

REVIEW
OF
FOREST ADMINISTRATION

IN
BRITISH INDIA

FOR THE YEAR

1909-10

BY

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REVIEW OF FOREST ADMINISTRATION IN BRITISH INDIA FOR THE YEAR 1909-10.

CHAPTER I. CONSTITUTION OF STATE FORESTS.

I.—ALTERATION IN AREA.

[Vide Appendix I.]

1. The area under the control of the Forest Department increased during the year by 3,777 square miles to a total of 245,551 square miles, or 24·9 per cent of the total area of British India.

2. The areas of the different classes of forests at the end of the years 1908-09 and 1909-10 are compared in the following statements :—

Class of forests.	1908-09	1909-10	Difference.
	Sq. Miles.	Sq. Miles.	Sq. Miles.
Reserved forests	94,561	96,474	+1,913
Protected „ .. .	8,835	8,814	—21
Unclassed State forests and Public forest lands ..	138,378	140,263	+1,885
Total ..	241,774	245,551	+3,777

3. The most important changes in the area of each class of State forests were as follows :—

(i) *Reserved Forests.*

Burma.—1,963 square miles of new reserves were finally notified, while survey and recomputation of areas and other minor changes resulted in a net increase of 157 square miles. Of the new reserves 1,229 square miles were constituted, mainly with the object of protecting the head-waters of streams and of controlling the storage and regulating the water-supply.

Eastern Bengal and Assam.—Fresh reservations amounted to 62 square miles; a more accurate computation of areas resulted in an increase of 104 square miles.

Central Provinces.—There was a net decrease of 482 square miles chiefly due to the transfer to Madras of the Cherla Range of the South Chanda Division in the Southern Circle.

Madras.—There was a nominal increase of 75 square miles. The reserves transferred from the Central Provinces cannot be included in the total of such forests in Madras until they have been reserved afresh under the Madras Forest Act.

(ii) *Unclassed Forests.*

Punjab.—A reduction of 248 square miles is due chiefly to the exclusion of village forests, which have never really been under the control of the Forest Department, and to further transfers to other Departments.

Burma.—A net increase of 2,139 square miles is due mainly to recomputation of areas based on surveys.

2.—FOREST SETTLEMENTS.

[Vide Appendix II].

4. The area finally settled during the year was 2,096 square miles as compared with 1,230 square miles and 1,798 square miles, respectively, in the two previous years. Except in Burma (1,963 square miles) the provincial areas were insignificant. The area in respect of which settlement operations were commenced was 867 square miles, including 787 square miles in Burma, as compared with 824 square miles in the previous year. The total area undergoing settlement at the close of the year was 4,394 square miles, or 1,958 square miles less than at the end of 1908-09. The cost of settlement charged in Forest accounts amounted to Rs. 1,26,572, or Rs. 83,663 more than in the previous year. Burma accounts for Rs. 19,038 of this total and Madras for Rs. 1,05,650. No explanation of the large expenditure in Madras is traceable in the reports.

3.—DEMARCATION.

[Vide Appendix III].

5. The total length of boundaries increased during the year by 3,794 miles to 170,063 miles, of which 18,063 miles are natural boundaries not requiring artificial marks. The principal additions were 3,079 miles in Burma and 608 miles in Bombay. The length of new boundaries demarcated was 2,572 miles (155 miles less than in the previous year). An increase of 324 miles occurred in Madras, while Burma and Bombay show reductions of 131 miles and 466 miles, respectively. Of the 6,033 miles of boundaries requiring artificial marks but not yet demarcated, 1,099 miles are in Burma, 1,020 miles in Madras and 3,470 miles, in Bombay. The total length of boundaries actually demarcated at the end of the year was 145,967 miles. Existing boundaries were repaired to the extent of 64,885 miles, or 3,650 miles more than in the previous year; 78,490 miles were not repaired. The expenditure on new work amounted to Rs. 35,260 and on repairs to Rs. 92,129, the average cost being Rs. 13·7 per mile and Rs. 1·4 per mile, respectively, as compared with Rs. 17 and Rs. 1·6 in the previous year. The most notable reduction in the cost of new work occurred in Madras, viz., from Rs. 49·9 to Rs. 23·8 per mile.

4.—FOREST SURVEYS.

[Vide Appendix IV].

6. The forest survey operations of the year were carried out, in almost every case, by the particular topographical parties in whose spheres of operations the forests lay. The surveys were for the most part on the 2-inch scale, but some of the areas were done on the 1-inch scale; and boundary surveys on the 4-inch scale were carried over a considerable area. The revision of certain areas, previously surveyed on the 4-inch scale by the old Forest Survey Branch, was also effected.

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

Presidency.	1"=1 mile.	2"=1 mile.	4"=1 mile.	Total.	REMARKS.
	Square miles.	Square miles.	Linear miles.		
Bengal	120	(a) 988	(c) 420	1,528	(a) Excludes 167 square miles previously surveyed on the 4-inch scale by the old Forest Survey Branch.
Madras	..	(b) 147	..	147	
Bombay	..	235	(c) 316	551	(b) Excludes 131 square miles of re-survey. (c) Linear miles of boundary survey.
Total	120	1,370	(c) 736	2,226	

The entire cost of the above surveys was borne by the Survey of India.

8. The details of survey carried out in the various provinces are given in the following paragraphs :—

Punjab.—The forest areas surveyed by No. 4 (late 18) Party on the 2-inch scale, fell chiefly in the Salt and Khushab ranges of the Shahpur District with some small areas in the Mianwali and Attock districts of the Shahpur Forest Division, of which the boundaries of most of those falling in the Salt Range were previously surveyed by the old Forest Survey Branch on the 4-inch scale. The total area of forests thus surveyed in the Shahpur district amounted to 343 square miles and, in the Mianwali and Attock districts, to about 4 square miles, or a total of about 347 square miles of the Shahpur Forest Division. In addition to these an area of about 34 square miles were surveyed in the Jhelum Forest Division (Attock District) on the 2-inch scale and a few forests lying in the *Thal* desert on the 1-inch scale.

Burma.—No forest surveys were undertaken in Burma during the year under report.

Eastern Bengal and Assam.—The survey of the Katakhal and Sonai reserves in the Cachar Forest Division, which was commenced last year, was completed during the year under report on the 2-inch scale by No. 12 (late 20) Party; and the Inner line and Barail reserves have only been mapped upto the limits of the topographical programme of the Party. The officer in charge reports that the large area of dense bamboo and cane jungle, the impenetrable nature of the undergrowth and extensive swamps met with in parts, made the survey of the Cachar forests one of the most trying and difficult pieces of work that have so far been experienced by his Party either in Burma or Assam. The area thus surveyed in the Cachar Division amounted to 293 square miles. The Lungi and Singla reserves in the Sylhet Forest Division, comprising an area of 9½ square miles, came under survey and were completed.

Central Provinces (Berar Circle).—In the course of the topographical survey of Berar, No. 6 (late 2) Party surveyed, on the 2-inch scale, all the A, B, and C class forests falling in the area under survey in the Yeotmal District and their boundaries were rigorously traversed by theodolite and plotted on the 4-inch scale. The area surveyed on the 2-inch scale amounted to 78 square miles and the boundary traversing to 229 linear miles. In addition to these about 191 linear miles of the boundaries of the A and B class forests lying in the area proposed for detailed survey next working season, were traversed in advance. C class forests were not specially surveyed before and considerable difficulties were experienced in identifying their boundaries as the field boundary marks (worlies and gotas) were in many places found missing. In two cases it was absolutely impossible to survey the boundary, as no marks of any kind existed on the ground. Steps have, however, been taken to inspect and renew the boundary marks if found missing and it is hoped that in the ensuing year there will be no further difficulties over this question.

Madras Presidency.—Forest surveys on the 2-inch scale were carried on during the year by Nos. 7 and 8 (late 3 and 19) Parties in the following divisions :—

In the Nilgiris, 122 reserved forests, of the total area of 59 square miles, were surveyed. Of these, 37 forests were partially done last year. In addition to this, many corrections to the demarcated boundaries were entered on last year's plane-table sections. The survey of the reserved forests in the Nilgiris is now complete. In Central Coimbatore, the Attapadi Forest reserve, which has recently been transferred to this division from South Malabar and the Chenat Nair, Pulampara and Varalapadi forest reserves, comprising an area of 48 square miles, were surveyed. In the South Coimbatore the greater part of the Anamalai forest reserve falling in sheet 58 B-15 was re-surveyed on the 2-inch scale, as the old 4-inch maps were found to be extremely inaccurate. The area thus surveyed amounted to 131 square miles. In South Canara, Sampage, Todikana, Kiribagh, Nalkuru and Devachalla forest reserves, of the total area of 40 square miles, were surveyed. The only forest reserves, which had not been previously traversed by theodolite (with the exception of the Nilgiris reserves), was the Attapadi forest, Block No. VI; it was intended to traverse this, but as the boundary was not cleared in time for the traverse to be carried out, this was abandoned. The total area surveyed in the Madras Presidency amounted to 278 square miles.

Bombay Presidency.—The survey of the Satpura reserve on the 2-inch scale which was commenced in the year 1905-06, was completed this year by No. 6 Party and about 121 square miles were surveyed. In addition to this, about 114 square miles of forests in the Bhusawal, Jamner and Jalgaon talukas of the East Khandesh District were surveyed on the same scale. Boundary surveys of all these forests, amounting to 316 linear miles were made on the 4-inch scale.

Coorg.—In Coorg, 20 reserved forests, of the total area of 309 square miles, were surveyed by No. 7 (late 3) Party on the 2-inch scale.

9. The number of maps issued to Forest and other officials and to the public during the year, was 9,662, of which 2,256 were coloured maps. The number issued last year was 7,689. But though the number issued during the year exceeded

that of the previous year, the amount realized by their sale was considerably less. The amount thus realized was Rs. 1,555 as against Rs. 3,312 in 1908-09. Of this amount, Rs. 467 was adjusted by book debit and Rs. 1,088 accrued from sales to private individuals and trading companies.

Besides the headquarters charges, a sum of Rs. 3,345 was debited to the Forest Department on account of mapping and publishing charges and the cost of additional details in the survey of the Mosit Reserve.

The following is a brief summary of the mapping executed during the year :—

Of the standard sheets of Forest Surveys, 46 were published, 39 were in the press and 148 in various stages of progress. Of the working plan and other special maps, 19 were published, 8 were in the press and 13 in hand. Two general maps of India, on the 48-mile scale which were put in hand last year for the Quinquennial Review of the Inspector General of Forests for 1904-09, were completed and sent to press and six maps of India on the 96-mile scale, shewing rainfall and the geographical distribution of the principal Indian timber growth, were published. These maps are of considerable value for educational purposes. Provincial Forest maps of Bengal and Punjab on the 32-mile and 16-mile scales, respectively, and the divisional maps of Chindwara, Narsinghpur, and Singhbhum and Chaibassa on $\frac{1}{4}$ -inch scale, were published; those of Balaghat and Jubbulpore were in the press at the close of the year and the maps of Nimar and Mandla were commenced. The district map of Tinnevely, on the $\frac{1}{4}$ -inch scale, was sent to press and the fair drawing of those of South Canara, Madura and Coimbatore, was completed and that of the Cuddapah and Salem maps was in progress. Block impressions of 22 of the new 2-inch standard sheets were received during the year from the Superintendents of Eastern Circle and Map Publication, Survey of India, for the insertion thereon, of area statements, headings, footnotes, references and additional names and for publication as special forest editions. These maps are now being dealt with. The map of the Mosit Reserve in the Bhamo Division, which was specially surveyed on the 2-inch scale for the Forest Department, was sent to press. Out of the 36 standard sheets on the 2-inch scale, received during the previous years and left unpublished, 4 were completed and sent to press and 6 were nearing completion at the close of the year; of the remainder, forest editions of some will not be required owing to their having been previously surveyed and published as forest maps and others will, it is understood, be drawn in the circle offices. The preparation of a second edition of the maps, consisting of 36 sheets, of the Bahraich district on the 4-inch scale, showing the necessary working-plan details, was put in hand and 15 sheets sent to press, of which 8 were published. A similar edition of the 4-inch maps of the Gorakhpur district, of 22 sheets, shewing all the latest corrections, was under preparation and 8 sheets were sent to press. Twenty 4-inch maps of the Shahpur Forest Division, and 2 sheets of the Dungagali and Tandiani Ranges, Hazara Division, were published and 5 sheets of the latter were in the press. The number of maps, and field sections received for storage from the Map Record and Issue Office, Calcutta, and other offices, was 3,035.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

I.—REGULATION OF MANAGEMENT.

Working Plans.

[*Vide Appendix V.*]

10. In the provinces other than Madras and Bombay, working-plans for areas amounting to 803 square miles only, including a revised plan for 334 square miles, were sanctioned. This is 2,359 square miles less than in the previous year, so that the progress made is not altogether satisfactory. There was, however, a considerable increase in the area for which working-plans were under preparation at the close of the year, which amounted to 7,145 square miles as compared with 3,635 square miles at the close of 1908-09. Of the 7,145 square miles, 2,364 square miles represent areas already under systematic management for which revised plans are being compiled; the remainder, 4,781 square miles, represents areas for which no working-plans have previously been prepared.

In Madras, working-plans for 847 square miles were sanctioned and new plans for 2,869 square miles were under compilation.

In Bombay the only working-plan sanctioned was for an area of 1 square mile, while new plans for 593 square miles were under preparation.

11. The following statement shows the total area under working-plans at the commencement and close of the year, excluding 14 square miles of reserved forests in Bengal which are not under the control of the Forest Department.

	At commence- ment of the year.	Added during the year.	Total.
Bengal	31,728*	469	35,197
Madras	7,046*	847	7,893
Bombay	6,330*	1	6,331
Total in 1909-10 ..	45,104*	1,317	49,421
Total in 1908-09 ..	44,848*	3,453	48,301

* Revised figures.

At the close of the year working-plans were under compilation for a total area of 8,243 square miles. The forest area, for which working plans will ultimately be required but for which they have not yet been undertaken, is estimated to be 161,679 square miles, while there is a further area of 26,208 square miles for which it is at present thought that no working-plans will be necessary.

2.—COMMUNICATIONS AND BUILDINGS.

[*Vide Appendix VI.*]

(a). *Roads and Bridges.*

12. The total expenditure on communications was Rs. 4,39,156, a decrease of Rs. 1,01,024 as compared with the year 1908-09. Both new work and repairs contributed to the decrease, the respective expenditure being Rs. 2,45,800 and Rs. 1,93,356 as compared with Rs. 3,23,560 and Rs. 2,16,620 in the previous year. In Bengal the total expenditure showed a slight increase, but lack of a qualified super-

vising staff again caused a reduction in the cart-road mileage it was found possible to construct. In Burma a reduction amounting to Rs. 53,527 in the expenditure on new work was due, partly to materials required for the work of the year under review having been purchased in the previous year, partly to delay necessitating postponing payments until the succeeding year, and partly to a general reduction in the amount of work undertaken. In the Central Provinces a general all-round reduction amounting to Rs. 26,399 was caused, partly by curtailment of the budget but also by lapses and slow progress. The North-West Frontier Province shows a satisfactory increase in the amount of work done, the expenditure being more than double that of the previous year. In Bombay the curtailment of the budget and the fact that most of the funds available were spent on buildings caused a reduction in expenditure amounting to Rs. 6,741 on new work and Rs. 8,853 on repairs.

(b). *Buildings.*

13. The total expenditure on buildings, including repairs amounted to Rs. 7,29,516, or Rs. 75,959 more than in 1908-09. The cost of new work increased by Rs. 92,019, while there was a reduction of Rs. 16,060 on account of repairs. In Bengal new work cost Rs. 19,042 more than in the previous year, the principal items contributing to the increase being Rs. 7,779 on account of school buildings at Kurseong. In the Punjab, Rs. 15,634 were expended on the construction of subordinates' quarters as compared with Rs. 4,788 in 1908-09; there was, however, a small decrease in the total cost of new work, expenditure on headquarters and rest-houses having been correspondingly reduced. In Burma an increase of Rs. 44,963 was due to the construction of several new headquarters houses and offices. An increase of Rs. 22,765 in Eastern Bengal and Assam is accounted for by the purchase of a residence for the second Conservator recently sanctioned, at a cost of Rs. 25,000. An increase of Rs. 26,232 in Madras was due to general development. The curtailment of the budget explains a decrease of Rs. 27,149 in Bombay. The differences in other provinces were comparatively small and call for no comment. The same remark applies generally to repairs in all provinces.

(c). *Miscellaneous Works.*

14. The expenditure under this head amounted to Rs. 1,31,296, being Rs. 44,691 less than in 1908-09. The work includes tanks, wells, bunds in torrent beds and protective works generally, the clearing of compounds and camping grounds, etc. The only variation of importance occurred in the Central Provinces where the amount expended was Rs. 41,106, as compared with Rs. 87,579 in 1908-09. The decrease was due partly to the fact that in 1908-09 it was necessary to provide work owing to the partial failure of the crops, but also to a considerable extent because the tank projects prepared by the Famine Survey have proved unreliable and new projects must be prepared and passed by Irrigation Officers before money can be profitably spent on these works.

3.—PROTECTION OF FORESTS.

(a) *General Protection.*

[*Vide Appendix VII.*]

15. The number of breaches of the forest laws disposed of during the year was 62,822 as compared with 61,954 in the previous year. Of the total, 8,408 were decided by the Courts and 54,414 were compounded, the corresponding figures for 1908-09 being 9,491 and 52,471, respectively. There was consequently a decrease of about one thousand cases dealt with by the Courts and an increase of about two thousand cases compounded. Convictions were obtained in 85.6 per cent. of the total number of cases decided by the Courts, the percentage being identical with that for 1908-09.

16. The forest offences reported during the year under review, including undetected cases and those subsequently written off, are compared with those of the

previous year and the average of the previous three years in the following statement :—

	Average 1906-07 to 1908-09.	1908-09.	1909-10.
Injury by fire	4,144	3,615	4,526
Unauthorised felling or appropriation of forest produce ..	35,334	37,238	36,529
Unauthorised grazing	25,333	26,173	27,490
Other offences	4,672	4,274	3,597
Total	69,483	71,300	72,142

There were 7,006 undetected cases, or 46 less than in the previous year. Cases of injury to the forests by fire increased by 911 to a total of 4,526 of which 3,683 remained undetected. Except in the Central Provinces, Madras and Bombay, where the fire season was an unfavourable one and which show increase of 334, 343 and 381 cases, respectively, the changes were unimportant. As regards the unauthorised felling and appropriation of forest produce, a reduction of 1,077 cases occurred in Bombay, the total number of offences of this class being 709 less than in the previous year. Unauthorised grazing continues to be prevalent, the cases reported during the year being 1,317 more than those of 1908-09 and 2,157 in excess of the average of the previous three years, the principal provincial variations were increases of 658 and 569 cases in the Punjab and in the Central Provinces, respectively, and a decrease of 377 in Madras.

As regards the total number of offences, the Punjab and the Central Provinces show increases of 627 and 1,080 cases, respectively, and Bombay a reduction of 965 cases; in the other provinces the changes were comparatively small.

(b). *Protection from Fire.*

[Vide Appendix VIII].

17. Fire protection was attempted over a total area of 48,510 square miles as compared with 46,432 square miles in the previous year. The area attempted represents 50·3 per cent of the total area of reserves as given in Appendix I, and the percentage of success was 94·3 as compared with 95·8 in 1908-09. The following statement gives the statistics for the various provinces :—

Province.	AREA IN SQUARE MILES.		Proportion of forests under fire protection to total area of reserves.	PERCENTAGE OF FAILURE TO AREA ATTEMPTED.	
	Attempted.	Protected.		Average of past five years to 1908-09.	1909-10.
Bengal	1,898	1,846	44·8	2·1	2·7
United Provinces	3,179	3,100	77·5	3·7	2·5
Punjab	1,051	1,025	47·5	1·8	2·5
Burma	7,727	7,662	30·1	6·1	0·8
Eastern Bengal and Assam.	(a) 2,435	(a) 2,356	37·6	3·1	3·2
Central Provinces	11,795	10,994	55·0	3·5	6·8
Coorg	208	208	40·0	2·5	0·2
North-West Frontier Province.	85	83	36·0	8·8	2·4
Ajmer	141	140	99·3	9·7	0·2
Madras	(a) 10,177	(a) 9,255	54·2	5·4	9·1
Bombay	9,814	9,099	80·4	9·5	7·3
Total 1909-10	48,510	45,763	50·3	5·6	5·7
Total 1908-09	46,432	44,497	49·0	6·3	4·2

(a) Includes partially protected areas.

The increase in the area attempted is more apparent than real as it is mainly due to the correction of previous returns, though there were also some extensions. An increase of 2,672 square miles in Madras is partly due to the inclusion of areas under partial protection previously omitted, while a decrease of 829 square miles in Eastern Bengal and Assam is due entirely to the exclusion from form 58 of areas previously shown as partially protected but which are practically non-inflammable. In Bombay a reduction of 334 square miles is partly due to the abandonment of fire-lines in portions of the Belgaum Division on the grounds that incendiarism is so prevalent that fire-lines are of little use, and partly to correction of the previous returns; the area statistics for Bombay appear to be rough estimates only.

In Madras, the Central Provinces, Sind and the Plains Division of Bengal the season is reported to have been an unfavourable, one for fire-protection and the percentage of failure in these localities was considerably greater than in 1908-09. It was probably the case that the season was unfavourable, but when fires are more numerous or extensive than usual there is a natural tendency to attribute the increase to an unfavourable season. As the Chief Commissioner of the Central Provinces points out in his resolution on the Forest Administration Report for the year under review, there is evidence that the staff is not always as careful as it should be, when burning fire lines, to prevent the fire from spreading. This evidence consists of the large areas burnt by fires which originate during departmental-fire-conservancy operations or which cross the external fire-traces (*vide* Appendix VIII). Improvements in the fire-conservancy arrangements appear to be necessary in localities where such fires occur frequently.

(c). *Protection from Cattle.*

[*Vide Appendices IX and X.*]

18. The grazing statistics given in the administration reports for Bengal, Eastern Bengal and Assam and Bombay include figures for 956 square miles, 6 square miles and 2,112 square miles, respectively, not under control of the Forest Department. The total area concerned is, therefore, 248,625 square miles. Of this area 43,205 square miles were closed to all animals and an additional 20,015 square miles to browsers only during the whole year, or 17.4 per cent of the total area to all animals and 25.4 per cent to browsers. The corresponding areas in the previous year were 41,188 square miles and 20,902 square miles, respectively. In Madras additional restrictions were imposed as regards goats, and these animals were admitted to 789 square miles only as compared with 983 miles in the previous year. The areas closed for grazing during a portion of the year only were 6,693 square miles to all animals and an additional 195 square miles to browsers. Except that goats alone were excluded from 15,356 square miles in Madras, the area open to all animals throughout the year was 178,517 square miles, or 71.8 per cent of the total.

Exclusive of cattle grazed in the unclassed forests of Burma and the Andamans, for which no figures are available, the cattle admitted to graze numbered nearly 13½ millions, or about 1,20,000 less than in the previous year. The total includes more than 4½ million browsers, such as goats, sheep and camels.

19. The number of cattle reported as impounded during the year was 436,522, or 27,533 less than in 1908-09. The figures for Bombay show a decrease of 28,199, which is largely due to the transfer of grazing areas to revenue control. In other provinces the changes in the figures are unimportant.

(d) *Protection against injury from natural causes.*

20. The principal natural causes of damage to forest are frost, drought, wind, insects, wild animals, fungi, climbers and parasitic plants. Generally speaking, the year under review was a favourable one so far as this class of injury is concerned. The principal feature was the improvement in the condition of the Sal forests of the United Provinces, which is referred to more in detail below. There was little injury by frost in most provinces, but a severe cyclone in Bengal caused considerable damage, especially in the Sunderbans Division. The most serious pests are the "spike" disease in Sandal, of which the cause is still unknown and for which no remedy has yet been discovered, and the fungus, *Trametes pini* which has done so much damage to blue pine in the Simla Hills. The former

appears to have obtained a footing in Bombay, while the latter is also very prevalent in Bashahr and has been found attacking the deodar as well as the blue pine. Climbers do a great deal of damage except in coniferous forests; their eradication is, however, to a great extent a question of labour and money and much attention is being devoted to this object. The following is a brief summary of the most important items in the provincial reports:—

Bengal.—The usual damage by wild animals is reported, but damage by wild elephants in Angul is said to have decreased considerably as a result of the Kheddah Operations. Injury by frost was slight but a cyclone of unprecedented violence did an enormous amount of damage in the Sunderbans Division.

The United Provinces.—The dying-off of *Sal*, which has been so noticeable for some years, and which was the result of a succession of dry seasons, was completely checked by the plentiful rainfall during the monsoon of 1909. Not only so, but many trees which appeared to be in a hopeless condition recovered completely. Nevertheless, the damage done has been great and changes necessitated in the working-plans will lead to a reduced revenue for many years after the dead trees have been removed. Damage by frost was slight, but some more or less serious cases of damage by animals, insects and fungi are reported.

The Punjab.—In Simla over 16,000 blue pine, attacked by *Trametes pini*, were felled and removed, their branch wood being destroyed. Nearly 10,000 of the removed trees were given away, the rest being burnt. The same disease was found to be very prevalent in parts of the Bashahr Division and it is being studied there. Pending further investigations, however, the adoption of the somewhat heroic measures taken in the Simla Division has been deferred. Two deodar trees have been found attacked by the same fungus and the position is consequently a serious one. No definite progress was made towards the identification of the fungi attacking the deodar in Kulu, and it is a matter of much regret that no Mycologist is available to investigate such matters. As a result of the measures taken in the Simla Catchment Area, an increase in the insect attack has taken place, but the traps cannot safely be dispensed with for some years.

Burma.—The reports contain little information regarding damage by natural causes. The teak defoliators *Hybla a-peura* and *Pyrausta machoralis* were noticed as usual; the damage done appears, however, to have been slight. Floods caused some damage, the amount not being serious. Climber cutting was done extensively but the area operated over is not invariably given.

Eastern Bengal and Assam.—Damage by insects and fungi appears to be unimportant and to require no remedial measures at present. Except that climbers are destructive, little damage can be attributed to natural causes. Climbers were extensively cut.

The Central Provinces.—The only damage of importance reported is that due to the ravages of the longicorn beetle *Celosterna spinata* in the Bhongaon Babul Ban in Berar. Some 600 acres of young babul plantations are involved and measures for dealing with the attack have been decided on.

Coorg.—Some 27,000 Sandal trees affected by the spike disease were uprooted as compared with 23,100 in 1908-09, while considerable activity was shown in attacking the Zizyphus which suffers in company with sandal and is always associated with the latter in its diseased form. There was again no increase in the area affected by the disease but, on the other hand, there was no abatement in its virulence in the area affected.

The scheme for the eradication of Lantana is held in abeyance pending the personal inspection of and recommendations by the Inspector General of Forests.

The North-West Frontier Province.—At high elevations snow caused considerably more than the usual amount of damage.

Baluchistan.—The winter being a severe one more damage than usual was done by frost.

Madras.—The reports differ little from those of previous years. The most serious pests from which the forests suffered were the spike disease in sandal-wood forests in North Coimbatore and Kollegal, the fungus (*Trichosporium vesiculosom*) in Ganjam and Lower Godavari, and caterpillars and other insects. The removal of the sandal trees attacked by "spike" was continued but no progress was made towards discovering the cause of the disease.

Bombay.—In the Southern Circle the mortality amongst the sandal-wood trees continued but it does not yet appear to have been decided whether the cause is the "spike" disease or not. Enquiries are now being made. The teak defoliating caterpillar *Pyrausta machora* is, as usual, did a considerable amount of damage and other insects are reported to have caused a certain amount of injury to various species. More expenditure than usual was incurred on the eradication of prickly pear, especially from the babul coupes; efforts, which appear to have been somewhat unsuccessful, were made in the direction of removing lantana to set free young sandal growing underneath it.

4.—SYLVICULTURE

(a) *Natural reproduction.*

21. On the whole, the year was not an unfavourable one for natural reproduction. A perusal of the reports shows that much progress is being made towards ascertaining the best measures to be adopted in order to obtain natural regeneration and to foster it once it is on the ground. Climatic influences are uncontrollable, but given an adequate staff, a sufficient labour supply and the possibility of controlling grazing, there is no reason to doubt that the natural regeneration of most of the Indian forests will, in a few years, present fewer difficulties than it does at the present time. The following are brief abstracts from the provincial reports.

Bengal.—The natural reproduction of sal was generally good, although climatic influences adversely affected the production of seed and, in the south of the province, its germination. In the Sunderbans the reproduction of *sundri* was unusually profuse, but in Darjeeling the seed of valuable species was conspicuous by its absence. In the latter division the advanced growth of 1906 continued to do well in blocks closed to grazing, and it is said to be fairly clear that natural regeneration can be obtained by a proper system of group fellings, and that planting will probably prove unnecessary in future. Burning over fuel coupes in the Tista Division has resulted in splendid natural regeneration; Coppice reproduction is generally good.

The United Provinces.—On the whole natural reproduction was equal to, or better than, that of a normal year, although deodar and chir gave no seed at all in the Eastern Circle. Sal reproduction was very good and the same remark appears to be applicable in the case of most of the important species. Coppice reproduction was good except in the case of oak in the Naini Tal Division, in which case the results are very disappointing.

The Punjab.—The report contains little information beyond a statement to the effect that grazing is too heavy for the sufficient reproduction of most species. It is stated that in Kangra in some forests *Pinus longifolia* is being replaced by valueless deciduous species which are not grazed by cattle.

Burma.—The reports contain numerous remarks regarding the adverse effect of fire-protection on the natural regeneration of teak. This question is still under close consideration and the experiments in progress may be expected to yield results of much value in the course of a few years. There is little of importance regarding the less important species.

Eastern Bengal and Assam.—The crop of sal seed was generally poor in most localities; it was also considerably damaged by storms. Other species seeded freely for the most part, and measures taken to assist seedlings produced naturally were generally successful. Further experiments regarding the best measures to adopt for this purpose are in progress.

The Central Provinces.—In the Northern and Southern Circles seed crops of the principal species were generally good but the heavy growth of grass seriously interferes with the development of the resulting seedlings. In Berar the year was not a favourable one for the production of seed, while the breaks in the rains caused numbers of seedlings to die. The beneficial effect on natural regeneration of closing areas under regeneration to grazing is stated to be most marked in the case of *Anjan*, while heavy grazing for a year or two before felling is beneficial, as the density of the grass growth is thereby reduced and the seed has a better chance of germinating.

Coppice reproduction is generally very successful everywhere; with some species cutting at height of about 18 inches from the ground yields better results than cutting flush with the ground.

Coorg.—The year was a favourable one for most of the valuable species except teak. Sandal reproduction was especially good.

The North-West Frontier Province.—Deodar seed was unusually scarce during the year and recent reproduction of deodar is not found in any quantity. There is some evidence, however, that reproduction of deodar can be obtained by the judicious admission of light.

Ajmer.—Reproduction by seed is generally poor in the case of most species and that by coppice fair. It is stated that most of the species found in Ajmer reproduce themselves by means of root-suckers.

Baluchistan.—The year was an unfavourable one for natural regeneration by seed, but reproduction by coppice appears to have been satisfactory.

Andamans.—Natural reproduction of padauk appears to be good wherever light is admitted, but so far it has not been found possible to pay sufficient attention to assisting the reproduction so obtained. It is hoped to do more of this important work next year.

Madras.—The short rainfall hampered reproduction in some districts; on the whole, however, reproduction was fair from seed and good from coppice. The results were best in localities protected from fire and closed to grazing.

Bombay.—On the whole the year was a favourable one for natural reproduction. Mention is made of several specific instances where successful fire-protection has resulted in a great

improvement in the number of seedlings which appear. Though teak seeded well in Thana, the opinion is again expressed that the reproduction of this species is poor; no satisfactory explanation of this fact has yet been found.

(b). *Artificial Reproduction.*

[Vide Appendix XI.]

22. The area of regular and taungya plantations increased by 3,298 acres and 598 acres, respectively, the total areas at the close of the year being 62,078 acres of regular plantations and 84,721 acres of taungyas. As regards regular plantations, the principal increases were 670 acres in the United Provinces, 636 acres in the Central Provinces, 290 acres in Madras and 987 acres in Bombay. An area of 650 acres was also added in the Punjab, on account of an irrigated plantation, but as the water channels were not in a sufficiently advanced state of construction to permit of planting, the addition is merely a paper one. The increase in the area of taungya plantations was a comparatively small one and was made up of additions of 159 acres in Burma, 153 acres in Coorg, 158 acres in the Andamans and 181 acres in Madras, together with a decrease of 53 acres in the Central Provinces.

The total expenditure on plantations amounted to Rs. 2,76,920, or Rs. 41,117 more than in 1908-09. Included in the expenditure was Rs. 43,742 on account of the Mergui Rubber Plantation in Burma, which was disposed of after the close of the year.

23. Cultural operations comprise all measures of artificial regeneration not amounting to plantations, and are undertaken chiefly for the purpose of introducing or increasing the proportion of valuable species, re-stocking blanks and regenerating coupes after final fellings. It is sometimes difficult to decide whether the operations carried out should be classed under taungya plantations or under cultural operations. In Bengal extensive areas overlooking the Tista Valley, which are being restocked with trees by means of taungya plantations, are included under cultural operations in Form 61, and the so-called agriculture-cum-forestry operations in Bombay are classed under the same head.

The following statement shows the areas newly worked over and the total amount expended on all areas during the years 1908-09 and 1909-10.

							Area newly operated on.	Total expendi- ture on all areas.
							Acres.	Ra.
Bengal	..	..	..	..	..	..	887	6,888
United Provinces	..	..	..	..	..	..	1,912	5,729
Punjab	..	..	..	..	..	..	140	1,089
Burma	..	..	..	..	..	..	15,733	13,059
Eastern Bengal and Assam	..	..	..	..	..	..	93	705
Central Provinces	..	..	..	..	..	..	2,004	1,186
North-West Frontier Province	..	..	..	..	..	..	30	264
Ajmer	..	..	..	..	..	..	77	17
Andamans	..	..	..	..	..	..	5	52
Madras	..	..	..	..	..	..	17,012	43,915
Bombay	..	..	..	..	..	..	37,968	9,681
Total						..	75,861	82,585
Total for 1908-09						..	82,144	62,359

(c). *Operations for the improvement of the growing stock.*

24. These comprise operations, the outturn of which is usually unsaleable, such as weedings, cleanings, thinnings, improvement fellings, the felling of ficus-bound trees, etc.

The great value of these operations has long been realised, and it is now an accepted fact that in most cases money spent on them is used to better advantage than if expended on the formation of artificial plantations. To carry out most of these operations properly requires more skill than the subordinate staff in most localities yet possesses, but considerable progress in the training of subordinates is being made, the establishment of local schools for this purpose having improved matters considerably. In many of the provincial reports details of the areas worked over and of the cost incurred on such works are not fully given. The following statement gives such information for provinces for which the details available are sufficiently full to justify their inclusion.

Province,	CLIMBER CUTTING ONLY.		IMPROVEMENT FELLINGS, THINNINGS, CLEANINGS, ETC.	
	Area.	Cost.	Area.	Cost.
	Acres.	Rs.	Acres.	Rs.
Bengal	23,117	3,112	6,087	3,205
United Provinces	71,319	4,148	32,834	7,386
Punjab	..	..	8,336	6,513
Burma	170,541	31,190	85,990	60,099*
Eastern Bengal and Assam	63,475	8,942	20,779	2,793
Central Provinces	45,835	1,445	74,502	28,261
Coorg	..	..	2,658	532
North-West Frontier Province	..	..	479.	109
Total ..	374,287	48,837	231,665	108,898

* Includes Rs. 13,564 on account of felling a large number of ficus-bound trees on an unknown area not included in that covered by the general improvement fellings.

(d). *Experiments.*

25. Few of the many experiments in progress in the various provinces appear to have yielded any very definite results during the year under review. An exception must be made in respect of camphor in Burma, where so much success has been attained that the cultivation of this tree is stated to have passed beyond the experimental stage. Camphor also seems to be doing well at Coonoor and Kodaikanal in Madras. The following brief abstracts from provincial reports will give a general idea of what is being done:—

Bengal.—The experimental attempt to provide grazing for the cattle required for the milk supply of Darjeeling by preparing and turfing a special area has proved unsuccessful and has been finally abandoned. The results of three years' observations on equal areas go to show that the yield of *sabai* grass (largely used for paper-making) from unburnt areas is 25 per cent only of that from burnt areas. Fire-protection has resulted in a large reduction in the revenue derived from *Sabai* grass in the Singhbhum Division. Certain experiments, in connection with the planting and natural regeneration of several species, have not yet yielded definite results.

The United Provinces.—Numerous experiments were made by the Forest Chemist with a view to improving the quality of rosin and turpentine. Chemically the experiments were entirely successful, a far higher standard of purity being obtained, but it is too early to say definitely whether any commercial benefit will result. The results of the experimental cultivation of lac were again disappointing. As only 70 per cent of the billets of spruce and silver fir arrived

at the Dakpathar Depôt and the cost was 11 annas per cubic foot, the result of the measures taken to test the floating capacity of these species was hardly encouraging. It appears, however, that silver fir at any rate floats well and that the small proportion of billets that arrived at Dakpathar may be largely due to theft in transit. More exact information is necessary before a definite conclusion on this point can be arrived at. A large quantity of the seed of blue gum (*Eucalyptus globulus*), obtained from the Nilgiris, germinated profusely and the seedlings developed in a phenomenal manner. Similar sowing of red gum (*Eucalyptus robusta*) were not a success. Other experiments in connection with artificial and natural reproduction can hardly be described as successful; the results are, however, still inconclusive.

The experiments started in Pilibhit in 1907-08 with regard to the capability of storage of forest fodder grasses have now been concluded, and it is considered that they have shown that such grasses can be stored effectively.

Punjab.—The attempt to introduce eucalyptus in the Simla Hills is being continued on a large scale and has formed the subject of a detailed report to the Local Government. The difficulty is to find a variety that will grow without being tended and watered. Many silvicultural experiments are in progress and will be reported on in due course. The resin-tapping experiments are being continued and promise well.

Burma.—The further experiments with *Catalpa speciosa* have generally failed, though some success has been obtained with this species at Maymyo (elevation 3,500 feet) and Mogoke (4,000 feet). The experiments with maniocoba rubber have also failed. Para rubber (*Hevea Brasiliensis*) is reported as growing most successfully in the Bhamo Division and in Myitkyina, a somewhat surprising fact as the climate of these localities is not at all what would generally be considered suitable for Para rubber. Camphor (*Cinnamomum camphora*) is stated to be a striking success and to grow well wherever it has been tried in the Northern Circle and in several localities in the Southern Circle. It probably does best below 4,000 feet. Its cultivation is said to be well beyond the experimental stage. Further experiments at the Government Tannin Factory in Rangoon, carried out by the Forest Chemist do not yet appear to have resulted in the production of tannin extracts free from all defects objected to by the trade.

Eastern Bengal and Assam.—A certain number of plants of *Catalpa speciosa* are still alive but the climate does not appear suitable for this species. The lac cultivation experiments have not been very successful; they are still inconclusive and are being continued. The planting of *Ficus elastica* seedlings in the Lushai Hills was successfully continued, but it is too early to say anything definite regarding the experiments with other rubber producing plants.

Central Provinces.—Lac cultivation by departmental agency was generally unsuccessful, and it has been discontinued in several localities. Of the many silvicultural experiments in progress few have yet yielded definite results; they are being continued. Only about 400 seedlings of *catalpa speciosa*, chiefly in the Melghat and Buldhana Divisions, are still alive and are from 2 to 4 feet high.

North-West Frontier Province.—Experiments with eucalyptus promise well as regards some species and the Robinia seems likely to prove an useful introduction.

Baluchistan.—The attempt to introduce European pines appears likely to prove unsuccessful. Only 87 seedlings now remain as compared with 261 last year.

Madras.—Experiments with exotic species were continued, but except in regard to *Swietenia Mahogany*, *Swietenia Macrophylla*, camphor, bamboos, eucalyptus, red sanders, divi-divi and sissoo in certain localities, the results were not encouraging. Nine varieties of timber-yielding eucalyptus, propagated from seed specially obtained from Australia, are being experimentally planted out at different elevations in the Nilgiris. Experiments to test the effects of fires on the growth of grass, made in all districts in the Northern Circle, yielded no definite results.

Bombay.—The plantations of four species of rubber-producing trees, *ceara*, *Ficus elastica*, castilloa and para in the Northern Circle are being maintained but no further extensions are to be made at present. So far the results are indefinite. The experiments carried out in some divisions to determine the damage done to forests by cattle grazing, though somewhat incomplete, show that, horned cattle unquestionably eat seedlings and coppice shoots of certain species when grass is scarce, and that damage is done to young growth of all kinds by their tread and in other ways.

Experiments with exotic and indigenous species gave generally poor results, and the same remark applies to the endeavours made to propagate lac.

5.—EXPLOITATION.

(a) *System of Management.*

26. In the provinces outside the Bombay and Madras Presidencies, the total area brought under regular Working-Plans amounted, in the year under review, to 35,211 square miles. As regards 317 square miles of forest in the Andamans, the remarks of previous years apply to this year also.

The various sylvicultural systems in force over this area are enumerated below:—

Sylvicultural systems.	Area in square mile.	Percentage of total area under each sylvicultural system.
Method of clear fellings by compartments	5	.014
Uniform Method	184	.523
Group Method	1	.003
Selection Method	11,700	33.228
Simple coppice	124	.352
Coppice with Standards	2,909	8.262
Method of Improvement fellings	7,898	22.430
Unallotted	12,390 (a)	35.188
Total ..	35,211 (b)	100.000

(a) Included in forests for which working plans have been prepared but not subjected to any definite system of working.

(b) Includes 14 square miles of reserves in Bengal which are not under the control of the Forest Department.

(b) *Agency of Exploitation.*

[Vide Appendix XIII].

(i) *Departmental Agency and (ii) Purchasers.*

27. The quantity of timber extracted by Government agency was 6,734,088 cubic feet, or 24,178 cubic feet less than in 1908-09. The most important changes in the various provinces were increases in the Punjab (201,167 cubic feet), the Andamans (33,794 cubic feet) and Madras (302,745 cubic feet), and decreases in Burma (224,592 cubic feet), Eastern Bengal and Assam (68,095 cubic feet), the Central Provinces (215,795 cubic feet) the North-West Frontier Province (60,057 cubic feet) and Bombay (36,167 cubic feet). The quantity removed by purchasers was 54,516,295 cubic feet as compared with 53,274,103 cubic feet in the previous year. As usual the provincial figures show considerable fluctuations, those of most importance being increases of 413,375 cubic feet in the United Provinces, 1,485,813 cubic feet in the Punjab and 494,477 cubic feet in Burma, and decreases of 744,437 cubic feet in Bengal and 677,675 cubic feet in Bombay.

As regards fuel, the quantity extracted by Government agency amounted to 22,413,511 cubic feet as compared with 20,104,293 cubic feet in 1908-09. The difference is chiefly due to an increase of 1,867,780 cubic feet in Madras, in which province the quantity extracted amounted to 13,953,682 cubic feet or considerably more than half the total. The quantity extracted by purchasers amounted to 90,751,966 cubic feet, or 3,486,764 cubic feet below the outturn of the previous year. Decreases of 2,219,382 cubic feet, 1,412,695 cubic feet and 6,079,262 cubic feet occurred in Bengal, Madras and Bombay, respectively. There were increases of 1,793,407 cubic feet in the United Provinces, 1,181,838 cubic feet in the Punjab, 1,841,440 cubic feet in Burma and 1,339,819 cubic feet in the Central Provinces.

The value of the bamboos extracted by Government agency was Rs. 1,15,827 as compared with Rs. 110,111 in the previous year; that of the bamboos extracted by purchasers also increased, being Rs. 926,627 or Rs. 1,76,304 more than in 1908-09.

The value of the other minor produce (including grass and grazing) extracted departmentally and by purchasers was Rs. 3,64,415 and Rs. 46,27,851, respectively or Rs. 68,980 and Rs. 37,368 more than in the previous year. The provincial changes call for no remark.

(iii) *Rights and privileges.*

28. The estimated quantities of forest produce removed by right and privilege holders during the last two years were:—

	1908-09.	1909-10.	Difference.
	Cft.	Cft.	Cft.
Timber (cubic feet)	2,563,187	2,609,490	+36,303
Fuel (cubic feet)	47,125,156	56,065,627	+8,940,471
	Rs.	Rs.	Rs.
Bamboos (value)	89,642	1,03,059	+13,417
Minor produce, including grass and grazing (value)	15,73,766	16,70,634	+96,868

(iv) *Free Grants.*

29. The forest produce granted free during the year under review and that preceding it were:—

	1908-09.	1909-10.	Difference.
	Cft.	Cft.	Cft.
Timber (cubic feet)	1,814,338	2,130,724	+316,386
Fuel (cubic feet)	6,157,792	5,911,229	—246,563
	Rs.	Rs.	Rs.
Bamboos (value)	11,209	9,294	—1,915
Minor produce including grass and grazing (value) ..	4,79,059	4,93,711	+14,652

(c). *Outturn of Forest Produce.*

[Vide Appendix XII].

30. The following statement shows the total outturn from all classes of forest as compared with that of the previous year:—

Presidency.	Year.			Timber and fuel.	Minor produce (including bamboos).
				Cft.	Rs.
Bengal	1909-10			172,514,202	48,51,604
	1908-09			165,610,113	45,33,914
Madras	1909-10			25,124,626	19,76,801
	1908-09			24,415,574	18,34,235
Bombay	1909-10			43,494,102	14,83,013
	1908-09			42,010,178	15,31,879
Total	1909-10			241,132,930	83,11,418
	1908-09			232,035,865	79,00,028

In provinces other than Madras and Bombay, the outturn of timber and fuel from reserved forests amounted to 88,069,189 cubic feet, or 51 per cent of the total, an increase over the outturn of the previous year of more than $5\frac{1}{2}$ million cubic feet. Of the increase, the United Provinces, Burma and the Central Provinces account for nearly 2 millions, more than $2\frac{1}{2}$ millions and nearly one million cubic feet, respectively, while there was a decrease in Bengal of more than $1\frac{1}{2}$ million cubic feet. The total outturn from protected forests amounted to 34,692,811 cubic feet, or 734,374 cubic feet less than in 1908-09. The principal changes in the provincial figures were a decrease of more than a million cubic feet in Bengal and an increase of nearly a quarter of a million cubic feet in the United Provinces. The outturn from unclassified forests was 49,752,202 cubic feet as compared with 47,872,798 cubic feet in 1908-09. In Burma there was an increase of nearly $2\frac{1}{2}$ million cubic feet and in Eastern Bengal and Assam the outturn was slightly in excess of that of the previous year: all other provinces show a decrease.

In Madras the total outturn from all classes of forest was in excess of that of the previous year by nearly three-quarters of a million cubic-feet, and in Bombay the increase was nearly $1\frac{1}{2}$ million cubic feet.

The total value of the minor produce (including bamboos) extracted amounted to Rs. 83,11,418 as compared with Rs. 79,00,028 in 1908-09.

6.—EXPORTS OF FOREST PRODUCE.

[*Vide Appendix XIV*].

31. The total value of the exports of forest produce at ports of shipment amounted to Rs. 4,20,96,717, as compared with Rs. 4,06,20,228 in 1908-09.

The quantity of rubber exported showed a slight decline of 17 tons to a total of 81 tons. The value, however, increased from Rs. 3,255 to Rs. 6,295 per ton, the total value being Rs. 5,09,904 as compared with Rs. 3,19,039 in the previous year.

The lac market was very depressed and a further fall of nearly 33 per cent in the average value of this product occurred. The total quantity of the various descriptions of lac exported increased from 19,041 tons to 27,740 tons, but the total value decreased by Rs. 2,30,244 to Rs. 2,77,16,718.

Exports of cutch and gambier amounted to 2,040 tons and again showed a decrease (1,102 tons) in quantity. The value, however, increased from Rs. 295 to Rs. 332 per ton.

The quantity of teak exported increased from 27,220 tons to 35,628 tons and the value per ton increased slightly. The total quantity and value were 35,628 tons and Rs. 54,24,433 as compared with 27,220 tons and Rs. 40,19,857, respectively in 1908-09.

CHAPTER III.

FINANCIAL RESULTS.

[Vide Appendices XV to XVIII].

32. The gross revenue, expenditure and surplus and the percentage of expenditure to gross revenue for the last 37 financial years were as follows:—

Quinquennial periods.	Gross Revenue (average).	Expenditure (average).	Surplus (average).	Proportion of expenditure to gross Revenue.
	Rs.	Rs.	Rs.	Rs.
1873-74 to 1877-78	67,23,191	44,76,303	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	64
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 to 1907-08	2,50,55,151	1,35,94,021	1,14,61,130	54
Years.				
1908-09	2,54,56,799	1,47,26,034	1,07,30,765	58
1909-10	2,60,25,794	1,49,20,654	1,11,05,140	57

33. The gross revenue realized was Rs. 5,68,995 in excess of that of the previous year. The expenditure was Rs. 1,94,620 greater so that the surplus increased by Rs. 3,74,375 as compared with 1908-09. The forests of India are still to a great extent undeveloped and unexploited. Much still remains to be done towards improving them and opening them up by the construction of roads and other means of communication, and also in providing an increased and better trained staff. The expenditure must increase accordingly. Further increases in the revenue may also be expected, but it should not be forgotten that a forest crop takes many years to come to maturity and that increased expenditure on forests cannot always result in an immediate corresponding increase in revenue.

34. The principal variations in the gross revenue in the various provinces, as compared with 1908-09, were increases in the United Provinces (Rs. 1,25,758), Burma (Rs. 1,66,045), Eastern Bengal and Assam (Rs. 88,364), the North-West Frontier Province (Rs. 50,523), the Andamans (Rs. 57,459), Madras (Rs. 2,87,462) and Bombay (Rs. 1,70,300) and decreases in Bengal (Rs. 1,04,205) and the Punjab (Rs. 2,56,159).

35. The most important changes in expenditure were increases in Eastern Bengal and Assam (Rs. 1,21,192) and in Madras (Rs. 4,22,374) and decreases in the Punjab (Rs. 1,83,875) and the Central Provinces (Rs. 1,66,455). The large increase in Madras is due chiefly to more extensive departmental operations for the exploitation and improvement of the forests. The decrease in the Central Provinces is ascribed to less expenditure on communications and buildings and on the organisation, improvement and extension of the forests, owing to lack of funds.

36. Increases in the net revenue occurred in the United Provinces (Rs. 1,38,886), Burma (Rs. 1,99,674), the Central Provinces (Rs. 1,66,633), the North-West Frontier Province (Rs. 54,545), the Andamans (Rs. 44,241), and Bombay (Rs. 1,51,085). Decreases are shown by Bengal (Rs. 1,11,323), the Punjab (Rs. 72,284), Eastern Bengal and Assam (Rs. 32,828), Coorg (Rs. 19,428), Ajmer (Rs. 2,981) and Madras (Rs. 1,34,912). Baluchistan alone shows a deficit which amounted to Rs. 7,820 or Rs. 5,461 less than in 1908-09.

37. The value of the forest produce removed by right holders, or granted free or at reduced rates, during the year under review, is estimated to be Rs. 46,71,292, or Rs. 73,842 more than in the previous year. The principal variations were increases of nearly one lakh in the value of timber and of nearly 6½ lakhs in that of grass and grazing, and decrease of nearly 3½ lakhs and 3 lakhs on account of fuel and miscellaneous produce, respectively.

38. The following statement shows the financial results of the working of the forests after deducting capital expenditure not yielding an immediate return :—

	Rs.
Gross Revenue	2,60,25,794
Value of produce granted free or at reduced rates ..	46,71,292
Total value of yield ..	3,06,97,086
Gross expenditure :	1,49,20,654
Deduct expenditure not yielding an immediate return—	
	Rs.
(a) Roads ..	13,65,555
(b) Cultural operations ..	7,77,055
(c) Working-Plans ..	83,521
(d) Settlements ..	1,81,427
(e) Surveys ..	85,104
(f) Demarcation ..	1,36,717
	26,29,379
Balance of direct revenue-producing expenditure —	1,22,91,275
Surplus over expenditure directly chargeable to revenue —	1,84,05,811

CHAPTER IV.

GENERAL.

39. Mr. F. Beadon Bryant continued to hold the post of Inspector-General of Forests during the year.

No changes occurred in the sanctioned permanent establishment of the department.

40. The following table shows the officers on foreign service in India, and serving under other Governments :—

In India.

Imperial Service.

1. Mr. W. H. Lovegrove (United Provinces) Kashmir from October 1907.
2. Mr. R. M. Williamson (Central Provinces) Rewah State from October 1907.
3. Mr. C. G. Trevor (Punjab) Chamba State from April 1908.
4. Mr. R. Kirkpatrick (Bengal) Khondmals State from March 1909 to July 1909.

Provincial Service.

1. A. P. Swami Mudaliar (Bengal) Mysore.
2. Lala Har Sarup (United Provinces) Gwalior.
3. Rai Kesho Nand Bahadur (United Provinces) Kashmir. (Reverted from 1st May 1910).
4. Lala Daulat Ram (Punjab) Kashmir (Reverted in August 1909).
5. Pandit Thakur Das (Punjab) Jubal State.
6. Mr. W. G. Gilmore (Central Provinces) Indore State.
7. Mr. B. Inamati Sham Rao (Central Provinces) Mysore.
8. Mr. F. J. Langhorne (Central Provinces) Court of Wards.
9. Rai Bahadur M. Muttannah (Madras) Mysore.
10. Rao Sahib M. Rama Rao (Madras) Travancore.
11. Mr. G. W. Thompson (Madras) Jeypore.
12. Mr. B. H. Dalal (Bombay) Rajpipla.
13. Mr. E. A. Rooke (Central Provinces) Bastar State.

Under other Governments.

1. Mr. W. F. Lloyd (Bengal) Siam from August 1905.

41. Seventeen officers, who had completed the forestry course at Oxford, were appointed Assistant Conservators of Forests and arrived in India about the end of 1909. Nine were posted to Burma, three to Eastern Bengal and Assam, two each to the United Provinces and Bombay and one each to the Punjab, the Central Provinces and Bengal.

42. One officer of the Imperial Service retired and one died during the year, so that casualties were unusually few.

APPENDIX I.

[Vide Paragraphs 1-3.]

Area of all forest lands.

PROVINCE.		FOREST AREA IN SQUARE MILES.				Percent- age of forests to whole area of Province.	REMARKS.
Name.	Area in square miles.	Reserved.	Protected.	Unclassed State.	Total.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Bengal	116,050	(a) 4,234	(b) 2,771	..	7,005	6.0	(a) Excludes 14 square miles of Reserved forests not under the management of the Forest Department.
United Provinces ..	107,637	(c) 4,103	(d) 30	42	4,175	3.9	(b) Excludes 942 square miles not under the control of the Forest Department.
Punjab	97,211	(e) 2,211	5,209	1,332	8,752	9.0	(c) Includes 156 square miles of leased forests.
Burma	178,125	25,602	..	113,007	138,699	77.9	(d) Excludes 9,069 square miles of district Protected Forests not under the control of the Forest Department.
Eastern Bengal and Assam.	93,783	(f) 6,477	4	22,752	29,233	31.2	(e) Includes 367 square miles of leased forests but excludes 110 square miles not under the management of the Forest Department.
Central Provinces ..	99,732	21,436	..	..	21,436	21.5	(f) Excludes 6 square miles of Reserved forests not under the management of the Forest Department.
Coorg	1,582	520	..	..	520	32.9	(g) Excludes 13 square miles of Military and Civil Reserved Forests.
North-West Frontier Province.	13,184	(g) 236	(h) ..	..	236	1.8	(h) 121 square miles of Civil Protected Forests are not shown.
Ajmer	2,767	142	(i) ..	..	(j) 142	5.1	(i) There are only 115 acres of Protected Forests in Ajmer.
Baluchistan ..	9,403	289	..	496	785	8.3	(j) Excludes 6 square miles of unclassified forests not under the management of the Forest Department.
Andamans ..	3,143	161	..	1,791	1,952	62.1	(k) Reserved lands including 158 square miles of leased forests.
Madras	142,413	18,769	..	(k) 843	19,612	13.8	(l) Includes 656 square miles of leased forests and excludes 2,112 square miles of forests in charge of the Revenue Department.
Bombay	122,960	12,204	800	..	(l) 13,004	10.5	
Total 1909-10 ..	987,990	96,474	8,814	140,263	245,551	24.9	
" 1908-09 ..	986,144	94,561	8,835	138,378	241,774	24.5	
" 1907-08 ..	985,938	94,059	8,853	134,897	237,809	24.2	
" 1906-07 ..	987,749	94,037	9,468	136,633	240,138	24.3	
" 1905-06 ..	970,617	92,496	10,018	131,137	233,651	24.1	

APPEN

[Vide para

Progress in Forest

Province.	AREAS ALREADY SETTLED AT THE COMMENCEMENT OF THE YEAR.			AREAS FINALLY SETTLED DURING THE YEAR.					
	Reserved forests.	Protect- ed forests.	Total.	Year.			Expenditure incurred.		
				Reserv- ed.	Protect- ed.	Total.	Reserv- ed.	Pro- tect- ed.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	Rs.	Rs.
Bengal	4,240	..	4,240	8	..	8	392	..	392
United Provinces ..	3,935	30	3,965	12	..	12	..	..	..
Punjab	1,953	5,222	7,175	5	..	5	..	..	..
Burma	23,753	..	23,753	1,963	..	1,963	13,079	..	13,079
Eastern Bengal and Assam	6,421	..	6,421	77	..	77	75	..	75
Central Provinces ..	18,180	..	18,180	4	..	4	..	..	..
Coorg	520	..	520	..	..	..	(a) 55	..	55
North-West Frontier Province.	(b) 236	(c)	236	..	..	..	..	..	..
Ajmer	..	..	..	..	..	..	..	..	..
Baluchistan	(a) 238	..	238	1	..	1	..	..	..
Andamans	161	..	161	..	..	..	..	..	..
Madras	16,881	..	16,881	11	..	11	..	..	..
Bombay	13,443	910	14,353	15	..	15	..	..	..
Total .. 1909-10	90,011	6,162	96,173	2,096	..	2,096	13,601	..	13,601
Total .. 1908-09	90,915	6,289	97,204	1,217	13	1,230	8,583	..	8,583
Total .. 1907-08	89,197	6,310	95,507	1,798	..	1,798	7,490	..	7,490
Total .. 1906-07	87,523	6,151	93,674	1,674	138	1,812	3,151	..	3,151
Total .. 1905-06	87,159	5,764	92,923	167	140	707	4,238	..	5,808

(a) Represents the pay and travelling allowance of a Surveyor who was employed for a few days.

(b) Excludes 14 square miles of Military Reserved Forests.

(c) 121 square miles of Civil Protected Forests not shown.

DIX II.

graph 4].

Settlements.

AREA UNDERGOING SETTLEMENT.								
At commencement of the year.			Taken in hand, during the year.			Expenditure incurred during the year.		
Reserved.	Protected.	Total.	Reserved.	Protected.	Total.	Reserved.	Protected.	Total.
(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	Rs.	Rs.
19	..	19	..	..	..	..	..	..
12	..	12	..	..	..	8	..	8
11	205	216	24	..	24	..	..	..
2,687	..	2,687	787	..	787	5,959	..	5,959
36	..	36	..	..	..	..	..	..
6	..	6	7	..	7	..	..	..
..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..
16	..	16	24	..	24	..	..	..
..	..	..	..	..	..	..	..	..
505	..	505	23	..	23	(e) 1,05,639	..	1,05,639
30	..	30	2	..	2	1,365	..	1,365
3,322	205	3,527	867	..	867	1,12,971	..	1,12,971
5,323	205	5,528	824	..	824	34,326	..	34,326
3,122	205	3,327	3,575	..	3,575	34,188	..	34,188
1,954	205	2,159	2,978	1	2,979	25,108	..	25,108
3,241	205	3,446	454	..	454	29,771	..	29,771

(d) Corrected area.

(e) Excludes Rs. 669 shown under other accounts.

APPENDIX III.

[Vide paragraph 5.]

Demarcation and Maintenance of Boundaries.

Province.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries not demarcated at the close of the year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	EXPENDITURE ON DEMARKATION DURING THE YEAR.	
								On new work.	On repairs.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Rs.	Rs.
Bengal	262	3,194	487	(a) 3,963	..	1,028	4,991	771	2,114
United Provinces..	2	1,545	2,883	4,430	9	1,572	6,011	171	10,192
Punjab	24	2,315	7,568	9,907	22	1,107	11,036	1,004	5,058
Burma	906	3,602	13,600	18,108	1,089	3,498	22,705	7,056	21,953
Eastern Bengal and Assam.	117	2,014	123	2,254	173	2,533	4,960	3,729	10,567
Central Provinces	103	24,327	9,613	34,043	61	2,758	36,862	2,799	18,848
Cborg	..	..	307	307	173	56	536	..	89
North-West Frontier Province.	..	20	757	777	..	139	916	..	354
Ajmer	..	2	259	261	..	158	419	14	33
Baluchistan ..	2	187	238	427	..	77	504	..	5
Andamans ..	8	9	58	75	6	116	197	46	4
Madras	644	19,640	14,575	34,859	1,020	1,775	37,654	15,303	16,714
Bombay	504	8,030	28,022	36,556	3,470	3,246	43,272	4,367	6,198
Total 1909-10 ..	2,572	64,885	78,490	145,967	6,033	18,063	170,063	35,260	92,129
„ 1908-09 ..	2,727	61,235	78,594	142,576	6,117	17,576	166,269	46,362	97,774
„ 1907-08 ..	2,421	55,439	83,367	141,227	10,653	17,490	169,370	57,006	89,154
„ 1906-07 ..	2,611	57,699	83,026	143,256	11,869	16,250	171,375	33,562	70,311
„ 1905-06 ..	3,319	55,317	76,705	135,341	17,896	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 Sub-divisions, such as blocks, compartments and coupes.

(a) Includes 20 miles demarcated by lessees of adjacent waste lands in the Sundarbans.

APPENDIX IV.

[Vide paragraphs 6-9.]

Forest Survey Operations.

Province.	Forest surveyed.	NATURE OF SURVEY OPERATIONS.						TOTAL AREA OF DETAIL SURVEY.		Expendi- ture of the year including mapping and publishing charges debitable to Forests.	REMARKS.
		1 st detail survey 2 nd detail survey.				4 th detail survey.		19.10 up to	Total up to date.		
		Area.	Cost rate.	Area.	Cost rate.	Area.	Cost rate.				
1	2	3	4	5	6	7	8	9	10	11	12
		Sq. m.	Rs.	Sq. m.	Rs.	Sq. m.	Rs.	Sq. m.	Sq. m.	Rs.	
Bengal	Pilibhit	..	..	..	..	..	..	..	(a) 4,530	107	(a) Includes an area of 2,223 sq. miles surveyed on the 4 th scale by the old Forest Survey Branch, but omitted in column 7 of Appendix V of the Review for 1906-07.
	Kheri	..	..	..	..	..	..	..	..	43	
	Gorakhpur	..	..	..	..	..	..	..	..	69	(b) Excludes 107 sq. miles previously surveyed on the 4 th scale by the old Forest Survey Branch.
United Provinces	Bahraich	..	..	..	..	..	..	..	4,136	271	
	Naini Tal	..	..	..	..	..	..	..	..	170	(c) Cost of additional details in the survey of the Musit reserve (specially surveyed for the Forest Department) including mapping and publishing charges.
	Garhwal	..	..	..	..	..	..	..	..	18	
	Ganges	..	..	..	..	..	..	..	..	62	
Punjab	Shahpur	..	..	(b) 180	29.7	..	..	214	3,786	890	(d) Linear miles of boundary traverse (Skeleton boundary Survey).
	Jhelum	..	..	34	..	..	..	..	..	..	
	Bashahr	..	..	..	..	..	..	..	..	5	(e) Cost rate not given.
Burma	..	..	..	..	..	..	..	..	14,132	(c) 3345	(f) Includes (d) (of the Central Provinces only) 420 linear miles of boundary survey.
Eastern-Bengal and Assam	Cachar	..	..	295	62.5	..	..	..	..	..	
	Sylhet	..	..	94	..	..	..	387	2,334	..	(g) Excludes 131 sq. miles of resurvey in south Coimbatore.
Central Provinces	Borur	..	..	75	35.1	(d) 420	(e)	(f) 498	19,766	6.6	
Coorg	..	..	..	309	44.9	..	..	309	405	..	(A) Includes (d) (of Bombay only) 316 linear miles of boundary survey.
North-West Frontier Province.	Hamara	..	..	..	..	..	..	..	445	122	
Ajmer	..	..	..	..	..	..	..	..	144	..	(i) Mapping and publishing charges only and excludes Forest map office Headquarters charges Rs. 41,165 and the cost borne by the Survey of India.
Baluchistan	..	120	24.3	..	..	..	..	120	227	..	(j) Excludes Headquarters charges Rs. 38,943.
Andamans	..	..	..	..	..	..	..	..	..	..	
	Nilgiris	..	..	59	30.5	..	..	..	..	..	(k) Excludes Headquarters charges Rs. 30,655.
Madras	Central Coimbatore.	..	..	48	..	..	..	(d) 147	15,062	..	(l) Excludes Headquarters charges Rs. 32,022.
	South Canara	..	..	40	44.9	..	..	..	..	..	
Bombay	East Khandesh	..	..	235	35.1	(d) 316	(e)	(h) 551	18,494	..	(m) Excludes Headquarters charges Rs. 29,655.
Total	1909-10	..	120	..	1,370	..	(d) 736	..	2,226	78,494	(i) 5,708
	1908-09	..	29	..	1,881	..	736	..	2,646	76,268	(j) 9,935
	1907-08	..	43	..	2,676	..	43	..	2,762	73,622	(k) 6,199
	1906-07	..	..	..	1,648	..	579	..	2,227	70,860	(l) 63,297
	1905-06	..	..	..	571	..	3,036	..	3,607	68,683	(m) 2,72,423

Note 1.—In columns 3, 5 and 7 no entry should be made in the case of forests which have previously been specially surveyed for forest purposes on any scale; but a note should be added in the "Remarks" column to show surveys that are carried out for a second time and are not included in these columns.

Note 2.—When forests are specially surveyed for the Forest Department and the cost is debitable to that Department, a note to that effect should be made in the column of "Remarks."

APPENDIX V.

[Vide paragraphs 10 and 11.]

Progress made in Working Plans.

Province	AREAS FOR WHICH WORKING-PLANS HAVE BEEN SANCTIONED BY LOCAL GOVERNMENTS.		AREAS FOR WHICH WORKING-PLANS ARE BEING COMPLETED.		Area for which Working-plans have still to be taken in hand.	Areas for which Working-plans are not at present required.	Total forest areas as Appendix I.	Percentage of area under Working-plans to the total forest area.	REMARKS.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.					
1	2	3	4	5	6	7	8	9	10
	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.		
Bengal	(a) 5,494	..	(b) 184	..	(c) 1,327	..	7,005	78	(a) Revised area excludes 14 square miles of "other Reserves."
United Provinces	3,779	(d)	300	..	96	..	4,175	91	(b) Excludes 212 square miles for which a revised Working-plan is under preparation.
Punjab	(e) 4,010	..	861	422	3,959	..	3,752	46	(c) Excludes 642 square miles of "other protected Forests."
Burma	(e) 6,970	309	(e) 1,550	498	(e) 129,372	..	133,699	5	(d) Excludes 334 square miles for which a revised Working-plan was sanctioned.
Eastern Bengal and Assam	1,300	(f) 160	(e) 195	176	4,656	22,746	29,233	5	(e) Revised areas.
Central Provinces	(e) 12,641	..	(g)	(A) 758	5,935	2,102	21,436	59	(f) Excludes 4 square miles of "unclassified state Forests."
Coorg	158	..	..	20	342	..	520	30	(g) Excludes 524 square miles for which a revised Working-plan is under preparation.
North-West Frontier Province	236	..	..	..	..	..	236	100	(h) Excludes 1,628 square miles for which a revised Working-plan is under preparation.
Ajmer	140	..	..	..	2	..	142	99	(i) Compiled in 1906-07 but not yet sanctioned or in operation.
Baluchistan	..	..	..	..	289	496	785	..	
Andamans	..	..	(i) 817	..	1,635	..	1,952	..	
Madras	(e) 7,046	(e) 847	(e) 2,655	214	8,667	193	19,612	40	
Bombay	(e) 6,330	1	(e) 389	204	5,409	671	13,004	49	
Total 1909-10	48,104	1,317	5,951	2,292	161,679	26,208	245,551	20	
" 1908-09	44,848	3,453	5,315	2,378	185,780	..	241,774	20	
" 1907-08	42,441	2,711	7,357	2,559	182,741	Included in column 6	237,809	19	
" 1906-07	41,586	882	9,061	2,001	186,608	..	240,138	18	
" 1905-06	37,551	2,371	8,257	2,168	183,304	..	233,651	17	

Note.—It should be explained in the "Remarks" column how far the areas shown are for revised working-plans and have already appeared in the Form.

APPENDIX VI.

[Vide paragraphs 12 to 14.]

Expenditure on Communications and Buildings.

PROVINCE. (1)	NEW WORKS.		REPAIRS.		Other Works. (6)	TOTAL (7)
	Buildings (2)	Roads. (3)	Buildings (4)	Roads. (5)		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bengal	29,318	15,421	12,512	12,305	3,792	73,348
United Provinces .. .	52,324	6,255	23,061	50,162	11,466	1,43,268
Punjab	20,154	25,760	8,067	22,617	2,430	79,028
Barma	1,25,681	58,158	48,864	21,157	17,238	2,71,098
Eastern Bengal and Assam ..	68,633	33,969	18,710	7,617	5,887	1,34,816
Central Provinces .. .	76,096	43,603	24,120	19,355	41,106	2,04,280
Coorg	617	..	1,512	1,352	35	3,516
North-West Frontier Province ..	5,048	4,078	473	1,026	407	11,032
Ajmer	587	105	85	106	215	1,098
Baluchistan	..	..	359	..	..	359
Andamans	1,903	378	328	3,382	(a) 2,466	8,457
Madras	1,20,893	52,902	43,033	33,903	17,324	2,68,055
Bombay	36,038	5,171	11,100	20,374	28,930	1,01,613
Total 1909-10	5,37,292	2,45,800	1,92,224	1,93,356	1,31,296	12,99,968
.. 1908-09	4,45,273	3,23,560	2,08,284	2,16,620	1,75,987	13,69,724
.. 1907-08	4,64,060	3,48,394	1,81,440	2,01,237	1,75,692	13,70,823
.. 1906-07	3,61,543	1,96,738	1,62,205	1,93,338	82,089	9,95,913
.. 1905-06	3,56,536	1,51,345	1,52,979	1,41,071	64,835	8,66,766

(a) Cost incurred on temporary trans lines.

APPENDIX VII.

[Vide paragraphs 15 and 16.]

Breaches of Forest Rules.

P. PROVINCE.		NEW CASES OF THE YEAR.						DISPOSED OF DURING THE YEAR.						CASES PENDING AT CLOSE OF YEAR.	
		Cases pending from 19-19.	Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grading without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	TOTAL CASES.	Convictions.		Acquittals.		TOTAL.		
									Cases.	Persons.	Cases.	Persons.	Cases.		Persons.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
Bengal	A.	35	20	100	10	45	175	210	145	433	28	145	173	578	23
	B.	92	4	1,303	523	61	1,891	1,983	1,816	3,568	..	..	1,616	3,568	157
	C.	4	108	6	..	1	115	119	..	..	..	..	..	..	..
	Total ..	131	132	1,409	533	107	2,181	2,312	1,961	4,021	28	145	1,839	4,166	180
United Provinces	A.	8	15	36	43	20	119	127	98	211	20	92	118	303	9
	B.	81	12	875	751	57	1,695	1,776	1,717	4,223	..	..	1,717	4,223	43
	C.	..	62	106	13	2	183	183	..	..	..	..	..	..	..
	Total ..	89	89	1,017	812	79	1,997	2,066	1,815	4,434	20	92	1,835	4,526	57
Punjab	A.	137	28	533	206	85	652	969	638	1,228	121	315	759	1,543	206
	B.	7	24	2,647	3,629	56	6,356	6,363	6,355	9,589	..	..	6,355	9,589	1
	C.	..	123	39	8	1	171	171	..	..	..	..	..	..	..
	Total ..	144	175	3,219	3,843	142	7,379	7,523	6,993	10,817	121	315	7,114	11,132	207
Burma	A.	195	22	706	51	133	912	1,107	706	1,309	172	432	878	1,741	226
	B.	142	14	1,635	76	826	2,551	2,693	2,429	3,226	..	1	2,429	3,227	180
	C.	..	7	24	..	..	31	31	..	..	..	..	..	..	..
	Total ..	337	43	2,365	127	959	3,494	3,831	3,135	4,535	172	433	3,307	4,968	406
Eastern Bengal and Assam.	A.	40	2	150	22	68	242	282	196	575	38	197	234	772	47
	B.	2	3	491	160	136	790	792	791	1,628	..	..	791	1,628	1
	C.	..	19	3	..	..	22	22	..	..	..	..	..	..	..
	Total ..	42	24	644	182	204	1,054	1,096	987	2,203	38	197	1,025	2,400	48
Central Provinces	A.	26	57	98	109	43	307	333	237	551	64	267	301	618	32
	B.	232	156	3,819	4,121	288	8,384	8,616	7,985	22,537	1	16	7,986	22,553	625
	C.	..	894	207	9	1	611	611	..	..	..	..	..	..	..
	Total ..	258	607	4,124	4,239	332	9,302	9,560	8,222	23,098	65	283	8,287	23,371	657
Coorg	A.	1	3	4	..	2	9	10	4	9	3	5	7	14	3
	B.	..	1	3	5	16	25	25	18	55	7	10	25	65	..
	C.	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	1	4	7	5	18	34	35	22	64	10	15	32	79	3
North-West Frontier Province	A.	61	5	94	43	9	151	212	180	359	33	153	163	512	41
	B.	..	2	376	411	1	790	790	793	1,284	..	..	793	1,284	..
	C.	..	14	31	17	1	63	63	..	..	..	..	..	..	..
	Total ..	61	21	501	471	11	1,004	1,065	923	1,743	33	153	956	1,896	41

APPENDIX VII—contd.

[Vide paragraphs 15 and 16.]

Breaches of Forest Rules—contd.

Province.		NEW CASES OF THE YEAR.						DISPOSED OF DURING THE YEAR.						CASES PENDING AT CLOSE OF YEAR.	
		Cases pending from 1908-09.	Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total Cases.	[Convictions.]		Acquittals.		TOTAL.		
									Cases.	Persons.	Cases.	Persons.	Cases.		Persons.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ajmer ..	A.	..	..	24	12	..	36	36	33	58	3	3	36	61	..
	B.	..	4	117	211	7	339	339	332	533	7	13	339	551	..
	C.	..	2	1	..	..	3	3	..	..	..	..	..	..	..
	Total	..	6	142	223	7	378	378	365	596	10	16	375	612	..
Baluchistan ..	A.	13	3	37	6	2	48	61	48	95	8	39	56	134	5
	B.	..	..	2	3	..	5	5	5	9	..	..	5	9	..
	C.	..	5	..	..	..	5	5	..	..	..	..	..	..	..
	Total	13	8	39	9	2	58	71	53	104	8	39	61	143	5
Andamans ..	A.	..	..	6	..	..	6	6	6	7	..	..	6	7	..
	B.	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	C.	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	..	6	..	..	6	6	6	7	..	..	6	7	..
Madras ..	A.	1,645	67	3,009	1,444	341	4,861	6,506	3,995	11,500	576	1,904	4,571	13,404	1,614
	B.	3,324	39	11,556	6,630	615	18,840	22,164	17,251	39,717	..	..	17,251	39,717	3,644
	C.	19	842	287	423	24	1,576	1,595	..	..	..	..	..	..	..
	Total	4,988	948	14,852	8,497	980	25,277	30,265	21,246	51,217	576	1,904	21,822	53,121	5,258
Bombay ..	A.	378	148	440	323	91	1,007	1,385	962	2,298	144	420	1,106	2,718	248
	B.	575	214	5,806	8,138	615	14,773	15,348	14,907	29,269	..	..	14,907	29,269	436
	C.	6	2,107	1,958	83	50	4,198	4,203	..	..	..	..	..	..	..
	Total	959	2,469	8,204	8,549	756	19,978	20,936	15,869	31,567	144	420	16,013	31,987	685
Grand Total ..	A.	2,539	870	5,237	2,279	839	8,725	11,264	7,198	18,833	1,220	3,973	8,408	22,605	2,455
	B.	4,455	473	23,630	24,658	2,678	56,439	60,804	54,399	114,763	15	40	54,414	115,808	5,092
	C.	25	3,683	2,662	553	80	6,978	7,006	..	..	..	..	..	..	..
	Total	7,022	4,526	36,529	27,490	3,597	72,142	79,164	61,597	133,396	1,225	4,013	62,822	138,408	(a) 7,547
"	1908-09	6,982	3,615	37,238	26,173	4,274	71,300	78,282	60,511	136,237	1,443	5,180	61,954	141,417	7,022
"	1907-08	6,091	4,679	35,470	25,016	4,528	69,603	75,784	57,602	126,195	1,229	4,708	58,831	130,903	7,131
"	1906-07	5,833	4,138	33,296	24,809	5,213	67,456	73,289	56,347	124,503	1,511	5,635	57,856	130,138	6,057
"	1905-06	5,227	4,320	33,911	24,684	4,771	67,686	72,913	56,294	130,188	1,429	5,473	57,723	135,661	5,838

N. B.—A. Cases taken into Court.

B. Cases compounded.

C. Undetected cases.

(a) Excludes 1,789 cases withdrawn.

APPENDIX VIII.

[Vide paragraph 17.]

Causes of Forest Fires.

Province.	Fires originating in departmental Fire Conservancy operations.		External fires crossing the fire traces.		Fires due to carelessness of outsiders.		Fires originating from intention or malice.		Fires due to unknown causes.		TOTAL.	
(1)	No. (2)	Sq. m. (3)	No. (4)	Sq. m. (5)	No. (6)	Sq. m. (7)	No. (8)	Sq. m. (9)	No. (10)	Sq. m. (11)	No. (12)	Sq. m. (13)
Bengal	5	0.1	13	8.1	(a) 22	32.5	18	11	..	..	58	51.7
United Provinces ..	25	5	21	22	28	12	4	15.8	42	24.8	20	79.6
Punjab	1	5.7	21	5.4	110	4.6	36	3.3	25	11.2	193	30.2
Burma	19	16.5	15	16.5	(b) 44	24.9	13	5.4	15	1.8	106	65.1
Eastern Bengal and Assam.	1	..	4	.. 9	(a) 22	8.7	3	.. 1	..	..	30	9.7
Central Provinces ..	92	57.3	129	215.7	142	178.8	25	110.8	187	238.4	575	801
Coorg	1	..	2	.. 1	1	..	4	.. 1	1	..	9	.. 3
North-West Frontier Province.	..	..	..	..	7	..	12	2.3	..	..	19	2.4
Ajmer	2	..	..	..	(a) 4	.. 2	..	..	..	..	6	.. 3
Baluchistan ..	..	..	..	..	..	..	..	..	..	..	..	..
Andamans ..	..	..	..	..	..	..	..	..	..	..	..	..
Madras	87	42.2	167	297.3	355	71.5	352	379.9	694	644.2	16.55	1,435.7
Bombay	88	25.2	143	88.9	1,367	(c) 196.3	185	68.7	758	400.4	2,541	779.5
Total 1909-10 ..	321	152.0	515	654.9	2,102	529.5	652	597.4	1,722	1,320.8	5,312	3,254.9
„ 1908-09 ..	302	77.0	394	496.7	(a) 2,651	1,015.4	441	313.8	..	..	3,788	1,902.9
„ 1907-08 ..	351	223.7	551	676.9	(a) 3,572	1,678.4	727	596.6	Included in columns 6 and 7.	..	5,201	3,175.6
„ 1906-07 ..	283	110.6	416	371.7	(a) 3,214	1,798.4	479	300		..	4,392	2,580.7
„ 1905-06 ..	297	217	458	623.1	(a) 2,250	1,271	1,887	1,386.1		..	4,892	3,498

(a) Includes fires due to unknown causes.

(b) Includes fires due to unknown causes in the Pegu Circle.

(c) Includes fires due to unknown causes in the Northern and Sind Circles.

APPENDIX IX.

[Vide paragraph 18 to 21.]

Area closed and open to Grazing.

PROVINCE.	AREA IN SQUARE MILES.				Open to all animals.	Total area.	REMARKS.
	Closed to all Animals.		Closed to browsers, camels, goats or sheep.				
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Bengal	5,358	32	657	66	1,848	7,961	
United Provinces ..	2,175	124	632	..	1,244	4,175	
Punjab	569	311	606	95	7,171	8,752	
Burma	20,505	4,026	126	6	114,036	138,699	
Eastern Bengal and Assam	5,575	..	183	..	23,481	29,239	
Central Provinces ..	3,492	538	8,909	17	8,480	21,436	
Coorg	179	341	..	..	..	520	
North-West Frontier Province,	83	6	100	..	47	236	
Ajmer	57	23	57	..	5	142	
Baluchistan	200	18	13	..	554	785	
Andamans	161	..	..	..	1,791	1,952	
Madras	2,388	147	930	2	(a)16,145	19,612	
Bombay	2,463	1,127	7,802	9	3,715	15,116	
Total 1909-10 ..	43,205	6,693	20,015	195	178,517	248,625	

(a) Of this area goats were admitted to 789 square miles only.

Note.—Separate figures for areas in charge of the Forest Department not being obtainable from the provincial forms, this statement includes figures for 956 square miles in Bengal, 6 square miles in Eastern Bengal and Assam and 2,112 square miles in Bombay which are under the control of the Revenue authorities.

APA

[Vide]

Protect.

PROVINCE.	GRAZED ON PAYMENT, NUMBER OF ANIMALS.									
	AT FULL RATES.					AT PRIVILEGED RATES.				
	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Bengal	8,692	33,342	4,998	..	12	9,288	152,351	12,678	..	53
United Provinces ..	69,592	207,926	77,883	2,102	8,660	28,577	145,695	114,597	5	30
Punjab	17,053	37,974	376,412	9,794	3,012	40	8,307	257,754	13	9
Burma	4,675	21,126	2,517	..	24	154	..	..	..	..
Eastern Bengal and Assam	51,199	17,713	291	..	632	..	91,252	..	..	..
Central Provinces ..	449,945	2,229,056	644,828	200	8,096	17,678	489,787	1,025	..	42
Coorg	465	2,137	..	..	..	..	..	..	..	..
North-West Frontier Province.	1,236	1,262	325	..	34	..	..	..	..	..
Ajmer	359	2,053	..	..	..	2,183	11,276	..	..	..
Baluchistan	559	5,611	4,222	..	22	..	..	..	..	..
Madras	109,449	970,611	1,560,134	..	110	16,140	78,607	13,635	..	8
Bombay	16,669	(a)74,863	89,262	1,278	1,100	74,767	(a)829,993	176,488	41	2,537
Total 1909-10 ..	729,893	3,603,674	2,760,872	13,374	21,702	148,827	1,807,268	576,177	59	3,518
" 1908-09 ..	860,729	4,547,306	3,342,919	15,381	24,895	162,773	1,891,704	575,115	50	5,965
" 1907-08 ..	692,263	3,955,142	3,247,292	20,928	33,266	225,677	1,687,295	590,358	191	5,652
" 1906-07 ..	790,146	4,261,849	3,034,793	13,915	21,157	223,617	1,560,713	710,338	300	9,929
" 1905-06 ..	731,377	4,064,332	3,010,997	10,421	22,091	660,991	1,555,800	608,116	256	8,996

(a) Includes buffaloes in the Southern Circle.

DIX X.

graphs 18 to 21.]

from Cattle.

GRAZED FREE, NUMBER OF ANIMALS.

BY RIGHT UNDER SETTLEMENT.					DURING PLEASURE OF GOVERNMENT OR OTHERWISE THAN UNDER SETTLEMENT.				
Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
30,866	82,734	21,000	..	..	110	322	130	..	3
20,268	127,064	45,083	..	987	3,291	20,940	832	..	78
130,344	650,264	954,566	307	180,565	92	1,037	106	7,341	36
51,515	221,075	..	..	3	1,249	..	2	43	1,192
..	60	..	..	..	67,761	397,507	81,690	..	573
..	350	..	..	..	1,454	149,018	839	..	77
..	210	..	..	..	..	..	..	..	..
370	740	..	..	..	1,402	7,098	..	..	15
..	..	..	..	..	..	1,443	..	..	..
..	1,573	29,883	1	858	..	..	..	..	..
125	2,104	4,363	..	..	6,187	55,505	184	..	..
2,519	9,775	91	2	364	80,710	344,522	575	497	3,291
245,007	1,095,949	1,054,986	310	182,777	162,256	977,392	84,358	7,881	5,265
257,681	1,236,268	791,327	401	16,985	128,149	806,629	77,254	4,701	5,282
244,966	1,135,089	800,972	285	15,222	280,770	1,467,382	132,781	5,243	5,812
256,502	1,141,481	793,228	285	15,355	125,550	726,647	76,996	3,120	6,214
247,628	1,080,742	745,249	285	13,846	149,062	839,288	78,966	5,550	6,859

APPENDIX XI.

[Vide paragraphs 22 to 25].

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

Province.					AREA IN ACRES AT CLOSE OF THE YEAR.			
					Regular plantations.	Taungya.	Total.	Cost of operations during the year.
1					2	3	4	5
Bengal	..	..	..	..	1,019	85	1,104	Rs. 1,352
United Provinces	..	..	..	..	6,001	..	6,001	4,399
Punjab	..	..	..	..	650	..	650	656
Burma	..	..	..	..	5,134	75,493	80,627	(a) 81,768
Eastern Bengal and Assam	..	..	..	..	3,906	7	3,913	5,441
Central Provinces	..	..	..	..	2,110	3,942	6,052	3,710
Coorg	..	..	..	..	2,062	1,533	3,595	3,849
North-West Frontier Province	..	..	..	..	..	..	..	..
Ajmer	..	..	..	..	64	..	64	815
Baluchistan	..	..	..	..	37	..	37	395
Andamans	..	..	..	..	770	1,253	2,023	4,359
Madras	..	..	..	..	27,400	2,408	29,808	1,50,185
Bombay	..	..	..	..	12,925	..	12,925	19,991
Total	1909-10	..	..	..	62,078	84,721	146,799	2,76,920
"	1908-09	..	..	..	58,780	84,123	142,903	2,35,803
"	1907-08	..	..	..	61,245	83,171	144,416	2,36,966
"	1906-07	..	..	..	57,710	77,075	134,785	2,31,036
"	1905-06	..	..	..	63,752	72,776	136,528	2,40,606

(a) Includes Rs. 43,742 on account of the Mergui Rubber Plantation.

APPEN

[Vide para.

Outturn of For.

Province.	RESERVED FORESTS.		PROTECTED FORESTS.		UNCLASSIFIED FORESTS.	
	Timber and fuel.	Minor produce.	Timber and fuel.	Minor produce.	Timber and fuel.	Minor produce.
1	2	3	4	5	6	7
	C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.
Bengal	18,297,203	1,98,131	16,663,910	1,68,899	1,135	39
United Provinces ..	16,008,085	6,58,890	370,284	3,728	19,276	3,106
Punjab ,	9,609,041	2,73,380	17,422, 807	3,37,214	889,582	44,140
Burma	12,830,152	3,30,940	..	..	35,925,756	4,50,925
Eastern Bengal and Assam.	6,733,719	2,04,092	..	..	11,924,161	6,71,907
Central Provinces ..	22,088,056	14,05,778	..	..	..	..
Coorg	181,828	22,448	235,810	275	..	..
North-West Frontier Province.	873,731	22,391	..	..	..	..
Ajmer	521,140	15,833	..	44	..	..
Baluchistan	34,429	29,975	..	..	277,921	52
Andamans	891,805	2,300 (a)	..	..	714,371	7,117
Madras	17,892,410	19,25,774	..	..	(b) 7,232,216	(b) 51,027
Bombay	42,622,948	14,83,013	871, 154	..	..	..
Total 1909-10 ..	148,584,547	65,72,945	35,563,965	5,10,160	56,984,418	12,28,313
" 1908-09 ..	Full details not available.					
" 1907-08 ..						
" 1906-07 ..						
" 1905-06 ..						
" 1904-05 ..						

(a) Includes cost of 81,140

(b) Outturn of reserved and

(c) The area of land from which

DIX XII

graph 30.]

est produce.

TOTAL		AVERAGE OUTTURN PER SQUARE MILE.							
		RESERVED FORESTS.		PROTECTED FORESTS.		UNCLASSIFIED FORESTS.		TOTAL	
Timber and fuel.	Minor produce.	Timber and fuel.	Minor produce.	Timber and fuel.	Minor produce.	Timber and fuel.	Minor produce.	Timber and fuel.	Minor produce.
8	9	10	11	12	13	14	15	16	17
C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.
34,962,248	3,67,069	4,321	47	6,014	61	..	..	4,991	52
16,397,645	6,65,724	3,902	161	12,343	124	459	74	3,928	159
27,921,430	6,54,734	4,346	124	3,345	65	668	33	3,190	75
48,755,908	7,81,865	499	13	..	..	318	4	352	6
18,657,880	8,75,999	1,040	32	..	..	524	30	638	30
22,088,056	14,05,778	1,030	66	..	..	..	..	1,030	66
417,638	22,723	350	43	..	..	..	..	803	44
873,731	22,391	3,702	95	..	..	..	..	3,702	95
621,140	15,877	3,670	111	..	..	..	..	3,670	111
312,350	30,027	119	104	..	..	560	1	398	38
1,606,176	9,417	5,539	14	..	..	399	4	823	5
25,124,626	19,76,801	953	103	..	..	(c)	(c)	(d)	(d)
43,494,102	14,83,013	3,493	122	1,089	..	..	..	3,345	114
241,132,930	83,11,418	1,540	68	4,035	58	406	9	982	34
232,035,865	79,00,028	Full details not available.						960	33
234,982,123	82,67,161							996	35
222,146,948	75,66,292							925	32
246,334,840	69,19,497							1,054	27

bamboos from reserved and unreserved lands in the Southern Circle,
unreserved lands.

revenue has been derived cannot be estimated.

152R&A

APPEN

[Vide para

FOREST PRODUCE REMOVED

Part I.—Tim

PROVINCE.	TIMBER.				
	By Government.	By purchasers.	By free grantees.	By right holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Bengal	32,199	4,526,776	15,075	199,115	4,773,165
United Provinces ..	77,902	4,522,034	47,022	288,935	4,935,893
Punjab	314,183	3,075,203	39,252	795,563	4,224,201
Burma	2,862,549	26,784,000	1,015,440	1,002,970	31,664,959
Eastern Bengal and Assam	488,984	5,212,068	572,017	400	6,273,469
Central Provinces ..	625,485	3,663,235	127,624	45,727	4,462,071
Coorg	126,434	210,954	..	..	337,388
North-West Frontier Province	11,628	552,406	10,695	11,666	586,395
Ajmer	..	580	..	3,185	3,765
Baluchistan	936	3,258	9,737	..	13,931
Andamans	374,378	47,514	33,720	47,607	503,219
Madras	917,164	(a) 2,486,273	149,969	93,422	(a) 3,646,828
Bombay	902,246	3,431,994	110,173	120,900	4,565,313
Total 1909-10 ..	6,734,088	54,516,295	2,130,724	2,609,490	63,990,597
„ 1908-09 ..	6,758,266	53,274,103	1,814,338	2,563,187	64,409,894
„ 1907-08 ..	7,823,674	52,965,071	2,112,544	2,464,266	65,365,555
„ 1906-07 ..	8,719,273	45,411,733	1,325,357	2,433,669	57,890,032
„ 1905-06 ..	10,296,310	50,836,317	1,758,952	4,783,137	67,674,716

(a) Exclusive of 12,800 cubic

(b) Exclusive of 17,692

DIX XIII.

graph 27.]

BY DIFFERENT AGENCIES.

ber and Fuel.

FUEL.				
By Govern- ment.	By purchasers.	By free grantees.	By right holders.	Total.
(7)	(8)	(9)	(10)	(11)
C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
23,106	16,164,585	14,238	13,987,154	30,189,083
566,678	7,816,769	136,930	2,941,375	11,461,752
801,612	3,373,771	123,645	19,393,201	23,697,229
811,186	15,469,901	76,369	733,493	17,090,949
16,480	6,305,548	4,465,298	1,597,085	12,384,411
1,019,586	14,318,561	757,509	1,530,329	17,625,985
11,150	69,100	..	..	80,250
57,606	179,881	15,069	34,980	287,336
211,733	298,712	6,930	..	517,375
28,431	269,988	..	..	298,419
675,980	33,600	269,760	123,617	1,102,957
13,953,682	(b) 7,365,192	4,312	154,612	(b) 21,477,798
4,236,481	19,086,358	36,169	15,569,781	38,928,789
22,413,511	90,751,966	5,911,229	56,065,627	175,142,333
20,104,263	94,238,730	6,157,792	47,125,156	167,625,971
21,546,742	92,015,666	7,653,314	48,400,846	169,616,568
20,725,926	92,222,166	5,991,867	45,316,957	164,256,916
20,195,946	88,007,123	6,453,358	56,928,362	171,484,788

feet obtained by confiscation.

cubic feet obtained by confiscation.

APPENDIX

[Vide paragraphs

FOREST PRODUCE REMOVED

Part II.—Value of

PROVINCE,		BAMBOOS.				Total.	GRA By Govern- ment.
		By Gov- ernment.	By pur- chasers.	By free grantees.	By right- holders.		
		(2)	(3)	(4)	(5)	(6)	(7)
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bengal		11,325	30,323	57	5,273	46,978	..
United Provinces		586	1,49,607	1	1,211	1,51,405	11
Punjab		1,457	5,389	..	58	6,904	37
Burma		338	2,17,767	13	41,632	2,59,750	..
Eastern Bengal and Assam		176	68,324	3,972	9,125	81,597	..
Central Provinces		5,944	1,81,453	3,091	9,615	2,00,103	5,330
Coorg		..	973	..	..	973	..
North-West Frontier Province		..	..	..	..	..	..
Ajmer		14	368	..	..	382	2,052
Baluchistan		..	..	..	..	..	..
Andamans		14	60	281	390	745	..
Madras		95,431	1,87,113	1,552	62	2,84,158	8,238
Bombay		542	85,250	327	35,693	1,21,812	..
Total	1909-10 ..	1,15,827	9,26,627	9,294	1,03,059	11,54,807	15,668
"	1908-09 ..	1,10,111	7,50,323	..	(a)1,00,851	9,61,285	
"	1907-08 ..	1,39,095	7,51,533	..	(a)2,37,292	11,27,920	Includ
"	1906-07 ..	1,20,174	6,93,669	..	(a)1,62,430	9,76,273	
"	1905-06 ..	65,573	7,67,157	..	(a) 79,895	9,12,625	

(a) Includes free grants.

XIII—contd.

28 and 29.]

BY DIFFERENT AGENCIES.

Minor Forest Produce.

KING AND FODDER GRASS.				OTHER MINOR PRODUCE.				
By purchasers.	By free grantees.	By right holders.	Total.	By Government.	By purchasers.	By free grantees.	By right holders.	Total.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
27,694	741	72,623	1,01,058	3,540	1,59,461	5,685	50,347	2,19,033
1,34,009	21,736	60,496	2,16,252	75,570	2,18,241	1,954	2,302	2,98,067
1,70,464	1,271	4,01,920	5,73,692	10,538	18,820	5	44,775	74,138
9,090	11,353	1,40,458	1,60,901	43,885	2,61,022	82	56,225	3,61,214
76,437	1,85,858	22,828	2,85,123	61,627	2,18,207	2,29,445	..	5,09,279
8,95,099	9,356	24,458	9,34,243	14,640	2,40,071	4,077	12,644	2,71,432
906	..	..	906	..	20,344	..	..	20,844
11,562	8,378	626	20,566	1,639	29	7	100	1,825
1,790	90	9,992	13,924	697	855	19	..	1,571
1,240	..	27,314	28,554	20	841	..	612	1,473
..	..	..	..	716	425	2,866	4,665	8,672
7,69,618	135	2,019	7,80,010	61,125	8,25,296	1,935	24,277	9,12,633
4,21,998	6,718	49,702	4,78,418	74,700	1,43,832	2,000	6,62,251	8,82,783
25,19,907	2,45,636	8,12,436	35,93,647	3,48,747	21,07,944	2,48,075	8,58,198	35,62,964
ded in columns 12-16				2,95,435	45,90,483	4,79,059	15,73,766	69,38,743
				3,32,571	46,53,786	7,68,135	13,84,749	71,39,241
				2,73,317	44,87,292	4,05,967	14,23,443	65,90,019
				4,85,101	41,74,894	4,37,067	9,09,810	60,06,872

APPENDIX XIV.

[Vide paragraph 31.]

Exports of Forest Produce.

Articles of Forest Produce.	QUANTITY IN TONS OF 20 CWT. IN THE CASE OF TEAK, CUBIC TONS.		VALUATION AT PORT OF SHIP- MENT IN 1909-10.	
	Average of 5 years 1904-05 to 1908-09.	In 1909-10.	Total.	Per ton.
(1)	(2)	(3)	(4)	(5)
			Rs.	Rs.
Caoutchouc	192	81	5,09,904	6,295
{ Button	1,842	2,473	25,40,259	1,027
Lac .. { Shell	12,177	23,053	2,46,42,640	1,069
{ Stick, seed and other kinds ..	1,256	2,214	5,33,819	241
Cutch and gambier .. .	3,696	2,040	6,76,706	332
Myrabolams	65,163	73,355	60,00,413	82
Cardamoms	103	181	4,57,547	2,528
Sandal, Ebony and other ornamental woods ..	(a)	(a)	8,46,805	..
Teak	42,127	35,628	54,24,433	152
Other timbers (excluding firewood) ..	4,585	5,202	4,64,191	89
	Total in 1909-10 ..		4,20,96,717	
	" 1908-09 ..		(b) 4,06,20,228	
	" 1907-08 ..		5,63,69,672	
	" 1906-07 ..		4,96,50,953	
	" 1905-06 ..		4,69,17,676	

(a) Quantity (whether by weight or measurement) not recorded.

(b) Corrected figure. Includes "other timbers" previously excluded.

APPENDIX XV.

[Vide paragraphs 32 to 38.]

Estimated value of Forest Produce given away free or at reduced rates.

Province.	Timber.	Fuel.	Bamboos.	Grass and grazing.	Other minor produce.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bengal	12,488	68,273	4,565	(a) 79,624	47,596	2,12,546
United Provinces	42,093	46,186	1,212	69,709	4,433	1,63,638
Punjab	57,024	2,14,914	..	4,06,862	44,838	7,23,638
Burma	2,28,602	13,251	41,977	1,51,110	52,211	4,87,851
Eastern Bengal and Assam ..	29,401	81,875	13,097	2,08,686	2,29,445	5,62,504
Central Provinces	14,159	57,268	13,617	98,765	15,265	1,99,074
Coorg	..	..	..	..	..	..
North-West Frontier Province ..	2,032	1,016	..	9,004	107	12,159
Ajmer	348	170	..	9,919	19	10,456
Baluchistan	(b) 893	..	..	27,314	612	28,819
Andamans	1,791	8,268	671	..	7,531	18,261
Madras	53,070	3,136	1,624	2,354	26,012	86,196
Bombay	1,49,803	7,79,269	36,020	9,22,033	2,79,025	21,66,150
Total 1909-10 ..	5,91,704	12,73,625	1,12,783	19,86,080	7,07,099	46,71,292
" 1908-09 ..	4,95,943	16,46,785	1,00,851	13,50,711	10,03,160	45,97,450
" 1907-08 ..	5,12,037	16,42,333	2,37,292	18,85,296	6,76,361	49,53,319
" 1906-07 ..	3,70,133	6,51,011	1,62,430	16,59,343	5,62,515	34,05,432
" 1905-06 ..	4,21,470	7,68,713	79,895	17,16,125	5,69,870	34,96,073

(a) Includes minor produce under free grants.

(b) Estimated figure.

APPENDIX XVI.

[Vide paragraphs 32 to 35.]

Details of Revenue and Expenditure for the Forest year.

		Rs.		
Gross Receipts	(a) Wood	1,97,76,654	..	
	(b) Minor forest produce	20,57,471	..	
	(c) Forest stamps and commutation fees for forest produce ..	1,42,485	..	
	(d) Grazing	25,51,191	..	
	(e) Revenue from forests not managed by Government ..	4,25,341	..	
	(f) Miscellaneous	10,72,652	..	
Total Revenue ..		2,60,25,794	..	
A. Recurring	(a) Administration.	(i) Superior Staff	29,36,884	..
		(ii) Subordinate Staff (including Rangers, Foresters and Guards).	25,77,994	..
		(iii) Office Establishments (including Contingencies).	15,33,621	..
	(b) Working.	(1) Extraction	34,78,423	..
		(2) Roads and Buildings ..	13,65,555	..
		(3) Fire-protection	6,60,534	..
		(4) Cultural operations ..	7,77,055	..
		(5) Live-stock, stores and plant..	4,33,544	..
		(6) Working-Plans	83,521	..
		(7) Rent for leased forests ..	2,63,405	..
		(8) Miscellaneous	1,79,404	..
	(c) Expenditure on realization of revenue from forests not managed by Government.		31,292	..
	(d) Forest Science and Education (including all "A" and "B" charges of Imperial Forest College and Research Institute.		1,96,174	..
	Total ..		1,45,17,406	..
B. Extraordinary	(e) Forest Settlement	1,81,427	..	
	(f) Forest Survey	85,104	..	
	(g) Forest Demarcation	1,36,717	..	
Total ..		4,03,248	..	
GRAND TOTAL EXPENDITURE		1,49,20,654	..	
Net Revenue ..		1,11,05,140	..	

Summary of Revenue and Expenditure of the

Budget Heads.	Imperial.	Bengal.	United Pro- vinces.	Punjab.	Burma.	Eastern Bengal and Assam.
1	2	3	4	5	6	7
REVENUE.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government agency.	5,184	28,370	1,83,457	2,15,754	26,43,361	4,32,644
II.—Timber and other produce removed from the forests by consumers or purchasers.	5,448	10,16,733	19,94,848	7,16,789	60,51,922	8,94,166
III.—Drift and waif wood and confiscated forest produce.	..	2,221	18,685	20,136	2,46,823	25,643
IV.—Revenue from forests not managed by Government.	..	..	16,441	1,889	2,78,966	1,07,526
V.—Miscellaneous ..	..	33,316	87,733	78,074	1,37,005	74,753
Total Revenue	(a) 10,632	10,80,640	23,01,164	10,32,633	93,58,077	15,34,732
EXPENDITURE						
A.—CONSERVANCY AND WORKS.						
I.—Timber and other produce removed from the forest by Government agency.	143	8,276	1,37,694	55,696	8,05,076	1,63,251
II.—Timber and other produce removed from the forests by consumers or purchasers.	..	1,70,101	45,247	5,854	1,11,580	16,825
III.—Drift and waif wood and confiscated forest produce.	..	639	4,143	9,268	1,19,416	1,647
IV.—Revenue from forests not managed by Government.	..	..	4,095	..	..	24,082
V.—Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	1,09,089	41,384	2,893	51,621
VI.—Live-stock, stores, tools and plant.	..	15,656	22,965	13,875	88,887	31,558
VII.—Communications and buildings.	..	69,330	1,77,223	86,285	2,59,561	1,46,510
VIII.—Demarcation improvement and extension of forests.	286	44,831	1,52,662	50,414	5,59,929	71,549
IX.—Miscellaneous ..	..	7,391	19,472	6,762	28,159	8,467
Total A.—Conservancy and Works.	(b) 429	2,53,224	6,72,590	2,69,538	19,75,495	5,15,510
B.—ESTABLISHMENTS.						
I.—Salaries ..	(d) 1,03,076	2,76,410	4,28,792	2,97,253	14,13,586	4,08,124
II.—Travelling Allowances ..	(c) 430	48,183	66,172	61,267	2,16,257	64,411
III.—Contingencies ..	(c) 397	13,282	41,754	39,694	78,280	24,496
Total B.—Establishments ..	1,03,903	3,37,875	5,36,718	3,98,214	17,08,123	4,97,031
GRAND TOTAL OF EXPENDITURE	1,04,332	5,91,099	12,09,308	6,67,752	36,83,618	10,12,541
SURPLUS ..	..	4,89,541	10,91,856	3,64,881	56,74,459	5,22,191
DEFICIT ..	93,700	..	..	..	..	..
Percentage of surplus to gross revenue.	..	45	47	35	61	34
Net revenue per square mile of forest area under control of Forest Department.	..	69	261	42	41	18

(a) Represents revenue derived from Indore and Bangalore.

(b) " expenditure on account of " " "

(c) " " " " " "

(d) Includes Rs. 1,976 " " " "

DIX XVII.

graphs 32 to 38].]

Forest Department in India for the financial year 19

Central Provinces.	Coorg.	North-West Frontier Province.	Ajmer.	Baluchistan.	Andaman	Imperial Forest College and Research Institute.	Forest Survey (Imperial).	Madras.	Bombay.	TOTAL.
8	9	10	11	12	13	14	15	16	17	18
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1,16,442	1,59,160	80,786	8,891	5,639	2,44,592	..	..	15,51,965	12,68,379	69,44,624
18,62,217	41,967	80,442	14,139	4,300	7,991	..	..	24,19,983	23,66,843	1,74,77,788
1,653	..	226	4	5	..	..	..	15,237	4,204	3,34,839
286	..	4,803	..	8,208	..	..	..	..	7,231	4,25,341
97,740	12,002	7,048	956	577	6,894	4,909	..	1,91,196	1,10,999	843,202
20,78,340	2,13,129	1,73,305	23,900	18,729	2,59,477	4,909	..	41,78,381	37,57,656	2,60,25,794
35,831	18,086	16,713	3,220	5,112	1,20,850	..	..	8,53,395	4,89,023	27,12,366
1,19,824	..	250	127	..	..	..	..	1,26,433	95,574	6,28,815
6	..	4	..	..	..	..	..	1,869	256	1,37,242
..	..	..	..	222	..	..	..	..	..	28,399
..	..	8,139	..	..	..	..	..	15,564	37,608	2,66,298
45,324	7,912	828	135	141	22,543	14,157	..	1,70,332	13,388	4,47,701
2,30,224	3,080	9,933	1,307	195	5,178	3,823	..	2,64,548	1,12,181	13,69,378
1,86,680	14,349	3,516	1,749	442	5,189	..	41,062	6,35,068	1,56,632	19,24,358
20,449	1,123	3,386	212	24	3,377	11,736	..	7,579	73,003	1,91,140
6,38,338	44,550	42,769	6,750	6,136	1,57,137	29,716	41,062	20,74,788	9,77,665	77,05,697
7,97,602	53,363	26,652	10,428	16,021	32,985	1,30,106	..	9,71,048	8,99,640	58,65,086
79,264	7,573	5,025	1,400	2,751	3,654	14,777	..	1,99,881	1,30,492	9,01,537
71,648	2,336	2,945	694	1,641	383	21,575	..	93,998	55,291	4,48,334
9,48,514	63,272	34,622	12,522	20,413	37,022	1,66,458	..	12,64,847	10,85,423	72,14,957
15,86,852	1,07,822	77,391	19,272	26,549	1,94,159	1,96,174	41,062	33,39,635	20,63,088	1,49,20,654
4,91,488	1,05,307	95,914	4,718	..	65,318	..	..	8,38,746	16,94,568	1,11,05,140
..	..	..	..	7,820	..	1,91,265	41,062	..	..	..
24	49	55	20	..	25	..	..	20	45	43
23	203	406	33	..	33	..	..	43	130	..

Revenue, Expenditure and Surplus of the Forest Department

(I) REVENUE

PROVINCE	1885-86	1886-87	1887-88	1888-89	1889-90	1890-91	1891-92	1892-93	1893-94	1894-95	1895-96	1896-97	1897-98
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Imperial*	14,708	4,186	4,847	4,017	4,759	6,370	6,688	5,240	2,680	4,980	2,600	4,192	12,130
Bengal	5,97,432	6,53,684	6,57,794	6,76,907	7,68,718	7,87,392	7,69,563	7,44,580	8,01,610	7,95,070	9,13,710	13,70,850	11,89,230
United Provinces	14,61,405	15,73,556	12,47,454	14,63,902	17,14,160	16,97,879	17,34,514	16,52,540	17,09,300	16,58,250	16,01,340	14,44,820	13,36,670
Punjab	8,50,419	11,27,277	7,86,838	10,45,768	9,21,713	8,34,370	10,20,074	8,12,830	9,13,300	10,32,430	10,14,500	11,07,720	10,66,470
Burma	20,23,359	21,06,741	25,15,773	41,89,233	49,40,786	43,21,968	41,85,414	56,00,000	57,85,100	54,36,780	56,95,330	63,78,950	72,15,260
Eastern Bengal and Assam	1,96,656	2,12,011	2,67,312	3,03,882	3,79,498	3,26,793	3,36,129	3,53,830	4,98,500	4,35,090	4,25,030	4,36,440	3,84,820
Central Provinces	13,57,376	12,54,322	15,00,412	15,86,983	15,96,722	17,00,570	18,71,085	16,61,870	16,17,280	14,32,030	14,91,280	12,91,140	11,80,400
Coorg	89,386	99,291	1,27,022	1,24,183	92,753	1,35,581	1,32,897	1,69,680	1,73,790	1,53,050	1,35,250	93,090	1,30,910
North-West Frontier Province													
Ajmer	9,697	11,274	14,233	13,574	11,592	15,266	19,798	14,890	14,820	12,840	15,640	12,370	15,540
Baluchistan	14,968	14,081	14,063	5,668	13,397	15,724	20,609	19,930	20,730	16,300	14,830	15,480	15,040
Andamans	23,944	21,870	1,04,052	1,06,075	1,62,196	1,58,326	2,72,353	3,69,490	4,41,790	1,14,580	1,32,120	3,62,370	4,39,710
Imperial Forest College and Research Institute, Forest Surveys (Imperial)	279	415	777	449	1,237	1,184	1,788	1,980	1,780	2,790	4,310	2,850	2,890
Total	66,40,409	71,18,899	75,40,781	95,53,235	1,06,08,249	96,98,507	1,04,38,145	1,14,97,580	1,19,71,400	1,14,44,320	1,14,32,140	1,26,20,470	1,30,42,340
Madras	11,38,650	13,46,911	13,74,980	15,15,006	15,57,627	17,95,408	16,94,216	15,77,210	19,47,180	18,94,030	21,10,570	23,03,330	21,38,400
Bombay	33,66,286	30,32,076	30,32,577	28,51,190	31,37,698	32,38,220	28,84,649	32,09,650	37,94,350	37,50,930	36,96,870	36,32,730	29,16,660
Grand total	1,12,96,345	1,18,96,186	1,16,43,238	1,38,98,451	1,53,03,572	1,49,67,126	1,54,17,010	1,63,44,340	1,77,13,020	1,67,88,880	1,70,99,880	1,78,36,510	1,77,96,490

(II) EXPENDITURE

PROVINCE	1885-86	1886-87	1887-88	1888-89	1889-90	1890-91	1891-92	1892-93	1893-94	1894-95	1895-96	1896-97	1897-98
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Imperial*	88,246	86,299	78,628	86,180	81,311	85,414	65,788	1,37,279	80,540	94,350	89,410	78,202	84,300
Bengal	3,70,890	4,32,781	3,90,368	3,76,270	3,98,150	4,14,004	4,22,930	3,81,610	4,04,040	3,97,380	4,66,070	6,09,040	6,53,440
United Provinces	9,74,519	9,19,580	8,90,748	8,44,544	8,63,151	9,19,195	9,58,211	9,28,640	9,69,020	9,36,310	9,42,860	9,06,340	9,17,950
Punjab	6,75,483	7,18,510	6,77,912	5,93,885	6,45,855	6,58,641	6,40,275	6,56,270	6,36,430	7,22,120	4,78,420	7,23,800	7,71,240
Burma	11,50,962	10,79,018	11,53,846	20,17,073	10,06,644	13,48,789	16,98,980	18,65,009	18,63,500	19,17,990	19,38,000	21,28,320	21,94,910
Eastern Bengal and Assam	2,11,404	2,12,287	2,26,892	2,09,905	2,57,129	2,83,852	2,67,525	2,64,070	2,69,220	2,72,010	2,86,140	2,89,010	2,83,830
Central Provinces	6,47,614	7,16,469	7,78,892	8,62,964	8,79,438	9,04,475	10,02,281	10,80,630	11,84,440	12,97,700	11,97,850	11,98,360	11,64,490
Coorg	66,990	74,083	72,629	80,175	72,420	65,818	86,560	73,090	86,980	86,140	85,840	71,630	87,920
North-West Frontier Province													
Ajmer	16,469	30,744	18,897	15,676	12,701	12,720	13,966	15,000	15,990	14,900	15,730	22,010	14,670
Baluchistan	15,793	17,836	17,753	15,994	17,962	29,450	30,497	55,620	63,790	40,910	21,770	29,770	27,330
Andamans	37,035	25,789	62,679	57,295	94,975	1,30,052	1,79,909	2,31,210	2,43,550	1,83,780	1,02,020	3,19,800	2,47,340
Imperial Forest College and Research Institute, Forest Surveys (Imperial)	24,239	30,331	33,120	22,961	29,846	35,191	2,31,210	44,547	66,400	66,538	67,950	67,880	60,920
Total	43,97,118	43,49,580	43,75,149	62,15,095	50,86,590	49,46,325	54,38,471	56,70,870	59,05,280	50,10,020	59,23,610	65,41,690	65,49,980
Madras	9,97,978	11,53,132	11,29,312	12,20,794	11,61,337	12,46,913	13,24,234	13,30,390	13,62,770	13,86,360	14,46,610	15,34,800	15,72,240
Bombay	16,39,461	19,52,916	19,44,986	16,93,962	17,70,691	18,09,837	19,81,487	19,04,970	20,71,940	20,87,920	19,56,380	19,69,160	20,73,180
Grand total	70,34,551	74,55,592	74,49,223	81,29,781	80,12,518	80,63,125	86,94,192	89,06,230	93,46,709	93,73,290	93,32,610	1,00,46,150	1,01,96,730

(III)

PROVINCE	1885-86	1886-87	1887-88	1888-89	1889-90	1890-91	1891-92	1892-93	1893-94	1894-95	1895-96	1896-97	1897-98
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Imperial*	73,537	82,113	73,779	83,182	76,552	79,944	59,100	1,02,030	78,100	79,370	77,720	74,860	83,170
Bengal	2,27,033	2,30,853	2,07,426	3,00,637	3,70,568	3,13,388	3,66,623	3,65,270	3,92,570	3,98,289	4,52,040	3,98,910	3,98,910
United Provinces	4,86,976	5,53,976	4,16,706	6,18,253	7,51,086	7,18,634	7,73,303	7,34,000	7,46,340	7,21,840	6,58,680	5,35,490	4,86,230
Punjab	1,74,936	4,10,787	1,69,984	4,51,888	2,75,858	1,81,329	3,78,739	1,56,360	2,78,270	3,10,310	4,36,980	3,84,430	2,96,130
Burma	8,72,907	10,88,723	18,61,927	21,72,169	33,34,142	29,33,170	24,86,454	38,55,000	39,22,600	35,18,790	27,82,230	42,88,890	54,18,890
Eastern Bengal and Assam	14,838	—	40,490	98,977	1,22,969	42,941	65,904	1,73,760	2,29,230	1,68,030	1,38,890	1,64,690	96,990
Central Provinces	7,09,762	5,67,853	7,21,610	7,35,519	7,17,364	7,96,095	8,69,480	5,51,840	4,30,340	2,44,280	2,89,430	98,320	11,230
Coorg	23,626	25,293	54,999	89,690	20,333	99,743	65,037	1,07,590	86,000	66,910	49,410	21,370	41,865
North-West Frontier Province													
Ajmer	—	—	—	—	—	—	—	—	—	—	—	—	—
Baluchistan	—	—	—	—	—	—	—	—	—	—	—	—	—
Andamans	—	—	—	—	—	—	—	—	—	—	—	—	—
Imperial Forest College and Research Institute, Forest Surveys (Imperial)	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	29,48,391	27,89,230	28,65,642	43,18,230	55,27,659	49,37,182	49,99,974	58,26,710	60,65,500	52,25,800	55,23,630	59,76,360	64,32,630
Madras	2,60,878	33,789	3,45,708	3,94,812	3,90,390	5,48,485	8,09,962	2,46,820	5,84,410	5,07,680	6,64,980	7,89,880	5,86,680
Bombay	15,26,825	19,79,789	19,83,572	11,56,228	13,67,003	14,18,333	13,53,198	13,64,580	17,22,410	16,82,110	15,78,280	16,82,280	6,82,420
Grand total	47,36,094	48,02,808	48,94,922	58,65,270	72,85,052	67,13,515	72,62,164	74,52,110	83,72,290	74,15,590	77,66,770	78,11,220	73,98,530

ment throughout India during the 25 financial years from 1885-86 to 1909-10.

ENUE.

1888-89.	1889-90.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	PROVINCE.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
17,540	6,090	2,463	2,484	3,659	7,455	3,708	7,255	..	7,666	8,189	10,632	Imperial*.
9,72,310	11,38,910	12,33,339	12,92,237	12,56,247	10,65,523	11,67,472	11,18,542	10,65,859	11,97,650	11,84,845	10,80,640	Bengal.
15,63,040	16,14,740	15,65,463	17,15,508	20,25,824	22,80,446	23,97,318	24,33,428	25,02,664	24,09,745	21,75,406	23,01,164	United Provinces.
14,74,480	14,00,770	13,50,842	14,47,558	15,86,408	17,17,797	18,74,443	17,81,653	16,05,284	14,57,449	13,88,792	10,32,633	Punjab.
33,50,800	73,12,050	80,64,444	58,73,938	67,39,053	82,68,535	89,59,766	1,03,29,869	98,12,519	86,63,989	91,92,032	93,58,077	Burma.
3,98,180	5,08,100	5,49,521	5,12,963	5,80,200	6,75,732	8,15,677	11,06,096	13,20,592	14,30,447	14,46,368	15,34,732	Eastern Bengal and Assam.
14,34,940	12,97,490	12,65,614	15,79,116	16,84,428	19,08,032	20,13,459	24,49,131	24,01,159	22,90,128	20,78,162	20,78,340	Central Provinces and Berar.
1,55,027	1,62,419	1,37,586	1,70,242	1,90,730	2,24,031	1,93,087	2,45,419	2,35,909	2,74,756	2,24,330	2,13,129	Coorg.
..	..	..	13,012	1,01,123	1,01,833	90,991	1,28,529	1,83,214	2,38,490	1,22,782	1,73,305	N.W. Frontier Province.
14,420	10,270	10,846	6,865	9,736	13,884	17,297	15,002	13,335	29,864	27,615	23,990	Ajmer.
14,020	17,060	16,956	14,712	19,336	18,368	22,555	21,481	21,195	24,820	23,305	18,729	Baluchistan.
2,29,460	2,09,600	2,77,884	2,66,903	3,26,035	4,32,381	6,20,786	5,82,511	6,07,027	2,91,822	2,02,018	2,59,477	Andamans.
2,360	3,210	3,697	3,545	3,252	3,088	3,557	3,080	4,579	6,137	4,680	4,909	Imperial Forest College.
290	420	327	473	3,934	431	..	..	..	..	..	..	Forest Surveys (Imperial).
1,42,32,850	1,42,92,120	1,41,68,794	1,29,00,556	1,45,23,561	1,68,07,481	1,81,80,176	2,02,21,996	1,97,78,836	1,88,22,972	1,79,78,524	1,80,89,757	Total.
21,10,520	23,02,290	23,40,170	25,43,430	26,13,819	26,57,727	28,23,216	29,07,604	32,90,669	33,93,830	38,90,919	41,78,381	Madras.
22,95,150	24,15,260	29,61,529	23,79,729	23,29,156	27,51,539	30,20,558	34,84,993	34,22,481	36,46,177	36,87,356	37,57,656	Bombay.
1,00,33,320	1,00,09,610	1,07,70,493	1,78,23,715	1,94,71,540	2,22,16,747	2,40,29,950	2,66,74,593	2,64,91,486	2,58,62,979	2,56,799	2,60,25,794	Grand Total.

EXPENDITURE.

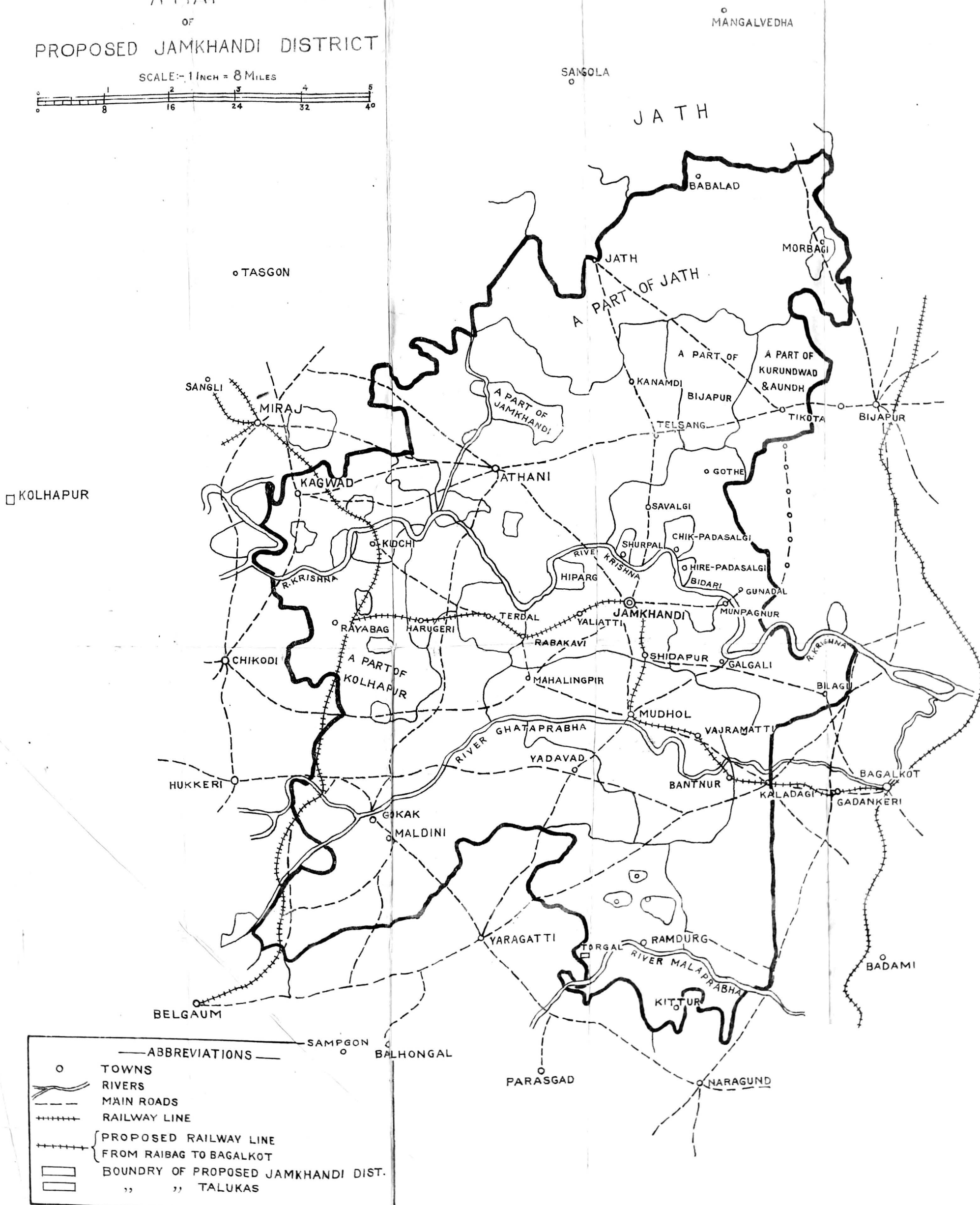
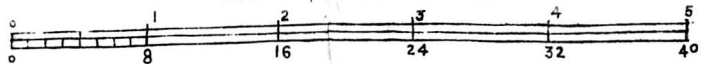
83,460	90,550	68,578	79,589	85,017	89,345	83,058	83,767	95,472	1,00,204	1,04,183	1,04,332	Imperial*.
4,88,320	5,45,210	5,70,806	6,57,131	6,38,014	7,03,508	6,88,589	5,93,509	6,33,386	7,13,394	5,83,981	5,91,099	Bengal.
9,72,030	9,42,380	9,63,439	10,03,739	10,13,998	10,81,438	13,91,583	14,05,182	13,06,851	11,94,013	12,22,436	12,09,308	United Provinces.
8,55,340	12,11,460	8,37,343	9,38,335	9,00,095	11,56,415	10,12,354	12,68,664	11,44,403	11,76,696	8,51,627	6,67,752	Punjab.
24,28,190	24,47,440	26,54,717	26,46,457	28,90,263	33,52,404	34,46,924	39,38,063	36,59,753	35,51,532	37,17,247	36,83,618	Burma.
3,03,360	3,57,140	3,47,972	3,20,112	3,27,498	4,25,484	5,03,856	5,93,910	7,07,860	8,00,373	8,91,349	10,12,541	Eastern Bengal and Assam.
11,09,400	12,75,820	11,65,866	12,00,904	12,57,238	12,80,966	13,20,615	13,07,153	13,42,878	15,83,407	17,53,307	15,86,852	Central Provinces and Berar.
80,100	74,220	70,905	82,333	89,437	92,191	83,820	95,748	1,02,855	1,04,819	99,595	1,07,822	Coorg.
..	..	..	19,510	54,086	60,603	74,958	95,258	93,650	88,400	81,413	77,391	N.W. Frontier Province.
16,300	15,350	16,782	15,927	16,377	16,630	15,641	17,131	16,715	18,186	19,916	19,272	Ajmer.
27,760	28,680	29,254	24,480	23,240	21,697	24,672	25,743	26,322	31,258	36,586	26,549	Baluchistan.
1,38,400	1,40,940	1,40,137	2,04,667	2,81,702	2,66,121	3,42,431	3,35,985	2,95,136	2,29,267	1,80,941	1,94,159	Andamans.
63,370	73,550	71,238	76,290	66,338	59,339	61,424	80,669	1,37,486	1,58,038	1,83,191	1,96,174	Imperial Forest College.
53,970	33,980	32,991	33,730	38,985	33,935	28,229	30,044	30,389	27,060	39,128	41,062	Forest Surveys (Imperial).
99,00,000	72,42,720	70,36,028	73,17,154	77,87,338	86,40,126	90,77,954	98,65,826	95,92,956	97,76,649	97,64,900	95,17,931	Total.
5,94,670	16,63,430	17,15,431	17,09,554	18,35,552	17,50,980	19,86,098	22,66,602	24,80,660	27,80,857	29,17,261	33,39,635	Madras.
46,39,250	21,28,430	24,08,531	17,19,690	16,76,441	17,75,937	19,03,804	21,26,093	19,90,183	19,55,427	20,43,873	20,63,088	Bombay.
1,00,33,320	1,10,24,630	1,11,60,040	1,07,46,388	1,12,49,331	1,21,66,993	1,29,67,856	1,42,58,521	1,40,63,799	1,45,12,923	1,47,26,034	1,49,20,654	Grand Total.

SURPLUS.

-47,920	-90,480	-61,115	-76,055	-81,358	-81,890	-79,290	-76,512	-95,472	-92,538	-95,904	-93,700	Imperial*.
4,85,090	5,93,700	6,62,533	6,35,106	6,18,233	3,62,015	4,78,883	5,25,033	4,32,473	4,84,266	6,00,864	4,89,541	Bengal.
5,06,090	6,72,360	6,02,024	7,06,769	10,11,326	11,99,008	10,05,735	10,28,246	11,96,013	12,15,732	9,52,070	10,91,856	United Provinces.
6,19,010	1,89,310	4,63,499	5,09,223	6,26,313	5,61,382	8,62,089	5,17,969	4,60,881	2,80,763	4,37,165	3,64,881	Punjab.
59,24,700	58,64,610	53,99,727	32,27,481	38,48,790	49,16,131	55,12,832	63,91,806	61,52,766	51,12,457	54,74,785	56,74,459	Burma.
62,820	2,10,980	2,01,549	1,83,851	2,52,701	2,50,248	3,12,021	5,12,186	6,12,732	6,30,074	5,55,019	5,22,191	Eastern Bengal and Assam.
3,25,540	21,070	99,748	3,78,212	4,27,140	7,17,086	6,92,844	11,41,978	10,58,281	7,06,721	3,24,855	4,91,488	Central Provinces and Berar.
74,970	88,190	66,691	87,909	1,01,293	1,31,840	1,09,267	1,49,671	1,38,054	1,69,937	1,24,735	1,05,307	Coorg.
..	..	..	-6,498	47,038	41,230	16,033	33,271	89,564	1,50,090	41,369	95,914	N.W. Frontier Province.
-1,880	-5,080	-6,136	-9,062	-6,641	-2,796	1,656	-2,129	1,620	11,676	7,699	4,718	Ajmer.
-12,840	-11,610	-12,298	-9,768	-3,904	-3,331	-2,117	-4,262	-5,127	-6,429	-13,281	-7,820	Baluchistan.
91,060	1,19,660	1,87,749	62,236	44,333	1,66,260	2,78,395	2,46,526	3,11,891	62,555	21,077	65,318	Andamans.
-61,810	-70,340	-67,541	-72,745	-63,086	-56,301	-57,867	-77,589	-1,32,907	-1,51,801	-1,78,511	-1,91,265	Imperial Forest College.
-38,880	-33,580	-33,964	-33,257	-30,951	-33,504	-28,229	-30,044	-30,389	-27,060	-39,128	-41,062	Forest Surveys (Imperial).
80,32,850	79,49,400	74,32,766	55,83,402	67,91,227	81,67,355	91,02,222	1,02,56,170	1,01,85,380	85,46,323	82,13,624	85,71,826	Total.
5,15,650	6,45,760	6,24,739	8,33,876	7,78,267	9,06,797	8,49,118	7,01,002	8,10,009	11,12,973	9,73,658	8,38,746	Madras.
4,55,900	2,36,770	5,52,948	6,60,049	6,52,715	9,75,002	11,15,754	13,58,900	14,32,298	16,90,750	15,48,483	16,94,568	Bombay.

A MAP OF PROPOSED JAMKHANDI DISTRICT

SCALE: 1 INCH = 8 MILES



M.K. AGNIHOTRI, D.T.C.
P.B. HIGH SCHOOL
JAMKHANDI