaria awaited the sanotion of the Local Government; and a Working-Plan for the Jamner Teak forests was in the Press when the year closed. A Preliminary Report on the Kurad, Patan and Shirola Teak forests was approved during the year. In the Southern Circle, a Plan for the Supa Fuel Working Circle; North Kanara Division, was sanctioned and the Plans for the Mundgod Teak Pole and Mundgod High Forest Working Circles and also for the Bhagwati and Mundki High Forest blocks were drawn up but no Preliminary Report appears to have been submitted for approval. From the Sind Circle, the Working-Plan for the Sukkar forests was submitted, but did not reach the Local Government till after the close of the year.

2.—COMMUNICATIONS AND BUILDINGS.

• [Vide Appendix X.] -

(a) Roads and Bridges.

12. In both original work and maintenance there was a distinct advance in the year's results, the cost of the former rising from R1,51,345 to R1,96,738, and of the latter from R1,41,071 to R1,93,338. The total expenditure on communications was therefore R3,90,076 compared with R2,92,416 in the previous year, involving an increase of nearly one lakh.

In Bongal the expenditure on new work fell from B28,415 to B25,329, while the cost of repairs rose by B3,900 and reached B15,554. Seventy per cent. of the total outlay was incurred in Singhbhum; difficulties in procuring labour in Angul led to curtailment of a portion of the year's programme in that division.

In the United Provinces new work extended over 137 miles of roads and paths at a cost of R18,973 and repairs over 4,499 miles at a cost of R50,987, the total charges being R69,960 against R53,565 in the previous year.

In the *Punjab* new work cost R28,874 or about double the amount spent in the previous year. Repairs rose from the comparatively insignificant sum of R5,103 to R24,816 and the total from B19,834 to R53,190, of which R39,207 were spent in Bashahr, under the arrangement by which a sum of R25,000 is annually set aside for this purpose.

Considerable progress was also recorded in *Burma*, where **B40,430** were spent on new work compared with **B21,324** in the previous year. Maintenance also rose from **B9,700** to **B14,246**.

With the five years' programmes which have been drawn up, and the co-operation which the Burma Government demands between district and forest authorities in the construction of roads, good progress should, in future, be made.

Progress in *Eastern Bengal and Assam* is but slow. The cost of original work was R14,237 compared with R9,277 in the previous year and repairs rose from H11,002 to H14,186, the total expenditure thus being higher by only about R8,000 as compared with that of the previous year. Much still remains to be performed on communications which, in view of the climate and nature of the country, will probably cost more than similar work in the majority of other provinces.

The Central Provinces and Berar show a slight rise in the cost of new roads, 169 miles were made at a cost of R18,132; repairs to 3,344 miles costing R19,601 against R13,497 in the previous year. The profit on the Allapilli mono-rail tramway which was recorded last year as 21.26 per cent. of its capital cost was reported during the year under review to have been nominal, due to work being greatly curtailed, sufficient timber only being extracted to keep the mills working.

In the Andamans work was confined to the extension of the steam tramway by about 14 miles at a cost of R3,107, maintenance and repairs costing R5,300.

New work in *Madrae* shows a considerable advance, 162 miles of roads and paths were completed for R27,612; repairs being executed over 598 miles at a cost of R31,900, the year's expenditure aggregating R59,512 compared with R47,857 in the preceding year. Tramways show, as in previous years, a profit in Nellore and a loss in Coimbatore.

In Bombay the cost of original work fell by over £6,000 to the small total of £18,100, repairs remaining practically stationary at £14,931. An almost similar fall was noticed last year in the cost of new work and the Bombay Government has, in reviewing the report, remarked on the inadequate expenditure incurred in the Central Circle.

(b) Buildings.

13. The total cost of building work incurred during the year was R5,23,749 or R14,233 more than in 1905-06. New work cost about £5,000 and repairs about R9,000 more than in the previous year. The marked improvement recorded in the review of 1905-06 has therefore not been maintained. In the United Provinces, where housing accommodation is already well provided, new work cost some R8,000 less than in 1905-06. In Bombay the expenditure under this head also fell from R65,545 to R28,902,-a decrease which largely serves to counterbalance the almost general increase in expenditure on building work in the majority of other provinces. The cost of maintenance of buildings was less than in the previous year in Bengal, the Punjab, Central Provinces and Berar, but was more than made good by general increases elsewhere, the chief expenditure taking place in the United Provinces, Eastern Bengal and Assam, and Bombay. The close relation, referred to in last year's review, between the provision of communications and buildings and the execution of silvicultural or other works in the forests must again be urged as of the greatest importance; but it is gratifying to observe that plans for the execution of these works over a period of years, so strongly recommended in previous reviews, have been introduced into a number of provinces.

(c) Miscellaneous Works.

14. The expenditure incurred on minor works such as irrigation channels, tanks, wells, the clearing and maintenance of streams, camping grounds and compounds amounted to R82,089 compared with R64,835 in the previous year. In *Bengal*, there was a fall from R6,060 to R2,159, due to less expenditure on the construction of tanks. With the exception of a slight fall in *Bombay* there was a general extension of miscellaneous work, the most noteworthy increase being in the *Central Provinces* where R31,076 were spent compared with R14,781 in the previous year or an increase of 110 per cent. A number of

tanks and a large number of wells were constructed, which are expected to prove of much benefit in improving the water-supply in grazing tracts. The co-operation of the Irrigation Department in the selection of suitable sites for the tanks and in providing a short course of training in these works to a number of Forest Rangers has gone far to achieve notable results in the Central Provinces. ាត្រជាដ្ឋារប្រ

3.-PROTECTION OF FORESTS.

(a) General Protection.

[Vide Appendices XI and XII.]

- 15. Breaches of forest rules, comprising offences against the forest laws. both referred to the courts and compounded, showed a slight increase, the total being 57,858 compared with 57,724 in the previous year, the former figure being 3.388 in excess of the previous triennial average. There was, in comparison with the previous year, a fall of 783 in the number of cases decided by the courts and a rise of 917 in the number of cases compounded. In Madras nearly a thousand cases fewer were taken into court while over twelve hundred more were compounded than in the previous year. In Bombay, the figures remained almost unaltered, while in other provinces small variations took place. the number of cases in the latter being some three hundred less than in the previous year, Undetected offences connected with unauthorized felling and misappropriation of forest produce rose by 231, but this increase was counterbalanced by a general decrease in other directions, the year's total of undetected cases showing only a rise of 23 in a total of 7,311 breaches of the rules.

16. The different classes of forest offences of the year under review, including undetected cases, compare as follows with the previous triennial average :----

		Average	1903-04 to 1905	06. In 1906-07.
Injury by fire	•••		4,432	4,138
Unauthorized felling an	d removal of	forest		Lands at Inthe
produce	• •		82,352	83,296
Unauthorized grazing		•	22,728	24,809
Other offences .	•	•	4,378	5,218
	Тота	L ·	63,890	67,456

While it is satisfactory to remark from the above figures that cases of injury by fire show some decrease, other offences show an increase, referable probably to a variety of local influences of which scarcity is generally the most (b) Protection from Fire. powerful.

[Vide Appendix XIII.]

17. Fire protection was attempted over 44,443 square miles, or 4,370 square miles more than in the previous year. The percentages of area successfully protected were 94.2 and 93.5, respectively, so that the season appears to have been slightly more favourable. The highest percentage of failure to area protected was 13.8 in Bombay; Madras showed 7.2, while in the rest of India. the figures fell to 2.6 and appear to be the lowest so far recorded. At this stage of Forestry in India few will be found who will attempt to controvert the statement that no efficient protection and exploitation of the State Forests is possible without the co-operation of the inhabitants of the country, or that such co-operation can be induced without insistence on a liberal but fixed policy by Government and its sympathetic application by Forest Officers.

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The reasons for theft and cattle trespass may be various-necessity in times of scarcity for which timely provision may not have been made, the laxity of the protective establishment offering irresistible temptation to the poorer classes, concessions to the population resident in the neighbourhood of the reserves, insufficient to convince them of the value of the reserves, and attempts to distribute the forest yield amongst a large population who have no direct interest in the maintenance of State reserves to the loss of those resident in the vicinity thereof. Such are some of the numerous causes leading up to a temporary or permanent increase in forest offences. But an increase in, or maintenance of, a high percentage of failures to protect the forests from fire may safely be held to prove discontent, legitimate or otherwise, resulting in the absence of co-operation with the forest officials; for to burn the forests is a form of remonstrance most easily adopted and most difficult to punish because it may. be presented as an apparent accident and emphasized by omission to afford the necessary assistance. The reasons for failure of protective measures against forest fires deserve the most careful study, and it is only in the very rare cases which may occur of an organized opposition to a liberal forest policy that sternly repressive measures will have a satisfactory result.

18: The following tabular statement compares the results of the year under review with those of the previous quinquennial average :----

	AREA IN BQ	VABR MILR.	Percentage of forests under fire	PBRCENTAGE OF FAILURE TO ABEA PROTECTED.		
PROVINCE.	Attempted.	Protected.	protection to total area of reserves.	Average of past five years to! 1905-06.	1906-07.	
Bengal .	1,879	1,872	44	3-1	•37	
United Provinces .	8,203	8,168	78	2.0	1.09	
Panjab · · ·	918	914	50	1.8	- 0.43	
Burma · · ·	8,153	•7,782	3 8	10-9	4.2	
Eastern Bengal and Assam	1,981	1,968	31 6	1.2	0-6	
Central Provinces including Berar.	10,660	10,381	4 8	3.2	2-6	
Cóorg	208	208	43	1.0	. 0.0	
North-West Frontier Province.	. 8a	83	85	5-9	0.0	
Ajmer	142	142 (a)	100	1.1	• 0•04	
Total Bengal	27,226	26,518	44(8)	5.1.	2 6(8)	
" Madras	7,857	6,825	39 ·6	6.1	7.2	
», tombay	9,860	8,495	71.9	13:2	13-8	
(1906-07 ·	44,443	41,839	47.2	7.5	5.8	
GBAND TOTAL { 1905-08 .	40,078	37,458	43.3	7.3	6.2	

(a) Only 42 acres were barnt in Ajmer.

(5) The corresponding figures for 1905-06 were respectively 39 and 57, not 481 and 346 as shown in the Review for that year.

19. While there can be no doubt of the value of fire conservancy in the drier parts of the country, it was remarked last year in this. Review that in many evergreen forests, some relaxation of the measures hitherto undertaken might be justified in the future. The subject has continued to receive attention, particularly in the moister parts of Burma, Bengal and Assam, where experiments have been commenced to test the effects of relaxing fire protection in small areas and the results compared with the adjoining fire protected forests. It will be some years before conclusive results can be obtained. The subject will again be dealt with under Silvioulture.

20. Statistics of fires, classified according to their origin, are given in Appendix XIII. Four thousand three hundred ninety-two fires were reported, covering an area of 2,581 square miles, against 4,892 fires covering 3,498 square miles in the previous year. The fires attributed to preventible causes were fewer than in 1905-06, those due to carelessness of outsiders or to unknown causes increased by nearly a thousand and the area burnt by over 500 square miles, while fires proved to have originated from intention or malice fell in number by over 1,400 and the area overrun by 1,086 square miles. The increase in the number of fires attributed to carelessness or unknown causes is almost wholly in Bombay, where the number of this class reached the high total of 2,384 or 1,279 more than in the previous year. In the number of fires proved to be due to malice the decrease is also almost entirely in that Presidentry.

(c) Protection from Cattle.

[Vide Appendices XIV and XV.]

21. Thirty-nine thousand six hundred and nine square miles or 16'4 per cent. of the total forest area was closed to all animals and 19,559 square miles or 8'1 per cent. was closed to browsers only. The area open to grazing is therefore very large but the intensity of grazing varies greatly in different provinces. In the Punjab only 1,416 square miles out of a forest area of 9,329 square miles are closed against all cattle. In the Central Provinces more than half the area is closed while the intensity of grazing is high, reaching one head of cattle per 2'8 acres in the case of non-browsers and one head per 7 acres for browsers. The danger to the forests is realized and the Local Administration proposes to associate Revenue officers more closely with Forest officers in the preparation of Working-Plans in future, with a view to meet pastoral requirements.

The total number of cattle including camels, buffaloes, cows, goats and sheep which obtained pasture in Government forests amounted to over $13\frac{3}{4}$ millions, of which over 8 millions paid full rates, $2\frac{1}{3}$ millions paid privileged rates, $2\frac{1}{5}$ millions were admitted by right under settlement, and less than a million during the pleasure of Government or otherwise than under settlement. There was a decrease in the number of cattle impounded, the total reaching 517,116 against 541,626 in 1905-03 which is also 16,983 less than the average of the past three years. In Madras and Bombay the reductions were of about 26,000 and 10,000, respectively, while the total of the rest of India rose by about 12,000.

(d) Protection against injury from natural causes.

22. These comprise climatic phenomena such as frost, snow and drought and vegetable and animal enemics such as climbers, fungi, insects, etc. It is

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satisfactory to record that the severe frosts which caused so much injury in 1905 have not so far recurred and that the forest growth is slowly recovering from their effect.

In Bengal climbers were cut over 16,802 acres at a cost of 1.25 annas per acre, against 16,140 acres at 1.2 annas per acre in the previous year. This work is generally well in hand although it is stated that the cutting of small creepers which arrest young growth is not as yet efficiently performed. Wild elephants continued to cause damage to the Mal plantations of the Tista Division.

In the United Provences a heavy fall of snow accompanied by rain, in March, caused considerable injury to young Deodar in Jaunsar. In Naini Tal Division monkeys were noticed to be partial to the young Chir seedlings during the winter months. Climber cutting was carried out extensively in accordance with the prescriptions of Working-Plans, the area worked over in the Eastern Circle extended to 40,854 acres at a cost of 11.5 pies per acre.

Locusts did considerable damage in the Rawalpindi, Jhelum, Chenab, Shahpur and Chenab Divisions of the *Punjab*: In Rawalpindi the *Pinus excelsa* has been noticed to die off in a very sudden manner. The cause is as yet not established but four insects which may be responsible are under observation. In Kulu and Bashahr a fungus is reported to be killing Deodar, while *Trametes Pini* is said to be spreading in the Simla hills. Defoliators also attacked Mulberry and Sissu in the Changa Manga plantation.

In *Eastern Bengal and Assam* climber cutting extended over 55,764 acres of Sál at a cost of H13,130 or about 3 annas 9 pies per acre. In Sibsagar nahor(*Mesua ferrea*) was freed from climbers over 11 square miles at a cost of H522 and in Lakhimpur over 235 acres for H337. This important operation is comparatively costly in the moist climate of this province as much of the work appears to have been done for the first time.

Extensive climber cutting was also undertaken in *Burma*. The figures for the Tenasserim Circle are not clearly stated but in the rest of the province 197,799 acres were worked over at a cost of £35,652. The bee-hole borer (*Duomitus ceramicus*) was reported to be common in some of the older Teak plantations in Toungoo and was noticed in the Teak plantations of the Shwegyin and West Salween Divisions. Fungus diseases are also reported from the taungya plantations of the Katha Division and from parts of the Upper Chindwin Division.

No special measures were undertaken in the *Central Provinces* to protect the forests against injury from natural causes. Care has, however, been taken to prevent undue opening of the canopy in frost localities, and the cutting back of teak damaged by frost and drought in previous years has been continued in all circles. Beneficial results have attended the thinnings in Babul woods in *Berar* with a view to arrest the spread of fungus (*Fomes Pappianus*).

In Coorg operations to arrest the spread of spike disease towards the north of the Division continued successful. But the disease appears to be still prevalent as 32,796 diseased, trees were removed against 26,565 last year. The cost of these operations was R1,144. The campaign against lantana was continued, 1,211 acres being cleared at a cost of R3,757.

In Ajmer swarms of locusts did considerable damage to the tree growth and also injuriously affected the grass crop.

In the Andamans damage by the padouk weevil is reported to continue, especially in the wet months.' New shoots are attacked and repeated injury causes the young tree to assume a bushy appearance.

Injuries from natural causes appear to be serious in *Madras*. The spike disease of sandal wood is reported to be spreading in North Coimbatore, while fungus and insect pests have become a serious menace to the numerous plantations. A fungus (*Trickosporium vesiculosum*) continued to attack casuarina plantations in Ganjam, Kistna, Guntur, Nellore and South Arcot, while insects are reported to be causing injury in many parts of the Presidency. Extensive clearances of affected trees and the destruction of insects were undertaken to arrest injury.

The principal operation undertaken in *Bombay* was that of climber cutting but the area worked over is not clearly indicated nor is it evident whether there is a concerted plan of action against these noxious plants. Lantana is reported to be spreading in felled coupes in Dharwar and Belgaum, while 'Sar 'grass is also reported as tending to stifle Babul seedlings in the Sind Circle. The system of clear fellings there in vogue is liable to aggravate this source of injury.

23. A perusal of the foregoing extracts from Provincial reports proves that this subject is one of vital importance to the future welfare of the Indian forests. The study of insect pests has fortunately reached a point where

preventive or remedial measures can usually be indicated, although, in some cases, these are of a very drastic nature and difficult or costly of application. In the matter of climbers and noxious weeds, such as lantana, the remedy lies in extirpation, though here too the cost is often heavy, while damage from other growth can often be overcome by adopting a suitable silvicultural treatment. As regards fungi and insects, these are usually more difficult to combat, particularly in plantations where conditions are most suitable for the development of a serious pest or disease. It is becoming an interesting question whether silvicultural treatment in India in the present does not often tend to the formation of too pure a crop of the most valuable species. Experience seems to show that any serious interference with the composition of the natural forest favours the development of insect and fungus attacks and it is therefore a matter for consideration whether, in future, mixed woods should not be more largely cultivated, not only because of their greater capacity for resisting attacks from natural enemies but in order to prevent the deleterious toxic effect on the soil which appears to result from the too prolonged cultivation of the same species. The economic aspect of the case is also important for the value of soft woods may become, as they have already done in Europe, of special importance in the development of local industries and manufactures, so that it is impossible to continue to assume that the potential value of the forests depends solely on the supply of timbers of the highest present value for construction, as now appears to be generally the case in India.

4.-SILVICULTURE.

(a)-Natural Reproduction.

24. This subject is generally dealt with in detail in the different reports. The effect of fire protection on reproduction is continuing to receive attention in those parts where climatic influences have produced conditions adverse to the propagation of the most valuable kinds. In the moist Sál forests of Bengal, the Conservator maintains that there is no reason to believe that fire could anywhere be used as a cheap and effective agent for improving the reproduction of Sál. Experiments undertaken during the last year or two tend to prove that, in existing conditions, Sal seedlings establish themselves and live for a time under the inferior growth and that the Sál can be assisted to develop by oft-repeated cleanings and weedings. No practical method has, however, been devised of dealing with bamboos which form the principal obstacle in the hill Sál areas. In the most fertile portions of other divisions which enjoy a comparatively dry climate, conditions are noticed, after years of fire protection, to approximate to those which have been alluded to above, and in such areas the matter is beginning to receive the necessary attention. Sundri is reported to be spreading in the Sundarbans but the valuable trees of the medium and lower elevations of the Darjeeling hills do not appear to reproduce themselves as satisfactorily as might be wished. Coppice reproduction is generally satisfactory.

25. In the United Provinces Sál reproduction, aided by two good seed years, was generally reported as satisfactory while climatic conditions were also favourable to the development of the seedlings. In the Eastern Circle the effects of grazing, aggravated by frost, served to arrest the spread of Sál to some extent. On the upper limit of its habitat the Sál is noticed to be giving way, under successful fire protection, to *Pinus longifolia*. Deodar reproduction is said to be plentiful in Jaunsar but the regeneration of oaks on the higher hills of the Naini Tal Division is not satisfactory, and cultural operations will probably be required to assist that species. In district forests heavy grazing and fires are the chief sources of injury, and it is only where these evils can be mitigated that success is attained.

In the *Punjab* efforts to improve the reproduction of Deodar by removing the layer of undecomposed vegetable matter and exposing the soil, were generally sttended with success in Bashahr and to some extent in Chamba. The natural reproduction of the Deodar and Firs is, however, not yet fully understood, and very contradictory results are achieved. In many forests the heavy grazing of goats and sheep renders reproduction impossible.

26. To confirm the view already expressed that prolonged fire protection in the moist parts of *Burma* was arresting the reproduction of Teak, countings were undertaken in sample plots in Tharrawaddy that tended to support this opinion. Protection will therefore be abandoned tentatively in specified areas and the results carefully watched. There is apparently no question of the value of fire protection in the drier parts of the country. The extensive flowering of *tinua* (*Cephalostachyum pergracile*) has not, however, resulted in the general assistance to natural regoneration of teak which appears to have been anticipated. Reproduction of padouk is stated to be generally unsatisfactory.

In Eastern Bengal and Assam the conditions which have been referred to regarding the moist Sál tracts of Bengal are intensified and endeavours are being made to ascertain, by experiment, the effect on reproduction of the use of fire over sample areas. It appears however that the moist forests which have been successfully protected for a long term of years do not readily burn and this difficulty seems to be affecting the course of the experiments. In Cachar and Chittagong the reproduction of some of the most valuable kinds is Poticed to be unsatisfactory, owing to the paucity of seed bearers, a probable consequence of unregulated working.

In the *Central Provinces*, climatic conditions were, as a rule, favourable to natural reproduction. The latter is, however, stated to be generally unsatisfactory in Berar. Heavy grazing and insufficient soil moisture are stated to be the chief preventing agencies.

It is difficult to extract any salient features from the mass of information contained in the *Madras* report, but regeneration both by seeds and coppice appears to, have been generally satisfactory, conditions of climate and freedom from fire assisting largely in the success attained.

27. The impression created by a perusal of the *Bombay* reports is that wherever fire protection, "*rab*" cutting, and cattle trespass can be controlled the forests reproduce themselves. The season was remarkable for an almost total absence of Teak seed in the Southern Circle, the reason for which is not clear. In Sind a favourable inundation of the Babul forests is expected to result in a plentiful supply of seedlings.

(b)—Artificial Reproduction.

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[Fide Appendix XVI.]

28. The area of plantations, including taungyas, fell from 136,528 to 134,785 acres. There was an increase of over 2,000 acres in *Burma* but this was more than counterbalanced by decreases in *Bengal*, the *Central Provinces*, Madras and Bombay. Seven thousand and nineteen acres of failures, 6,286 of which were sown with Burma teak seed, were struck off in the Southern Circle of the Central Provinces. Similarly in the Central Circle of Bombay, 3,125 acres of failures were abandoned.

The total expenditure on plantations fell from R2,40,606 to R2,31,036. It appears to be a sound policy to curtail expenditure on plantations if it is felt that the time and money allotted to their formation and maintenance is more advantageously spent on cultural operations and works tending to improve the growing stock in natural forests, and, as already explained, the dangers to which pure plantations are exposed from insects and fungus pests are also of importance in determining the present policy.

29. Cultural operations which comprise any works of artificial regeneration not amounting to regular plantations such as the introduction of valuable species, the filling up of blanks, etc., were undertaken in most provinces.

In Bengal 296 acres were dealt with in the Darjeeling and 194 acres in the Tista Divisions. In Puri a small area was sown with Teak and Cassia Siamea.

In the United Provinces the most extensive operations were undertaken in Jaunsar, where an area of 451 acres was sown or planted with Deodar. Similar work was undertaken in Naini Tal over 149 acres of newly acquired land and blanks, but much useful work was also done by Forest Guards and fire watchers in removing cover over suppressed seedlings in the coupes of the year. In the Eastern Circle a commencement has been made in sowing Shorea robusta, Acacia Catechu, Bombax malabaricum, Acacia Arabica and Catal pa speciosa in blank or poorly stocked areas with a view to their reboisement. It is anticipated that 1,000 acres yearly may ultimately be dealt with at a cost not much exceeding RS per acre.

In the *Punjab* work was centered mainly in Bashahr and Changa Manga. In the formet extensive sowing and transplanting of established plants from sown lines was undertaken and helps to reduce the cost of these operations. In Changa Manga there were many failures the cause of which is unexplained; this matter is, however, to receive more attention in future.

Extensive operations are in progress in *Burma* to dibble in Teak seed in areas where Bamboo has recently flowered. The results achieved in the Prome and Katha divisions generally prove that the dibbling in of Teak seed is far less successful than the introduction of transplants.

In the Central Provinces the experimental cultural operations by the agri-silvicultural method were continued in the Barar Circle. Blanks in mixed forests were resown to an extent of 2,574 acres and sowings in *Babul* woods, after clear felling, were carried out over 556 acres. The total cost of these operations was R2,836. No very marked success appears to have so far been attained except as regards the regeneration sowings of *Babul* woods in a few localities.

In *Eastern Bengal and Assam* the most interesting feature is an attempt made to introduce *Ficus elastica* into the Lushai Hills through the agency of, the chiefs and village communities. This should prove a valuable industry to the villagers in inaccessible parts, rubber affording a suitable crop owing to the case of transport and its value.

Operations appear to have been extensively undertaken in *Madras* in practically all districts with varying success. The work was mostly in the direction of introducing valuable kinds and extended over 4,727 acres at a total cost of R15,632 of which R4,815 was incurred on creation and R10,817 on up-keep.

Similar operations in *Bombay* extended over 44,310, acres, the cost of creation amounting to R5,927 and of up-keep to R2,773. As in other parts, the results were not always successful but on the whole the progress made is encouraging.

20. The expenditure incurred on cultural operations in the different provinces was :--

Bengal United Provinces	· · · · · · · · · · · ·		an a	4,799
Punjab			1. 19 1. 1 . 1. 18 1. 18	7,579
Burma	a		· · · · · · · · · · · · · · · · · · ·	. 17,278
Eastern Bengal and A	Aesam .	19 1 19 1		171
Central Provinces			5	2,572
Coorg .	•	ant • s f s <mark>1</mark> • s ·	u e la turite, l	459
			Carried over	. 38,544

•		1		Brought	forwarJ	R . 33,544
North-West	Frontier .	•	• •	•	• •	
Ajmer .	• •	•	•		• •	. 2
Baluchistan		•	• •	•	• •	. 14
Andamans	• •	•	• •	•	•	• • • • •
		ی م بر م	•		TOTAL	33,620
Madras .	tan an Anaratan ar	•	• •	•	•	. 15,632
Bombay .	• •	•	• •	• .	• • •	8,700
	1	<u>.</u> .			BRAND TOTAL	62,952

(c)-Operations for the improvement of the Growing Stock.

31. These comprise weeding, cleaning and thinning necessary to establish and assist the growth of all wooded crops and, in addition, improvement fellings and girdlings which are at present of special value in India in preparing the irregular and too-often ruined forests for the introduction of a permanent silvicultural system. The value of the latter consists in their effect on the crop of the future and their expediency may not therefore be determined solely by questions of demand, for the material removed is usually of small value, while the benefit to the growing stock and future yield is out of all proportion to the loss of possible revenue involved when the material remains unutilized.

The following is a brief abstract of the work undertaken in different provinces :-

In *Bengal*, eleanings which include the cutting, lopping or girdling of inferior kinds and the removal of shrubs or undergrowth to uncover young growth of valuable trees were carried out over 9,641 acres at a cost of R2,086.

In the United Provinces, the work which is generally carried out under the prescriptions of Working-Plans was with few exceptions accomplished. In Jaunsar, opportunity was taken of the flowering of Strobilanthes to eradicate the shrub by uprooting it before the seed ripened. One thousand one hundred and ninety-eight acres were thus worked over at a cost of R728 and the result will be watched with interest.

In the *Punjab*, improvement fellings to benefit Deodar extended over 1,567 acres in Bashahr and over 474 acres in Kulu. Clearing of undergrowth and thinnings was also carried out to some extent; but the total expenditure of only R3,338 appears to indicate that much was not accomplished during the year.

The principal operation undertaken in *Burma* consisted of improvement fellings which extended over 73,400 acres at a cost of R17,485. The work fell short of the prescriptions of Working-Plans, while the manner of its execution in some divisions seems to justify some doubt as to its effectiveness.

In *Easters Bengal and Assam*, improvement fellings and cleanings were made over 6,986 acres in Buxs at a cost of R1,144. In Goalpara 4,971 acres were marked over for improvement fellings but the work actually done is not stated.

It is not an easy matter to ascertain from the reports the area worked over under improvement fellings in the *Central Provinces*. A sum of R12,856 was spent on this work which, however, is clearly insufficient. The Administration endorses the opinion of the Inspector General of Forests in regard to the urgent need for properly conducted improvement fellings, and remarks that urgent silvicultural operations should not be neglected even when involving the removal of unsaleable material.

Natural padouk seedlings were freed from overhead cover in the *Andamans*. The presence of these in considerable numbers in the second growth forest resulting from fuel fellings indicates an alternation of species and offers a probable solution of the hitherto doubtful method of natural regeneration of padouk.

In *Madras*, progress in the abolition of the permit system and the restriction of fellings to specified areas are important factors in the treatment of the forests, but the area over which the change of system extended and its cost are not generally stated in the report. In Bombay work was not extensive; the principal operations were those undertaken to assist Teak in North Kanara and Surat.

(d)-Experiments.

32. The experimental burning of grass in the Sambalpur Division of Bengol, inaugurated last year, has been discontinued as the staff is as yet insufficiently organised to carry out the experiment in the manner required, and evidence of the immediate effects can be ascertained from fire lines.

Experiments were undertaken in the United Provinces to determine suitable species (1) to grow on the many acres of bare hillsides facing south and on which few indigenous species thrive, and (2) of quick growing kinds to supplement the fuel supplies of hill stations. The Hardy Catalpa has been found most suitable for the former purpose but it thrives best at the lower elevations. For the latter Acacia dealbata was found to succeed on sandy loams at 5,000 feet elevation with a north or north-eastern aspect. Eucalyptus globulus is also being tried. The experiment in lac cultivation in the Siwalik Division appears to be succeeding, some areas having been leased for that purpose. The relative fertility of Sál seed from coppice and high forests was tested in Gonda and Bahraich. Results so far indicate that seed from coppice is sufficiently fertile for all practical purposes.

Experiments with Eucalyptus in the *Punjab* have been successful in Lahore, but in Simla it is believed that the climate is too cold for this tree, which is also liable to suffer from snow-break. The remedy probably lies in the selection of more suitable kinds, as certain species of Eucalyptus occur in Tasmania under conditions of climate not dissimilar to those of Simla. It is obviously useless to continue experiments with *Eucalyptus*. globulus.

33. The Mergui rubber plantation in *Burma* has proved beyond doubt the suitability of the locality for the cultivation of *Hevea Braziliensis* and endeavours are now being made to lease it. The cultivation of the camphor tree at Bhamo and Momeik has produced encouraging results.

The silvicultural experiments undertaken last year in the Central Provinces were continued, but as yet have not produced clear results. An inspection of the sandal plantations in North Chanda appears to show that the introduction of this tree can never be of more than experimental interest.

A large number of exotics are cultivated in *Madras*. The camphor tree (*Cinnamomum Camphora*), some Californian pines, Mahogany (*M. Swietenia*) and various rubbers appear to promise best.

In *Bombay*, somewhat extensive cultivation of the various rubbers was undertaken in all circles with varying success, with a view, no doubt, to testing the adaptability of the various kinds to local conditions.

The cultivation of rubber on a commercial scale is probably best left to private enterprise as it has been found, both in Assam and Burma, that the supervision of such rubber plantations makes unreasonable demands on the forest staff and interferes with its more legitimate work.

5.--- EXPLOITATION.

(a)-System of Management.

34. There is nothing to add to the general remarks made in paragraph 33 of last year's Review in this respect. The subject is fully entered into whenever Working-Plans are introduced. It is hoped that the application of the various silvicultural systems may be more fully dealt with in next year's Review.

(b) — Agency of Exploitation. [Vide Appendix XVIII.]

(i) Departmental Agency and (ii) Purchasers.

35. There was a fall from 67²/₄ to 57⁴/₅ million cubic feet in the total output of timber. Eight and three-quarter millions were removed departmentally, 453 millions by purchasers, 11 millions by free grantees and 21 millions by rightholders. The decrease was general under all the above heads but was proportionally highest under removals by free grantees and right-holders; in the latter case the deficit was about 50 per cent. of the previous year's outturn. The outturn of fuel was 1641 millions or 71 million cubic feet less than in 1905-06. Twenty and three-quarter million cubic feet, were removed by Government Agency, 921 million cubic feet by purchasers, nearly six million cubic feet by free-grantees and 451 million cubic feet by right-holders. While removals by Government Agency and by purchasers rose by half a million and 41 million cubic feet, respectively, there was a total fall, as in the case of timber, in fuel removed by free-grantees and right-holders of about 12 million cubic feet.

. In Bamboos also there was a considerable fall in the total outturn which reached 181 millions against 210 millions in the previous year. Removals by Government Agency reached 7 millions, by purchasers $158\frac{1}{4}$ millions and by free-grantees and right-holders $3\frac{1}{4}$ and $12\frac{1}{2}$ millions, respectively. There was an increase of about 3 millions under departmental agency, but a marked fall of over 27 millions under sales to purchasers and of over $5\frac{1}{4}$ millions by right-holders:

The outturn of minor produce, including grass and grazing can only be shown in value. The total outturn reached R654 lakhs against 55 lakhs in the previous year. The value of produce extracted departmentally fell by over two lakhs, while that extracted by purchasers rose by more than three lakhs of rupees and that of right-holders also rose by over five lakhs.

A remarkable feature of this and the past year is the continued fall of outturn in timber, fuel and bamboos. It appears that the outturn rose until 1904-05, but it is not easy to assign a reason for the subsequent decrease nor why removals by free-grantees and right-holders, which are based on rough estimates, should be so much less than the amount at their disposal.

(iii) Rights and Privileges.

36. The different classes of produce removed from the forests in satisfaction of rights and privileges were as follows :---

	Timber	•		2,433,669	cubic feet.
	Fuel			45,816,957	do.
1	Bamboos			12,830,125	No.
-	Minor produce inclu	uding grass and g	razing .	14,23,443	rupees.

` (iv) Free grants.

37. These were granted in all provinces to relieve distress caused by fire, flood, etc., and for works of public utility erected by public-spirited persons. The produce so granted was as follows :--

Timber			• •		1,325,357 cubic feet.
Fuel			, · ·		5,991,867 . do.
Bamboos		•	•	 •	3,222,567 No.
Minor pro	duce etc.		 •		4,05,967 rupees.

19

(c)-Out/urn of Forest produce.

[Vide Appendix XVII.]

Pre	esidency	Timber and fuel.	Bamboos.	Minor produce,
•		Cubic feet.	No.	R
- Bengal	{1906-7	162,390,630	135,503,416	87,19,998
	1905-6	179,761,727	164,298,466	86,15,587
Madras	1906-7	23,975,356	39,282,182	15,20;606
	1905-6	22,514,748	32,054,025	14,01,348
Bombay	1906-7	85,780,962	, 6,608,172	18,49,415
	1905-6	44,058,865	18,821,289	4,95,884
Grand Total	{1906-7	222,146,948	181,393,770	65,90,019
	1905-6	246,334,840	210,173,780	55,12,809

38. The following statement shows the total outturn of the past two years from all classes of forests under the control of the Forest Department :---

As already remarked, there was a considerable decrease under timber and fuel and bamboos but a compensating increase under minor produce.

The principal decrease under timber and fuel is of 8½ million cubic feet in the Punjab, 7 million cubic feet in Burma from unclassed State forests and 8 million cubic feet in Bombay. The decrease in the Punjab is due to a reduced demand from purchasers and the cessation of earthquake relief grants. In Burma the fall is general in all circles and is attributable to the exhaustion of accessible forests. The fall in the outturn from the Bombay forests cannot be accounted for from the circle reports. In the majority of other Provinces there was a small net increase.

The decrease in the number of bamboos extracted exceeded 283 millions. The principal decreases were of 21 millions in Eastern Bengal and Assam, of 15 millions in Burma and 7 millions in Bombay; but there were compensating increases in other Provinces for which Madras (7 millions) and the Central Provinces (8 millions) are mainly responsible. The reasons for the large falls above noted cannot be ascertained from the circle reports. The substantial increase in the value of minor produce is almost wholly, covered by the increase in Bombay, the value of whose outturn rose from R4,95,884 to R13,49,415, which is apparently due to increased sales of myra-

bolams and lac in that Presidency.

CHAPTER III.

FINANCIAL RESULTS.

[Vide Appendices XIX to XXIII.]

39. A comparison of the gross Revenue, Expenditure, Surplus and the proportion of Expenditure to gross Revenue of the last 34 financial years is shown in the following table :---

Quinquennisl periods.	Gross Revenue. (Average.)	Expenditure. (Average.)	Surplus. (Average.)	Proportion of Expenditure to Gross Revenue.
	R		R	Per cent.
1873-74 to 1877-78.	67,23,191	44,76,803	. 22,46,888	66
1878-79 to 1882-83.	79,15,956	52,09,538	27,06,418	66
1883-84 to 1887-88.	1,10,59,434	71,42,382	39,17,052	61
1888-89 to 1892-93.	1,51,86,115	82,61,176	69,24,939	55
1893-94 to 1897-98.	1,74,50,655	96,57,496	77,93,159	55
1898-99 to 1902-03.	1,90,22,776	1,08,42,872	81,79,904	57
1903-04	2,22,16,747	1,21,66,993	- 1,00,49,754	55
1904-05	2,40,29,950	1,29,67,856	1,10,62,094	54
1905-06	2,66,74,593	1,42,58,521	1,24,16,072	53
1906-07	2,64,91,486	1,40,63,800	1,24,27,686	, 58

Although the gross revenue is less than that of the previous year by R1,83,107 the expenditure is also less by R1,94,721 so that the surplus is better by R11,614. It might be expected from the decrease in outturn referred to in Chapter II that there should be some fall in the gross receipts but the decrease in timber, fuel, and bamboos appears to be almost compensated by the increased value of the minor produce disposed of; for while the outturn of timber and fuel fell by 9 per cent. and that of bamboos by 13 per cent. there was a rise of 15 per cent. in the revenue derived from minor produce, and the fall in gross revenue amounted therefore to '68 per cent. only.

The most marked decreases in gross receipts occurred in *Bengal* ($\frac{1}{2}$ lakh), *Punjab* ($\frac{19}{4}$ lakhs), *Burma* (5 lakhs), *Central Provinces* ($\frac{1}{2}$ lakh) and *Bombay* ($\frac{3}{5}$ lakh) while all other provinces showed better gross returns. The fall in revenue in the Punjab is due to a reduced demand, during a period of scarcity, both for standing timber and fuel and for material collected in depôts. The deficit in Burma is covered by a corresponding increase in the value of stocks.

The increase in net revenue is due to a smaller expenditure : the principal decreases under the latter head occurred in the United Provinces (1 lakh), *Punjab* ($1\frac{1}{5}$ lakhs), *Burma* ($2\frac{3}{5}$ lakhs), and *Bombay* ($1\frac{1}{5}$ lakhs), they appear to be almost wholly due to a fall in the expenditure on departmental timber works—consequent on the application of the policy of leaving the exploitation of the forests to private enterprise. It has been shown in Chapter II that works of improvement are generally receiving the necessary attention; so the

value of the forests is clearly increasing, and when these have been further opened up, when the areas which have received protection and careful treatment for many years are fully utilized, and when new sources of income are tapped, the financial results will continue to improve as the quantity, quality and value of the outturn rises.

40. The net revenue per square mile of land under the control of the Department varies enormously in the different provinces : it is dependent on the proportion of revenue producing area and on the proportion of area utilized in the satisfaction of the rights and privileges of the people, as well as on the intensity of working justified by sound management. The highest net return per square mile was B383 in the North-West Frontier Province, the United Provinces and Coorg yielding B287 and B263, respectively. The lowest returns were of B21 in Eastern Bengal and Assam and of B11 in Ajmer. The average for all provinces was B52 per square mile against B50 in 1905-06 and B47 in 1904-05. These figures seem to support the view taken of the increasing value of the State forests.

The above calculations omit the value of forest produce given away free or at reduced rates. The estimated value of such concessions amounted during the year to R34 lakhs and represents a portion of the direct value of the forests to the country, apart from the contribution of about $1\frac{1}{4}$ crores to the State revenues.

41. The financial results of the working of the forests after deducting capital expenditure not yielding an immediate return is as follows :---

- 		Total value	of yield	. 2,98	3,96,918
Gross	Expenditure .]	1,40,63,800		
	penditure not yielding an im				
_	Roads and Buildings				
• •	-	C. C.		;	
(c)	Working-Plans		90,513		
(d)	Settlements		78,116		
(e)	Surveys	• • •	2,97,964		
(ƒ)	Demarcation .	• • •	1,09,573		
	•	TOTAL .	21,19,111	. :	

CHAPTER IV.

GENERAL.

1.-ADMINISTRATION.

42. The post of Inspector General of Forests was held by Mr. S. Eardley-Wilmot until 17th April 1907, when he availed himself of three months' privilege leave, the vacancy being filled by Mr. J. H. Lace; Conservator of Forests, 1st grade. Eight Conservators were on leave during a portion or the whole of the year.

In view of the rapid development of the forests in Burma, the ultimate strength of the Controlling staff in that province was raised during the year from 33 Imperial and 31 Provincial Service officers to 56 Imperial and 60 Provincial officers respectively.

A notable event of the year was the re-organisation of the Imperial Forest Service with regard to the emoluments of Deputy and Assistant Conservators. Grade promotion was replaced by a system of personal pay dependent on the length of service, the individual officer rising from R380 to R1,250 per mensem in the 20th year of service, but officiating and exchange compensation allowances were abolished for these officers.

Eour officers of the Imperial and three of the Provincial service retired; one officer of the Imperial service resigned and one of the Provincial service died during the year.

Officers on Foreign Service.

据17,16233.437。

. 43. The following statement shows the number of officers on foreign service in India, in British Colonies and serving under other Governments .---

In India.

5.

Imperial Service.

Provincial Service.

1.	Mr.	Å.	W.	Blunt.	(Central	Province	s),	· 1. Lala Daulat Ram (Punjab), Kashmir.
		a in			Mary Car	Kashm	nir.	2. Mr. Keshva Nand (United Provinces),
2.		R.	Μ.	Willian	nson*: (Ce	otral. Pro	v -	Kashmir.
· .,		÷.,	to sa to sa			ntral India		8, Rai Bahadur M., Muttanah (Madras),
	i i i				1011 G.W.			Mysore.
								4. Mr. G. W. Thompson (Madras), Jeypore.
							* - I	5. " V. Alwar Chetty (Madras), Cochin.
							1	6, Inamati Sham Rao (Central Prov-
								inces). Mysore.
							टटा	7. " A. P. Mudaliar (Bengal), Mysore.
							11	8. Blagwandas Harkisandas Dala (Bombay),
							цó [Rajpipla.
							• 1	9. Pandit Thakur Das (Punjab), Indore
								State.
								10. Mr. J. M. Blanchfield (United Provinces),
					·			Bundelkand State.
							* . {	11. Lala Devi Ditta (Funjab), Jubal State.
					•	· · ·		
						In th	e U	0601168.

1. Mr. N. C. McLeod (Central Provinces), South Nigeria.

Under other Governments.

1. Mr. W. F. Lloyd (Bengal), Siam 1. Mr. S. A. Wood (Burma), Soudan.

* Mr. Williamson's deputation to Central India terminated on 19th November 1906; he has since been deputed to Rewah State for a period of three years from 28th October 1907.

2.-EXPORTS OF FOREST PRODUCE.

[Fide Appendix XXIV.]

44. The total value of exports of forest products at ports or shipment amounted in the year under review to $496\frac{1}{2}$ lakhs of rupees as against 469 lakhs in 1905-06 and an average of 402 lakhs for the three preceding years. There has been a general falling off in the quantity of articles exported, the increase in value being chiefly due to the better prices realised.

The quantity of caoutchouc exported fell from 279 tons in 1905-06 to 224 tons in 1906-07. The out-put however still compares favourably with the average of 168 tons for the 5 years ending 1905-06. The value of this product rose at the same time from R4,595 per ton to R4,993.

Thirteen thousand four hundred and sixty-four tons of lao were exported during the year or 259 tons less than in the previous year, but the total value of this article rose from 318 lakhs to 350 lakhs, button and shell lac having risen in value by 13 per cent. and 16 per cent. respectively. The demand for this article appears to be limited only by its supply and this again only by the area suitable for its cultivation. In the Central Provinces the development of this industry by departmental agency has been somewhat hampered by existing leases and contracts. In Sind the propagation of lac has for some time been fostered departmentally, with the result that the lac-bearing area has rapidly extended and the industry has already proved a profitable source of revenue to the State.

The quantity of teak exported fell from 52,768 tons in 1905-06 to 44,203 tons in 1906-07. The price however improved slightly during the year. Four hundred tons of selected teak squares were supplied direct to the Admiralty under tentative arrangements made with the Lords Commissioners.

3.-RECRUITMENT AND TECHNICAL EDUCATION.

45. Eight officers who had completed their training at Cooper's Hill College were appointed Assistant Conservators of Forests and arrived in India at the end of 1906. Three of these were posted to Burma, two each to Bengal and Bombay and one to Eastern Bengal and Assam. Dr. Noshirvan Gustasp, Ph.D., an Extra-Assistant Conservator of Forests serving in the Bombay Presidency, was appointed to the Imperial Forest Service as a special case and posted to that Presidency.

Nineteen candidates were selected in England by the Secretary of State for training at Oxford for the Indian Forest Service.

46. Mr. Lace held the post of Principal of the College and Imperial Silviculturist until 17th April 1907, when he was appointed to officiate as Inspector General of Forests, and Mr. H. H. Haines took over charge of the post of Principal in addition to his duties as Forest Botanist. 'Mr. R. S. Hole succeeded Mr. Haines as Botanist from 28th May 1907 and Mr. C. E. O. Fischer temporarily held the post of Imperial Forest Zoologist during the absence of Mr. E. P. Stebbing, on leave. Mr. Puran Singh was appointed acting Imperial Forest Chemist.

47. The number of candidates who presented themselves for the entrance examination of the Imperial Forest College in 1906 was 103, or 20 more than the previous year. Out of 44 who qualified for admission, 36 joined the College in April 1907, besides eight students, including four from Nepal, who were specially exempted from passing the entrance examination. One stipendiary student from Sind and another from the Nepal State left the College before the rains term, thus reducing the number to 42 at the close of the year. At the final examination held in March 1907, Higher Standard certificates were awarded to 23 candidates and Lower Standard certificates to 8. Since the Dehra Dun Forest School was founded in 1873, Higher Standard certificates have been granted to 600 students and Lower Standard certificates to 174. Owing: to the reconstitution of the School into a College and the abolition of the Lower Vernacular Class, this was the last occasion on which certificates were issued under the old rules.

48. The duty of training subordinate officers below the rank of Banger has now devolved on Local Governments and steps were taken in most provinces where there were no local Forest Schools to establish suitable institutions for the instruction of Guards, Foresters and Deputy Rangers in the rudiments of practical Forestry and cognate sciences. A Vernacular Forest School was established at Balaghat in the *Central Provinces* from 1st April 1908, providing a course of instruction extending over one year and for the admission of 21 students annually.

For Bengal a course of instruction in Forest subjects was instituted at Kurseong under the supervision of the Divisional Forest Officer. The training is to last for six months from June to December and the number of students admitted on each occasion is not to exceed eight.

The United Provinces Government decided to hold a training class at Bamnagar for subordinate officers, not exceeding twelve at a time, under the supervision of the Conservator of the Western Circle and under the immediate charge of a selected officer of the Provincial Forest Service. The class is to meet about the end of October and to last for eight months, during which the students will tour through the most important forests of the two circles, and receive practical instruction from works in actual progress.

Proposals were sanctioned during the year for the reconstitution of the Vernacular Forest School in *Burma* and for its transfer to Pyinmana. The new rules provide for two courses, one in English for the award of the Higher Standard certificate and the other in Burmese for the Lower Standard. Each course is to last for two years and the School will admit a maximum number of 10 upper and 20 lower class students.

49. Forest Research.—Although the Imperial Forest Research Institute was only created towards the end of the previous year, and the duties of the staff are held to consist primarily in the education of the large classes of forest students at the College, very gratifying progress was made in research work and of this details are available in the Progress Report of the Imperial Forest Research Institute for 1906-07, the following remarks affording only general information on the subject.

The Principal of the College, who also held the post of *Silviculturist*, was unable to find time to devote to enquiry into silvicultural problems and the Imperial *Forest Chemist* during the first few months of his incumbency was chiefly engaged in placing the Laboratory into working order.

The Superintendent of *Working-Plans* commenced investigations into the determination of the height, diameter and volume growth of individual trees at various ages and the production of timber per unit of area. For this purpose, the collection of (1) statistics and data regarding experimental plots and

(2) of production from control forms, was undertaken and from these was compiled "A Preliminary note on the development of the sal in volume and in money value". Similar publications regarding teak, Pinus longifolia, Deodas and Pinus excelsa were also taken in hand. To ensure uniformity in technicaterms used in the Department a "List of Technical Terms" was also prepared and issued after the close of the year.

The Forest Botanist conducted local investigations in Chota Nagpur and the Santhal Parganas with a view to completing information for the local Flora which are being prepared and this left little time for research in applied botany,

Steady progress was made in Forest Zoology. Investigations were conducted in the Himalayas into the insect pests of *Pinus longifolia*, *Pinus* excelsa, Deodar, Silver Fir and Spruce. The principal publications under preparation were (i) A monograph on the lac insect, (ii) A note on some Assam Sal insect pests and (iii) A Manual of Elementary Forest Zoology.

In Forest Economics, the chief subjects of investigation were (i) the supply of sleepers of Xylia dolabriformis, (ii) Utilization of Dipterocarpus tuberculatus for sleepers and other purposes, (iii) Introduction of inferior species into use for railway sleepers, (iv) Trials of various timbers for paving blocks, lead pencils, oricket bats, tea boxes, etc. A Manual of Forest Utilization was compiled but was not published until after the close of the year.

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APPENDIX I.

[Vide paragraphs 1 to 3.]

Area of reserved and leased forests.

	٨	BRA IN SQ	UARE MILES		
PBOVINCH	At com-, mencement of year.	Added in	Excluded in	At close of	Remarks.
a with the second second	lan yang ya				3
Bengal	4,260	2	22	4,240	
United Provinces	(a)4,091			4,091	(a) This was shown
	Alter de de	in the second			as 4,092 square miles in previou
$\frac{1}{2}$		a de la composition de la comp			year's report and includes 157 square miles of leased
$\lambda_{ij} = 0$					forests.
Punjab	(8)2,857	23	(ð)48	(b)2,332'	(b) Include 535, 10 and 525 square
	5				miles of leased forests respectively
Burma .	(c)20,534	1,792	751	-21,575	(c) This was shown as 20,544 in pre
					vious year's repor owing to the wrong inclusion of 10
					square miles of reserve.
Eastern Bengal and Assam	6,009	253	6	6,256	
Central Provinces (includ- ing Berar).	22,127	817	446	21,998	
Coorg	505	2	31	476	
North-West Frontier .	284	•••	•••	234	
Ajmer	142	***	•••	142	
Baluchistan	264	16		2 80	
Andamans	156	·•• · · · · · · · · · · · · · · · · · ·	•••	156	
Total Bengal	60,679	2,405	1,304	61,780	
" Madras .	18,288	302	49	-18,541	
" Bombay .	(d) 13,518	234	. 86	(d) 13,716	(d) Includes 217 square miles of leased forests.
GEAND TOTAL, 1906-07	(<i>f</i>)92,485	2,941	1,389	(e) 94,037	(e) Includes 899 square miles of larged forests
" " 1905-06 .	(1)92,179	1,986	- 1,669	(f) 92,496	leased forests. (f) Includes 910 square miles o leased forests.

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APPENDIX II.

[Vide paragraphs 1 to 3.]

Area of all forest lands.

	PROTINGE.	1		<u>et 1</u>	H BQUARN M		Proportion of forests	
	Nam e.	Area in square miles,	Bstervod.	Protected.	Unclassed State.	Total.	to whole area of Province.	Brmanns.
					•			
	Bengal	115,768	4,240	2,833	•••	7,073	61	
	•							
								na shine a vine -
	United Provinces .	107,043	(a)4,091	. 30	43	4,164	3.8	(a) Includes 157 squar miles of lease
1. 								forests.
7	Punjab . • •	97,218	(6)2,332	5,241	1,758	9,329	9.7	(b) Includes 525 squar miles of lease
								forests.
• •	Burma	179,146	21,575	396	108,965	130,540	72.8	
				•				
• •	Eastern Bengal and Assam.	93,771	(c) 6,256	5	22,956	29,217	31-1	(c) Includes 6 squar miles of reserve
					•			forests under the management
	Central Provinces (in- cluding Berar).	100,335	21,998		4	22,002	21 9	Railway Companie or of the Revenu
	finding verarie							Department.
	Coorg	1,582	476	•••	(ď)30	506	32.0	(d) Temporarily trans
		14 A	•					ferred to reserve land for the purpos
		10.057	89.4					of resettlement.
	North-West Frontier	13,057	234		440	234	1.8	
	Ajmer	2,646	142	988	6	148	5.6	
	Baluchistan	9,403	280	•••	*14	280	2.9	
	Andamans	8,143	156	714	1,794	1,950	62-1	ri F
· .								
	Total Bengal	723,112	61,780	8,109	135,554	205,443	28.4	4
	TOTAT TOURT .	•	011100		2001003			
							e i	
	" Madras .	141,679	18,541	•••	(e)1,079	19,620	13-9	(e) Reserved lands.
	" Bombay .	122,958	(<i>f</i>)13,716	1,359	•••	٩ 15,075	12.2	(f) Includes 21 square miles o leased forests.
	GRAND TOTAL, 1908-07	987,749	(g,9 4, 037	9,468	136,633	(g)240,138	24-3	(g) Includes 899 squaro miles o lessod forests.
	» " 1905-06	970,617	(A)92,496	10,018	131,137	(#)233,651	24.1	(A) Includes 91 square miles of leased forests.
			1 × 5 × 5	1	1 6		1	

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APPENDIX III.

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[Vide Paragraph 4.]

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Progress in Forest Settlements.

	1. 1. j.	e Alfred		PT	ogre	SS 11	1 For	est c	ettle	men	.18.	•					_	
	AT THE		SEÍTLEI Cement Ile.	ARE	ABEAS FINALLY SETTLED DUBING THE YEAR					, ABEA UNDERGOING SETTLEMENT,								
Phorings.	foresta.	restar			AREA		Ex	PENDIT	URN D		INENO TEE,T			W IN 1		INCUR:	ENDITU	BING .
	Reserved for	Protected forester	Total.	Rossrved.	Protected.	Total.	Reserved.	Proteoted.	Total.	Reserved.	Protected.	Total,	Beserved.	Protocked.	Total.	Re.orvod.	Protected.	Total.
	Sq. m.	Sq. m.	6q. m,	Sq. m.	\$q. m.	8g. m.	R	R	£.	6q. m.	Są. m.	Sq. 10.	8q. m.	8q. m	6q. m.	R	B	R
Bengal	4,285		4,235	2				-	·	2			İ5		15		- 	
United Provinces	8,994	30	3,934	1	·	1	852		852			·		-	·			
Panjad •	1,938	5,168	7,106		74	74			83 5	15	205	230	70		70		-	
Burma	20,572		20,572	1,030		1,030	2,029		2,029	814		814	2,809		2,809	16,639		18,639
Eastern Bengal and Assam .	6,009		6,009	220		220	.,.	· ••• '		427		427	. 7	1	- 18			
Ce tral Provincés Including Berar.	18,234	S. Mar	18,234	16	177	16				14		- 14	1		1			
Coorg	476		476	1. [.]	0		1.53						^{>} 30		· 30	. 983		(a) 583
North-West Frontier	• 234		234		1											•		
Aimer.								,										,
Baluchistan.	264	1	264	16		16		· · · · ·		1 . 1 · ·			·					
										-	1.1		<i>.</i>	1 ·	·			
Andamans .	156	1	156			· • ·	•••								1	***		
Cotal Bengal	56,022	5,198	61,220	1,283	74	1,357	2,881		2,881	1,270	205	1,475	2,932	1	2,933	17,622		17,622
, Madras *	18,288		18,288	194		194	270	·	270	649		649	10	-	10	538		538
, Bombay)	13,213	953-	14,166	197	64	261	N. Age			35	•	35	- 36		36	(b) 6,918		6,918
	1		· · · ·						·			<u> </u>	<u> </u>	<u> </u>		<u> </u>		
GRAND TOTAL, 1906-07	87,523	6,151	93,674	1,674	138	1,812	8,151		3,151	1,954	205	2,159	2,978	1	2,979	25,108		25,108
• • •	87,159	5,764	92,923	567	140	707	4,238		5,808	3,241	['	3,446	454	-	454	29,771		29,778

(a) Excludes R3,850 paid for putchase of 2 Cardamoms estates within reserves. (b) Excludes B13,235 expended in other than Forest Accounts.

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APPENDIX IV.

[Vide paragraph 5.]

Demarcation and Maintenance of Boundaries.

ріотисв.	CIRCLS.	Length of boundaries artificially domarcated	esisting	Length of previously existing	marked.	Length of boundaries not	Length of natural boundaries pot	Total length of boundaries	EXPERD DAMABGATI TRA	TURA OF OF DURING FRAR.
• • • • • • • • • • • • • • • • • • •	a de la companya de la	during the	bour daries repaired,	boundaries #Bot repaired.	boundaries at the close of the year.	demarated at the close of the year,	requiring artificial marks.	at the close of the year,	On new work,	On repairs.
		Mil ė .	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.;	£	₽.
Bengal		52	8,244	9 78	3,694	•***	1,005	• 4,699.	1,163	3,034
United Provinces	Eastern Circle . Western - "	2	819 523	1,694 1,617	2,515 2,144	`9 2	599 784	3,123 2,930	245 349	5,610 2,808
	Total .	8	1,343	3,311	4,659	11	1,983	6,053	594	. 8,418
Punjab .	4	`21	2,596	8,249	10,866	8,555	1,191	15,612	(a)223	3,244
Barms	Pega Cirole Tenasserim 19 Northera 29 Southern 29	90 49 101 189	629 1,524 1,144 1,183	2,620 1,841 2,403 2,470	3,339 3,414 3,648 3,842	246 55 143 877	1,247 607 251 •447	4,832 4,076 2,942 4,666	J,240 525 1,836 3,880	4,928 6,390 2,164 1,668
	Total .	429	4,480	9,334	14,243	721	2,552	17,516	7,481	. 15,150
astern Bengal and Assam.		73	1,648	292	2,013	•14`	2,601	••4,628	2,655	7,804
Central Provinces	Northeyn Circle Southern ,, Berar ,,	14 6 1,086	7,830 7,475 5,853	3,868 1,292 6,362	11,712 8,773 13,301	59 59	1,125 974 667	12,837 9,806 14,027	253 9 5,059	5,663 3,295 3,750
	Total-	1,106	21,158	11,522	33,786	118	2,766	36,670	5,321	12,708
oorg orth-West Frontier jmer aluchistan .ndamana		 	34 189	307 743 262 212 42	307 777 262 421 43	173	(56 (139 (158 (77 116	536 916 420 498 187	 218 	73 707 18 19 7
otal Bengal .		1,707	34,691	34,652	71,070	4,621	12,041	87,735	17,655	51,182
"Madras "	Northern Circle . Central Southern	184 105 135	9,078 11,670 1,080	7,738 3,143 8,743	9,995 14,918 (b)9,958	160 194 535	545 280 846	10,700 15,392 11,339	7,672 494 1,718	3,654 2,753 7,960
	Total .	424	14,823	19,624	34,871	889	1,671	37,431	9,884	14,367
" Bombay	Northern Cixcle . Central " Southern " Sindh "	13 142 297 28	884 3,957 1,595 1,649	4,582 14,003 9,841 324	5,479 18,102 11,733 2,001	796 4,539 1,024	469 861 626 579	6,744 23,502 13,383 2,580	194 1,194 4,635	1,771 1,199 1,792
	Total .	480	8,085	28,750	37,315	6,359	2,535	46,209	् ठ,023	4,763
BAND TOTAL, 1906-07		2,611	57,599	83,026	143,256	11,869.	16,250	171,875	33,562	70,311
» " 1905-06		3,319	55,317	76,705	140,852	12,385	16,456	169,693	44,482	79,967

N.B. - Boundaries include, besides the outer perimeter, the limits of enclosures of private and other lands within the forests, but not the limits of subto) Excludes field expended in dem arcation the Pr Mahal plantation. (4) Excludes 23 wills of artificial boundary in Coimbatore District.

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APPENDIX V.

[Vide paragraphs 6 to 9.]

Forest Areas Surveyed and under Survey.

Peorince.	°.1, %"≑1,	MILE	4 ″=1	MILE.	TOTAL OF DEC ON 2 ^V BC OVI	ALB AND	Expenditure on Surveys including mapping and publishing
	Outtum.	Cost rate.	Outturn,	Cost rate	1908-07.	Total up to date.	publishing charges (debitable to Forests).
i i i i i i i i i i i i i i i i i i i	• 5	3	4	5	6	7	. 8
Bengel	Sq. miles. 1,050	₽ 43	Sq. miles. 	R 	8q. miles. 1,050	Sq. miles. 1,050	H (a) 366
United Provinces of Agra and Oudh .		•••	63.2	17.9	63·5	• 4,138•5	4,574
Punjab North-West Frontier Province	•••	•••	•••	149 149	54() 	3, 568 366	2,462 375
Burma : · · · · · · · · · · · · ·	576	62.8	51	805.7	627	13,105	14,612
Central Provinces including Berar . Eastern Bengal and Assam . Ajmer	•••	41	24	 112•5 	22 24 	18,619 [.] 5 1,580 144	(a) 3,453
Totel of Bengal	1,648		138.5		1,786.5	42,571	- 25,842
,, Bombay	••••• • •	***	378 62	91·45 65·8	378 62	14,278 (b) 11,788	23,944 13,511
Total of Madras and Bombay			440		440	26,066	37,455
GRAND TOTAL, 1906-07	1,648 571		578·5 3,036·5	· · · · · · · · · · · · · · · · · · ·	2,226·5 3,607·5	68,637 (ð) 68,633 5	(c) 63,297 (d) 2,72,423

(a) Cost of 3" Survey borns by the Survey of India.
(b) Includes 126 square miles on 8" scale.
(c) Excludes R33,022 for headquarter charges.
(d) , R29,655.
The Spurce shown in this statement are exclusive of charges debitable to Survey of India.

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APPENDIX VI.

[*Vide* paragraphs 6 to 9] Details of Forest Survey operations

	Details	UL	rorea	35 01	urve	7 OD	erat	ເດກຊ	
1.1				· • · · ,		/ ~£			
		- 1 - C	1		. 72			the second second	Sec. 1
								the second s	- <u> </u>

,		NATU	LS VI SUR	ver oper	ATIONS.	Expenditore	
PROVINCE.	Porest Surveyed,	9" Detai	l Survey.	4º Detai	l Survey.	mapping and publishing charges debitable to	Romanne,
	and the second	-4700,	Cost rate,		Cost rate.	Voresta.	
• •		3q. m.	B	8q. m.	Ħ	B	
• •	Angul .	504				366	Mapping and publishing
CANGAL	Sundarbana .	1,050	. 43			(a)	Charges.
	Total .	1,050	43	*		. 366	
,	Tehri-Garhwal		1			2,069	For second edition of
UNITED Western	Ganges .	•••		•••		795	Kumaun and Garbers
BOVINCES CIFCIE.	Naini Tal Garhwal		***	· · · · · · · · · · · · · · · · · · ·		, 226 382). maps.
of Aesa ND OUDH. Eastern	Pilibhit .	•••	•••	62 1•5	2 17.0	§ 3,019	State Ball State
Circle. ~ 1	Kheri Kamaun	••••		5 (11)) (* 1 ₁ 253)	ζ 67 26 μ	For second edition of Kumaun and Garhwal maps
	Total		на н	63 ·5	17.3	4,574	Administra and Garnwai maps
· · ·							
	Jhelum Rawalpindi					406	
UNJAB	Lahore :			8.2 **		51 290	Mapping and publishing charges.
	Shabpur Bashahr			5. *** 1		310 1,405	
				, ••• 		. 1,900	
	Total .	(1) ••• • (1)	···· ·		1.49 1.19 1.19	2,462	ait sa atalan di sa tari Tinggan di sa
obth-West Féontibe Province.	Hazara					375	Mapping and publishin charges.
	Katha		•••	,		2,676	Mapping and publishing
Northern Circle.	Mu	125.29	54.08			1,231(a)	charges. Mapping and publishing
UBNA STA	Mandalay .	Γ.		•		-49	charges. Mapping and publishing
Southern	Ruby Mines .					110	s charges.
Tenasserim Circle.	Yaw . Thaungyin .	450.84	¢,524	51 ·25	305.70	(a) 10,546	
	Total .	576·13	•••	51.25	2 84	146 12	
	Amraoti	h	l an E		Į	· ·	
CENTRAL BOVINCES. Berar Circle	Akola Yeotmal	} 22	· · · 41 · · · ·	a and	•••	(a)	
	Total .	22	41				
	e Per Star						
	Kamrup Nowgong		•••			209 223	Mapping and publishing
ASSAM.	Garo Hills		844 974			29	f charges.
	Darrang Chittagong	2011 	*** ***		112.5	2,993	
	Total .			24	1125	3,453	
ADBAS Northern Circle	Ganjam North Coimbatore	147 477		343·38 34·25	} 91.45	23,944	
	Total .			377-63		23,944	
BOMBAY Central Circle	Khandesh .			62.4		13,511	
Forest Surveys						33,023	
GRAND TOTAL, 1906-07		1,648		578-78		95,319	
,, ,, 1905-06		571		(*)3,036.5		3,02,078	

(a) Cost barne by the Survey of India, (3) Includes 128 square miles on 8" scale.

APPENDIX VII.

[Vide paragraphs 10 and 11.] Areas brought under the control of sanctioned Working-Plans up to 30th June in the provinces outside the Madras and Bombay Presidencies.

	Fe	DERST AREA, 11	BQUARE MILI	18.	Area for	
PROTINOR.	Beserved,	Protected.	Unolassed State.	Total.	which Work- ing-Plans prepared and sanctioned up to 80th June 1907.	Proportion of Forest area under sanctioned Working- Plaus,
Bengal	4,240 4,091	2,833		7,073	5,083 3,318	72
Punjab -	2,332 21,575	5,241·	1,756 108,965	4,104 9,829 130,540	4,145 4,208	80 • 44 • 3
Eastern Bengal and Assam Central Provinces including Berar	6,256 21,998	5	22,956 4	29,217 22,002	1,103 11,847	4 54
Coorg North-West Frontier	476 331 234 142	••• •••	30 	- 506 234 148	 178 184 140 	35` 79 95
Ajmer Baluchistan Andamans	280 156	494 494	1,794	148 - 280 1,950	140	- 14
GBAND TOTAL IN 1906-07	61,780	8,109	135,554	205,443	30,216	15
,, ,, 1905-06	60,690	8,626	129,840	199,156	28,166	14

NOTE .- This appendix was compiled by the Superintendent of Working-Plans.

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APPENDIX X.

[Vide paragraphs 13 to 14.]

Expenditure on Communications and Buildings.

Paorisca,	NEW WORE.		BBPAJES.			
	Buildings.	Roeds.	Buiklings.	* Bosds,	Other Work.	TOTAL
	B	Ð	R	R	Đ	B
Bengal	15,713(a)	25,829	8,202(8)	15,554	2,159	66,957
United Provinces	77,390(b)	18,973	2 9,218(b)	50,987	11,070	1,87,638
Punjab	18,110	28,874	7,556	24,316	2,491	81,347
Burms	69,198	40,430	84,744	14,249	8,801	1,67,422
Eastern Bengal and Assam	23,677	14,237	17,603	14,136	3,746	73,399
Central Provinces (including Berar) .	58,460	18,132	20,114	19,601	31,076	1,47,383
Coorg	1,100	735	1,578	1,621	116	5,150
North-West Fronties .	1,862	1,067	213	545	38	3,720
Ajmer	849	105	123	193	- 233	659,
Baluchietan	***	37	269		1	306
Andamans	5,602	3,107	973	5,300	• • • •	14,982
Total, Bengal	2,71,112	1,51,026	1,20,593	1,46,507	59,725	7,49,963
" Madras .	61,529	27,612	30, 056 -	81.900	9,071(c)	1,60,166
" Bombay .	2 8,902	18,100	11,556	14,931	13,293(<i>d</i>)	86,782
GRAND TOTAL, 1908-07 .	3,61,543	1,96,738	1,62,205	1,93,338	82,089	9,95,911
" " 1905-06 .	3,56,536	1,51,345	1,52,979	1,41,071	64,835	. 8,66,766

(a) Exsindes R1.007 on account of unapportioned temporary establishment employed.
(b) Excludes R2.566 ditto ditto ditto.
(c) The cost of miscelence on works is not given in the Local Government's report.
(d) Excludes R5.731 expended in the Sindh Circle and charged in the accounts of the Public Works Department.

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APPENDIX IX.

[Vide paragraphs 10 and 11.]

Comparative statement of progress made in Working-Plans.

¢ .	n an		ABBAS POR WORKING-PI BEEN COM AND BANC	ANS HAVE PLETED LIOSED.	ABRAS YOR WORKING-P BRING COL	LANS ARE APILED.	Areas for which Working-Plans	Total orest area,	7
	PROVINCIA		At com- mencement of the year.	During the year.	At com- mencement of the year-	Taken in hand during the year.	have still to be taken in hand.	s- in Form No. 51.	REMARES.
	1	•	3	8		6	6	7	8
	• • • •		Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m. `	Sq. m.	(a) Decrease by 29 square mile compared with the figures of 19 is due to the revision of Darjeeling and Tists Wor
1	Bengal	•	(a)5,093	1=1	(6)229	66	1,685	7,073	Plans. (b) Transferred from column Form 55 of the Bengal H
۰.	Eastern Circle	•	(c)1,460		855		340	2,155	Report for 1906-07 to column
	United Provinces . { Western		1,858		. 78		. 73	2,009	the sppendix with reference to servator's letter No. 12, data April 1908.
	Punjab .	•	4,145		(0)362		4,822	9,329	(c) Exclude 834 square mi Forests in Eahraich Divisio existing Working-Plans for
	Pegu Circle		(d)1,539	183	····		30,116	31,788	were under terision during th and 31 square miles of fore. Gonda Division the Working
	, Tenasserim C		1		(p)835	· · 81	29,605	31,65 8	during 1897-08 These area
	Burma · · Northern		(e)38		586	130	27,958	28,712	therefore been shown in colur (d) Decrease by 1 square mi compared with the figures of 1
	Southern				· (q)974	469	35,623	38,382	compared with the figures of 1 is due to correction of area in 2 Division.
			I .			199	27,915	29,217	(e) Increase by 3 square mill compared with the figur 1905-06, is due to correction
	Eastern Bengal and Assam		(f)1,100	6		100		7,375	(f) Decrease by 1 square m
	(Northern Circ		· .		(r)939		()2,316	1	13 Jaibairun, Huya and Gar
	Central Provinces Southern "		(1)5,538		(8)57		(\$\$)2,021	7,616	
	(Berar "	•	(1)2,189	· •••		••••	(1)4,822	. 7,011	(g) Decrease by 935 square m compared with the tigat columns 3 and 4 of Appen of 1905-43, is due principally transfer of the Berui Divisio
	Coorg	٠	178	i		· ···, ·	328	506	(A) Increase by 2,256 square as compared with the bg 1905-06, is due to chauges areas of all the Divisions
	North-West Frontier Province .	1	- 123	61	50			234	1905-06, is due to chauges areas of all the Divisions : Circle.
	Ajmer		140	. in			8	148	(i) Increase by 591 square mi compared with the figures of i
	Baluchistan	•			2 an -		280	280	is due to changes in the areas Circle. (J) Includes 906 square mil
	Andamans				(m)317		1,633	1,950	which Working-Plans and
									(k) Includes 1,439 square mi which Working-Plans ar required.
	(1,1) $(1,1)$ $(1,1)$	ŧĢ							(1) Includes 432 square mil which Working-Plans are required.
	TOTAL BENGAL		30,019	197	4,782	895	169,550	205,443	(m) A Working-Plan for the was compiled during the year
					1 .				not yet sanctioned. (n) Excludes 17 square mile explanation has been rendered
									(c) Decrease by 5 square mi
	(Northern Circ	le .	(t)1,734	574	934	119	8,479	6,840	compared with the figures of 1 is due to grant of leases for pu of cultivation in Bashahr Div
	Madras { Central- "	•	(u)2,177		(v)1,670	525	2,892	7,264	(p) Decrease by 25 square mi compared with the figures of 1 is due to correction of a
	(Southern "	•	2,139	28	(w)405	398	2,546	5,516	Thaungvin Division. (g) Decrease by 14 square mil
	ж.		L	1 · · ·			1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		compared with the figur oolumns 4 and 5 of Appendix the Review for 1905-06, is
	•								recomputation of area in the Mines Division. (r) and (s) The differences as
	TOTAL	•	6,050	602	3,009	1,042	8,917	19,620	pared with the figures of are due to changes in the ar
				.				.	Divisions. (f) Decrease by 78 square mi- compared with the figures off)
	(Northern Circ	10	(-)1 000		1.30F			2,561	is due to the revision of the ing-Plan for the Yerramalais
	and the second	19.	(x)1,788		(y)65		708		in the West Kurnool District. (w) Decrease by 114 square mi compared with the figures of 1
	Bombay .	•	2,277	3	554	8	2,254	5,096	is due to the exclusion of 104 in the f
	Southern "	•	(5)841	80	230	56	3,383	4,590	District and the revision area of forests in Aorth District.
	(Sindh "		611		421		(n)40	1,089	(c) and (w) No explanations differences between the trai 19.5-06 and those of 19.5-9
									forthcoming. (x), (y) and (z) The difference between the figures for 120-0
	·		E #1#	01	1.070		6 90F	19 992	to the transfer to the h
	TOTAL	· •	5,517	83	1,270	64	6,385	13,336	Drvision (418 square miles) fro Southern to the Northern Circ

Nors .- This appendix was compiled by the Superintendent of Working-Plans.

APPENDIX X.

[Fide paragraphs 12 to 14.]

Expenditure on Communications and Buildings.

	- Naw	Wong.	Bar			
Раотист.	Buildings.	Roads.	Buiklings.	Boads.	Qther Work.	Тотањ
· · · · · · · · · · · · · · · · · · ·	B	B	R	B	B	₽ ∵
Bengal	15,713(a)	25,329	8,202(6)	15,554	2, 159	66,957
United Provinces	77,390(6)	18,973	2 9,218(b)	50,987	11,070	1,87,638
Punjab	18,110	28,874	7,556	24,316	2,191	81,347
Burms	69,198	40,430	84,744	14,249	8,801	1,67,422
Eastern Bengal and Assam	23,677	14,237	17,603	14,136	3,746	73,399
Central Provinces (including Berar) .	58,460	18,132	20,114	19,601	31,076	1,47,383
Coorg	1,100	735	1,578	1,621	136	5,150
North-West Frontier	1,862	1,067	213	545	33.	3,720
Ajmen		105	123	198	233	659
Beluchistan	,	37	269			306
Andamans	5,602	3,107	973	5,300	• •••	14,982
Total, Bengal	2,71,112	1,51,026	1,20,593	1,46,507	59,725	7,48,963
" Madras .	61,529	27,612	80,056 -	81.900	9,071(c)	1,60,166
, Bombay .	28,902	18,100	11,556	14,931	13,293(d)	1. A.
GEAND TOTAL, 1908-07 .	3,61,543	1,96,738	1,62,205	1,93,338	82,089	9,95,911
» » » 1905-08 .	3, 56,536	1,51,345	1,52,979	1,41,071	64,835	. 8,66,766

(a) Exsindes R1.007 on account of unapportioned temporary establishment employed.
(b) Excludes R2.666 ditto ditto ditto.
(c) The cost of miscellaneous works is not given in the Local Government's report.
(d) Excludes R5.721 expended in the Bindh Circle and charged in the accounts of the Public Works Department.

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APPENDIX XI.

[Vide paragraphs 15 and 16.]

Breaches of Forest Rules.

•		1			
	PBOVINCE.	Number of cases decided by the courts.	Number of cases com- pounded.	Total.	Percentage of convic- tions to total number of cases de- cided by the courts.
Bengal		. 269	1,862	2,131	85
United Province	S • • •	. (a)70	(a)1,053	1,123	77
Punjab .		. 815	4,346	5,161	81
Burma		. 1,241	2,190	8,431	83
Eastern Bengal	and Assam		618	838	82
Central Province	es (including Berar).	. 343	5,155	5,503	. 81
Coorg .			80	88	100
North-West Fro	ntier	• 63	568	631	83
Ajmer .		. 19	288	807	84
Baluchistan (. 85	118	158	- 88
Andamans		• • • • • •		•••	
	Total Bengal	. 3,083	16,278	19,861	82.5
	" Madras	. 5,217	14,510	(8)19,727	86.2
	"Bombay	2,077	16,693	18,770	89.0
	(1806-07,	. 10,377	47,481	57,858	85.9
	1905-06	. 11,160	46,564	57,724	88.3
*GB	AND. TOTAL - 1904-05	. 10,209	43,842	54,051	89.0
•	1903-04	. 10,928	40,709	51,637	83.4

* Includes cases which were pending at the close of the previous year.
(a) Excludes breaches of rules in District Forests.
(b) Excludes 1,960 cases withdrawn under the orders of the District Forest Officer.

APPENDIX XII:

[Vide paragraphs 15 and 16.]

Breaches of Forest Rules.

		•		· · · · · · ·		<u> </u>											<u></u>
	CABRI	-	into Co	532. .	Co	A LOAND	BD CASE	ß.	CASES 281		E THE OF		TOTA	5 OF 14	CR CLASS	07 077	E¥GE.
Psovince.	Injury to fire-protected forests by fire.	Unauthorized feiling or appropria- tion of wood and minur forest produce.	Grating without permission in tracts in which grazing is pruhibited.	Other offences.	Injury to fire-protected forests by fire.	Usauthorised feiling or appropria- tion of wood and minor forest produce.	Grasing without permission in tracts in which grazing is prohibited.	Other offences.	Injury to the-protected forests by	Unauthorized feiling or appropria- tion of wood and minor forest produce.	Grazing without permission in tracts in which grazing is prohi- bited.	Other offences.	Infury to fire protected forests by	Unauthorised feillag or appropria- tion of wood and minor forest produce.	Grazing without pormission in tracts in which grasing is probi- bited.	Other offences.	Grand total of eases.
d Provinces	19 7 22 40 3	141 25 563 872 146	16 16 246 40 16	79 15 48 217 45	2 7 9 26	1,281 466 2,081 1,222 261	478 441 2,196 49 147	154 139 59 996 200	67 42 61 - 37 18 - 294	9 25 25 47 3	 8 1 5	5	88 56 90 103 21 426	1,431 516 2,672 2,141 410 3,120	494 465 2,443 90 163 2,107	238 154 107 1,219 245 259	8,251 1,191 5,312 3,553 839 5,912
 Provinces (including ac). West Frontier bistan Dians 	61 	153 51 10 20	70 9 12 	59 1 3	71 	2,818 2 254 206 5	2,032 9 266 -76 112	198 63 48 5	239 16, 3 4		A D A D A D A D A D A D A D A D A D A D		18	3,120 2 315 218 25	2,001 99 291 85 125 	64 50 5	5,572 75 674 310 157
Total Bengal . "Madras . "Bombay .	154 54 • 198 406	1,981 3,378 835 6,194	• 450 1,451 867 2,768	469 346 187 1,002	114 26 229 369	8,599 9,472 5,823 23,89 1	5,807 6,190 9,457 21,4 5 4	1,862 968 1,228 4,058	512 490 2,331 3,363	268 413 -2,527 ,3,208	15 317 255 587	13 36 04 153	810 570 2,758 4,138	10,948 13,263 9,185 33,296	6,272 7,958 19,579 24,809	2,344 1,350 1,519 5,213	20,274 23,141 24,041 67,456
	421 813 426	6,86 1 6,431 5,816	3,261 2,933 3,589	1,189 1,101 1,118	437 348 471	24,070 23,251 21,675	20,711 18,950 17,227	3,405 3,098 2,759	3,462 3,337 4,080	2,977 3,186 2,785	672 427 414	177 157 181	4,320 3,998 4,977	23,911 32,868 30,276	24,644 22,310 21,230	4 ,771 4 ,359 4 ,006	67,646 63,535 60,489

• Includes only the new cases of the year; net those which were left pending at the close of the previous year.

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APPENDIX XIII.

[Vide paragraphs 18 to 20.]

Causes of Forest fires.

	11	CAU	o Prevri 616.	TIBLE		II.—Oran	B YIRES.			
Psovinon	iu Depi Fire Co	riginating artmental mervanoy ations.	fres of the	ternal prossing fire aces.	carele outeid	i dae to senere of jers or to wu causes.	fromi	riginating ntention nalice,	T	OT1L,
	No.	Sq. m.	No.	Sq. m.	No.	Sq. m.	No.	Sq. m.	No.	8q. m.
Bengal	5	03			10	1.3	18	5.2	33	7.1
CEastern Circle	2	1	7	8	23	20;0	3	2 ·0	35	30.7
United Provinces	4	. 7	2	•7	7	2.3	2	-2	15	3 ·8
				, ,						
Total .	6	0.8	9	8.7	30	22.8	5	2.3	50	34.5
Punjab	8	.13	10	•2	63	4.5	18	1.3	99	6.2
(Pegu Circle	10	13.5	20	33-2	59	135.5	25	87.3	114	219.5
Tenasserim Circle	. 3	0.1	8	77.2	20	39.4	8	2.3	39	119.0
Burma Northern	5	2.2	11	3.2	4	1.6	1	01	21	7.1
Sonthern ",,	7	5.6	15	5.7	.52	- 9.6	7	4.6	81	25.5
		_		<u> </u>			<u> </u>			
Total	25	21.4	54	119.8,	135	186 1	41	44.3	255	371-1
Eastern Bengal and Assam	3		6	05	13	4.7	1		23	5.2
		7	19	21	80	43	3	6	119	. 77
	13	3	26	47	60	55	2		101	105
1942 Chief Luiges Born, Berger, All Chief and	20	3	11	6 {	38	6	3 2	 1	98	81*
Codura 19				10. J L	†27	+ +65		-		
an a		13		74	205	169	7	7	318	263
Total .	50	10	56		205	105		·	-010	
Coorg			•••]			•••		
North-West Frontier	•••				11	, •02	.7	• • 01	18	-0:
Ajmer	•••		1	•02	3	•04			4	•01
			·	000.8		000.4			000	687.1
Total Bengal •	97	35.6	136	202.7	470	388.4	97	60 3	800	0871
(Northern Circle	82	57	18	18	- 54	73	25	15	179	163
Madras , Central "	10	2	77	44	.226	70	227	154	540	270
(Southern "	9	2	15	4	80	7	45	21	149	34
								! I		
Total .	101	61	110	66	360	150	297	190	868	467
/ Northern Circle .	41	. 3	83	35	827	243	18	3	972	†283
Central "	29	2	13	60	817	810	16	15	875	887
Bombay Southern "	11	9	73		698	205	51	32	833	254
Sindh "	1	100	1	•••• ·	42	3			44	8
				· ·						
Ţotsl .	85	14 .	170	103	2,384	1,260	85	50	2,724	1,427
		110-0	110	0.51.5	3,214				2 000	2,581
GBAND TOTAL	283	110.6	416	871.7	3,214	1,798.4	479	300	1,392	دەن, ش

* A total area of 95 square miles is shown as burnt in Borar in the report of that circle. The excess of 14 square miles over the total shown in this statement is not explained. † In Form No. 58 in the Bombay report only 221 square miles are shown as burnt, the discrepancy which arises in Recet division tennerglained.

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APPENDIX XIV.

[Vide paragraph 21.]

Protection from Cattle.

	RESEI	EVED BO	B 8879.	PROTE	cred Fo	rests.	UNOL	Assad F	obeste.		L CLASSE FORESTE	
PBOVINCE.	Totāl areas.	Area closed to all ani- mals.	Area closed to brow- sers only.	Total areas.	Area closed to all animals.	Area closed to browsers only.	Total areas.	Area closed to all animals.	Area olosed te brow- sers only.	Total areas.	Area clused to all animals.	Area closed to brow- sers only.
8 •	Sq. m.	8g. m.	Sq. m.	Sq. m.	Sq. m.	8q. m.	8q. m.	Sq. m.	Sq. m	Sq. m.	Sq. m,	8q. m.
Bengal	4,240	8,582	88	2,833	1,733	422		•••	3-m	7,073	5,315	510
United Provinces	4,091	2,065	703	- 30		30	43	1	. 30	4,161	2,066	763
Punjab	2,332	621	511	-5,241	58	143	1,756	5	78	9,329	684	732
Burma	81,575	17,643	83		ed.		108,965			130,540	17,643	83
Eastern Bengal and Assam	6,256	4,630	1,086	5	-4-		22,956			29,217	4,630	1,086
Central Provinces including Berar.	21,998	8,955	7,696		.	• • • • • • • • • • • • • • • • • • •	4			22,0(2	3,955	7,696
Coorg	476	183		· · · · · ·			30			506	183	
North-West Frontier	234	72	94			•••		-		234	72	94
Ajmer	142	-53	- 89				6	-		148	53	89
Balnchistan	250	209	8	449						280	209	8
Audamans	156	156	- 1.1		•••	•	1,794		. 240	1,950	156	
Total Bengal .	61,780	33,169	10,958	8,109	1,791	595	135,554	6	108	205,443	84,966	11,061
" Madras .	18,541	1,947	811	600	(a)	(a)	1,079	(a)	(a)	19,620	1,947	811
"Bombay .	18,716	2,696	1,654	1,359		83				15,075	2,696	7,687
GRAND TOTAL .	94,037	87,812	18,823	9,468	1,791	628	136,638	6	108	240,138	89,609	19,559
(1905-06 .	92,496	36,930	15,546	10,018	1,805	522	131,137	13	171	233,651	38,743	16,239

(a) Closed areas in 'reserved lands' are included in those shown under reserved forests.

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APPENDIX XV.

[Vide paragraph 21.]

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Protection from Cattle

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i.			GKA	LED ON	PAYM	ENT, I	NUMBEI	B OF ANI	ai 4 1.6,	· · · · · ·			GRA	CED M		NUMB	EB OF	VNIMV!	L8.
			Ar PU	LL BATRS.		. 4	•	AT PRIVIL	IGE RATI	£6.		Br 1	IGNE ANDI	in Servi	.IVIN	N	0 80 0	PLEADUR THERWIN Sate	
PROVINCE.	Cirole.		Ballocks.	Sheep.			:	Buljocks.	Sheep.		5		Bullocks.	Sheop.		4		Bullocks.	Sheep.
		Buffalces.	Cows and B	Goats and B	Camels.	Other animals	Buffalobs.	Cows and B1	Gosts and Sl	Camels.	Other animals	Buffal our.	Cows and Br	Goats and S	Came le.	Other animals.	Buffaloe	Cows and Br	Goats and S
Bengal		6,248	35,428	5,634		15	9,443	152,461	12,561		529	21,000	63,000	21,000			20	242	1
United Provinces.	Eastern Western	35,886 28,852	26,754 62,084	4,7 14 21,784	 2,035	1,530 5,207	29,724 5,221	128,606 29,46 4	53,776 53,681	893 	975 2,193		51,618 71,636	2,3 98 50,123	527 849	944 40	2,682 546	7,464 7,125	1
Total .	244	64,738	88,838	26,528	2,035	6,737	34,945	158,070	107,457		3,078	23,086	123.254	52,521		981	3,228	14,589	1,1
Panjeb .	 / Pegu	17,450 2,236	44,020 1,274	361,638	10,443 	1,627 7	1,728	10,747	247,732	217	949 	145,215 17,085	661,188 37,818	700,455 	2 82	1 2,9 30		7 32 	
Barma .) Tenasserim) Northern	-, 14 	-jera 110				 70	••• •••			•••• •••	24,542 14,467	4, 11 2 226	•••			 619	***	
	(Southern	76	454	28	***	90 	50 g 100 					656	87,203	•••	-	.	2,770		
Total .	77 *	2,826	1,728	28		27	70			1 ang - 1		56,750		` 		12			
Eastern Bengai and Assam,	***	38,994	8,934	6		775	11*	56,766	- 40	-			60	•••	***		66,436	375,564	72,1
Cectral Provinces.	Northern Southern	238,187 35,099		93,575 107,022	i .	6,085	1	520 605	 77,746		 510			427	•••		100 417	11,197 4 ,140	
A formers.	Berny	216,098		574,069	1	367 4,204	61,962 6,845	1	6,101		272	1	112,634	-	•••		27	14,012	
Total .	•••	489,381	2,181,799	774,666	169	10,656	68,807	586,124	83,847		782		112,634				514	29,349	1,1
Coorg .		456	1,948	489 -	•••		755		121	445			1,676	-	•	-	•••	30	
North-West Frontier. Ajmer	•••	1,630 171	1,209	-41	544	55 	 1,556	 8,329	494 254	•••		370 			••• •••		1,301 107	1,052	
Baluchistan	(1906-07 .	220 617,117		1,640 1,170,160		10 902	 116,549			 217	5,338	 246,421	1,337	21,959 	·	662 14,588		428,202	275,6
Total Bengal,	1905-08 .	566,384					149,434	972,507 1,114,804		178		244,686	· · ·			13,734			1
Madras .	Northern Central Southern	85,391 41,158 31,811	442,737 767,665 350,383	715,76 <u>4</u> 922,253 170,590		106 282	6, 869 12 	49,364 1,446 85	92,088 775	•••		1,491 	\$,\$ 97 685 	2,202 	••• ••		1,364 681		1
Total .	{ 1906-07 . { 1605-06 .	158,360 143,681	1,560,785 1,589,204	1,808,607 1,637,807		388 996	6,881 9,436	5 A 4	92,861 9,557			1,491 	5,182 £ ,585	2,202 5,505	1		2,0 45 705		1
Bomtey .	Northern Central Southern Sindh	918 3 ,337 10,414	3,454 13,529 (0) 3,196 9,989	 2,646 1,825 51,5 55	 1,268	13 708 156	76,515 23,056 	(a)271,669	6,312	 	184 4,181 67 159		 28,126 		 	 633 134		•••• •••	
Total .	{1908-07 . 1905-06 .	14,669 21,312	30,168 37,626	56,026 2(8,994	1,268	877		537,311	165,880	83 83 70	4 ,591	8,590 2,942	11,595 	91 91			48,450	, 280, 4 10) 1,
GRAND	(1908-07 .	790,146	4,761,849	3 ,034,793		—	502,021 223,817	363,584 1,560,713	141,205 710,338	 300	9,929	2,542	10,252 1,141,481	 793,228		15,355		726,647	

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APPENDIX XVI.

[Fide paragraphs 28 to 30.]

Area of Plantations and the cost of the year's work.

و و فر العرب ا			- 3	1						 	_		Cost of
PBOVINCE.		MENCEM HB TBAR		ADDEI	DURIN TEAB.	G TEB		DED DU			IB AT OLO HE YBAS		opera- tions during
	Regular Planta- tions.	Taun- gyas.	Total.	Regular Planta- tions.	Taun- gyas.	Total.	Regular Planta- tions.	Taun- gyas.	Total.	Regular Planta- tions.	Taun- gyas.	Total,	the year.
													Ð
lengal	1,219	. 444	1,213	105	•••	105	564	- 100 () - 100 ()	564			754	1,801
nited Provinces	8,519		8,519	153	•••	153	ym -	907	- 640	8,672		8,672	2,329
unjab	507	145	507		***	840			•••	507		507	1,682
arma	5,648	70,655	76,303	140	2,329	2,469	142	31	179	5,646	72,953	78,599	1,10,912
Castern Bengal and Assam.	8,875	7	3,882				-14		14	3,861	7	3,868	7,215
entral Provinces in- cluding Berar.	747	р 1 444 г. 1 г. – К	747	294	50	314	••• •••	•••		1,041	50	1,091	476
leorg	2,062	1,067	8,129	•••	130	180		•••		2,062	1,197	8,259	2,193
North-West Frontier .	1 	849						1 ets					
ljmer · · · ·	96	-1.	96	4	14		36	•••	36	61	1 2 1 1 1 1 1 1 1 1	64	795
Balachistan	36	•••	36		jn.	.	3		8	83		33	210
andamans	657	892	1,049	44	225	269	4		4	697	617	1,514	5,608
Total Bengal .	18,860	72,121	90,481	740	2,734	8,474	763	81	794	18,837	74,824	93,161	1,32,716
" Madras "	22,123	8,226	24,349	1,225	25	1,250	. 840		840	23,008	2,251	25,259	85,864
"Bombay .	21,855		21,355	1,379		1 ,379	. 6,369		6,369	16,365	-	16,365	12,456
1906-07	61,838	74,347	136,185	8,844	2,759	6,103	7,472	31	7,503	57,710	77,075	134,785	2,31,03
BAND TOTAL 1905-06	58,099	70,825	128,424	11.587	2,590	14,177	5,934	138	6,072	63,752	72,776	126,528	2,40,600

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APPENDIX XVII.

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[Vide paragraph 38.]

Outturn of Forest Produce.

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	[•	.		- -	1	AVE	BAGE	OUT	TUBN	PER	sou	ARE
ا ۲۰۱۹ م ۲۰۰۰ م ۲۰۰۰ م		RBSR	RVRD FORE	BT8.	PBOT	GTED FOR	B878.	UNCLA	BBBD FORES	· 5 ,	B St For	BÉVED Rests.	•	Pao	TECTEL LESTS.	· {	Unc Fo
PROVINCI	F 54 3	İmber and Fuel.	Bamboos.	Minor Produce.	Timber and Fuel.	Bamboos,	Minor Produce.	Timber and Fuel.	Bamboos.	Minor Produce.	Timber and Fuel.	Bamboos.	Minor Produce.	Timber and Fuel.	Bamboos.	Minor Produce.	Timber and Fuel.
Bengai United Provinces	(4) 1 (1)		15,706,186	4,10,880	· ·	32,350	4,235	144,697	No. 48.890			3,840	100	11,404	No. 1,587 1,078	R 50 141 46	C.ft. 3,481 443
Punjab Burma Eastern Beng Assam.	I and		101,525 16,847,000 11,621,478	1,49,571	· · · ·	12,216 	2,43,492	779,495 28,451,748 10,937,774	10,633 41,626,000 12,298,245	2,56,762	436	781 1,857	6 17		 	 	26: 47(
Central Province ing Berar. Coorg North-West From	•	208.636	3.		•••		#1# ###	 143,760	22,000	10 •••	1,085 438 5,478	217					 4,79
ince		584,845 77,060 669,053	14,709		8,263		178	- 269,300 1,059,520		47	4,118 275	103	66				
TOTAL, BENGAL,		86,062,974	203,512 76,409,517 69,249,513	24,91,330	34,538,319 38,619,810	(a)		41,789,337 50,722,067		8,38,813	1,393	1,236	40	4,259	560	48	30

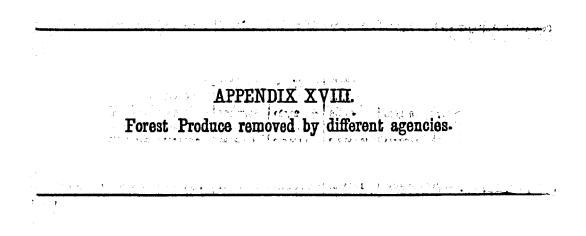
• Excludes bamboos valued at H20 removed by right holders. † Includes H4,852 on account of commutation fees for removal of bamboos.

. 1	THOTOTOS TATOOR OH	aucoune ui	oommu	110510	W Yeed	for ter	LO Y GL	OT DB		
			1.1		1.1	· . ·			.	
	÷ •		14	1	1	-				

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	Total area undencontrol		•			AGE OUTTUR	
Presidency.	of Forest Department.	and Fuel.	Bamboos.	Minor produce.	Timber and Fuel.	9 Bamboos.	Minor produce.
	Sq. m.	C. ft.	No.	£	C. ft.	No.	R
Bengal .	205,443	162,390,630	135,503,416	37,19,998	790	659	18
Madras	19,620	23,975,856	39,282,182	15,20,606	1,222	2,002	77
Bombay	15;075	35,780,963	6,608,172	13,49,415	2, 373	438	• 89
GBAND TOTAL	240,138	222,146,948	181,393,770	65,90,019	925	755	27
(1905-06 .	233,651	246,334,840	210,173,780	55,12,809	1,054	899	23

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APPENDIX

[Vide para

Forest Produce removed

		Тімв	LE.		• •	. Fu	L.	
PROVINCE.	Removed by Govern- ment.	Romoved by Pur- chasers.	Removed by Free- grantees.	Bemoved by Bight- holders-	Bemoved by Govern- ment.	Bemoved by Pur- chasers.	Bemoved by Free- grantees,	Bemoved by Right- holders.
	C. ft.	0. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Bengal .	\$3,837	4,689,531	18,812	175,696	161,031	16,132,591	20,094	13,384,954
United Provinces .	135,145	4,225,969	\$6,184	672,003	431,874	7,674,849	186,975	. 3,431,048
Panjab.	522,863	8,184,929	81,880	882,363	1,512,061	1,725,696	93,815	19,849,047
Burma,	4,122,202	18,846,484	414,799	484,546	110,212	12,179,765	56,611	1,625,692
Eastern Bengal and Assam	523,020	4,707,401	521,567	1,450	55,433	6,484,894	8,825,773	1,019,365
Central Provinces including Berar	787,775	3,631,122	76,825	48,225	762,292	15,517,388	1,513,399	1,544,758
Coorg	110,646	162,410	843	-11	12,900	66,440	59 0	
North-West Frontier Province	202,673	720,558	8,825		43,281	244,735	32,400	34,9 80
Ajmer .	381	2,970		564	10,091	572,106	1,936	60
Baluchistan :	_ 147	2,970	8,821	•••	61,191	256,511	- 8,010	12,710
Andamans (b)	654,055	23,512	28,020	(6)77,881	682,280	• 4,920	224,160	(6)24,74
1906-07	7,092,744	40,198,856	1,164,733	2,842,728	3,842,646	60,859,395	5,968,173	40,926,854
Total Bengal . 1905-06	8,275,740	46,765,284	1,853,596	4,685,422	5,666,334	55,830,538	6,436,795	44,072,68
Madras	555,629	1,840,167	82,601	90,941	12,544,480	8,595,705	8,285	257,54
Bombay	1,070,900	8,372,710	- 78,023		4,338,800	22,767,065	20,409	4,133,05
GBAND TOTAL. { 1906-07	8,719,273	45,411,733	1,325,357	2,433,669	20,725,926	92,222,166	5,991,867	45,316,95
GBAND TOTAL . (1905-06	10,296,310	50,836,317	1,758,952	4,783,137	20,195,946	88,007,122	6,453,358	56,828,3 63

(a) Bamboos valued at H20 were removed by right-holders in Coorg. (b) Removed by District Officers.

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XVIII.

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graphs 35 to 37.]

by different agencies.

. <u></u>	Bàmboos.		and the second sec	MINOB P	BODUCH INC GRAZI	LUDING GRA ING.	SS AND	
Removed by Govern- ment.	Removed by Par- chasers,	Bemoved by Free- grantees.	Removed by Right- holders.	Bemoved by Govern- ment.	Removed by Pur- chasers.	Bemoved by Free- grantees.	Bemoved by Bight- holders.	PBOVINCE.
No.	No.	No-	No.	R	B	B	B	
474,123	7,066,249	19,289	4,000,450	1,130	1,72,400	1,690	1,12,913	Bengal
50,764	15,494,629		242,033	81,952	2,73,381	10,716	50,912	United Province
56,155	68.219	mi	yko	1,182	1,67,502	1,065	8,78,759	Punjab.
£0,000	53,002,000	92,000	5,329,000	8,098	2,68,840	18,427	1,16,968	Burma.
22,451	20,127,612	1,877,460	1,892,200	37,485	2,30,166	3,47,539	14,209	Eastern Bengal and Assam.
437.008	23,246,939	698,548	\$61,000	11,211	12,72,985	14,097	89,229	Central Provinces including Berar.
	125,650	Q=4	(a)		14,933	114		a
***		889		445	9,440	7,058	650	North-West Frontier Province.
5,161	9,548	119		2.930	2,954	1,974	24,186	Ajmer.
***				17	1,037	926	16,748	Baluchistan;
17,200	17,900	3 73,600	(6)346,228	5,985	215	2,381	(6)1,319	Andamans (b).
1,112,862	119,158,746	8,060,897	12,170,911	1.50.434	24,13,803	8,99,873	7,55,888	c 1906-07.
1,254,030	149,064,525	2,889,655	11,090,256	1,93,496	22,80,225	4,13,501	7,32,415	} Total Bengal . { 1905-06.
5,949,691	\$3,178,499	132,278	21,714	63,977	14,14,830	746	41,553	Madras
9,140	(c)5,932,140.	29,392	(d)637,500	58,906	6,59,159	5,348	6,26,002	Bombay.
7,^71,693	158,269,385	3,222,567	12,830,125	2,73,317	44,87,292	4,05,967	14,98,448	(1906-07.
8,837,728	185,306,629	8,236,683	17,792,745	4,85,101	41,74,894	4,37,067	9,09,810	GBAND TOTAL [1905-06.

(c) Exclusive of 4,247 cart loads and 417 head loads, (d) Exclusive of 20,000 cart loads of hamboos,

APPENDIX XIX.

[Vide paragraphs 39 and 40.]

Comparative Statement of Revenue and Expenditure.

	Вжув	¥ ₩ ₿.	. Sçri	PLUS;	DEF	1017.	•	Net Revena
PROVINCE	1008-07.	Average for preceding 5 years.	1928-07.	Average for preceding 5 years.	1906-07.	Average fot preceding 5 years.	Propartion of Surplus to Gross Revenue.	per square mile of land under costr of Porest Departmen
	R	. R	R.	R	R	₽	Per cent.	ß
Imperial .		5,124	•••	0 egi 0 th 1 914 - 24	95,472	79,021		•••
Deng81.	10,65,859	11,80,004	4,32,473	5,24,801	,		40.6	6
United Provinces .	25,02,664	21,70,405	,11, 9 6,013	9,90,217	•••		47.8	28
Punjab Name in the second	1 6, 05,284	16,81,572	4,60,881	6,15,399	1. 1. a.		34.8	4
Burms and the second states of	98,12,519	80,34,230	61,52,766	47,79,366	•••	•••	62.7	4
Eastern Bengel and Assam	13,20,592	7,38,134	6,12,732	3,02,201	· ·	••••	46.3	2
Central Provinces and Berar	24,01,159	19,44,833	.10,58,281	6,71,448			44.0	4
Coorg	2,35,909	2,04,702	1,33,054	1,15,996			56:6	26
North-West Frontier Province ,	1,83,214	87,097	89,564	26,215	,	691	48.6	38
Ajmer	18,335	12,557	1,620			8,794	8 •8	<u> </u>
-Baluchistan	_21,195	19,289		ید میں میں میں میں میں میں میں میں میں میں	5,127	4,677		
Andamans ,	6,07,027	4,45,725	3,11,891	1,03,299			51.2	15
Imperial Forest College .	4,579	3,294	898		1 32,907	65,517	•••	
Forest Surveys		787			30,389	31,197	•••	
Total.Bengal	1,97,78,336	1,65,27,755	1,01,85,380	80,00,095		.a. ••• 3	51.5	. 4
Madras	32,90,669	27,22,358	8,10,0.9	8,12,611			24.6	4
Bombay .	34,22,481	27,93,195	14,32,298	9,52,504		`	41.8	91
£ 1906-07 .	2,64,91,486	2,20,43,308	1,24,27,686	97,65,510			46.9	5
GBAND TOTAL 1905-06 .	2,66,74,593	2,06,62,489	1,24,16,072	85,24,085		··	46.2	្ត

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47 APPENDIX XX. [Vide paragraph 40.]

PROVINCE	Timber.	Fuel.	Bambcos	Minor Produce.	Grass and Grazing:	.Total.
	B	R	R ·	Ħ	Ħ	Ŗ
Bengal .	9,637	58,878	4,866	44,036	66,266	1,83,653
United Provinces .	75,767	59,575	1,037	5,657	92,205	2,34,241
Punjab	45,592	1,79,848	•••	49,542	3,28,984	6,03,966
Burma	1,11,544	24,360	40,876	16,147	1,11,258	9,04,185
Eastern Bengal and Assam	. 28,182	64,592	7,948	2,02,074	1,59,672	4,62,468
Central Provinces including Berar.	4,898	(a) 56,122	12,081	34,367	18,582	1,25,545
Coorg					•	a de la alere de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de
North-West Frontier Prov- ince.	115	254	•••		.7,058	•7,427
Ajmer .	69	(ð) 1	1	26,618		, 26,688
Baluchistan	(c) 1,193	1,059		926	16,743	19,921
Andamans .	2,104	6,222	900	3,700		12,926
Total Bengal	2,78,596	4,50,911	67,708	3,83,067	8,00,768	19,81,050
" Madras .	40,841	5,402	845	39,689	6,192	92,469
"Bombay	51,196	1,94,698	93,877	1,89,759	8,52,383	13,31,913
G 1906-07	3,70,133	6,51,011	1,62,430	5,62,515	16,59,343	84,05,432
GBAND TOTAL { 1905-06	4,21,470	7,68,718	79,895	5,09,870	17,16,125	84,96,073

(a) Includes the value of 48,225 cubic feet of timber removed by right-holders in Berar Circle.
(b) The value of 1,936 cubic feet of fuel supplied to District Officers' camps is not shown in the report.
(c) Includes the cost of 8,000 cubic feet of fuel granted free to zemindars.

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APPENDIX XXI.

[Vide paragraph 41.]

Details of Revenue and Expenditure.

				1 B	1
1	(a) Wood			2,03,42,597	
	(b) Minor fore	st produce		19,49,606	
	(c) Forest stau	ops and commutation	on fees for forest produce .	7,84,881	•
Gross Receipts .	(d) Grazing	• •∎• ••••		22,03,571].
7. L e - 1. - 1.	(e) Revenue fi	rom forests not man	naged by Government	4,36,315	
	(f) Miscellane	OUB • •		7,74,513	
t i					
		Lot of States	TOTAL REVENCE .	2,64,91,486	
, î	1		TOTAL DEVENCE .	2,04,91,400	
	_	· · ·			
		ang melat	(i) Superior Staff	24,29,422	
	-		(ii) Exchange Compensation allowance.	56,673	
		(a) Administra- { tion.	(iii) Subordinate Staff (in- cluding Rangers, Foresters and Guards)	21,99,459	-
			(iv) Office Establishments (including Contingen- cies).	11,01,204	·
	A. Recurring		(1) Extraction	39,50,804	•
1			(2) Roads and Buildings .	9,83,944	. .
4			(3) Fire-protection	5,90,714	
		(b) Working	(4) Cultural operations .	5,59,001	
		(0) Working	(5) Live-stock, stores and plant.	4,56,541	
Expetiditure .	i kana sa		(6) Working-Plans	90,513	
	17.334 A	1.00 B X73 B	(7) Rent for leased forests.	7,90,940	•
			(8) Miscellaneous	2,11,921	
ί,	artany ar	(c) Expenditure forests not	on realization of revenue from analged by Government.	19,525	•
: 		(d) Forest Science "A" and "	e and Education (including all 'B" charges of Forest School).	1,37,486.	
ند به				1 95 79 147	
		•	Total .	1,35,78,147	
		(c) Forest Settle		78,116	
	B Extraordinary	() Forest Surve	ys • • • •	2,97,964	
: 1		(g) Forest Dema	rcation	1,09,573	
- - -			Total .	4,85,853	
	-	GEAN	D TOTAL, EXPENDITURE .	1,40,63,800	
			Net Bovonus .	1,24,27,686	

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APPENDIX XXII. Summary of the Revenue and Expenditure of the Forest Department in India for the financial year 1906-07.

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[Vide paragray

		•		Summa	ry of R	evenue a	and Expe	enditure	of the	Fe
BUDGET HEADS.	Imperial.	Bengal.	United Provinces.	Punjab.	Burma (Lower).	Burma (Upper).	Eastern Bengal and Assam.	Central Provinces including Berar.	Coorg.	N Fr Pro
						[! 	
BEVENUE.		-				1				
I.—Timber and other produce removed from the forests by Government agency.	í "	46,155	2,24,800	7,64,322	36,87,361	9,08,021	2,85,272	2,31, 186	1,96,160	
II.—Timber and other produce removed from the forests by consumers or purchasers.		9,82,885	21,46,958	7,14,877	14,02,147	80,91,671	8,29,510	20,95,744	86,412	
III Drift and waif wood and con- fiscated forest produce.	•	4,085	20,059	80,353	1,91,905	1,14,444	29,906	1,941		
IVBevenue from forests not managed by Government.			14,478	1,152	- 3,01,343		1,00,354	370	 	ļ
V.—Miscellaneous		32,734	96,374	45,080	67,325	48,297	75,550	71,918	3,837	
TOTAL BEVENUE	111	10,65,859	25,02,664	16,05,284	56,50,086	41,62,433	13,20,592	24,01,159	2,35,909	1,
		· .	~			•			• •	
EXPENDITURE,		•			:					
A CONSERVANCY AND WORKS.				•				-		
L-Timber and other produce removed from the forests by Government agency.	5 m.	28,589	1,00,344	2,71,985	8,74,664	2,82,285	1,60,705	87,771	11,883	
11.—Timber and other produce removed from the forests by consumers or purchasers.	· ••	91,985	44,051	2,308	57,307	20,257	18,598	1,19,614	`	
111Drift and waif wood and con- fiscated forest produce.	•	620	5,511	17,695	78,094	\$1,071	1,224	3 0		ł
IV.—Revenue from forests not managed by Government,			3,453		1,720		14,043	•••• • • • • • •	•••	
VBent of leased forests and payments to charcholders in forests managed by Govern- ment.	. 	27,030	3,21,157	3,51,3 02		·	21,136			
VILive stock, stores, tools and plant.	· .	14,529	34,530	6,965	41,394	79,502	26,960	40,415	8,369	
VIL-Communications and buildings .		75,116	2,08,565	80,736	75,728	91,295	66,819	1,28,369	6,488	ľ
VIII.—Demarcation; improvement, and extension of forests.		83,542	1,23,311	59,522	3,71,077	2,84,727	68,730	1,36,694	17,589	ŀ
IXMiscellaneous		7,426	, 13,025	5,702	29,013	12,158	7,885	12,043	. 1,714	
Fotal AConservancy and Works		3,28,837	8,53,947	7,96,215	15,28,992	8,01,295	8,86,100	5,24,936	46,043	
			·						-	
BESTABLISHMENTS.					}	•			10 41 4	
I.—Salaries	72,536	2,53,027	3,65,883	2,73,985	5,72,782	5,19,084	2,57,664	6,97,177	43,616 6,876	
II.—Travelling allowances	14,006	39,050	53,632	47,840	79,896	90,531	44,053	65,789 55,026	5,870 ≓1,820	
saa. comungenend , , ,	8,930	12,472	33,189	26,363	39,398	27,775	20,048			
Total BEstablishments	95,472	3,04,549	4,52,704	3,48,188	6,92,076	6,37,390	8,21,760	8,17,942	56,812	
GEAND TOTAL OF EXPENDITURE	95,472	6,33,386	13,06,651	11,44,403	22,21,068	14,38,685	7,07,860	13,42,878	1,02,855	
SURPLUS .	•••	4,32,473	11,96,013	4,60,881	34,29,018	27,23,748	6,12,732	10,58,261	1,33,054	
DEFICIT	95,472	•••					***			

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Partment in India for the financial year 1906-07.

jner.	Baluchis- tan.	Andamans.	Forest School.	Forest Surveys (Impe- rial).	Total Bengal Presidency,	Madras.	Bombay.	, GRAND Total.	BUDGET HEADS.
			}						•
•			-			a and a second sec			DEVENTIO
5,26 2	10,898		1 .			10.01 000	10 00 000		REVENUE.
	10,898	6,01,559	•••	10 10 L	70,48,520	12,81,028	12,82,850	\$6,19,393	iTimber and other pr removed from the fund
		•							Government agency.
12,020	1,712	3,185			1,14,06,551	18,93,372	20,84,801	1,58,84,727	IITimber and other pro
			-			· .		-	removed from the fore consumers or purchasers.
87	8		-		1.70 500		1	1.00 FF4	· · · · · · · · · · · · · · · · · · ·
•	6	***		***	4,42,788	13,589	4,827	4,60,554	IIIDrift and waif wood and fiscated forest produce.
-	8,922				4,26,619		9,696	4,36,815	IV Revenue • from forests
	0,000	101			9,40,019		3,030	3,00,010	managed by Government
1,018	160	2,200	4.879		4,53,905	1,52,680	90,907	6,97,492	V Miscellaneous.
				•••		1,02,000		0,01,102	
10,335	21,195	6,07,027	4,579		1,97,78,336	32,90,669	34,22,481	2,64,91,486	TOTAL REVENUE.
		0,07,041	3,010		4,01,10,000	02,00,000	03,4 <i>0</i> ,901	2,03,01,200	AULAN MATENUA
	14 E 11								
		1.15						a far an an an an an an an an an an an an an	
		•		-					EXPENDITURE.
-									A CONSERVANCY AND WORKS
									· · · · · · · · · · · · · · · · · · ·
1,629	5,108	1,85,462	***		20,42,914	7,09,456	4,15,886	\$1,98,251	I. – Timber and other pr removed from the forest
						-			Government agency.
66	· · 1.				8,54,295	1,16,762	1,45,184	6,16,241	IITimber and other pr
		•							removed from the forest consumers or purchasers
	-			•		· · · ·			
2	***				1,34,247	1,926	139	1,36,312	III.—Drift and waif wood and fiscated forest produce.
-		· .		•	· • •	· ·			
	\$09			.a 👯 🗋	19,525		•••	19,525	IVRevenue from forests managed by Government
-									
-	141	144	· ***	•••	7,46,175	17,713	27,052	7,90,940	VRent of leased forests payments to shareholde
		•	•					•	forests managed by Go ment.
				. ۳۰۰۰ محمد م		·			
296 .	133	48,370	5,656		8,07,614	1,47,406	- 7,177	4,62,197	VILive-stock, stores, tools .
8073	6 70							0.01007	VIICommunications and building
\$71	819	8,872	121		7,46,810	1,54,324	\$3,481	9,84,065	
1,199	829	14,523	+45	\$0,389	11,94,881	3,64,800	1,66,200	17,25,881	VIII.—Demarcation, improvement, extension of forests.
_					-				
δ	25	5,082	2,496	•••	• 97,482	8,596	1,08,389	2,14,417	IXMiscellancous.
						<u>}</u>			
8,766	6,219	2,61,758	8,278	80,889	56,43,398	15,20,978	9,83,458	81,47,829	Total A Conservancy and Works.
•									
. · · [•								B ESTABLISHNES
11,346	16,208	29,161	1,09,486	•••	82,48,920	7,27,826	8,42,541	48,18;787	I.—Salaries.
854	2,938	3,608	11,627		4,63,651	1,58,879	1,12,316	7,31,846	IITravelling ellowances.
847	957	614	8,150		2,36,993	73,477	51,868	\$,62,838	IIIContingencies.
12,947	20,103	33,378	1,29,213		39,49,584	9,59,682	10,06,725	59,15,971	Total B Establishments.
	100	010,010	+1601410		40,20,00%	0,00,00A	***************		
M.715	26,822	9.05 100	1 98 400			94 90 000	19,90,183	1,40,63,800	GRAND TOTAL OF EXPENDITURE.
	20,522	2,95,136	1,37,486	30,389	95,92,957	24,80 <u>,66</u> 0	T9'90'100	1,10,00,000	Anter aven de farener ani
1,620		9 11 001			1. 101 07 020	0 10 000	14,32,298	1,24,27,686	SUBPLUS.
ALASED	144	8,11,891	110	•••	1,01,85,379	8,10,009	14,02,295	1,29,2(,000	SUBPLUE.
	5,127			80,889					DEFICIT.
			1,82,907						

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Revenue, Expenditure and Surplus of the Forest Department thre

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•	Provisce.	188:	3-83. 1983-84	188 1-85.	1885-88.	1896-87.	1897-88.	1888-89.	1889-90,	1890-91.	. 1891-93.	1892-03.	1893-94,
		I	e B	B	B	B	B	Đ.	. B	B	8	B	B
Central P Coorg North-We Baluchist:	ovilices (pper) (pper) (point)	6. 10.1 7. 25.0 24 12.6	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6.089	1,96,656 13,57,376 89,386	19,98,667 1,08,071 2,12,011 12,84,322 99,291		14,62,802 10,45,768 26,09,305 15,79,928 3,03,882 15,88,382 1,36,183 5,668	7,68,718 9,21,713 31,34,716 18,06,070 2,79,498 15,96,722 92,753 13,897	1 35.561	10.20,074 28.58.114 13.27,360 3.36,129 18.71,085 1.82,897 20,609	16.52.540 8.12.630 35.83.370 20,76,650 3 82,830 16.61,870 1,80,680 19,030	8.01,610 9,13,300 9,13,300 22,95,750 4,88,560 16,17,289 1,73,750
Ajmer Andaman Forest Sci Forest Sui		7	0,858 21,76 348 ··· 3	2 22,213	23,944 273 202	31,870 415 241	1 7//	1,06,075	11,592 1,62,195 1,237 220	1,58,326 1,184	2,72,338	3,60, 490	14,620 4,41,790 1,990 240
Madras Bombay	τσ	tal 67,4 9.0 20.9	8,358 6,442 9,53,70 0,353 25,03,10	62.48.412 11,66,916 27,74,842	66,40,409 11,98,650 33,66,286	71.18 899 12,46,911 20,32.676	72,40,791 13,74,920 30,32,577	95,33,255 15 15,006 28,50,190	1,06,08,249 15,57,627 31,37,696	98,83,597 17,95,408 22,88,220	1,04,38,145 16.94,216 32,84,649	1,14,97.520 15,77,210 32,69,550	1,19,71,499, 19,47,180 37,94,350
-	GRAND TOT	sc . 97,4	5,153 1,08,54,882	1.01,90.170	1.12,05,345	1,13,98,486	1,16,18,288	1,38,98,451	1,53,03,572	1,49,67,135	1.54.17,010	1,63,44,340	1.77.13,020

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(II) E2

Imperial [®] Bengal Unitéd Provinces Ponjab Barma (Lower) Barma (Coper) Eastern Bengal and Assam Central Provinces and Berar Coorg North West Froniler Province Baluchistan Ajmer	87,268 3,82,183 8,39,025 5,60,750 12,48,955 1,71,823 5,67,301 64,770 11,962 11,284	98,266 3,82,813 10,41,885 6,53,146 12,17,824 1,99,562 6,07,680 75,023 16,911 14,574	96.306 4,11.915 10,20.101 5.58.070 12.12.233 1.97.699 6,83.274 76.951 13.766 16.315	88,215 3,70,399 9,74,519 6,75,483 11,50,952 2,11,494 6,47,614 65,690 15,799 16,469	2,188 2,12, -87 7,16,469	78,626 3,90 368 8,30,748 6,77,912 10,32,694 1,21,152 2,26,892 7,78,8-12 7,78,8-12 72,629 17,753 18,897	86,199) 3.76,270) 8.44 544 5.93,885 12.31,944 7.85,129 2.09,905 8.62,84 80,175 15,994 15,676	81,311 3,98,150 9,63,151 6,45,855 13,32,844 2,57,129 8,79,458 72,420 17,952 12,701	85,414 4,14,004 9,19,195 6,53,041 10,86,474 3,02,315 2,83,852 9,04,475 65,818 29,450 12,720	65,788 4,22,930 9,58,211 6,40,275 13,25,121 3,73,859 2,67,525 10,02,281 86,860 30,497 13,985	3,81,610 9,28,540 6,56,270 13,63,250 4,41,710 2,61,070	80,840 4,04,04 9,63,020 6,36,430, 13,41,640 5,20 8 0 2,68,220 11,86,440 86,830 63,730 15,900	13. 5. 2.
Audamans Forest School Forest Surveys (Imperial)	1,840 41,595	12,161 30,940	22,760 22,568 19,823	37,035 24,239 19,180	25,769 30.831 28,348	62.674 33.129 32.868	57,235 32,961 22.164	94,975. 29,645 21,188	1,30,052 35,191 2 4,3 24	1,79,909 44,317 26,882	2,31,210 50,400 22,160	2.44.550 65.530 27,900	1,
Madras ,	39,68,756 6,45,352 12,78,770	43,55,985 7.86.733 15,64,172	43,51,282 8.96 505 17,78,723	42,97,118 9.37.972 18,39,161	43,49,560 11.53,122 19,52,910	43,75,149 11,29,212 19,44,005	52,15,005 12,20,794 16,93,932	50,80,590 11.61,237 17,70,691	49,46,325 12,46,913 18,69,887	54,38,471 13,24,254 19,31,457	56,70,870 13.30,390 19.04.970	59 ,05,900 13,62,770 20 ,71.140	12.8
GBAND TOTAL.	58,92,878	67,06,890	70,26,510	70,74,551	74,55,592	74,48,366	81,29,761	80,12,518	80,63,125	86,94,18 2	89,06,230	93,40,700	90,7

*Includes pay of Inspector-General of Forests, certu.u

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				1 		(III) S'
Imperial Bengal United Provinces Punjab Burma (Lower) Hurra (Upper) Eastern Bengal and Assam Central Provinces and Berar Coorg North-West Frontier Province Baluohistan Ajmer Forest School Forest Surveys (Imperial)	$\begin{array}{c} -56.536\\ 3.11.776\\ 3.06.52\\ 1.74.378\\ 5.69.99\\ 2.07.959\\ 2.57.03\\ 12.74.941\\ 12.91.45\\ 70.792\\ 12.74.941\\ 12.91.45\\ 7.02.360\\ 6.95.10\\ 73.252\\ 12.79\\ -6.023\\ -6.578\\ -4.158\\ -6.77\\ 65.018\\ 12.60\\ -41.247\\ -20.909$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 3,70,568 3,13,888 1 7,51,008 7,18,684 2,75 8,8 18,15,29 18 01,872 15 91,197 15 32,770 13,41,982 ,22,369 42,941 7,17 254 7,96,095	3.66,623 3.63,270 7.73.303 7.24,000 3.79.799 1.56,360 15,32,933 22,20,120	-78 1/0 -77 3.97 5/0 3 - 7.46 3/0 7 1 2.76 3/0 3.0 1.47 7/0 3.8 - 2.14 7/10 3.8 - 1.77 1.8 0 1.0 - 2.0 2.8 1 - 2.0 2.8 1 - 3.00 8-0 - -3.0003 -1.2503 1.97 2.4 - -3.0003 -3.00003.00003.00003.00003.00003.00003.00003.
Total . Bombay	27,79,602 30,42,093 2,61,090 1,66,971 8,11,583 9,38,925	18,97,130 23,43,291 27,6 2.70,411 2.60,678 6 9.96,119 15,26,825 10.7	9,339 28,65,642 43,18,250 3,789 2,45,708 2.4,212 9,766 10.88,572 11,56,228	3 86 3 40 5.48 495	49,99,674 58,26 ,716 3,69,962 2,46,820 13,53,192 13,64,580	60,65,500 52.25. 5,83,410 5.77. 17,22,410 10.00.
GRAND TOTAL .	38,52,275 41,47,992	81.63,660 41,30,794 39.4	2.894 41.99,922 67,68,690	72,91,054 69,04,010	67, 22,E28 74,38.110	83,72.320 74,15,1

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*Includes pay of Inspector-General of Porests, sertain h

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ndia during the 25 (financial) years from 1882-83 to 1906-07.

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ы.	15 96-97. _	1 807-98.	1898- 99 .	1899-1900,	19 06-01.	1901-02.	1902-09.	1903 -(4	190 4 -05.	1905-08,	1906-07.	Proyince.
	B.	B	B	B	₽	B	B	B	B	B	Ē.	
57000000000000000000000000000000000000	4,100 13,70,8-0 14,44,8-0 11,67,72-) 38,18,270 4,56,440 4,56,440 4,56,440 4,56,440 4,56,440 4,56,440 12,91,140 93,000 12,370 3,62,370 3,62,370 400	19,130 11,89,280 13,56,370 40,36,200 31,22,060 31,22,060 31,22,060 11,80,400 11,30,410 15,540 15,540 4,33,710 4,33,710 2,300	15,63,040 14,74,430 42,22,960 41,27,930 3,98,180 14,34,940 1,55,070	17,060	12.33,3:9 15.65,463 13,50,842 45,43,363,35,11,081 5,43,521 12,65,614 1,37,596 10,646 2,77,886 10,646	1,70,292 13,012 14,712 6,865	3 ,659 19 ,56,247 20 ,225,324 15 ,86,408 37 ,22,502 30 ,16,451 5 ,80,200 16 ,84,428 1 ,90,730 1 ,01,223 1 ,90,730 1 ,01,223 1 ,90,730 3 ,352 3 ,352 3 ,334	10,65,523 22,80,446 17,17,797 49,23,247 33,45,228 6,75,732 19,98,032 2,24,031 19,98,032 2,24,031 11,01,833 18,363 13,684 4,32,381 4,32,381	3,768 11,67,472 23,97,318 16,74,348 54,85,700 34,74,056 34,74,056 34,74,056 34,74,056 34,74,056 34,74,056 34,74,056 1,33,087 90,921 17,297, 6,20,796 3,557	7,255 11,18,542 24,33,248 17,81,653 65,21,706 38,08,163 11,06,095 24,49,131 2,452,419 1,22,52,119 1,22,52,119 1,22,52 1,491 15,002 5,82,511 1,3,080	10,65,859 25,02,664 16,06,284 56,50,086 41,62,433 13,20,522 24,01,559 12,235,909 12,235,909 12,235,909 14,321,957 18,335 6,07,027 4,573	Punjab. Burma (Lowert. Burms (Upper). Eastern fengal and Assam. Contral Frovinces and Berar. Coorg. North-West Frontier Province. Baluchistan. Ajmer. Andemana.
10 -70 70	1,25,20,470 23 03,339 30,32,710	1,30,42,340 21,36,420 26,16,600	1,46,32,859 21,10,520 22,95,150	1,42,92,120 23,02,290 24,15,200	1,44,68,794 \$3,40,170 \$9,61,529	1,29,00,556 25,43,430 23,79,729	1,45,28,565 26,13,819 23,29,156	1,68,07,481 26,57,727 27,51,539	1,81,80,176 28,29,216 30,20,558	2,02,21,996 29,67,604 34,84,993	1,97,78,336 32,90,669 34,22,481	Total. Madras. Bombay.
30	1,78,56,510	1,77,95,490	1,90,38,520	1,90,09,610	1,97,70,493	1,78,23,715	1,94,71,540	2,22,16,747	2,40,29,950	2,66,74,593	2,64,91,486	СВАНТ ТОТАL.
tab	e and petty l	er av:1 Aadito oca) itema.	r Genera].	Ŷ			2					
TE 1000000000000000000000000000000000000	78,969 6,90,640 9,16,340 7,23,300 15,03,220 6,25,530 2,82,010 11,92,860 71,630 29,770 29,770 29,710	6,53,440 9,17,450 7,71,940 14,64,110 7,92,500 2,88,830 11,65,490 87,020	9,86,32(9,72,03(8,55,34(15,29,57(8,96,62(3,05,35(11,09,40(80,10(27,76(9,42,380 12,11,460 15,01,470 9,45,970 3,57,140 12,75,320 74,220	29.25	6 6,57,131 9 10,68,739 3 9,39,335 6 14,26,436 1 12,20,021 2 3,29,112 6 12,00,904 5 42,333 4 9,511 82,333 4 9,511 82,333 4 9,511 82,333 4 9,511 1 1,00,904 1 1,000 1 1,000	6,38,111 10,13,991 9,60,093 15,53,75 13,36,511 3,27,493 12,57,281 54,08 54,08	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	10,12,354 20,06,666 14,40,258 5,03,656 13,20,615 83,820 74,958 24,672	5,93,500 14,05,188 12,63,664 24,49,355 14,88,711 5,93,910 13,07,155 95,743 25,743	95,47 6,33,38 13,06,65 11,44,40 227,21,06 19,38,68 7,07,86 13,42,87 1,342,87 1,342,87 1,22,85 93,655 26,322 16,71	Contral Provinces and Berar. Coorg. North-West Frontier Province. Baluobistan.

770 750 756 556	29,770 22,010 3,16,600 67,380 31,970	14.670	16.3(0 1,38,400 63.370	15.350	16 782	15.927	16,377 2,81,702 66,338	21,697 16,680 2,66,121 59,339 33,935	24,672 15,641 3,42,431 61,424 28,229	3,35,985 80,669	26,322 16,715 2,95,136 1,37,486 30,389	Andamans. Forest Sobool.
10 10 90	65,41.690 15,34,310 19,69,160	15.72.850	66,00,000 15,94,670 18,39,250	16.53.530	70,36,028 17,15,431 24,08,581	73,17,154 17,09,554 17,19,680	77,37,338 19,35,552 16,76,441	86,40,126 17,50,930 17,75,837	90,77,954 19,86,098 19,03,804	98,65,826 22,66,602 21,26,093	95,92,957 24,80,660 19,90,183	Total. Madras Bombay.
510	1,00,45,150	1,01,95,730	1,00,33,920	1,10,24,680	1,11,60,040	1,07,46,388	1,12,49,331	1,21,66,993	1,29,67,856	1,42,58,521	1,40,63,800	GRAND TOTAL.

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0,\$5,150	1,01,95,730	1,00,33,920	1,10,24,680	1,11,60,040	1,07,46,388	1,12,49,331	1,21,66,993	1
								ł
tributab	le and petty l	ceal items.		Je fri de				

a undistributable and petty local items.

	$\begin{array}{c} -74.860;\\ 6.80, 81.0;\\ 5.38, 4.20;\\ 3.84, 4.20;\\ 23, 14, 980;\\ 19, 35, 15.0;\\ 19, 35, 15.0;\\ 19, 35, 15.0;\\ 21, 370;\\ 21, 370;\\ -14, 310;\\ -9, 640;\\ 45, 770;\\ -64, 530;\\ -31, 570;\\ \end{array}$	-65,170 5,33,840 4,68,870 2,56,530 26,82,050 23,36 560 95,950 14,910 5,3800 -12,290 1,86,370 -28,030 -33,730	-67,620 4,85,990 5,96,160 6,18,010 26,593,550 92,850 92,850 32,31,310 92,850 -1,880 91,160 -61,010 -33,580	90,460 5,93,700 6,72,360 1,89,310 23,03,766 25,60,8*0 21,670 21,670 21,670 -5,0280 -5,0280 1,18,660 -70,340 x -33,560	-81,115, 6,62,533, 6,02,024, 4,63,459 30,18,597, 23,81,130 9,2,748, 66,691 -12,2788 -61,365, 1,37,749 -67,541 -83,664	-76.056 6.35,106 7.06,769 5.09,223 21,80,017 10,37,364 1.83,851 3.78,212 8.7909 -6,438 -9,768 -9,768 -9,768 -9,768 -72,736 -72,736 -733,257	$\begin{array}{c} -81,359\\ 6,18,2233\\ 10,11,320\\ 6,26,3313\\ 21,68,8399\\ 16,72,9411\\ 2,527,140\\ 1,527,140\\ 1,527,140\\ -3,004\\ -3,004\\ -6,641\\ -63,036\\ -30,951\\ \end{array}$	-81,890 3,62,015 11,99,008 20,23,781 2,50,23,781 2,50,23,781 2,50,23,781 1,31,840 41,230 -2,796 1,66,260 -56,301 -33,504	$\begin{array}{c} -79.280\\ 4.78,883\\ 10.05,735\\ 8.62.089\\ 34,79.034\\ 20.33,746\\ 8.12.021\\ 16.023,814\\ 1.09.207\\ 1.656\\ 2.78,365\\ -25.1867\\ -28,229\\ \end{array}$	$\begin{array}{c} -76.512\\ 5.25.033\\ 10.28.246\\ 5.17.989\\ 40.72.354\\ 23.19.452\\ f.12.186\\ 13.41.978\\ 1.49.671\\ 1.53.271\\ -4.252\\ -2.123\\ 2.45.558\\ 2.45.558\\ -77.584\\ -30.044 \end{array}$	4.32,473 11,96,013 4.60,881 34,29,018 27,23,748 6.12,732 10,58,281	Bengai, United Provinces, Punjab, Burma (Lower), Burma (Upper), Eastern Bengal and Assam, Central Provinces and Berar, Coorg, North-West Frontier Province, Paluchistan, Ajmer, Andarmane, Porest School,
3 520	59,78,780 7,69,030 10,63,550	64, 92, 650 5, 63, 640 5, 43, 470	80,32,850 5,15,850 4, 55,900	70,49,400 6,48,760 2,86,770	74,32,766 6,24,739 5,52,948	55, 83, 192 8, 23, 876 6, 60, 049	67.91.227 7,78,267 6,52,715	81,67,355 9,06,797 9,75,602	91,02,222 8,43,118 11,16,754	1,03.56 170 7,01,002 13,58,900	1,01,85,379 8,10,009 14,32,298	Total. Madran. Bombay.
3,770	78,11,360	75,99,760	90,04,660	79,94,930	86,10,453	70,77,327	82,22,209	1,00,49,754	1,10,62,094	1,24,16,072	1,24,27,686	GILTD TOTAL.

and undistributable and petty local items.

APPENDIX XXIV.

[Vide paragraph 44.]

Exports of Forest Produce.

	QUANTITY IN TON THE CLOB OF TH	B OF 20 OWT. IN MAE, OUBIG TORS.	VALUATION AT PORT OF SHIPMENT IN 1506-07.			
ABTICLES OF FOREST PRODUCE	Average of 5 years 1900-01 to 1905-06.	In 1906 07.	Total.	Per ton.		
1	2	8	4	5		
			Ð	R		
Caoutchouc	168	224	11,18,487	4,993		
Button .	1,949	1,856	44,45,914	2,395		
Lac Shell	9,084	10,274	2,89,75,551	2,820		
Stick, seed and other kinds.	430	1,334	15,76,275	1,181		
Sandal, Ebony and other ornamental woods .	(a)	(a)	11,74,769			
Cutch and gambier .	3,672	4,868	15,94,908	328		
Myrabolams .	58,664	58,111	43,97,591	75		
Teak	58,353	44,202	61,48,291	189		
Cardamom	110	90	2,19,172	2,435		
Total in 1906-07	••••		4,96,50,953			
» » 1905-06	•••	•••	4,69,17,676			

(a) Figures are not available.

CALCUTTA SUPERINTENDENT GOVERNMENT PRINTING INDIA.