

1-
ANNUAL ADMINISTRATION REPORT

OF THE

FOREST DEPARTMENT

OF THE

MADRAS PRESIDENCY,

FOR THE

TWELVE MONTHS ENDING 30TH JUNE 1899.

(1898-99.)

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

1900.

SECRETARIAT LIBRARY	
MADRAS	
Class.....	No.....
Book-case.....	
9-6-10	

TABLE OF CONTENTS.

CHAPTER I.—EXTENSION AND CONSTITUTION OF STATE FORESTS.

	PARA.	PAGE		PARA.	PAGE
i. Alteration of Area—					
Areas—			Reserved Lands not brought under Settlement ..	11	10
Changes during the 12 months. District Areas and Forest Reserves ..	1	1 & 2	Survey of proposed Reserves, and Employment of Draughtsmen ..	12	10 & 11
Reserved Forests—	2	2 & 3	Demarcation of proposed Reserves ..	13	11 & 12
Area constituted during the 12 months ..	3	4			
ii. Forest Settlements—			iii. Demarcation—		
Progress in Settlement ..	4-7	5-7	Lengths demarcated and cost of permanent demarcation ..	14	12-15
Outturn of Work by Special Forest Settlement-officers ..	8	7-9			
Outturn of other Settlement-officers (Divisional-officers) ..	9	9	iv. Surveys—		
Selections for further Reservation and Estimate of Area to be eventually declared Reserved Forests ..	10	9 & 10	Operations of the Survey of India Party ..	15	15 & 16
			Departmental Surveys and the mapping of Reserved Forests.	16	16

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

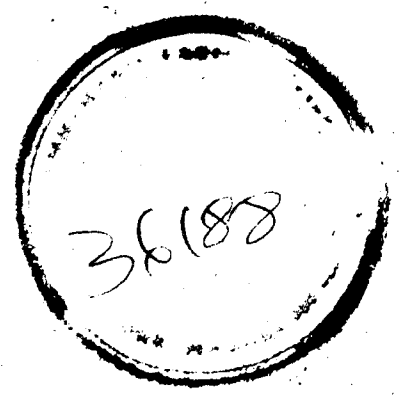
1. Regulation of Management—			Artificial Reproduction, Plantations and Cultural Operations ..	29	32 & 33
Working Plans and their control. Annual Plans of Operations ..	17	16-18	Early Thinnings, other Operations for the improvement of the Growing Stock ..	30	33 & 34
2. Working of the year—	18	18	Experiments ..	31	34 & 35
(a) Communications and Buildings—			(d) Exploitation of Major Forest Produce—		
General ..			Clear or Regeneration		
Expenditure on Roads ..	19	18 & 19	Fellings ..	32	35
Do. on Buildings ..	20	19 & 20	Selection Fellings	33	35 & 36
Tranways ..			Improvement, Coppice, &c., Fellings	34	36 & 37
(b) Protection of Forests from Injury—			Unregulated Fellings ..	35	37
General Protection and Breaches of Forest Law and rewards to informers and subordinates of the Forest and Abkari Departments ..	21-23	20-27	(e) Extraction and Transport of Major Forest Produce ..	36	37
Protection from Fire ..	24-26	28 & 29	(f) Exploitation of Minor Forest Produce—		
Regulation of Grazing and Protection from Cattle ..	27	29-31	Extraction of Fodder ..	37	37
(c) Improvement of Forest growth—			Grazing ..	38	37 & 38
Natural Reproduction ..	28	31 & 32	Miscellaneous Produce ..	39	38 & 39

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

Yield—			Comparative Cost of Departmental and Private Working ..	43	44
General ..	40	39	Confiscated Produce ..	44	44 & 45
Departmental Operations ..	41	40-42	Free grants of Forest Produce ..	45	45
Removals by purchasers ..	42	42-44			

CHAPTER IV.—FINANCIAL RESULTS.

Revenue and Expenditure ..	46	45-47
----------------------------	----	-------



R
J. R. 2112 1498
1100

CHAPTER V.—FOREST ADMINISTRATION.

	PARA.	PAGE		PARA.	PAGE
Important Administrative Changes—			Inspection of Range offices by		
Realization of Revenue from the			District Forest-officers ..	56	
Usufruct of Toddy-yielding Trees			Audit of the Accounts of the		
in the Reserved Forests and			District Forest offices ..	57	49
Government Waste and Poram-			Forest School ..	58	
boke Lands ..	47	47	Conference of District Forest and		
Measures adopted to encourage			Divisional officers during jama-		
the growth of manure leaf yield-			bandi ..	59	49 & 50
ing trees and shrubs ..	48	47	Conduct and Work of the Estab-		
Working of the Department—			lishment ..	60	
Improvement of Forest growth			Health of the Establishment ..	61	50
and wants of the people ..	49	48	Service Books ..	62	
Rules under the Forest Act ..	50	48	Inventory of Valuable Stock ..	63	
Working of the Rules under			Elephants ..	64	
Section 26 of the Forest Act ..	51	48	Rain-gauges ..	65	51
Coffee Cultivation in Reserved			The Iron Industry in the Salem		
Forests ..	52	48 & 49	District ..	66	
Tours of Forest Member ..	53		Mica ..	67	
Conservators' Inspections ..	54	49	Work done by Superior officers ..	68	51 & 52
Touring of District Forest officers.	55				

APPENDICES.

	PAGE
Area of Reserved Forests and Reserved Lands (No. 44) ..	i-xii
Progress made in, and expenditure incurred on, Forest Settlements (No. 45) ..	xiii-xxix
Appendix A—Forest Settlement ..	xxx-xxxii
Do. B—Causes of delay in the submission of final Notifications of Forest	
Reserves ..	xxxiii
Do. C—Reserved Lands not under Settlement in square miles ..	xxxiv
Do. Demarcation and maintenance of boundaries (No. 46) ..	xxxv
Forest Areas Surveyed and under Survey (No. 47) ..	xxxvi & xxxvii
Appendix D—Abstract of District Reports in regard to the maintenance of Maps ..	xxxviii & xxxix
Do. E—Statement showing the area of Forest Reserves for which final Maps	
have been prepared ..	xxxix
Progress made in Working Plans (No. 48) ..	xl
Communication and Buildings (No. 49) ..	xli-xlii
Statement showing the results of Transport of Wood by Tramways compared with	
the Transport by Carts (No. 65) ..	l-lij
Register of Breaches of Forest Rules (No. 50) ..	lii-lvii
Area of Forest Tracts protected from Fire (No. 51) ..	lviii-lxxi
Areas open and closed to grazing (No. 52) ..	lxxii
Statement of grazing in Reserved Forest and Reserved lands (No. 53) ..	lxxiii-lxxvii
Area of plantations cultural operations and Topes (No. 54) ..	lxxviii & lxxix
Statement showing the Outturn of Timber and Firewood and Agency of Exploitation	
(No. 55) ..	lxxx
Outturn of Minor Forest Produce (No. 56) ..	lxxxi
Account of Timber, &c., in Depots and sold locally (No. 57) ..	lxxxii & lxxxiii
Timber and other Produce cut and collected and removed by Consumers (No. 72 A,	
Old Code) ..	lxxxiv
Timber and other Produce confiscated and sold (No. 72 B, Old Code) ..	lxxxv
Abstract showing the value of Timber and other Produce at Depots (No. 58) ..	lxxxvi-lxxxviii
Summary of Revenue and Expenditure (No. 59) ..	lxxxix-xciii
Abstract of the above prepared in the Board's office ..	xciv & xcv
Outstandings and Liabilities on account of Contractors and Disbursers (No. 60) ..	x cvi
Do. on account of Revenue (No. 61) ..	xcvii
Statement of Financial results (No. 62) ..	xcviii
Abstract showing the value of Live-stock, Stores, Tools and Plant (No. 64) ..	xcix & c
Return of Elephants (No. 63) ..	ci & cii

MADRAS PRESIDENCY

SHOWING THE DISTRIBUTION
OF
RESERVED FORESTS & RESERVED LANDS
UP TO
1898-99

Scale 1 Inch = 32 Miles, or 1:2,027,520.

AREA STATEMENT IN SQUARE MILES OF FORESTS
ON 30th JUNE, 1899.

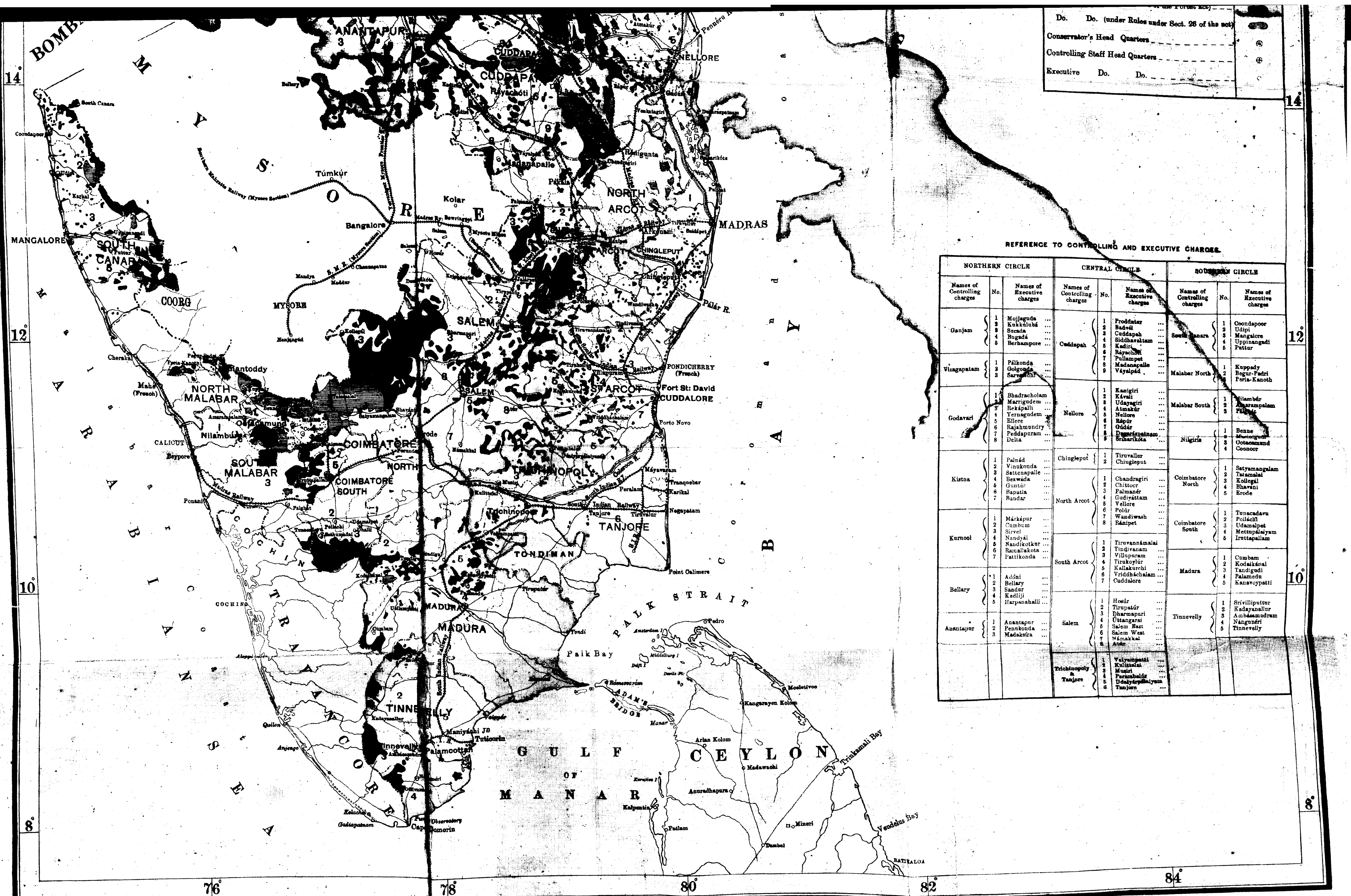
Circle	Division	Area	
		Reserved forests	Reserved lands
NORTHERN	Ganjam	415	124
	Vizagapatam	142	211
	Godavari	866	90
	Kistna	747	396
	Kurnool	2004	895
	Bellary	475	134
	Anantapur	500	7
Total		5149	1857
CENTRAL	Cuddapah	1855	598
	Nellore	652	56
	Chingleput	210	5
	North Arcot	1160	67
	South Arcot	685	24
	Salem	1237	186
	Trichinopoly	216	107
	Tanjore	18	...
Total		6042	1043
SOUTHERN	South Canara	287	952
	Malabar North	159	113
	Malabar South	190	138
	Nilgiris	359	135
	Coimbatore North	1061	558
	Coimbatore South	654	3
	Madura	577	36
	Tinnevely	416	16
Total		3703	1951

BOMBAY PRESIDENCY

Hyderabad

REFERENCE

Limit of Conservator's charge	Northern Circle	
	Central Circle	
	Southern Circle	
Boundaries of Conservator's Charge		
Do. Executive Charge		
Reference No. to Do.		6
Forest Surveyed on 4 Inch scale		
Reserved Forests not yet Surveyed		
Do. Lands (under Sect. 4 of the Forest act)		
Do. Do. (under Rules under Sect. 26 of the act)		
Conservator's Head Quarters		
Controlling Staff Head Quarters		
Executive Do. Do.		



Do.	Do.	(under Rules under Sect. 26 of the act)
Conservator's Head Quarters		
Controlling Staff Head Quarters		
Executive	Do.	Do.

REFERENCE TO CONTROLLING AND EXECUTIVE CHARGES.

NORTHERN CIRCLE			CENTRAL CIRCLE			SOUTHERN CIRCLE		
Names of Controlling charges	No.	Names of Executive charges	Names of Controlling charges	No.	Names of Executive charges	Names of Controlling charges	No.	Names of Executive charges
Ganjam	1 2 3 4 5	Mojaguda Kalkilub Sunda Bugad Berhampore	Cuddapah	1 2 3 4 5 6 7 8 9	Proddatur Badvel Cuddapah Siddavallam Kadiri Rayachoti Pallampet Madanapalle Vijayapad	South Kanara	1 2 3 4 5	Coondapoor Udipi Mangalore Uppinangadi Pattur
Vizagapatam	1 2 3	Pilkonda Golconda Sarasvathi				Malabar North	1 2 3	Kuppady Bagur-Pedri Poria-Kanoth
Godavari	1 2 3 4 5 6 7 8	Bhadrachalam Marigudem Retkappali Yernagudem Ellore Rajahmundry Peddapuram Debia	Nellore	1 2 3 4 5 6 7 8	Kanigiri Kavali Udayagiri Atmakur Nellore Rajpur Odrar Durgam-Chennam Gharikota	Malabar South	1 2 3	Nilambur Anarampalam Pillai
Kistna	1 2 3 4 5 6 7	Palnad Vinkonda Sattenapalle Sewada Guntur Bapatla Raudar	Chingleput	1 2	Tiruvallur Chingleput			
Kurnool	1 2 3 4 5 6 7	Makipur Cumbham Sirvel Nandyal Nandikotkur Ranachakota Pattikonda	North Arcot	1 2 3 4 5 6 7 8	Chandragiri Chittoor Palmaner Gudiattam Vellore Folur Wandiwash Raniwet	Coimbatore North	1 2 3 4 5	Satyamangalam Tatamalai Kollegal Bharani Erode
Bellary	1 2 3 4 5	Addi Bellary Saddur Kodliji Harpanahalli	South Arcot	1 2 3 4 5 6 7	Tiruvannamalai Tindivanam Vilupuram Tirukoyilur Kallakurichi Vridhichalam Cuddalore	Coimbatore South	1 2 3 4 5 6	Tunacadvu Polkodi Udamalpet Mettupalaiyam Irttapallam
Anantapur	1 2 3	Anantapur Penconda Madakstra	Salem	1 2 3 4 5 6 7 8	Hoedr Tirupadur Dharmapuri Uttangarai Salem East Salem West Nimakkal Arani	Madura	1 2 3 4 5	Cumbam Kodakinal Tandigudi Palamedu Kansavoyatti
			Tinnevely	1 2 3 4 5 6	Vakrampatti Kullisalai Mudiri Paranahalli Udayarpalayam Tanjore			
			Trichinopoly & Tanjore	1 2 3 4 5 6				
						Tinnevely	1 2 3 4 5	Srivilliputtur Kadayanallur Ambasamudram Nanguneri Tinnevely

PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE MADRAS PRESIDENCY

FOR THE TWELVE MONTHS ENDING WITH 30TH JUNE 1899.

CHAPTER I.—EXTENSION AND CONSTITUTION OF STATE FORESTS.

(i) *Alteration of Area.*

The changes that have taken place during the year in the area of the state forests in the three circles and in the Presidency as a whole are presented in the following abstract. Details of alterations in each district are shown in Form No. 44.

ABSTRACT A.—Classes and areas of forests.

	Area on 1st July 1898.	* Added during the year.	Excluded during the year.	Net increase or decrease.	Area on 30th June 1899.
<i>Northern Circle.</i>					
Reserved forests	SQ. MLS. 4,802 {	SQ. MLS. (a) 14 (b) 348	SQ. MLS. (c) 13 (d) 39	+ 349	SQ. MLS. 5,151
Do. lands	2,108 {	(a) 24 (b) 269	(c) 98 (d) 52 (f) 348	- 244	1,859
Total ..	6,905	+ 655	550	+ 105	7,010
<i>Central Circle.</i>					
Reserved forests	5,555 {	(a) 190 (b) 379	(c) 92 (d) 2	+ 477	6,042
Do. lands	1,262 {	(a) 8 (b) 186	(c) 22 (d) 10 (f) 379	- 219	1,043
Total ..	6,817	+ 765	505	+ 258	7,085
<i>Southern Circle.</i>					
Reserved forests	3,408 {	(a) 288 (b) 288	(c) 1 (d) 27	+ 287	3,694
Do. lands	2,113 {	(a) 17 (b) 17	(c) 9 (d) 288	- 309	1,804
Total ..	5,521	+ 305	297	+ 2	5,828
<i>Total.</i>					
Reserved forests	13,775 {	(a) 704 (b) 1,015	(c) 105 (d) 1	+ 1,113	14,888
Do. lands	4,478 {	(a) 32 (b) 472	(c) 43 (d) 147 (f) 1,016	- 772	4,706
Grand Total ..	18,253	+ 1,323	1,392	+ 341	19,594

(a) Rectification of area. (b) Transferred from reserved lands. (c) Disafforested or unreserved.
(d) Newly constituted reserved lands. (e) Excluded at settlement. (f) Transferred to reserved forests.

2. The following statement shows the forest area of each district and the percentage which it bears to the district area and to unoccupied lands. For the Presidency the percentage of the area reserved has risen slightly from 37.21 to 37.87 and is commensurate with the increase to the forest area, no changes having been recorded during the year in the district areas for want of information.

District	Total district area excluding feudatory and tributary states.	Area excluding zemindari and whole man villages.	Occupied area.	Particulars of remaining area (column 3—column 4).				Reserved forests and reserved lands.			Percentage of column 10 to column 3.	Percentage of column 10 to column 7.
				Unoccupied, culturable, unencumberable and forest areas.	Area for which returns are not available.	Total of columns 5 and 6.	Reserved forests under Act V of 1882.	Reserved lands.	Total of reserves, columns 8 and 9.			
	2	3	4	5	6	7	8	9	10	11	12	
Northern Circle.												
Ganjam	8,369	4,437	606	1,147	2,384	3,531	415	123	538	12.12	14.04	
Vingapur	17,242	1,378	365	572	641	1,213	142	213	354	25.68	31.80	
Godavari	7,857	3,976	1,562	2,424	572	2,434	866	96	956	24.04	39.43	
Krishna	8,498	6,615	3,192	2,318	1,115	2,433	743	396	1,144	20.37	47.21	
Karnool	7,614	6,799	2,041	4,758	..	4,758	2,094	896	2,900	42.65	60.95	
Bellary	5,713	4,686	2,032	1,944	..	1,944	475	135	611	13.17	31.43	
Aquasagar	6,461	4,569	2,166	2,284	119	2,403	500	7	507	11.09	21.09	
Total ..	60,659	31,410	12,514	15,447	3,449	13,896	5,151	1,959	7,010	22.31	37.69	
Central Circle.												
Quddusah	6,723	7,576	2,132	5,438	..	5,438	1,855	593	2,453	32.40	45.10	
Belore	8,765	4,073	1,762	2,297	13	2,310	632	56	768	17.38	30.64	
Chingelput	3,092	2,049	1,027	1,013	9	1,022	216	5	215	10.49	21.03	
North Arcot	7,365	3,965	1,882	2,517	6	2,523	1,169	67	1,236	31.65	48.98	
South Arcot	5,216	4,969	2,467	2,429	73	2,502	685	24	709	14.26	28.33	
Setim	7,629	5,391	2,164	3,227	..	3,227	1,237	186	1,423	26.39	44.09	
Trichinopoly	3,631	2,684	1,661	1,068	17	1,085	216	107	323	12.02	31.51	
Tanjore	3,706	2,467	1,779	1,693	15	1,708	18	..	18	0.72	2.54	
Total ..	48,927	33,199	14,374	18,623	133	18,756	6,042	1,043	7,085	21.38	37.77	
Southern Circle.												
South Canara	3,902	3,883	633	3,200	..	3,200	284	811	1,095	28.19	34.31	
Malabar	5,594	5,566	1,593	3,972	..	3,972	349	261	610	15.16	25.16	
The Nilgiris	957	309	957	648	..	648	368	133	491	10.78	15.16	
Coimbatore	7,860	7,297	3,861	3,436	..	3,436	1,715	560	2,275	31.17	36.31	
Madura	8,913	3,244	1,684	1,560	..	1,560	573	37	609	18.77	39.03	
Tinnevely	5,389	3,567	2,298	1,263	6	1,269	417	12	429	12.02	38.80	
Total ..	32,615	24,513	10,428	14,079	6	14,085	3,695	1,804	5,499	22.43	39.04	
Grand Total ..	141,201	89,058	37,316	48,148	3,588	51,736	14,838	4,766	19,594	22.00	37.97	

N.B.—The figures in columns 2 to 7 are the same as those adopted in the report for the previous year, the figures for the year being not yet available in the Settlement Department of the Board of Revenue.

3. The area finally constituted reserved forests in each district during and up to the end of the year is exhibited in the subjoined statement:—

ABSTRACT C.

Districts.	Prior to 1897-98.	During 1897-98.	During 1898-99.	Total.
<i>Northern Circle.</i>				
Ganjām	SQ. MLS. 148	SQ. MLS. 99 { 176 } (a) — 6	SQ. MLS. 416	
Vizagapatam	136	1 { 36 } (a) — 2	142	
Gōdāvari	810 {	52 { 41 } (a) + 1	866	
Kistna	654	156 { 42 } (a) — 12	748	
Kurnool	1,806	15 { 12 } (b) — 1	2,004	
Bellary	456 {	13 { 50 } (a) + 6	476	
Anantapur	437	50	600	
Total ..	4,445	357	5,151	
<i>Central Circle.</i>				
Cuddapah	1,576 {	74 { 204 } (b) + 1	1,855	
Nellore	537	17 { 98 } (c) — 9	652	
Chingleput	203 {	7 { 9 } (c) — 1	210	
North Arcot	1,021	26 { 24 } (a) + 98	1,169	
South Arcot	573	103 { 9 } (a) + 2	686	
Salem	1,229 {	2 { 11 } (a) — 1	1,287	
Trichinopoly	189	3 { 24 } (a) — 1	216	
Tanjore	18	..	18	
Total ..	5,346	219	6,042	
<i>Southern Circle.</i>				
South Canara	114 {	27 { 118 } (a)* + 25	284	
North Malabar	157	2 { 159 } (c) — 1	159	
South Malabar	39	1 { 1 } (c) — 1	190	
The Nilgiris	358 {	4 { 7 } (c) — 3	358	
North Coimbatore	1,053 {	..	1,061	
South Coimbatore	654	..	654	
Madura	562 {	15 { 5 } (a) — 10	572	
Tinnevelly	410	2 { 5 } (a) — 10	417	
Total ..	3,347	61	3,695	
Grand Total ..	13,188	637	14,888	

* One block of 97 acres was notified.

(a) Rectification of area. (b) Rounding off fraction in previous year's returns. (c) Declared unreserved.

The largest addition was in Cuddapah but 155 square miles of the area constituted related to two blocks the notifications of which were issued during the year previous to that under report. *Ganjām*, *South Malabar*, *South Canara* and *Nellore* ranked next; the other districts in which there were noticeable additions were *Anantapur*, *Kurnool* and *Kistna*. In the marginally-noted districts notifications in respect of the extent noted against each were issued during the year, the reservation however, taking effect from dates subsequent to the close of the period. The sanction of the Government of India for the disforestation of a few acres (176) in Kurnool, of 155 acres in North Malabar and of about half a square mile in the Nilgiris was also obtained.

	SQ. MLS.		SQ. MLS.
Ganjām	13	Chingleput	1
Gōdāvari	30	Salem	6
Kistna	3	South Canara	38
Bellary	1	Tinnevely	1
Cuddapah	18		

ment of a few acres (176) in Kurnool, of 155 acres in North Malabar and of about half a square mile in the Nilgiris was also obtained.

(ii) *Forest Settlements.*

4. The progress of forest settlement is abstracted in the subjoined statement:—

ABSTRACT D.

Circle.	Area of reserved lands—vide Abstract A above.					Area brought under Chapter II of the Madras Forest Act.				
	On 1st July 1898.	Added during 1898-99.	Total.	Excluded during the year mainly by reason of constitution as reserved forests.	Balance at the end of the year.	Area notified under section 4, not constituted as reserved forests on 1st July 1898.	Added during 1898-99.	Total.	Constituted reserved forests during 1898-99, or otherwise disposed of.	Balance notified under section 4 but not constituted reserved forests on 1st July 1899.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Northern Circle	2,103	298	2,396	537	1,859	1,336 { 118 } (a) — 17	1,437	{ (b) 348 (c) 51 52 }	986	
Central "	1,262	194	1,456	413	1,043	1,072 { 240 } (a) + 6	1,318	{ (b) 379 (c) 19 10 }	910	
Southern "	2,113	17	2,130	326	1,804	1,419	135	1,554 { (b) 288 (c) 5 9 }	1,252	
Total ..	5,478	504	5,982	1,276	4,706	3,827 { 493 } (a) — 11	4,309	1,161	3,148	

(a) Rectification of area.

(b) Initial notifications cancelled.

(c) Excluded at settlement.

5. The statement in Appendix A shows districtwar, the total area brought under settlement up to the end of the year, the area constituted reserved forests and the particulars of balance under settlement on 30th June 1899. The following table shows the totals for the Presidency as compared with those of the previous year and the area notified under section 4 in each district is exhibited in Appendix C:—

	1897-98.		1898-99.	
	Number of blocks.	Area.	Number of blocks.	Area.
(1) Areas notified as proposed reserves under section 4 and remaining to be constituted reserved forests at the beginning of the year.	501	SQ. MLS. 4,052	{ 477 } (a) + 6	SQ. MLS. 3,827 (a) — 11
(2) Notified under section 4 during the year	128	515	167	493
Total ..	629	4,567	649	4,309
(3) Deduct area finally constituted as reserved forests under section 16, or excluded at settlement, or the initial notifications of which were cancelled, &c.	{ 132 } (b) 30	{ 658 } (c) 49 (c) 29	{ 206 } (b) 12	{ 1,015 } (c) 75 (c) 71
Total of (3) ..	152	740	218	1,161
(4) Area which remained to be finally constituted at the end of the year	477	3,827	431	3,148

(a) Rectification of area.

(b) Initial notifications cancelled.

(c) Excluded at settlement.

At the beginning of the year there were 482 blocks covering an area of 3,816 square miles remaining to be finally constituted reserved forests and 167 blocks of an aggregate extent of 493 square miles were added during the period against 128 blocks with an extent of 515 square miles in the previous year. The large number of blocks 70 in number notified in *North Arcot* and the *Nilgiris* being very small explains the

decrease in the area and the increase in the number notified. The blocks notified in *South Canara, Cuddapah, Kurnool, Trichinopoly* and *Nellore* covered a large extent of land. Seventy-one square miles were excluded at settlement for extension of cultivation and for the exercise of communal privileges and 12 blocks of 75 square miles were also abandoned more or less to meet the same purpose. It is satisfactory to note that 206 blocks with an extent of 1,015 square miles were finally constituted reserved forests during the year against 132 blocks of 652 square miles in the preceding year, leaving at the close of the period under review 431 blocks covering an extent of 3,148 square miles remaining to be notified. The particulars of this balance of area under settlement are as follows:—

	1897-98.		1898-99.	
	Number of blocks.	Area in square miles.	Number of blocks.	Area in square miles.
(1) Notified under section 16 but not constituted reserved forests during the year ..	34	219	21	118
(2) With Board or Government awaiting publication of notification under section 16 ..	75	696	49	496
(3) Returned by the Board for revision and remaining either with Collector, District Forest-officer or Forest Settlement-officer ..	30	488	22	460
Total settled and reported on ..	139	1,302	92	1,073
(4) Settled but not reported on ..	81	638	57	221
(5) Settlement proceeding ..	267	1,887	282	1,854
Total of (4) and (5) ..	338	2,525	339	2,075
Total of (1), (2), (3), (4) and (5) ..	477	3,827	431	3,148

6. The decrease in the number and extent of blocks pending at the close of the year as compared with that in the previous year is also satisfactory and was the result of the increase in the number and extent of the reserves finally gazetted. Of the 67 blocks comprising 221 square miles shown above as settled but not reported on—

- 9 were awaiting preparation of maps;
- 7 do. disposal of appeals;
- 9 do. expiry of time prescribed for appeals;
- 10 do. payment of compensation or exchange of lands; and
- 22 were pending submission of final reports by Forest Settlement-officers or owing to other causes.

Two hundred and eighty-two blocks were pending with the Forest Settlement-officers, District Forest-officers and Collectors in various stages of settlement. A statement showing districtwise the causes of pendency of the blocks not yet constituted reserved forests is given in appendix B.

7. The results of the settlement operations of the year under report are compared with those of the previous year in the following statement:—

Date.	Finally notified during the year.		Settled and reported on.		Settled but not reported on.		Total.	
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
1	2	3	4	5	6	7	8	9
30th June 1898 ..	132	SQ. MLS. 652	139	SQ. MLS. 1,302	69	SQ. MLS. 619	340	SQ. MLS. 2,578
30th June 1899 ..	206	1,015	92	1,073	57	221	355	2,309

It will be seen from columns 8 and 9 of the statement that the year's operations were slightly in advance of those of the previous year in respect of the number of blocks but the area involved was less by 264 square miles.

In *Ganjam* seven of the eleven blocks pending for more than fifteen years were gazetted during the year and the notifications in respect of the others will be published within the current year. Of the four blocks in *Visagapatam* originally notified in the name of the Divisional-officers the final report of one Dharakonda has since been approved by Government. The settlement records of the Barnakonda block awaited submission to the Board at the close of the year. The final report of the Kadagandi reserve which was transferred to the Special Forest Settlement-officer is delayed as it is under contemplation to acquire under the Land Acquisition Act that portion of the reserve which was decreed by the District Court in favour of the Honourable the Raja of Bobbili. The other block Bointi was abandoned to provide room for the people of the villages acquired within the Kadagandi reserve. In *Godavari* the reservation of one of the four oldest blocks took effect after the close of the year and the settlement reports of two others were pending with Government. It is hoped that the settlement of all the blocks in the district will be completed within the current year. Good progress was made in *Kistna, Anantapur, Nellore, Chingleput, Cuddapah, Trichinopoly* and *South Canara* and it is noted with satisfaction that all the blocks in Anantapur have been finally notified. In *Bellary, North Arcot, South Arcot, Salem, Madura* and *Tinnevely* the progress was rather slow. The Peria, Padri and Kanoth reserves in *North Malabar*, blocks of long-standing, are reported to await the preparation of maps and the admission of certain rights of way by the Forest Settlement-officer. In *South Malabar* the New Amarampalem forest of 150 square miles was gazetted during the year. As regards the Attipadi valley blocks I, II, III and IV it has been decided to abandon III and IV and the other two await inspection by the Forest Settlement-officer. The initial notifications of the Nilambur leased forests were cancelled at the close of the year. The re-notification of the two oldest blocks in *North Coimbatore*, (Yedaralli and Madeswaramalai) has been found necessary and will shortly be submitted to Government.

8. *Outturn of work by the Special Forest Settlement-officers.*—The following abstract shows the work done by these officers during the year under report and it will be observed therefrom that the total outturn compares favourably with that of the preceding two years:—

Names of Special Forest Settlement-officers.	Districts.	Issue of proclamation after notification under section 4.		Settlement of claims.		Report after settlement submitted.		Final notification proclaimed.		Cost
		Number of blocks.	Area.	Number of blocks.	Area.	Number of blocks.	Area.	Number of blocks.	Area.	
1	2	3	4	5	6	7	8	9	10	11
Mr. F. W. Bateman	Ganjām	3	11	10	165	7	119	11	206	1,956
	Vizagapatam ..	1	8	14	31	8	4	8	4	1,956
	Gōdāvari	1	..	9	122	8	119	2	62	1,956
	Kistna	..	..	6	14	2	7	..	..	1,956
	Kurnool	..	..	4	119	2	60	..	..	1,956
	Total	5	19	43	481	27	309	21	272	9,780
Mr. E. A. Smith and M.R.Ry. P. S. Singaravelu Pillai Avergal.	Kistna	12	62	21	57	27	79	22	40	5,098
	Kurnool	5	37	3	54	4	30	5	41	1,420
	Bellary	10	30	11	22	11	22	7	12	1,201
	Anantapur	..	..	5	24	5	24	11	57	886
	Nellore	19	40	3	6	6	19	19	98	3,566
	Total	46	169	46	163	53	174	64	248	12,171
M.R.Ry. K. Ganapayya Garu.	Cuddapah	12	108	18	167	19	176	13	89	3,643
	North Arcot ..	43	1	34	1	18	7	6	24	4,304
	South Arcot ..	..	..	3	12	4	12	2	9	160
	Salem	1	35	4	43	4	43	3	17	1,536
	Chingleput ..	..	..	11	7	13	6	26	10	1,386
	Total	59	144	70	230	58	244	50	129	11,017
Mr. F. V. P. Gompertz	Trichinopoly ..	23	56	21	28	22	36	18	27	2,383
	Madura	1	11	4	17	2	16	2	3	2,383
	Coimbatore ..	..	..	1	3	4	58	6	6	2,383
	Tinnevely	5	10	2	1	2	1	3	3	2,383
	Total	29	77	28	49	30	110	26	39	9,532
Mr. H. S. Mullins	Malabar	..	..	2	50	1	2	3	151	5,864
	South Canara ..	10	118	30	295	28	197	26	137	5,866
	Total	10	118	32	345	29	199	29	201	11,730
	Grand Total ..	149	527	219	1,268	197	1,036	189	979	51,230
	In 1897-98 ..	115	438	233	1,159	148	680	126	740	59,654
	In 1896-97 ..	144	511	146	1,234	98	518	99	623	58,222

During the year, Mr. F. W. Bateman, Assistant Superintendent, Madras Survey, was appointed to succeed Mr. R. H. L. Lushington, Special Forest Settlement-officer, Ganjām, &c., districts, and assumed charge of the division on the 26th September 1898 having previously undergone a short period of training with Mr. Gompertz in Trichinopoly in order that he might gain an insight into the details of forest settlement work. Mr. Smith was granted privilege leave for three months from 13th July 1898 and M.R.Ry. P. S. Singaravelu Pillai Avergal was appointed as his *locum tenens*. Messrs. Gompertz and Mullins were also absent on privilege leave for three months and one month, respectively, from October 1898 and M.R.Ry. Ganapayya Garu, for one month and twenty days from 25th February 1899. The number of blocks ready for settlement in the southern districts was for various causes insufficient to justify the appointment of a *locum tenens* during the absence of Mr. Gompertz. Notwithstanding the absence on leave of all these officers the outturn showed a marked general improvement on the preceding year's work and is satisfactory. Mr. Mullins was engaged for a considerable period in negotiating for the acquisition of the lands belonging to Bavoti Haji in the Periya and Kanoth reserves in Malabar and Mr. Gompertz in perambulating the Madeswaramalai block in North Coimbatore, the re-notification of which has been found necessary. But for this engagement their outturn would have been

greater. All the officers worked well during the year and the Board trusts that better results will be achieved during the current year. The work of the several officers was regularly scrutinized in the quarterly reviews of the Board, and the necessity of making every endeavour to expedite the submission of the final reports has been impressed upon the Forest Settlement-officers.

9. *Outturn of Forest Settlement work by Revenue Divisional-officers.*—No progress was made in the settlement of the three blocks pending with the Senior Assistant Collector, Berhampur, and the Principal Assistant Collector, Chicacole, in the *Ganjām* district, and the blocks have since been transferred to the file of the Special Forest Settlement-officer. The causes of the pendency of the blocks in *Vizagapatam* have already been explained. In the *Nilgiris*, the Head Assistant Collector was not able to pay much attention to the settlement work having been engaged on other work especially plague which required his constant personal supervision. The work was therefore transferred to the Special Forest Settlement-officer, Trichinopoly, &c., Districts, at the close of the year.

10. *Selections for further reservation.*—Selections to the extent of 20 square miles in the Agency tracts of "Pondokhol" mitta and 4 square miles in the Berhampur range have still to be made in the *Ganjām* district. The extent estimated last year was 85 square miles, and a considerable portion of this area selected during the year was abandoned to make provision for extension of cultivation after consultation with the Revenue authorities. No further selections were made in *Vizagapatam*, and what remains to be done is the submission of notification under section 4 of the Palkonda and Saragudu blocks which have already been constituted by the Collector as "reserved" lands under rules under section 26 of the Forest act. Three blocks of an aggregate extent of 49 square miles were selected in *Gōdāvari*, and this area is set down as the latest estimate of further reservation in the district. The area presumably excludes the proposed selection in the Delta range referred to in the report for the previous year as awaiting demarcation. In *Kurnool*, as has already been noticed, the selections made and reserved have exceeded the sanctioned estimate of reservation, and the question of unreserving certain areas notified last year in the Palkonda and Ramallakot taluks is under the consideration of the Collector. The final scheme for further reservation in all the taluks of the *Bellary* district was approved by Government, and no further selections remain to be made. In *Anantapur* eight blocks of about 5 square miles were selected in the date-bearing areas of the Madakasira range and are about to be notified under section 4. No further selections are to be made in *Cuddapah*, the work having been completed during the year. In *Nellore* 36 square miles were selected against 55 square miles in the previous year, but the progress cannot be regarded as satisfactory considering the very large extent (298 square miles) which still remain to be selected to complete reservation in the district. The sanction of Government was accorded during the year for the final scheme of reservation in *Salem* submitted by the Board, and the demarcation, mapping and survey of the selected blocks are in progress. The selections in the Musiri taluk of the *Trichinopoly* district referred to in the report for the previous year were notified under section 4 and their settlement is being proceeded with. In *South Canara* selection and demarcation in some of the ranges are awaiting the settlement of the *khan* and *bāne* question and the completion of the revenue settlement. An extent of about 4 square miles was selected in *North Malabar*. In *South Malabar* the selection of the Silent valley block of about 27 square miles has been postponed, but 10 square miles, which are the subject of civil suits, will be taken in hand if they are found to belong to Government. The selections in *North Coimbatore* have been deferred for a considerable time owing to the want of maps which are being prepared by the Revenue Survey Department. It is reported that some of the maps have been recently received. The subjoined abstract shows the latest estimate of reservation in each district:—

Names of Special Forest Settlement-officers.	Districts.	Issue of proclamation after notification under section 4.		Settlement of claims.		Report after settlement submitted.		Final notification proclaimed.		Cost
		Number of blocks.	Area.	Number of blocks.	Area.	Number of blocks.	Area.	Number of blocks.	Area.	
1	2	3	4	5	6	7	8	9	10	11
Mr. F. W. Bateman	Ganjām	3	11	10	165	7	119	11	206	1,956
	Vizagapatam ..	1	8	14	31	8	4	8	4	1,956
	Gōdāvari	1	..	9	122	8	119	2	62	1,956
	Kistna	..	..	6	14	2	7	..	..	1,956
	Kurnool	..	..	4	149	2	60	..	..	1,956
	Total	5	19	43	481	27	309	21	272	9,780
Mr. E. A. Smith and M.R.Ry. P. S. Singaravelu Pillai Avergal.	Kistna	12	62	24	57	27	79	22	40	5,098
	Kurnool	5	37	3	54	4	30	5	41	1,420
	Bellary	10	30	11	22	11	22	7	12	1,201
	Anantapur	..	..	5	24	5	24	11	57	886
	Nellore	19	40	3	6	6	19	19	98	3,566
	Total	46	169	46	163	53	174	64	248	12,171
M.R.Ry. K. Ganapayya Garu.	Cuddapah	12	108	18	167	19	176	13	69	3,643
	North Arcot ..	43	1	34	1	18	7	6	24	4,304
	South Arcot ..	..	..	3	12	4	12	2	9	150
	Salem	1	35	4	43	4	43	3	17	1,535
	Chingleput ..	..	..	11	7	13	6	26	10	1,385
	Total	59	144	70	230	58	244	50	129	11,017
Mr. F. V. P. Gompertz	Trichinopoly ..	23	56	21	28	22	36	15	27	2,383
	Madura	1	11	4	17	2	16	2	3	2,383
	Coimbatore ..	..	..	1	3	4	58	6	6	2,383
	Tinnevely	5	10	2	1	2	1	8	3	2,383
	Total	29	77	28	49	30	110	26	39	9,532
Mr. H. S. Mullins	Malabar	..	..	2	50	1	2	3	151	5,804
	South Canara ..	10	118	30	295	28	197	25	137	5,806
	Total	10	118	32	345	29	199	28	201	11,730
	Grand Total ..	149	527	219	1,268	197	1,036	189	979	51,230
	In 1897-98 ..	115	438	233	1,159	148	680	126	740	59,654
	In 1896-97 ..	144	511	146	1,234	98	518	99	623	58,222

During the year, Mr. F. W. Bateman, Assistant Superintendent, Madras Survey, was appointed to succeed Mr. R. H. L. Lushington, Special Forest Settlement-officer, Ganjām, &c., districts, and assumed charge of the division on the 26th September 1898 having previously undergone a short period of training with Mr. Gompertz in Trichinopoly in order that he might gain an insight into the details of forest settlement work. Mr. Smith was granted privilege leave for three months from 13th July 1898 and M.R.Ry. P. S. Singaravelu Pillai Avergal was appointed as his *locum tenens*. Messrs. Gompertz and Mullins were also absent on privilege leave for three months and one month, respectively, from October 1898 and M.R.Ry. Ganapayya Garu, for one month and twenty days from 25th February 1899. The number of blocks ready for settlement in the southern districts was for various causes insufficient to justify the appointment of a *locum tenens* during the absence of Mr. Gompertz. Notwithstanding the absence on leave of all these officers the outturn showed a marked general improvement on the preceding year's work and is satisfactory. Mr. Mullins was engaged for a considerable period in negotiating for the acquisition of the lands belonging to Bavoti Haji in the Periya and Kanoth reserves in Malabar and Mr. Gompertz in perambulating the Madeswaramalai block in North Coimbatore, the re-notification of which has been found necessary. But for this engagement their outturn would have been

greater. All the officers worked well during the year and the Board trusts that better results will be achieved during the current year. The work of the several officers was regularly scrutinized in the quarterly reviews of the Board, and the necessity of making every endeavour to expedite the submission of the final reports has been impressed upon the Forest Settlement-officers.

9. *Outturn of Forest Settlement work by Revenue Divisional-officers.*—No progress was made in the settlement of the three blocks pending with the Senior Assistant Collector, Berhampur, and the Principal Assistant Collector, Chicacole, in the Ganjām district, and the blocks have since been transferred to the file of the Special Forest Settlement-officer. The causes of the pendency of the blocks in Vizagapatam have already been explained. In the Nilgiris, the Head Assistant Collector was not able to pay much attention to the settlement work having been engaged on other work especially plague which required his constant personal supervision. The work was therefore transferred to the Special Forest Settlement-officer, Trichinopoly, &c., Districts, at the close of the year.

10. *Selections for further reservation.*—Selections to the extent of 20 square miles in the Agency tracts of "Pondokhol" mitta and 4 square miles in the Berhampur range have still to be made in the Ganjām district. The extent estimated last year was 85 square miles, and a considerable portion of this area selected during the year was abandoned to make provision for extension of cultivation after consultation with the Revenue authorities. No further selections were made in Vizagapatam, and what remains to be done is the submission of notification under section 4 of the Palkonda and Saragudu blocks which have already been constituted by the Collector as "reserved" lands under rules under section 26 of the Forest act. Three blocks of an aggregate extent of 49 square miles were selected in Gōdāvari, and this area is set down as the latest estimate of further reservation in the district. The area presumably excludes the proposed selection in the Delta range referred to in the report for the previous year as awaiting demarcation. In Kurnool, as has already been noticed, the selections made and reserved have exceeded the sanctioned estimate of reservation, and the question of unreserving certain areas notified last year in the Pattikonda and Ramallakot taluks is under the consideration of the Collector. The final scheme for further reservation in all the taluks of the Bellary district was approved by Government, and no further selections remain to be made. In Anantapur eight blocks of about 5 square miles were selected in the date-bearing areas of the Madakasira range and are about to be notified under section 4. No further selections are to be made in Cuddapah, the work having been completed during the year. In Nellore 36 square miles were selected against 55 square miles in the previous year, but the progress cannot be regarded as satisfactory considering the very large extent (298 square miles) which still remain to be selected to complete reservation in the district. The sanction of Government was accorded during the year for the final scheme of reservation in Salem submitted by the Board, and the demarcation, mapping and survey of the selected blocks are in progress. The selections in the Musiri taluk of the Trichinopoly district referred to in the report for the previous year were notified under section 4 and their settlement is being proceeded with. In South Canara selection and demarcation in some of the ranges are awaiting the settlement of the *khan* and *bāne* question and the completion of the revenue settlement. An extent of about 4 square miles was selected in North Malabar. In South Malabar the selection of the Silent valley block of about 27 square miles has been postponed, but 10 square miles, which are the subject of civil suits, will be taken in hand if they are found to belong to Government. The selections in North Coimbatore have been deferred for a considerable time owing to the want of maps which are being prepared by the Revenue Survey Department. It is reported that some of the maps have been recently received. The subjoined abstract shows the latest estimate of reservation in each district:—

ABSTRACT F.

District.	Sanctioned estimate of areas for reservation.	Area brought under the Forest Act—vide column 14 of Form 44.	Additional estimated area selected or to be selected.	Total estimate proposed to be reserved.	Percentage of column 5 to the area of Government lands in the district.	Percentage of column 5 to the un-occupied Government lands in the district.
1	2	3	4	5	6	7
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.		
Ganjam	656	538	30	568	12.80	14.82
Vizagapatam	415	354	..	354	25.68	31.80
Godavari	997	956	49	1,005	25.27	41.48
Kistna	1,165	1,144	..	1,144	20.03	47.21
Kurnool	2,877	2,900	..	2,900	42.65	60.95
Bellary	575	(d) 511	34	545	13.91	33.17
Anantapur	535	507	5	512	11.20	21.30
Cuddapah	2,640	2,453	..	2,453	32.40	45.10
Nellore	1,132	708	298	1,006	24.70	43.54
Chingleput	231	215	..	215	10.49	21.63
North Arcot	(a) ..	1,236	3	1,239	31.72	49.10
South Arcot	836	709	..	709	14.20	28.33
Salem	1,594	1,423	171	1,594	20.56	49.39
Trichinopoly	(a) ..	323	3	326	12.13	31.80
Tanjore	23	18	1	19	0.76	2.68
South Canara	1,011	1,095	..	1,095	28.19	34.21
Malabar	(c) 273	600	12	612	10.99	15.40
The Nilgiris	(b) 411	403	8	411	42.93	62.42
Coimbatore	(e) 1,812	2,275	37	2,313	31.69	67.31
Madura	(a) ..	609	..	609	18.77	39.03
Tinnevely	440	429	1	430	12.05	38.88

(a) No definite schemes were formulated and approved for these districts.

(b) Excludes leased forests.

(c) Final schemes were submitted only for the Northern Division of the district.

(d) Includes leased forests 62 square miles.

11. *Reserved lands not brought under settlement.*—The area of reserved lands not yet brought under settlement is shown in Appendix C. The only districts in which considerable areas have yet to be notified under section 4 are *Kurnool*, *South Canara*, *Kistna* and *Vizagapatam*. In the first mentioned district the area rose from 275 to 458 square miles. The demarcation of the blocks selected in previous years is in progress and a considerable number of them await inspection by the District Forest-officer. Good progress was made in *South Canara*, where 116 square miles were notified under section 4, and some of the selections await, as already remarked elsewhere, the settlement of the *khan dane* question. Out of the 240 square miles shown against *Kistna*, the demarcation and mapping of 110 square miles have yet to be made, and 86 square miles, which have been demarcated and mapped, await submission of the initial notifications. The notifications for 14 square miles have, it is reported, been postponed pending the results of the experiments made for the reclamation of coast swamps, while those for 21 square miles awaited the preparation of maps. The notifications in respect of the remaining extent were pending either with the Board or Government. Only 21 square miles were notified under section 4 during the year, and the short work is ascribed to the delay caused by the necessity of first referring to the Public Works Department whether any of the areas taken up would be irrigable in the near future. The area in *Vizagapatam* consists of the two blocks, Palakonda and Saragadu, and their notification was for some time delayed for want of a surveyor.

12. *Survey of proposed Reserves.*—The Survey of India Party completed the survey of 93 square miles in *Cuddapah* and 271 square miles in *North Coimbatore*. A staff of departmental temporary surveyors and draughtsmen also continued to work in connection with proposals for reservation. The work in *Vizagapatam*, where one surveyor was employed during a part of the year, consisted of the survey of two proposed reserves. About 148 miles of survey and 33 miles of demarcation were executed in *Godavari* and 70 miles of survey in *Kistna*. In the latter district work was interrupted by the illness of the surveyor. In *Kurnool* the surveyor continued surveying the unsurveyed fields in the *Kistna* blocks under settlement and selection. In *Salem*, about 65 square miles of survey were completed in addition to demarcation of patia

fields settled by the Boundary Settlement-officer on the Kollimalais. Two surveyors were employed in *South Canara*—one entirely under the orders of the Forest Settlement-officer in correcting plans and boundaries. The other surveyor chained 241 miles and surveyed 88½ square miles with the plane table and prepared 18 tracings besides clearing 196 miles of line and demarcating 23½ miles. In *Madura*, the work of the surveyor consisted of the survey of the areas leased out for cardamom cultivation.

The draughtsmen were, as usual, engaged in preparing or revising sketch-maps to accompany notifications under sections 4 or 16 and in posting and maintaining the maps prescribed in the Forest Code. The outturn of their work in this direction was generally satisfactory.

13. *Demarcation of proposed reserves.*—The subjoined statement shows the length of boundary lines preliminarily demarcated and the total and the average cost of the work as compared with the figures of the preceding year:—

PRELIMINARY demarcation work.

	During 1897-98.			During 1898-99.		
	Miles.	Cost.	Average cost per mile.	Miles.	Cost.	Average cost per mile.
1	2	3	4	5	6	7
<i>Northern Circle.</i>						
Ganjam	8	RS. 20	RS. A. P. 2 8 0	22	RS. 180	RS. A. P. 5 14 6
Vizagapatam	32	535	16 12 0	20	268	13 6 4
Godavari	17	88	5 2 10	96	249	2 9 6
Kistna	179	1,034	7 4 11	84	362	4 4 11
Kurnool	(a) 217	(a) 608	2 12 11	343	942	2 11 11
Bellary	(b) 52	(b) 147	2 5 7	75	348	4 10 2
Anantapur	154	363	..	..	..	..
Total, Northern Circle ..	659	3,069	4 10 6	640	2,299	3 9 5
<i>Central Circle.</i>						
Cuddapah	(b) 69	(b) 206	2 9 7	(b) 73	185	2 10 8
Nellore	123	440	3 4 11	149	458	3 1 2
Chingleput	37	120	3 3 11	..	..	..
North Arcot	..	..	..	..	..	..
South do.	..	..	..	..	..	..
Salem	10	14	1 2 5	46	224	4 10 9
Trichinopoly	6	46	7 10 8	..	..	..
Tanjore	..	..	..	..	..	..
Total, Central Circle ..	300	916	3 0 10	275	877	3 3 0
<i>Southern Circle.</i>						
South Canara	366	94	0 4 1	(b) 424	(c) 188	0 7 1
North Malabar	39	235	6 0 5	(b) 151	(c) 364	2 6 6
South do.	5	76	15 3 2	6	84	4 4 0
The Nilgiris	75	537	7 2 7	55	296	49 5 4
North Coimbatore	12	136	11 5 4	16	207	13 15 0
South do.	..	17	..	..	..	..
Madura	..	..	..	..	..	..
Tinnevely	..	..	..	..	..	..
Total, Southern Circle ..	497	1,095	2 3 3	660	1,725	2 9 4
Grand Total, Presidency ..	1,456	5,080	3 7 10	1,575	4,900	3 1 9

(a) Cost of erecting cairns. (b) Repairs. (c) Amount spent in clearing 151 miles of line for Forest Settlement-officers.

The reasons adduced in the previous year's report for absence of work in certain districts and short work in some others apply to similar occurrence during the year under report. Satisfactory progress was made in those districts where there were large areas to be notified under section 4. The outturn in *Kistna* could have been larger but for the fact that almost all the blocks remaining to be demarcated lie in unsurveyed areas and it was considered desirable to survey them before demarcation. The increase in the work turned out in *Kurnool* and *South Canara* where large areas remained to be demarcated is satisfactory. In the *Madura* district demarcation was

done in the Yerramalais and in the plain jungles of Sirvel taluk, and in the latter district it was almost completed in the Uppinangadi range and nearly so in the Puttur range. In *Anantapur* no preliminary demarcation was carried out during the year as the newly-selected areas are whole field numbers and the survey stones are considered sufficient for the purpose.

The average cost per mile in *Ganyam* is higher than that of last year and the increase was due to the difficulty of obtaining labour and the heavy charge incurred in cutting the line along the ridge of high hills heavily wooded in parts and somewhat inaccessible from the surrounding villages. In *Bellary* the work was done at double the cost paid last year and the increase was due partly to the lines having been made broader and partly to the heavy growth of forest through which they had to be cleared. Preliminary demarcation in *South Canara* is of a very simple kind and consists merely of cutting a number on a tree and heaping up a few stones near it. The rate has nearly doubled itself and it is explained that the difficult nature of the country and the time entailed in cutting the numbers deeper on the trees contributed to the increase. There was a remarkable rise in the rate in *South Malabar* and it has been attributed to the difficult nature of the country and the line running through dense shola forests. Moreover no labour was available but that of hillmen. In *Salem* and the *Nilgiris*, the average cost has arisen on account of the heavy clearings of undergrowth, and in *North Coimbatore* on account of the erection of permanent cairns in the preliminary stage in respect of certain blocks, the boundaries of which are not likely to be altered at settlement.

(iii) Demarcation.

14. There has been no change in the system of permanent demarcation reported in previous years. Form No. 46 shows the work turned out under this head as well as the expenditure incurred under new works and repairs.

The following table presents the length of boundary lines permanently demarcated during the year as compared with the results of the preceding year :—

ABSTRACT G.—Demarcation Work done during 1898-99.

Districts.	Permanent.				Re-clearing old lines.			
	During 1897-98.		During 1898-99.		During 1897-98.		During 1898-99.	
	Miles.	Cost.	Average cost per mile.	RS. A. P.	Miles.	Cost.	Miles.	Cost.
1	2	3	4		8	9	10	11
<i>Northern Circle.</i>								
Ganjam ..	53	(a) 349	RS. A. P. 6 9 4	RS. 1,400	260	(a) 567	{ (c) 59 } { (d) 49 }	RS. 176
Vizagapatam ..	74	1,891	25 8 10	1,443	..	156	100	326
Giddavari ..	108	(a) 701	6 7 10	572	296	{ (b) 49 } { (d) 379 }	{ (c) 286 } { (d) 109 }	792
Kistna ..	78	(a) 1,645	21 1 5	(a) 1,424	41	641	30	508
Kurnool ..	85	3,133	36 13 9	1,370	{ (c) 6 } { (d) 483 }	404	564	115
Bellary ..	187	1,190	6 5 9	1,147	20	(b) 267	490	229
Anantapur ..	10	{ (f) 33 } { (g) 44 }	8 4 10	529	..	12	..	185
Total, Northern Circle ..	695	5,986	15 1 8	7,885	1,106	2,479	1,897	{ (a) 1,178 } { (b) 1,833 }
<i>Central Circle.</i>								
Oddapah ..	(g) 437	3,160	7 3 8	1,349	33	163	80	366
Nellore ..	206	(a) 1,446	7 0 4	(a) 275	60	158	9	23
Chingleput ..	78	(a) 1,570	20 2 0	(a) 849	21	{ (b) 472 } { (d) 143 }	..	53
North Arcot ..	(h) 116	1,385	11 15 0	656	254	954	{ (c) 1,765 } { (d) 12 }	117
South Arcot ..	154	2,518	16 6 7	3,678	{ (c) 51 } { (d) 305 }	72	3	478
Salem ..	21	51	2 6 10	243	..	563	486	146
Trichinopoly ..	9	51	5 10 8	..	{ (c) 50 } { (d) 177 }	258	{ (c) 486 } { (d) 118 }	17
Tanjore ..	..	..	..	..	..	..	..	522
Total, Central Circle ..	1,021	10,181	9 15 7	7,060	1,001	3,549	2,875	32
								85
								1
								1,840

(a) Includes cost of erecting cairns, &c.

(b) Includes cost of sign-boards, &c.

(c) Includes rectifying 42 miles of demarcation.

(d) Amount spent in cutting 48 miles of block lines in the interior of reserves.

(e) Cost of temporary establishment.

(f) Cost of demarcation of enclosures in eighteen reserves.

(g) Added as per Accountant-General's audited figures under A-VIII (a).

(h) Includes amount spent for cutting compartment and coupe lines.

Abstract G.—Demarcation Work done during 1898-99—cont.

Districts.	Permanent.						Re-clearing old lines.			
	During 1897-98.			During 1898-99.			During 1897-98.		During 1898-99.	
	Miles.	Cost.	Average cost per mile.	Miles.	Cost.	Average cost per mile.	Miles.	Cost.	Miles.	Cost.
	1	3	4	5	6	7	8	9	10	11
<i>Southern Circle.</i>										
South Canara	259	1,443	5 9 1	136	1,348	9 14 7	1	..	..	{(A) 20 (B) 35 (C) 1,368 (D) 200 (E) 1,460 (F) 145 (G) 446 (H) 70 (I) 106 (J) 866 (K) 23
North Malabar	18	199	11 0 11	..	..	..	134	..	20	{(A) 134 (B) 20 (C) 1,368 (D) 200 (E) 1,460 (F) 145 (G) 446 (H) 70 (I) 106 (J) 866 (K) 23
South Malabar	..	..	..	..	..	..	..	..	..	..
The Nilgiris	3	21	7 0 0	11	134	12 2 10	240	..	90	{(A) 240 (B) 90 (C) 1,368 (D) 200 (E) 1,460 (F) 145 (G) 446 (H) 70 (I) 106 (J) 866 (K) 23
North Coimbatore	43	975	22 10 9	68	864	12 8 5	347	..	111	{(A) 347 (B) 111 (C) 1,368 (D) 200 (E) 1,460 (F) 145 (G) 446 (H) 70 (I) 106 (J) 866 (K) 23
South Coimbatore	..	..	..	..	..	..	..	..	..	..
Madura	..	..	..	..	..	..	..	..	..	..
Tinnevely	31	237	10 12 11	12	194	16 2 8	41	..	4	{(A) 41 (B) 4 (C) 1,368 (D) 200 (E) 1,460 (F) 145 (G) 446 (H) 70 (I) 106 (J) 866 (K) 23
Total, Southern Circle ..	344	2,864	8 5 3	258	2,465	13 6 3	897	4,581	409	4,886
Grand Total, Presidency ..	1,969	22,031	11 3 10	1,578	18,990	11 11 0	{(C) 2,093 (D) 711	10,609	{(C) 1,713 (D) 3,268	12,139

(e) Includes cost of erecting cairns, &c. (f) Cost of temporary establishment. (g) Includes cost of sign-boards, &c.
 (A) Added as per Accountant-General's audited figures under A. VIII (e). (B) Amount spent for cutting compartment and coupe lines. (C) Cleared by the Forest establishment. (D) Includes cost of sign-boards, &c.

Satisfactory progress was made in several districts and the work done was commensurate with the requirements. In *Chingleput*, *Tanjore*, *South Canara* and *North Malabar* permanent demarcation was practically complete and in *Bellary*, *Anantapur*, *Cuddapah*, *North Arcot*, the *Nilgiris*, *North and South Coimbatore* and *Madura* nearly so. The outturn in *Ganjām*, *Vizagapatam* and *Kistna* in the *Northern Circle* and in *South Arcot* in the *Central Circle* shows an increase and may be regarded as fair, but it is noted that there is still a very large area remaining to be permanently demarcated in these districts as also in *Goddavari*, *Kurnool*, *Nellore*, *Salem*, *Trichinopoly* and *Tinnevely*. The outturn in *Goddavari* was poor and this result was due to more attention having been devoted to the re-clearing of lines. It is explained that a considerable amount of time was devoted to removing stumps on the lines and erecting cairns where stones were available, the object being to turn out thorough work over a short distance so as to prevent coppice growth and the necessity for the work being frequently attended to. The work in *Kurnool* shows a decrease. It consisted of cutting the district boundary between *Kurnool* and *Kistna*, the taluk boundaries between *Nandikōtkur* and *Markapur* and the boundaries of certain reserves; the difficult character of the localities in which work had to be done accounts for the decrease in the district. The short work in *Nellore*, *Salem*, *Trichinopoly*, *South Malabar* and *Tinnevely* has not been explained.

Compared with the cost of the preceding year there was a marked increase in *Ganjām*, *Goddavari*, *Nellore*, *Chingleput*, *South Canara*, the *Nilgiris*, *Madura* and *Tinnevely*. The increase in *Ganjām* was due to the hilly and tortuous character of the lines which had to be demarcated, enhancing the cost of cutting and the number of cairns, and that in *Goddavari* to more substantial work as explained above. The demarcation of the Sangam reserve in *Nellore* involved a large outlay and the high rate in *Chingleput* was attributed to a large number of cairns having had to be erected in shorter distances than in the previous year. Difficult ground and scarcity of labour accounted for the increase in *South Canara*, the *Nilgiris* and *Madura*. No explanation has been furnished for the high rate paid in *Tinnevely*.

(iv) Surveys.

15. The Survey of India operations were continued by the combined parties Nos. 9 and 19 in *Kurnool* in the *Northern Circle*, *Cuddapah*, *Salem* and *South Arcot* in the *Central Circle*, and *Madura* and *Coimbatore* in the *Southern Circle*. The outturn during the survey year from 1st September 1898 to 31st August 1899 was as follows:—

Districts:	Triangulation.	Traversing.	Topography.	
			Total.	Reserved forests.
	SQ. MILES.	L. MILES.	SQ. MILES.	SQ. MILES.
Kurnool	160	341	303	303
Cuddapah	650	121	334	241
Coimbatore	260	261	688	417
Madura	..	..	13	13
Salem	..	..	2	2
South Arcot	..	..	10	10
Total	960	723	1,350	986
Total of the preceding year ..	3,331	712	1,050	1,041

The outturn under triangulation was purposely restricted, as there was a large margin of the previous year's advance triangulation remaining for purposes of detail survey. The boundary traversing carried out was only slightly larger than in the previous year. The decrease under triangulation was more than compensated by the increase in topography which exceeded the estimated programme by 170 square miles and the previous year's work by 30 per cent.; and it will be observed that it is the highest record yet reached. The work in *Kurnool* and *Cuddapah* was conducted by a separate section of the parties in each and was confined to the survey

of the reserves in the Nallamalais and Lankamalais. A double section was at work in North Coimbatore. With the small outturn shown against *South Arcot* and *Salem*, the operations in these districts were completed. The work in *Madura* consisted of the survey of extensions to reserves on the Palni hills.

District Forest-officers visited the Survey office at Bangalore during the recess for the verification of the maps with the notifications. The corrections have been inserted in the fair maps and 36 of the year's work and 19 of the preceding year's work have been submitted for publication. The fair drawing of all maps was completed including 18 in connection with which field work has to be done in the next season.

The actual expenditure, inclusive of the cost of instruments, amounted for the survey year to Rs. 1,00,510, which is less than the preceding year's cost by over Rs. 29,000. The cost rate per square mile of topography was Rs. 74 against Rs. 119 in the previous year, and the reduction is attributed to the proper re-organization of the combined parties, which consisted during the year of 1 officer in charge, 5 European Assistants, 60 surveyors and apprentices and one writer.

16. *Departmental surveys*.—Two surveyors were employed in *Ganjām* and surveyed 323 miles, of which 199 refer to compact blocks and 124 to enclosures and parts of boundaries hitherto unsurveyed. In *Gōdāvari* a considerable portion of the surveyor's time was devoted to resurveying settled reserves and 51 miles were thus surveyed. The outturn in *Kistna* amounted to 94 miles, and in *Nellore* to 3 miles forming the survey of the Rapur-Veligonda boundary line and the Tammanipatam plantation reserve. In *South Malabar* the work consisted of the swamps and portions unsuitable for planting in coupe 1 in the Karimpoya reserve.

The area of reserved forests for which final maps were prepared up to 30th June 1899 amounts to 8518 square miles. The details for each district will be found in appendix E.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

(1) REGULATION OF MANAGEMENT.

(a) Working Plans and their Control.

Some progress has been made in the preparation of working plans and collection of statistics for future plans. The following is a *resumé* of the district reports:—

NORTHERN CIRCLE.

17. No working plans have as yet been framed for the forests in *Vizagapatam* and *Kurnool*. In *Ganjām* valuation surveys in the sal forests were commenced by the Extra Assistant Conservator Mr. Hearsey in January 1899. The work was, however, interrupted by his illness, but has since the close of the year been continued by Mr. Cox. Material progress was made in *Gōdāvari* in the organized working of the reserved forests. Previous to 1898-99 two working plans for *Coringa* and *Upputeru* were in force, but had not received the sanction of the Board. These plans were revised and are pending submission to the Board. Three plans of a simple nature dealing with the conservation of small grazing areas were approved by the Board during the year. Plans for dealing with five areas comprising 15,206 acres were approved by the Conservator tentatively, and it is proposed to consider the expediency of finally recording them as working plans after a year's working. Similarly a simple plan for the Nallacherla reserve comprising 5,360 acres to provide for working the forest as well as for goat browsing was approved by the Conservator. According to the rough working plan drawn up in the preceding year for the Bollapalli reserve in *Kistna*, one-fifth of the existing stock in coupe 2 of compartment 1 was marked and advertised for sale, but no bidders came forward as the contractors for the trees in coupe 1 in the preceding year sustained a heavy loss owing to a large number of *Yepi* (*Hardwickia binata*) trees having been found to be hollow on cutting and unfit for building purposes. Coupe 6 of the Guntūr Babul (*Acacia arabica*) working circle

was sold during the year. In *Bellary* the provisions of the working plan for the eastern slopes of the Ramandrug range were adhered to. Some preliminary cuttings in *Bandri* and *Gundu* were carried out to secure statistics of yield. The provisions of the working plan for the Khojipalli reserve have again been held in abeyance on account of the impracticability of carrying them out. The area is overrun with prickly-pear and its eradication at a cost of Rs. 100 per acre is not justifiable.

CENTRAL CIRCLE.

The operations in *Balapalli* in *Cuddapah* were conducted in accordance with the provisions of the working plan. An area of 55 acres was cut over, and the outturn was about 4 tons of fuel and 2 tons of brushwood per acre. In *Chingleput* several experimental coupes were opened during the year to meet the demand for fuel, &c. The provisions of the Annamalai working plan in *South Arcot* were carried out and the casuarina compartments were sold to advantage. The Morur block in *Salem* was worked in accordance with the working plan. The wood cut was for the most part supplied to the Railway Company as engine fuel and the small wood taken to the Salem depot for supply to the town. Considerable progress has been made in the collection of data for the preparation of simple working plans. In *Trichinopoly* the provisions of the working schemes for the Cauvery south bank plantations, the Udaiyarpalaiyam casan (*Memecylon edule*) reserves, and of the preliminary working plan for the Manaparai hill reserved forests were adhered to during the year, the error referred to in the preceding year's report as regards the last-named working plan having been rectified with the approval of the Conservator. The working scheme for the upper anicut padugais was deviated from in consequence of a larger demand from the Public Works Department for fuel to meet urgent requirements in connection with some important construction works undertaken by them near the padugais. In *Tanjore* the working plans for the Vettangudi reserved forest and the Tirumalavasal casuarina plantations were adhered to. An area of 168 acres in the Vettangudi block was sold during the year for Rs. 600 against Rs. 355 realized during the preceding year.

SOUTHERN CIRCLE.

In *North Malabar* a rough working plan was prepared for the Kurichiyat reserved forest on the basis of the measurements made on a line, $5\frac{1}{2}$ miles long and 50 yards wide, 100 acres taken right through the forest. The sample plots have not been under observation long enough to arrive at any data of importance. In *South Malabar* the provisions of the working plan for the teak plantations and that for the natural forests of Nilambur valley were adhered to. The work done in the natural forests was successful financially. In the area of 80 acres planted up, the cost of planting after deducting the amount realized by the sale of the timber originally standing on the ground came to Rs. 155 only. In the same tract another block of 80 acres was cleared and prepared for planting at a cost of Rs. 2,388, and the produce removed realized Rs. 5,000 and odd. The Walayar working scheme was again held in abeyance as the reserve required rest. In the *Nilgiris* Mr. Tireman's working plan for the Ootacamund plantations was held in abeyance owing to absence of demand. The operations were, however, carried on there and at Coonoor in accordance with the rough preliminary scheme drawn up by Mr. Gamble and as far as demand and other conditions permitted. The method of treatment was coppice. In *North Coimbatore* the Thottampalayam working plan is the only sanctioned one. It was proposed to raise seedlings of valuable trees with crops of castor-oil which it was estimated would yield excellent financial results. The results of the departmental work were not promising and the plan was accordingly modified, and it was proposed to lease out portions of the coupes for five years and to receive them back at the end of that period with 250 seedlings to the acre. The results were again not favourable owing to the unfavourable season. For fuel a series of five coupes were selected and demarcated and the yield was being carefully registered. Bamboos were also felled in coupes in a systematic manner. Sandalwood fellings were conducted in accordance with the provisions of rough working plans and the cutting was restricted almost entirely to dead and dying trees. In *South Coimbatore* the area covered by the provisions of the Sholakarai working scheme was given a rest which it requires and

which must be continued for another 7 or 8 years. During the period of rest, work will be carried on in the extension to the Sholakarai working circle comprising Thenkaradu and Sankararapuram for which a simple working plan has to be prepared. Work was continued in Ayarantal working circle and one coupe was cut over in addition to the portion of a coupe remaining uncut from the previous year, with satisfactory results much in excess of the estimated yield and revenue. Some coupes were cut in Singara tope working circle, but one coupe which had to be felled to keep abreast of the working plan was left untouched for want of labour. The operations in the Chinnar working circle were in arrears. Some coupes were worked departmentally and some by contractors, and the results of yield and revenue were fairly good. In *Madura* working plans were being prepared for the forests extending over 252 square miles in Palamedu and Kanavoipatti ranges. They were not submitted for orders before the close of the year. They are to provide for the production of fuel and small timber for local consumption and for the growth of manure leaves. In *Tinnevely* there were 12 working circles to which no additions were made during the year. They are chiefly worked for fuel, and the provisions of the working schemes applying to them were adhered to with some important deviations which were brought to notice. The results of working are fairly satisfactory.

(b) *Annual Plans of Operations.*

18. In the *Northern Circle* the plans of operations were fairly well followed in almost all the districts. In *Ganjām* they were adhered to with the exception of four items of works which were not carried out. In *Visagapatam* and *Kistna* they were deviated from by deferring the erection of the Palkonda Range office in the former and the construction of certain Range camps and roads in the latter. In *Goddavari* the plans of operations were very closely worked up to, the main deviations having been prompted by conditions which could not be foreseen. The plans of operations in *Kurnool* were mainly adhered to, except in the execution of demarcation works. An important road work in the Sirvel range was carried on outside the plan. The deviations in *Bellary* were but few and in *Anantapur* almost none. In the *Central Circle* the plans of operations were, with only a few exceptions, adhered to in all the districts comprised therein. In *Chingleput* it was proposed that a coupe of 100 acres each in the Nagalapuram and Tirukalikundram reserved forests should be cut back departmentally and the produce sold in the forests on permits. The felling was, however, done on contract, and it has not been stated whether the felling was carried out in a manner which would justify the expectation of an improved stock. In the *Southern Circle* there were no material divergences in the plans of operations except in *North Malabar* and *South Coimbatore*. In *South Canara* the construction of new works under A-VII was deferred owing to financial pressure. In *North Malabar* some of the proposed works were left untouched and others were substituted for them. In *South Malabar*, the *Nilgiris*, *North Coimbatore*, *Madura* and *Tinnevely* the plans of operations were followed, with only a few exceptions. In *South Coimbatore* they were departed from to a large extent. A number of proposed works were dropped for various reasons and replaced by others which became necessary. The experiment of floating timber in the Bhavani was not completed. Two rest-houses were not built as they were found not to be urgently required.

(2) *WORKING OF THE YEAR.*

(a) *Communications and Buildings.*

19. The subjoined statement shows the outlay on communications and buildings during the year under report as compared with the previous year :—

	1897-98.	1898-99.
	RS.	RS.
Roads and bridges	33,689	38,614
Buildings	44,205	49,409
Other works	6,783	5,876

Compared with the figures of the previous year there was an increase of expenditure under "roads and bridges" and "buildings" and a decrease under "other

works." The increase under the first named item is satisfactory as it shows that the most important means of developing and working the forests is receiving due attention.

In the *Northern Circle* a sum of Rs. 14,737 was spent on roads and bridges. A very large portion of this expenditure was incurred in *Goddavari*, *Kistna* and *Kurnool*. The work in *Goddavari* consisted, besides the execution of repairs to existing roads, of the construction of 11 miles forming portions of two new ones, (1) from Ramannayyapet to Lododdi, and (2) from Vetangi to Rajavomangi. In *Kistna*, two new roads, 2½ miles long, were made and 19½ miles of the existing ones repaired at a cost of Rs. 4,302 and Rs. 234, respectively. The two new roads were in progress in the previous year. The road from Mellavagu to Remidicherla was completed and the other, Kondapalli hill road, was made practicable for carts, but requires draining and widening in parts. The chief new works in *Kurnool* were the alignment of (1) a road from Chelama Railway station to Byreni, (2) the construction of culverts on the Kodur-Ernipad Local Fund road, and (3) the conversion into roads of the existing cart-tracks from Pogapada to Chinna Mantrala and from Bandlagadda to Kutikanama in Markapur and Sirvel ranges, respectively. Repairs to existing roads were also executed. The new works and repairs undertaken in the other districts were small and call for no remarks.

In the *Central Circle* there was an expenditure of Rs. 5,713 on roads, chiefly in *North Arcot* and *Salem* under new works and in *Cuddapah* under repairs. In the last named district the most important work constituted the repair of 2½ miles of the old Padarallasagundu road which opens up part of Seshachalam reserve. The cost of the repair amounted to Rs. 1,284. The new works in *North Arcot* and *Salem* consisted of the construction of the Patracad ghaut road at a cost of Rs. 1,765 in the former and of the Chitteri and the Pannagaram to Anchetti roads at an aggregate cost of Rs. 1,194 in the latter district.

In the *Southern Circle* the expenditure on roads amounted to Rs. 18,164. The bulk of this sum was spent on repairs in all the districts except *South Canara*, *South Malabar* and *Madura*. The only new works of importance were the completion of two roads and the Mandanthorai ferry approach in the *Tinnevely* district. The principal works of repair in *North Malabar* and the *Nilgiris* were confined to the Chedleth-Sultan's Battery road in the former district and to the remetalling and opening of drains in certain roads in the latter. In *North Coimbatore* a sum of Rs. 3,863 was spent in repairing the two main ghaut roads from Hassanur to Lokanahalli and Aggipuram to Chellampalayam; and in *South Coimbatore* an amount of Rs. 1,200 was paid to the Local Fund Board as contribution for 1897-98 and 1898-99 for the maintenance of the Anamalai-Sethumadai road. In *Tinnevely* an expenditure of Rs. 3,894 was incurred in sundry repairs.

Under "buildings" the most important new works undertaken in the *Northern Circle* consisted of the construction of rest-houses at Tunikicheruvu, Narlakonda and Jeediguppa in *Goddavari*; inspection camps at Bandlapenta and Dornal in *Kurnool*, and a rest-house at Rallapalli in *Anantapur*. The expenditure in the *Central Circle* was chiefly confined to repairs. A few rest-houses and tanna sheds were, however, constructed in *Salem*, *North Arcot* and *Cuddapah*. In the *Southern Circle* a large outlay was incurred on buildings. In *South Canara* a rest-house was constructed at Kadike at a cost of Rs. 1,308. The chief works in *North Malabar* were the construction of a rest-house at Begur at a cost of Rs. 2,049 and of a shed for drying gum-kino at Manantoddy for Rs. 400. The construction of a sandalwood godown at Kollegal in *North Coimbatore* and of a workshop for saw mill and peon's line at Mount Stuart and a chattram for coolies on the Anamalais in *South Coimbatore* formed the chief new works in the district. There were no works of importance in the other districts. Sundry works of construction and repairs were also executed in all the districts.

20. *Tramways.*—No conclusion has yet been arrived at with regard to devising a satisfactory method of estimating the usefulness of the tramway and the matter is still under correspondence with the Conservators. No attempt has therefore been made this year to compare the cost of transport by tramway with any other mode of conveyance, the work done and the actual cost incurred having only been exhibited

in Form No. 65. In *Cuddapah* a sum of Rs. 400 was spent during the year under report on repairs to the tramway which is invariably worked at a loss, the outturn of produce to be removed being comparatively small. It is noted that the transfer of the tramway to *Nellore* is under correspondence between the two District Forest-officers. The tramway in *Srīharikōta* range in *Nellore* is $5\frac{1}{4}$ miles long and that in the casuarina plantation range 4 miles. The quantity of wood carried by it in the former range was 5,319 tons or 25,265 ton miles against 21,436 in the preceding year, while that carried in the latter range was 919½ tons or 3,677 ton miles against 6,822 in 1897-98. The tramway in the *Srīharikōta* range was worked over a distance of only $4\frac{1}{4}$ miles. The quantity trammed in *South Coimbatore* was 14,988 cubic feet against 40,880 cubic feet in 1897-98. This large decrease is attributed to the retention of many logs in forest depots to secure seasoned wood for the saw mill at Mount Stuart. There was, however, also some difficulty in securing contractors.

(b) *Protection of Forests from Injury.*

(1) GENERAL PROTECTION AND BREACHES OF FOREST LAWS.

21. The details of forest offences detected and disposed of in each district are given in Form No. 50 and the following summary shows by circles the new cases of the year with particulars of last year for comparison:—

Circle.	Year.	Number of cases pending at commencement of the year.	New cases of the year.					Total cases.	Cases pending at close of year.
			Injury by fire.	Unauthorized felling, &c.	Illicit grazing.	Other offences.	Total new cases.		
Northern	1897-98	710	17	2,472	1,384	369	4,442	5,152	665
	1898-99	665	35	2,680	1,798	320	4,723	5,388	639
	Difference	- 45	+ 18	- 212	+ 414	- 49	+ 281	+ 236	- 26
Central	1897-98	682	58	3,710	3,823	377	7,965	8,647	1,054
	1898-99	1,078	17	4,879	5,964	401	10,861	11,939	1,305
	Difference	+ 396	- 41	+ 1,169	+ 2,141	+ 24	+ 2,896	+ 3,292	+ 251
Southern	1897-98	384	42	1,395	762	257	2,808	2,970	462
	1898-99	457	92	1,813	1,107	194	3,606	3,163	430
	Difference	+ 73	+ 50	+ 418	+ 345	- 63	+ 792	+ 493	- 32
Presidency	1897-98	1,776	112	1,997	5,971	1,003	14,998	16,769	2,181
	1898-99	2,300	144	9,072	8,164	915	19,395	20,495	2,844
	Difference	+ 524	+ 32	+ 7,075	+ 2,193	- 86	+ 4,397	+ 3,726	+ 663

* Vide explanation in form No. 50 for variation of opening balance.
† Excludes petty offences in *South Canara* let off with a warning.

For the Presidency there was an increase under every head except "other offences" and the total number of new cases during the year increased by 22 per cent. The largest increase (32.6 per cent.) was in the *Central Circle*. *Southern Circle* ranked next with 16.2 per cent. The inclusion of undetected cases in the returns accounted for the comparatively small increase (6.4 per cent.) in the *Northern Circle*. The cases of "injury by fire" increased in the *Northern* and *Southern Circles* and decreased largely in the *Central Circle*. The fall in the last mentioned circle was general but was particularly noticeable in *South Arcot* where the offences reported decreased from 37 to 9. The increase in the *Northern Circle* occurred principally in *Vizagapatam*, *Gōdāvari* and *Anantapur*. In the last mentioned district there were no cases of fire during the previous year but all the 11 cases of the year under review were undetected. In the *Southern Circle* 37 and 33 cases were reported in *South Canara* and *Tinnevely*. Most of these cases which were due to incendiarism were undetected and it was impossible to get any clue of the offenders. There was a falling off in the cases of "unauthorized felling" in the *Northern Circle*. The increase occurred mainly in *Ganjam*, *Bellary* and *Anantapur* and was more than counterbalanced by a large decrease in *Gōdāvari* and *Kurnool*. Better supervision and the recent strengthening of the subordinate establishments resulted in efficient detection in the three first mentioned

districts. In the *Central Circle* there was a slight decrease under this head in *Cuddapah* and a marked increase in the other districts except *Nellore*. In *Chingleput*, *North Arcot*, *South Arcot* and *Salem* the number rose from 245, 605, 1186 and 729 to 560, 767, 1,445 and 1,035, respectively. The increase of offences of all descriptions in *Chingleput* is ascribed to the introduction during the year under report of the system of treating the case of every individual who may have been concerned with others in the commission of one and the same offence as a separate charge, under the orders of the District Magistrate. In *Trichinopoly* the increase was the result of the prohibition imposed during the first half of the year—the manuring season—on the removal of manure leaves from the Pachamalai reserved forests. In the other districts it was due to increased vigilance on the part of the subordinates. There was a falling off in the number of cases in *South Canara*, *Malabar* and *South Coimbatore* and an increase in the other districts of the circle chiefly in *Madura* and the *Nilgiris* where the offences reported on were 368 and 51 against 242 and 24, respectively, in the previous year. In *Tinnevely* the offences were petty ones and related to cases of illicit removals from unreserved lands and the increase in other districts was due to better detection.

"Illicit grazing" increased considerably in all the circles, 29.5 per cent. in the *Northern Circle*, 37.6 per cent. in the *Central Circle*, 45.2 per cent. in the *Southern Circle* and 36.7 per cent. for the Presidency. Taking the districts individually it diminished in *Ganjam*, *Gōdāvari* and *Trichinopoly*, the number of cases falling from 65 and 205 to 51 and 125, respectively, in the first mentioned two districts. The increase in *Kistna* has not been explained. In *Vizagapatam*, *Nellore*, *Tinnevely* and *North Coimbatore* as well as in *Bellary* and *Salem* it was due to better supervision. The increase in *Kurnool* is set down as being due to the vast area reserved by the Collector under the rules under section 26 which was originally grazed free by the ryots. For the increase in *Anantapur* an explanation is to be found in the fact that during the preceding year the reserves were for several months thrown open to grazing free of charge owing to the prevailing drought and no cases were reported during that period. It was also in a measure due to increased detection. In *North Arcot* and *Madura* the offences under this head were doubled, the number of cases rising from 642 and 233 to 1,285 and 462, respectively. The increase in these last two districts as well as in *South Arcot* and *Cuddapah* was due to much illicit browsing of goats. The number of goats impounded were 32,659, 13,972, 35,436 and 22,721, respectively. The increase in *Chingleput* has already been explained.

The enhanced rate of pound fees was in force throughout the year under report, in the *Tiruvannamalai taluk*. The statistics of cattle impounded and the amount of pound fees, compensation and fines levied are compared in the following abstract:—

Year.	Number of animals dealt with.	Pound fees.	Compensation fees.	Fines.	Total.
1897-98	19,758	Rs. 3,478	Rs. 3,940	Rs. 711	Rs. 8,129
1898-99	18,722	8,940	2,719	825	7,478

"Other offences" diminished in the *Northern* and *Southern Circles* and increased slightly in the *Central Circle*. Except in *Ganjam*, *Gōdāvari* and *Anantapur* the number of cases diminished in all the districts of the *Northern Circle*, notably in *Kistna* and *Bellary*. The decrease in the last mentioned district was the result of the introduction of the tree-tax system. The increase in *Gōdāvari* was but slight, while that in *Ganjam* has not been explained. In *Anantapur* the cases were "unauthorized cultivation in reserved forests" or those of shooting without a license. In the *Central Circle* the number diminished largely in *South Arcot* and more than doubled itself in *North Arcot*; the increase in the latter district was due to better detection, but the nature of the offences has not been reported. In the *Southern Circle* the decrease occurred in all the districts except *Madura* and *Tinnevely*; in the last two districts the increase was only very small and calls for no remark.

The number of cases pending at the close of the year was only 183 more than the number pending at the close of the previous year. This does not require any explanation seeing the large increase (3,302) in the number of cases reported on.

22. The following abstract compares the disposal of offences during the year with that in the preceding year:—

Circle.	Year.	Total.	Withdrawn.		Compounded.		Prosecuted.		Percentage of cases prosecuted to disposals.	Percentage of acquittals to cases prosecuted.
			Number.	Percentage.	Number.	Percentage.	Convicted.	Acquitted.		
Northern	1897-98	4,487	702	15.7	2,235	49.8	1,356	194	34.5	12.5
	1898-99	4,764	717	15.1	2,355	49.4	1,445	246	35.5	14.5
	Difference	+ 277	+ 15	- 0.6	+ 120	- 0.4	+ 90	+ 52	+ 1.0	+ 2.0
Central	1897-98	5,593	1,348	17.3	4,255	56.0	1,691	299	26.2	15.0
	1898-99	10,324	1,177	11.4	6,390	61.8	2,407	380	25.8	13.0
	Difference	+ 2,741	- 171	- 6.4	+ 2,135	+ 5.8	+ 716	+ 81	+ 0.6	- 2.0
Southern	1897-98	2,508	370	14.8	1,304	48.0	777	157	27.2	16.8
	1898-99	8,998	470	15.5	1,225	43.7	1,090	148	40.8	11.9
	Difference	+ 6,490	+ 100	+ 0.7	+ 121	- 4.3	+ 313	- 9	+ 8.6	- 4.9
Residency	1897-98	14,568	2,420	16.6	7,694	52.7	3,824	650	30.7	14.5
	1898-99	18,131	2,864	15.8	10,870	55.6	4,915	784	31.4	13.2
	Difference	+ 3,563	+ 444	- 0.8	+ 3,176	+ 2.9	+ 1,119	+ 134	+ 0.7	- 1.3

The percentage of acquittals to prosecutions again shows an improvement having fallen from 14.5 to 13.2 for the Presidency, from 16.8 to 11.9 in the *Southern Circle*, and from 15 to 13 in the *Central Circle*. The *Northern Circle* showed, however, an increase of 2 per cent. Taking the districts individually, the percentages fell from 8 and 16 in *Ganjam* and *Kurnool* to 12 and 10, respectively. In *Visagapatam*, *Goddavari*, *Kistna* and *Bellary* the acquittals increased by 5, 3.6, 5.5 and 3 per cent., respectively. In *Anantapur* the percentage was as high as 26. The unusual state of things in the last mentioned district is attributed by the District Forest-officer to perverse decisions on the part of one of the Sub-Magistrates and the attention of the District Magistrate has been drawn to the matter. In *Bellary* the number was swelled by several careless prosecutions for cultivation which was eventually proved to have been made outside the limits of reserved forest. In *Goddavari* the increase in the number of acquittals is said to be due to the leniency of the Magistrates and in some cases to prevarication of the Forest subordinates. In *Chingleput* and *Trichinopoly* the acquittals rose from 10 per cent. to 18 and 20 per cent., respectively. In the former district the high percentage is ascribed to the Sub-Magistrates treating as acquittals all cases in which the compounding fees were paid into Court. The increase in the latter district was due to the fact that in a few cases the acquittals were based on the Magistrates' view that the graziers and not the owners of cattle should be prosecuted and to the reluctance of the Magistrates in a few cases to accept the uncorroborated testimony of a watcher or guard, the only evidence available, and partly to the increase in the number of cases dealt with. In *Tanjore* 31 cases were taken to Court and of these, 3 were acquitted. The percentage of acquittals was 36 for *North Malabar*, but the total number of prosecutions was only 11 and the acquittals 4. In *South Canara* and *South Coimbatore* it rose from 20 and 11 to 22.6 and 13.6, respectively.

The percentage of cases withdrawn to cases disposed of diminished largely (6.4 per cent.) in the *Central Circle*, but in the *Northern* and *Southern Circles* it fell and rose but slightly, the net result for the Presidency being a decrease of 3.6 per cent. The slight increase in *Ganjam* (11 to 13 per cent.), *Visagapatam* (20 to 22 per cent.), *Bellary* (10 to 12 per cent.) and *Anantapur* (8 to 11 per cent.) was to a great extent counterbalanced by the decrease in *Kistna* and *Kurnool*. In *Bellary* many of the offences reported by the Revenue Inspectors under a misapprehension of the rules

under section 26 had to be withdrawn. In the other districts the inclusion of undetected cases under withdrawals accounted for the increase. In the *Central Circle* the decrease was general, except in *Chingleput* where there was a slight rise (7 to 9 per cent.) due to the withdrawal of charges against minors. In *South Canara*, the *Nilgiris*, *North Coimbatore* and *Tinnevely* an increase of 3, 7, 4 and 6 per cent., respectively, is observed, the increase being for the most part compensated by the decrease in the other districts. The increase in the first-mentioned two districts has not been explained. In *North Coimbatore* it was due to the lenient treatment of cases of grazing without permit in the early months of the year when, the offence was due to carelessness in renewing permits than to any intention to evade payment; while in *Tinnevely* the striking off the register of a large number of undetected cases for the first time included in the returns apparently resulted in the rise in the percentage. The percentage of cases compounded diminished largely in the *Southern Circle* (from 48 to 43.7 per cent.) and slightly in the *Northern Circle* and increased by 5.8 per cent. in the *Central Circle* where, more than 50 per cent. of the cases compounded were grazing offences. In *Cuddapah*, *Chingleput*, *South Arcot* and *Trichinopoly* the percentage rose from 43, 69, 57 and 35 to 51, 77, 61 and 57, respectively. In *Nellore* it fell from 17 to 12 and in *North Arcot* from 78 to 77. The Board has no reason to doubt that the instructions on the subject are well understood in all the districts.

The following statement compares the amount of compensation realized during the year in each circle and the average amount per case and per person involved with those of the previous year:—

Circle.	During 1897-98.			During 1898-99.		
	Amount realized.	Average per case.	Average per person accused.	Amount realized.	Average per case.	Average amount per person accused.
Northern	Rs. 21,333	Rs. A. P. 10 12 6	Rs. A. P. 3 4 4	Rs. 17,092	Rs. A. P. 7 4 1	Rs. A. P. 2 11 9
Central	81,747	7 7 6	3 1 2	87,630	5 14 2	2 8 5
Southern	8,803	7 4 11	2 14 2	8,921	6 11 8	2 10 11
Total	81,883	8 5 1	3 1 9	88,643	6 5 1	2 9 7

The total amount of compensation realized was only slightly larger than in the previous year, but it is satisfactory to find a reduction in the average amount paid per person involved in each circle as well as in the Presidency generally. The increase in the amount occurred mainly in *North Arcot*, *Trichinopoly* and *Tinnevely*. The increase in the latter two districts was the result of a greater number of cases compounded during the year. In *Trichinopoly*, where the amount rose from Rs. 1,356 to Rs. 3,499, it is also reported to be due to the higher compounding rates levied for the purpose of producing a deterrent effect. In *North Arcot* higher rates were levied on old offenders. The increase is also attributed to the larger number of cattle detected in each case. The amount realized was Rs. 8,839 against Rs. 3,906 in the previous year. In *Kistna*, *Kurnool*, *Bellary*, *Cuddapah*, *South Arcot*, *Salem* and *Tinnevely* the amount levied was Rs. 4,225, Rs. 4,058, Rs. 5,508, Rs. 2,966, Rs. 15,474, Rs. 5,898 and Rs. 3,454 respectively. In the *Northern Circle* the decrease was general in all the districts except *Kurnool*, and the cases dealt with were petty ones.

The three cases of forged Government marks in *Ganjam* referred to in the report for the previous year resulted in conviction. The accused (the same in all the cases) was sentenced to six months' rigorous imprisonment and a fine of Rs. 300 in all. During the year under review, property consisting of one cart, 2 bulls and 3,384 cubic feet of wood was seized in a case of illicit removal of firewood and the accused sentenced to one month's rigorous imprisonment. In another case of illicit felling of nine sal trees in the same district the accused was fined Rs. 70. An important case of illicit removal of yepi wood from the forests of the Palnad range in *Kistna* was detected; the two accused were sentenced to one and one and a half months' rigorous imprisonment respectively. In *North Arcot* there were several cases in which a large number of goats were caught grazing in reserves and rescued on their way to the

pound, the subordinates being beaten in some instances. But most of these cases resulted in acquittal owing to the range officers not having made an immediate inspection and enquiry. In *Madura* a forester while driving goats to the pound was attacked by Kallars, one of whom was shot by a revolver by the forester in self-defence. The forester was tried and acquitted; but the Kallars who were tried by another Magistrate were also acquitted. In the other districts there were no important cases worth mentioning.

23. No rewards were disbursed during the year to informers of forest offences in *Ganjām, Vizagapatam, Bellary, Nellore, Salem, Trichinopoly, Tanjore, South Malabar, the Nilgiris, North Coimbatore, South Coimbatore and Tinnevely*. Information on the subject is not contained in the report from *North Malabar*. In the other districts, rewards to an aggregate extent of Rs. 365 to informers (including forest subordinates) and Rs. 204 to the subordinates of the Abkari department were paid. As in the previous year, the Board has issued a proceedings* on the subject of forest offences, a copy of which has been forwarded for the information of Government. The usual statements prescribed by the Government of India are appended below:—

No. I.

Circle.	Cases taken to Court.				Cases compounded.			
	Injury to forests 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.	Injury to forests 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.
1	2	3	4	5	6	7	8	9
Northern	10	940	622	158	1	1,243	925	127
Central	8	1,861	1,276	156	1	2,008	3,008	200
Southern	18	609	569	99	2	811	416	73
Total	31	2,910	2,467	408	4	4,957	4,849	399

Circle.	Cases withdrawn or undetected.				Total cases.				Grand total of cases.
	Injury to forests 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.	Injury to forests 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.	
10	11	12	13	14	15	16	17	18	
Northern	24	338	946	40	35	2,580	1,793	820	4,723
Central	13	615	480	45	17	4,979	5,364	401	10,561
Southern	72	189	122	23	92	1,613	1,107	194	3,006
Total	109	1,205	848	108	144	9,073	8,164	915	18,956

* Excludes petty offences let off with a warning in South Canara.

No. II.

Details of prosecutions for offences by fire.

Division.	Serial No. of fire.	Acres burnt.	Character of offence (whether careless or intentional).	Whether acquitted or convicted.	Section of Law under which convicted.	Amount of punishment.
Vizagapatam	1	5 acres.	Intentional	Convicted	Section 21 of the Forest Act	Sentenced to fifteen days' rigorous imprisonment.
	2	"	Careless	Do.	Do.	Sentenced to four days' rigorous imprisonment.
	3	No information.	Intentional	Case pending	Do.	Do.
	4	"	Do.	Do.	Do.	Do.
	5	"	Do.	Do.	Do.	Do.
Goddavari	1	0-90 acres.	Do.	Convicted	Section 21 (b) of the Forest Act	Fined Rs. 5.
	2	1-00 "	Do.	Do.	Do.	Fined Rs. 10.
	3	250-00 "	Do.	Do.	Do.	Do.
	4	325-00 "	Careless	Acquitted	Section 21 (b) of the Forest Act	Two were fined Rs. 10 each.
	5	13-00 "	Do.	Compounded	Do.	Compounded for Rs. 1-12-0.
Kistna	1	12,000-00 "	Intentional	Acquitted	Section 21 of the Forest Act	Do.
	2	No information.	Do.	Case pending	Do.	Do.
	3	No information.	Do.	Convicted	Section 21 of the Forest Act	Two were sentenced to fifteen days' rigorous imprisonment each.
	4	No information.	Careless	Do.	Do.	Do.
	5	24 acres.	Intentional	Do.	Do.	Do.
Kurnool	1	50 "	Do.	Convicted	Section 21 of the Forest Act	Do.
	2	50 "	Do.	Do.	Do.	Do.
	3	50 "	Do.	Do.	Do.	Do.
	4	150 "	Do.	Do.	Do.	Do.
	5	150 "	Do.	Do.	Do.	Do.
Cuddapah	1	40 "	Careless	Convicted	Section 21 of the Forest Act	One was fined Rs. 2 and another Rs. 3.
	2	40 "	Do.	Do.	Do.	Three were fined Rs. 20 each, in default one month's imprisonment.
	3	10 "	Do.	Do.	Do.	Do.
	4	10 "	Do.	Do.	Do.	Do.
	5	5 "	Do.	Do.	Do.	Do.
North Arcot	1	No information.	Do.	Convicted	Section 21 (b) of the Madras Forest Act	Fined Rs. 2.
	2	12 acres.	Do.	Do.	Section 26 (b)	One was fined Rs. 5, in default one week's rigorous imprisonment and two others each fined Rs. 8, in default one week's rigorous imprisonment.
	3	20 "	Do.	Do.	Section 21 of the Forest Act	Fined Rs. 10, in default ten days' simple imprisonment.
	4	10 "	Do.	Do.	Section 21 of the Forest Act	Sentenced to one month's rigorous imprisonment.
	5	75 "	Careless	Do.	Section 21 (b) of the Forest Act	Sentenced to four months' rigorous imprisonment and fined Rs. 50, in default six weeks further rigorous imprisonment.
South Arcot	1	10 "	Do.	Do.	Do.	Fined Rs. 20.
	2	3 "	Do.	Do.	Do.	Fined Rs. 15.
	3	300 "	Do.	Do.	Do.	Fined Rs. 8 and Rs. 10 compensation.
	4	0-25 "	Do.	Do.	Do.	Fined Rs. 3, in default ten days' rigorous imprisonment.
	5	400 "	Do.	Do.	Do.	Fined Rs. 1 each.
Salem	1	No information.	Do.	Do.	Section 21 of the Forest Act	Fined Rs. 5 "
	2	20 "	Do.	Do.	Do.	Fined Rs. 2 "
	3	10 "	Do.	Do.	Do.	Fined Rs. 2 "
	4	75 "	Do.	Do.	Do.	Six were sentenced to ten days' rigorous imprisonment each.
	5	10 "	Do.	Do.	Do.	Sentenced to one month's rigorous imprisonment and to pay Rs. 25 as compensation.
Trichinopoly	1	395 acres.	Do.	Do.	Do.	Three were sentenced to one month's rigorous imprisonment each.
	2	10 "	Do.	Do.	Do.	Do.
	3	19 "	Do.	Do.	Do.	Do.
	4	400 "	Do.	Do.	Do.	Do.
	5	7 "	Do.	Do.	Do.	Do.
South Canara	1	Nil.	Careless	Do.	Section 21 of the Forest Act and Section 546 of the Criminal Procedure Code	Nineteen offenders fined Rs. 5 each and Rs. 5 each as compensation.
	2	Do.	Do.	Do.	Section 21 (d) and (f) of the Forest Act.	Fined Rs. 6.
	3	Do.	Do.	Do.	Do.	Fined Rs. 7-4-0.
	4	Do.	Do.	Do.	Do.	Fined Rs. 4.
	5	Do.	Do.	Do.	Do.	Do.
South Malabar	1	10 square yards.	Do.	Do.	Do.	Do.
	2	0-2 acres.	Do.	Do.	Do.	Do.
	3	50-00 "	Do.	Do.	Do.	Do.
	4	300-00 "	Do.	Do.	Do.	Do.
	5	Do.	Do.	Do.	Do.	Do.
North Coimbatore	1	Do.	Do.	Do.	Do.	Do.
	2	Do.	Do.	Do.	Do.	Do.
	3	Do.	Do.	Do.	Do.	Do.
	4	Do.	Do.	Do.	Do.	Do.
	5	Do.	Do.	Do.	Do.	Do.
South Coimbatore	1	Do.	Do.	Do.	Do.	Do.
	2	Do.	Do.	Do.	Do.	Do.
	3	Do.	Do.	Do.	Do.	Do.
	4	Do.	Do.	Do.	Do.	Do.
	5	Do.	Do.	Do.	Do.	Do.
Madura	1	Do.	Do.	Do.	Do.	Do.
	2	Do.	Do.	Do.	Do.	Do.
	3	Do.	Do.	Do.	Do.	Do.
	4	Do.	Do.	Do.	Do.	Do.
	5	Do.	Do.	Do.	Do.	Do.
Tinnevely	1	Do.	Do.	Do.	Do.	Do.
	2	Do.	Do.	Do.	Do.	Do.
	3	Do.	Do.	Do.	Do.	Do.
	4	Do.	Do.	Do.	Do.	Do.
	5	Do.	Do.	Do.	Do.	Do.

* The case against two persons was withdrawn.

No. III.

Division or Circle.	A. Fire caused by accident or through carelessness in burning fire lines.						B. Fires entering the forests by crossing exterior fire traces.						C. Fires beginning inside the reserve or fire traced areas.					
													Owing to carelessness or accident.					
	Number of fires.	Area burnt in acres.		Number of fires.	Area burnt in acres.		Number of fires.	Area burnt in acres.		Number of fires.	Area burnt in acres.		By workmen employed in the forests, by purchasers of forest produce, and by Yab-cutters.	Number of fires.	Area burnt in acres.	By villagers, travellers, &c., passing through the forests.	Number of fires.	Area burnt in acres.
1.	2	3		4	6		6	7		8	9		10	11		12	13	
Northern Circle.																		
Ganjum	..	..	..	..	160	..	..	..	..	2	600	..	..	..	..	..	..	..
Vizagapatam	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Godavari	..	..	..	..	..	..	..	..	..	10	3,467	..	..	..	..	..	..	..
Krishna	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..
Karnool	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bellary	..	1,955	..	..	..	..	..	..	..	3	200	..	3	160	..	..	..	..
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total, Northern Circle	2	1,955			160		7	3,568		18	4,277		3	150		..	..	..
Central Circle.																		
Cuddapah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	..	200	..	..	80	..	..	..	..	3	6	..	..	..	..	..	..	..
South Arcot	..	105	..	..	25	..	..	..	..	1	2	..	..	..	..	..	..	..
Salem	..	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total, Central Circle	6	345		6	105		3	34		3	8		..	..		..	..	..
Southern Circle.																		
South Canara	..	..	..	..	63,859	..	..	..	..	16	500	..	..	..	..	..	..	..
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Malabar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
The Nilgiris	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Coimbatore	..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madura	..	33	..	..	490	..	..	..	..	2	52	..	..	..	..	..	..	..
Tinnevely	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total, Southern Circle	7	132		20	67,140		5	413		22	580		..	..		1	50	..
Total, Presidency	14	2,432		28	67,405		14	4,405		43	4,865		3	150		1	50	..

* The Collector has not explained the omission in this statement of the fires recorded against the district in statement II.

† Does not tally with the figures in statement No. II. The Collector has not explained the variation.

No. III—cont.

Division, or Circle.	C. Fires beginning inside the reserve or fire traced areas - cont.														Total A, B and C.			
	By intentional firing.						Causes unknown.											
	In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.		Total.		Number of fires.		Area burnt in acres.		Number of fires.				Area burnt in acres.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.			Number of fires.	Area burnt in acres.
	14	15	16	17	18	19	20	21	22	23	24	25						
Northern Circle.																		
Ganjam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Godavari	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Krishna	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Karnool	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Bellary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Total, Northern Circle	6	61	2	251	5	5	13	317	81	19,433	126	30,250	..	..	..	..		
Central Circle.																		
Cuddapah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
North Arcot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
South Arcot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Salem	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Total, Central Circle	13	2,513	..	..	6	500	19	8,013	92	13,529	127	17,034	..	..	..	..		
Southern Circle.																		
South Canara	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
South Malabar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
The Nilgiris	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
North Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
South Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Madura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Tinnevely	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Total, Southern Circle	36	4,654	2	300	25	1,284	63	6,238	28	1,259	146	75,812	..	..	..	..		
Total, Presidency	65	7,228	4	551	36	1,789	95	9,568	201	34,221	399	123,095	..	..	..	..		

† Not known.

‡ No explanation has been given by the Collector for not recording these fires in Form No. 50.

|| The Collector has not explained the variations between these figures and those entered in Form No. 51.

(2) FOREST FIRES AND FIRE-PROTECTION.

24. The following abstract exhibits the results of fire protection as compared with those of the preceding year:—

Circles.	During 1897-98.			During 1898-99.		
	Area attempted in square miles.	Percentage of area attempted which escaped fire.	Average cost per square mile.	Area attempted in square miles.	Percentage of area attempted which escaped fire.	Average cost per square mile.
Northern	1,069	94	9 0 4	963	95.1	10 10 9
Central	2,379	96.7	5 9 8	2,416	98.9	6 3 8
Southern	1,873	89.7	7 3 7	1,747	93.6	6 10 4
Total ..	5,321	93.6	6 13 9	5,126	96.3	6 11 9

There was no change in the system of fire protection previously reported. The net result of the operations shows a decrease of 195 square miles in the area attempted to be protected and of Rs. 1,983 in the cost incurred which, as per Form No. 51, amounted to Rs. 34,532 during the year under report. When compared with the rate for the previous year, the average cost per square mile is higher in the *Northern Circle* and slightly lower in the other two circles as well as for the Presidency. There was a decrease of 106 square miles in the area attempted in the *Northern Circle*, chiefly in *Kurnool*, *Bellary* and *Anantapur* due to the abandonment of certain areas, the protection of which was considered inadvisable for the present, while on the other hand the expenditure in these districts showed an increase contributing to the increase in the cost rate. In *Kurnool* fire tracing the district, taluk and reserve boundaries had to be undertaken, while in *Anantapur* fresh compartment lines had to be cut through heavy growth. Work was carried out more thoroughly in *Bellary*, many of the compartment lines having been recleared and all the lines cleared to a greater width than in the previous year. In the *Central Circle* there was an increase of 37 square miles in the area attempted, chiefly in *North Arcot*, while the cost of protection was less. The decrease is ascribed to the fire patrols having been employed for shorter period owing to the favourable season and to the utilization of the watchers in clearing fire lines. The decrease in the *Southern Circle* occurred mainly in *Madura* where protection was limited to Alagarmalai in the Palamedu and to certain reserves in the Kodaikānal range, as it could not be made effective in the larger blocks for more than a few years at a time.

25. The percentage of area burnt to the area attempted is 4.9 in the *Northern Circle*, 1.1 in the *Central* and 6.4 in the *Southern Circle* against 6, 3.3 and 10.3, respectively, in the preceding year. The percentages for the several districts, as compared with those for 1897-98, are shown below:—

Northern Circle.			Central Circle.			Southern Circle.		
Districts.	Percentage of fires to area attempted		Districts.	Percentage of fires to area attempted		Districts.	Percentage of fires to area attempted	
	In 1897-98.	In 1898-99.		In 1897-98.	In 1898-99.		In 1897-98.	In 1898-99.
Ganjām ..	2.8	2.9	Cuddapah ..	5.3	3.2	South Canara ..	0.6	1.3
Vizagapatam ..	2.0	5.5	Nellore ..	2.2	..	North Malabar ..	80.7	82.1
Gōdāvari ..	3.9	6.4	Chingleput ..	0.3	..	South do. ..	..	0.005
Kistna ..	0.1	0.3	North Arcot ..	2.6	0.4	The Nilgiris ..	0.2	0.5
Kurnool ..	37.4	10.8	South do. ..	4.4	0.1	North Coimbatore ..	5.9	0.6
Bellary ..	0.7	4.9	Salem ..	2.5	0.1	South do. ..	4.5	0.09
Anantapur ..	0.5	4.8	Trichinopoly ..	0.1	0.06	Madura ..	19.4	0.3
			Tanjore ..	..	..	Tinnevely ..	2.2	2.4
	6	4.9		3.3	1.1		10.3	6.4

Compared with the preceding year, the results of fire protection during the year under report are satisfactory. Dealing, however, with individual districts, the results in almost all the districts in the *Central Circle* and in *Coimbatore (north and south)* and *Madura* in the *Southern Circle* are good. The percentage of failures in the several districts comprised in the *Northern Circle* compares unfavourably with the results of 1897-98 except in *Kurnool* where the satisfactory result is attributed to efficient protection. The increase in *Ganjām* was trifling, but it is believed that many of the fires were deliberately planned by the villagers to enable them to collect bamboo seed. In *Vizagapatam* the rise is ascribed to the fires resulting from "podu" (shifting) cultivation, while in *Gōdāvari* to their uncontrollable character in the hill reserves. In *Bellary* rigid protection was confined to the leased forests and plantations. The area burnt was the result of two fires—one of which alone was responsible for 1,900 acres which occurred while burning the lines, the fires having got out of control owing to high wind. The other fire was caused by sparks from the railway engines. The failure in *Anantapur* was due to the apathy displayed by the village officers in failing to render help in extinguishing the fires. It is noted that the delinquents have been fined and otherwise punished. In *Cuddapah* there were eighteen fires in the Yerrakonda, Lankamalais and Nallamalais due in most cases to incendiarism. The area burnt amounted to 3,826 acres, but it is only approximate. The Yerrakonda has been closed to grazing during 1899-1900. Three fires in the Nallamalais are reported to have crossed from Kurnool and one in the Lankamalais to have been started by a spark from a fire outside the protected area. Early rains contributed to the success in *North and South Arcot*, *Salem* and *Madura*. Three cases of fires occurred in *Trichinopoly*, but the damage done was trifling. In *South Canara* 750 acres were burnt, the worst fires being in the Chinkramale reserve (300 acres) and in the Baindur block (210 acres). The former was due to incendiarism and the latter to accident. The result of fire protection in *North Malabar* was again most disappointing, the percentage of area which escaped fire being only 17.9 against 19.3 in the preceding year. Large areas of dead bamboos made the forest very inflammable and the exceptionally high winds that prevailed during the year under report caused the fires to spread rapidly. The large specially-protected area in Kurichiyat block was burnt through after having escaped for six years. A number of logs was burnt, which, owing to want of elephants, had not been dragged to depot. The loss amounted to about 1,871 cubic feet of teak, vengai and ventek.

In *North Coimbatore* four small fires occurred. An attempt was made to destroy the Judathalhall sandalwood compartment by setting fire deliberately in eight places, but the fire was quickly put out, a comparatively small area having been burnt. The only important fire in *South Coimbatore* occurred in the Tekadi leased forests and the area burnt was 400 acres. In *Tinnevely* the areas under special protection comprised the areas of all the working circle coupes under immediate regeneration, the working plans providing for such protection for a period of five years after they have been felled over. In the area under general protection, the chief fires occurred in Ambasamudram and Tenkasi taluks in both of which taluks some grazing compartments were closed to grazing owing to persistent firing of the forests.

26. In *Gōdāvari*, *North* and *South Coimbatore* the recording of the results of fire protection on maps is being continued and in *Tinnevely* they are being marked on skeleton maps attached to each working circle. In *Vizagapatam* and *North Arcot* no steps have yet been taken to record the results because no reliable maps are available for the reserves in the former district and the survey of India maps for the reserves in the latter are only just being received. The reports from other districts contain no information on the subject.

(3) REGULATION OF GRAZING AND PROTECTION FROM CATTLE.

27. The areas open and closed to grazing in each district are shown in Form No. 52, and the number and kind of animals grazed free or on payment of fees in the reserved forests and reserved lands, in Form No. 53. Owing to the favourable character of the season no reserves were thrown open to free-grazing except in the district of *South Arcot* where some of the firewood coupes continued to be open for over

a month at the beginning of the year. The total area of reserved forests and reserved lands rose from 19,253 to 19,594 square miles. Of these, 1,824 square miles were closed to all animals throughout the year and 132 square miles for a portion of the year, against 1,792 and 233 square miles, respectively, in the previous year. Taking the circles individually, the area closed throughout the year decreased in the *Central* and *Southern Circles* and increased in the *Northern Circle*. In the *Southern Circle* only 115 square miles were closed in *North Coimbatore* against 215 square miles in the preceding year and the decrease is noted with satisfaction. In *Kistna*, *Kurnool* and *Bellary* in the *Northern Circle* some of the areas opened during the previous year were closed, the necessity for keeping them open having ceased to exist during the year under report. A smaller extent was closed in *Trichinopoly* and *Chingleput* in the *Central Circle*. All the reserved forests and lands in *Vizagapatam* to an aggregate extent of 354 square miles, and 5 square miles in *North Coimbatore* were closed to both goats and sheep and permits for these animals were not issued in the districts of *South Canara* and *North Malabar*. 16,421 square miles were closed to goats only, 5,660 in the *Northern*, 6,962 in the *Central* and 3,799 square miles in the *Southern Circle*. The area open to all animals decreased from 1,247 to 996 square miles. In *Vizagapatam* goats and sheep were admitted during the previous year in 275 square miles open to other animals but were excluded entirely from these areas during the year under report; and this accounts for the decrease in the area open to all animals in the *Northern Circle*. In *Kistna*, *Kurnool* and *Bellary* the extent open was slightly larger than in the previous year. In *Anantapur* sheep were admitted for the first time into all the reserves that were open to grazing.

In *Cuddapah* larger provision was made for goat-browsing, the area reserved being 65 square miles against 61 in the previous year. In *Nellore* and *Chingleput* the area set apart for these animals was reduced from 35 and 18 square miles to 18 and 13 square miles, respectively. The grounds of reduction in the former district are not apparent. In the latter district part of the area required rest and had to be closed. In *Salem* and *North Arcot* 15 and 12 square miles, respectively, were made available. A scheme for further extension in *North Arcot* is under consideration and will be started from 1st January 1900. The extent now allowed for the purpose in *Kistna* has proved to be insufficient and the question of further provision is receiving the attention of the District Forest-officer. As in the previous year goats were strictly prohibited in *Ganjām*, *Gōdāvari* and *Anantapur* in the *Northern Circle*, in *South Arcot* and *Trichinopoly* in the *Central Circle*, and in all the districts of the *Southern Circle*. In *Ganjām*, *Vizagapatam*, *Anantapur*, *Trichinopoly*, *Coimbatore* and *Tinnevely* no provision is said to be required as there is ample unreserved waste available and the statistics of the animals impounded in these districts merely show that the goat owners prefer to risk driving them into the reserves where the forest growth is better than on the unreserved waste. In *Gōdāvari* and *Madura* schemes have been completed for the purpose. In *South Arcot* where the goat difficulty is most pressing it has been decided that even where considerable areas of village waste have been brought under reservation, provision for the admission of goats into reserved forests should not be made if the number of permits actually issued for cattle and sheep is already excessive and shows that no spare ground is available for goat-browsing. In *Kurnool* each reserve was treated as separate grazing ground and a separate permit required for each reserve. This arrangement brought many complaints and steps are now being taken to issue permits for a working circle consisting of two or more reserves instead of for a single reserve. The number of cattle admitted under licenses is shown in the following abstract:—

	Buffaloes.	Bulls and cows.	Sheep.	Goats.	Other animals.
Northern Circle	67,370	378,446	396,987	118,899	163
Central Circle	37,488	606,881	578,597	58,644	3
Southern Circle	21,589	278,379	68,667	..	236
Total	116,306	1,264,646	1,044,321	172,543	402

The permit system was introduced during the year for all grazing areas in *Nellore* except three which were leased out under the five years *Kancha* system which expired by the 30th June 1899. This is the only district in which fees were levied for grazing in unreserved areas and licenses were issued to 1,479 buffaloes, 6,559 cows and 20,996 goats or sheep. In *South Canara* grass from several blocks were sold at auction to neighbouring ryots who collected and removed it at their own cost. Grazing permits at three annas per hundred per diem were issued in the *Nilgiris*, under the rules of the district, for the pack bulls and cows of travelling tribes and merchants conveying grain from place to place. In *North Malabar* a lease was granted to Mr. MacDonald, a planter, at *Kurtikulam* allowing him to graze not more than 900 cattle in the adjoining reserves on payment of Rs. 100 per annum.

(c) Improvement of Forest growth.

(1) NATURAL REPRODUCTION.

28. The year was on the whole favourable to natural reproduction and the progress under this head may be regarded as satisfactory. The following has been culled from the district reports:—

Northern Circle.

Reproduction from seed was good in *Ganjām* particularly that of *Bambusa arundinacea*. In *Vizagapatam*, *Chloroxylon swietenia* continued to coppice freely in all the coupes. In *Gōdāvari* there was a good growth of *Tectona grandis*, *Terminalia tomentosa* and *Xylia dolabriformis* besides several other species which regenerated well. In *Kistna* the coppicing of *Acacia arabica* is reported to be satisfactory, shoots rising to 10 feet in four seasons, cattle being excluded. *Hardwickia* reproduced itself satisfactorily in the closed portions of the *Bollapalli*, *Kakirala* and *Guttikonda* forests. Bamboo has thriven well in the *Kondavid* reserve. In *Kurnool* reproduction was favoured by the comparative absence of fires. Seedlings of *Pterocarpus santalinus* and regrowth of bamboos were most prominent. In *Bellary* and *Anantapur* natural reproduction was unsatisfactory owing to the extreme dryness of the climate. Except in areas under rigid protection the seedlings of *Hardwickia* died off after the cessation of the rains.

Central Circle.

Regeneration was poor in *Cuddapah* owing to scanty rain. Experiments were made in *Kodur* hill and *Thanakonda* reserves in 1896 and in the past year, to determine the best months in which to fell for coppice. In the experiment made in 1896 standards were left and in that in 1898 the areas were clear cut. In the coupes in the *Kodur* hill reserve the coppice is reported to be fair and the best months for cutting to be September to January. In *Thanakonda* reserve the coppice is good though the leaves are drying up from want of rain. August to January seems to be the best months and April and May distinctly the worst. Coppice shoots appear about three months after felling. *Yelama* (*Anogeissus latifolia*) is the species by which the result of the experiment was principally judged. In *Nellore* reproduction was not promising owing to continued west wind which was a most parching one. An experiment similar to that made in *Cuddapah* to determine the effects of clean coppice as opposed to leaving standards and the months best suited for cutting is being tried but no decided conclusion has yet been arrived at. In *Chingleput* regeneration from coppice was satisfactory but that from seed not so promising. In *North Arcot* reproduction from seed in closed areas was good except that of *Pterocarpus santalinus* which was poor owing to want of cover; that from coppice was also encouraging. Root-suckers in the *Gudiyam* range were thriving well. In *South Arcot* the observation on the growth of coppice reports recorded in the report for 1897-98 was kept up and some data collected, but it is suggested that they should be reserved until next year. In *Salem* natural reproduction from coppice continued to make satisfactory progress in the coupes felled on the coppice with standard system during previous years while that from seed in some of the specially protected areas was fairly good. This was particularly noticeable in the *Singarapatti* block where numerous *Chloroxylon swietenia* (*Satinwood*), *Acacia Catechu* and *Albizia amara* seedlings were found. In areas not under special protection, reproduction is generally unsatisfactory and only existed in places where the thorny undergrowth protected the seedlings from being grazed over by cattle. In *Trichinopoly* regeneration from seed and coppice was good, the chief species being *Inga dalziei*, *Acacia arabica*, *Cassia florida*, *Chloroxylon swietenia*, *Mimusops himalaia*, *Albizia amara* and *Acacia planifrons*. *Casuarina* did not coppice satisfactorily in the *Coleroon* and *Cauvery* padugais while *Mimusops* did well in the felled coupes of the *Udaiyarpalayam* range. As stated in the report for 1897-98 reproduction from seed and coppice growth of *casuarina* was unpromising. In *Tanjore* reproduction from seed was not satisfactory owing to the dry sandy nature of the soil; the coppice growth of *casuarina* (*Mimusops*) in the *Vettangudi* and *Point Calumet* reserved forests was good.

Southern Circle.

In *South Canara* natural reproduction from seed was excellent in the ever-green forests on the ghâts. It is here where the *Peciloneuron Indicum* occurs in profusion and in almost pure forest which it is hoped will prove a valuable timber for sleeper and paving block purposes. The coppice growth in blocks felled for fuel was generally excellent and often remarkable, that of *Acacia catechu* was reported to be very good and greatly assisted by successful fire protection. Fires and dense undergrowth of brushwood and grass continue to retard natural reproduction in *North Malabar*. Towards the end of June *Teak* and *Xylia* seeds were sown broad cast over some 20 patches where dead bamboos had been burnt. The latter germinated at once and where growing, the former did not germinate by the close of the year. In *South Malabar* regeneration from seed was excellent, notably *Dalbergia latifolia* and *Xylia*; that from coppice in *Walayar* was very fair and seedlings sprung up in large numbers in *Chenat Nair* reserve and in *Palghat* range. In the *Nilgiris* natural reproduction from seed in the outer slopes of the hills in the *Coonor* range was poor. In *Segur* range it was better and numerous seedlings were noticeable. In *Mudumalai* range *Teak* (*Tectona grandis*), *Vengai* (*Pterocarpus marsupium*) and blackwood (*Dalbergia latifolia*) were growing fairly well. The forests in this range have been so much drawn upon for the supply of the more valuable timbers that it has been decided to give them an entire rest for some years to come. The coppice reproduction in the *Eucalyptus* plantation was as vigorous as ever. In *North Coimbatore* the growth from seed was poor in the case of *Teak* (*Tectona grandis*) but good in respect of *Acha* (*Hardwickia binata*). Coppice reproduction was satisfactory. In *South Coimbatore* there was a fair growth of *Hardwickia binata* seedlings in the *Gopnari* reserve. Seedlings of *Bassia elliptica*, *Messua ferrea*, *Peciloneuron pauciflorum* came up in great profusion in the ever-green forests on the *Anamalais*, but there seemed to be a tendency for the former to die out. Coppice growth was good in *Singara tope* and *Aiyarangel Working Circle*. In *Madura* regeneration from seed in the ever-green forests was good and coppice growth of *Albizia amara* was also satisfactory. The condition of timber trees in the deciduous forests was poor. Coppice growth was satisfactory in *Tinnevely* in coupes felled over.

(2) ARTIFICIAL REPRODUCTION, PLANTATIONS AND CULTURAL OPERATIONS.

29. The area under plantations, topes and cultural operations, together with the cost incurred thereon during the year under report, is given in Form No. 54.

The following is a summary of the year's work:—

No fresh planting was undertaken in *Agusti Nowgam* reserve in *Ganjam*. Work was confined to the maintenance of the young plants at a cost of Rs. 940 and the plantation is reported to be doing well. The *Ceara rubber* trees planted out in 1896-98, 111 in number, are doing well. The *Sweetenia macrophylla* and *Sweetenia mahagoni* planted out in *Russelkonda* died, but of those planted in *Napier Park*, nine are alive and in good condition. In *Vinagapatam* seeds of *date* and *Terminalia chebula* were sown in the blanks of the coupes of the *Madalammakonda*, *Arlova* and *Beddapalli* reserves with indifferent success owing to the damage done to them by wild beasts. *Tamarind* seeds were sown in nurseries. They have germinated freely and the seedlings will be planted in the blanks in reserves. In *Goddavari* the two casuarina plantations were increased by an additional total area of 16.48 acres at a cost of Rs. 886. In *Kistna* 20 acres in coupes Nos. 9 and 11 of *Gopurvanipalem*, and 50 in *Chirala*, reserves were planted with casuarina at a cost of Rs. 8 and Rs. 4 per acre respectively. *Bambusa arundinacea* together with *Dioscorea* and *Mangifera Indica* were planted in *Weld* reserve block I. One hundred acres in *Pandillapalli* and 50 in *Nayanapalli* reserves were also planted with a mixed crop. The nurseries in the *Weld* reserve were well stocked. In *Bellary* the *Kuppegal* plantation was extended by an addition of 193 acres. Seeds of *date*, *Nim*, *palmyra* and *Albizia Lebbek*, were sown in furrows. The seedlings of the *palmyra* were doing well. The *date* germinated freely, but the drought which followed the rains killed nearly all the seedlings. Of *Nim*, and *Albizia Lebbek* only a small percentage came up. The *Albizia Lebbek* plants put out in 1892-93 are reported to have grown to an average height of 15 feet and girth of 18 inches. The operations carried on in the *Tungabhadra* plantation have not been a complete success. The failure is partly attributed to insufficient supervision. Patch sowings under shelter were made on an extensive scale in *Sanduru* and *Adoni* ranges but with little success, the seedlings which appeared having withered after the cessation of the rains. The chief work in *Anantapur* consisted of the sowing of the *date* seed in 11 acres in *Kothakota* reserve, 15 acres in *Anantapur* reserve, 12 acres in *Kojjipalli* and 27 acres in *Kakiti*. The seed germinated freely except in *Kojjipalli* where the operations were begun late in the year. The seedlings continued to do well in all the reserves until the commencement of the hot weather, when for want of rain they showed signs of withering. Their condition towards the close of the year was not satisfactory. Twelve acres in *Illuru* reserve were sown with *babul* (*Acacia arabica*) seed, but the operation was a failure owing to want of rain.

In *Cuddapah* seeds of various sorts including *palmyra*, *tumma* (*Acacia arabica*) and *date* were sown in *Proddatur* range. The seedlings of *palmyra* are reported to be doing well. In *Pullampet* and *Madanapalle* seedlings of different species were planted out, but they were not doing well owing to want of rain. *Sandalwood* seeds were also sown in the forest tope at

Madanapalle. They germinated and were doing well. There was an addition of 207 acres to the plantations during the year in *Nellore*. The younger plants of the preceding monsoon were also watered. Several acres of seedlings were washed away by the sea during the year, but the area was replanted immediately and the plants are doing well. The operation in *Chingleput* consisted of the maintenance of the previous year's plantations. In *North Arcot* 10,000 seedlings of various species including *teak* were planted in the *Kylasagiri* reserve and 5,000 in *Palamadi* reserve in August 1898 at a cost of Rs. 367 and Rs. 201, respectively, but only 1,411 in the former and 2,238 in the latter survived owing to heavy rains at the close of 1898 and to want of sufficient watering and proper supervision. In both the reserves the soil is barren and water has to be carried some distance. It is proposed in future to leave these areas to natural reproduction of indigenous species and to undertake planting operations in bungalow compounds where water is near and supervision good. In *Ambur* bungalow compound 194 seedlings of red sanders, *teak* (*Tectona grandis*) and *sandal* were planted with only 11 casualties. *Casuarina* planting is proposed to be continued in the river side plantations near *Vellore* as there is a good market for firewood at the Central jail and at the *Kolar* gold mines for props. In *South Arcot* 58 acres were planted with *casuarina* in four localities at an average cost of Rs. 14 per acre against Rs. 15-13-0 in the preceding year, and the decrease in rate is due to the more favourable character of the season in the year under report. The casualties in the experimental bamboo planting still continued and it is noted that a special report on the subject is promised. In *Tanjore* an area of 46½ acres was planted with *casuarina* in *Tirumalaivasal* at varying distances. The number of plants amounted to 57,675 and the plants are reported to be doing fairly well. Four thousand *palmyra* seeds were dibbled along a portion of the western and eastern boundary lines of the *Vettangudi* reserved forest.

In *South Canara* no fresh additions were made to the plantations. The attempt to dibble in seeds of various valuable kinds of timber, such as *teak*, *jack* and *wild jack* in some blocks in the *Puttur* range was unsatisfactory. The system, referred to in the last report, of planting up forest areas cleared for migratory cultivation with *teak* seedlings promises to be a success. Thirty-eight thousand and seven hundred plants were put out in parts of two areas cleared for cultivation to the extent of 200 acres, of which 22,230 are thriving and have been paid for at the rate of Re. 1 per 100. There are plantations of *teak*, *blackwood*, *vengai* (*Pterocarpus marsupium*) and *sandalwood* in small areas in the several ranges of *North Malabar*. In most instances the *teak* is reported to be doing fairly well. The *teak* as well as *blackwood* and *vengai* (*Pterocarpus marsupium*) were planted also in tuckles, abandoned areas of migratory cultivation by the *Kurumbars*, and were fairly reported on. The *sandalwood*, planted, is said to be looking more healthy but of uncertain success. In *South Malabar* the 80 acres prepared last year were planted up with *teak* and a fresh area of 80 acres was cleared and the site prepared for planting. Casualties were replaced and the saplings smashed by wild elephants cut back. The planting of 24 acres in *Ramalur* was completed and replacement of casualties attended to. *Sweetenia macrophylla* was planted with much success in parts where *teak* has failed. The attempt to raise bamboos from seed was only partially successful probably owing to old seed having been used. The attempt to grow *mahogany* at *Mudumalai* and *Benne* in the *Nilgiris* has been a complete failure. In *North Coimbatore* attempts were made to re-stock some *palmyra* areas in *Erode* with success. An experiment was made to introduce bamboos by means of root-shoots into the *Vellore* reserve in *Erode* taluk. One clump has survived and it is said that the experiment will be extended when the rains commence. Experiments in combining natural and artificial reproduction of *sandalwood* were only partially successful. In *South Coimbatore* 16 acres of the area previously treated in the *Tekadi* leased forest were re-cleared and seeds of *teak*, *vengai* (*Pterocarpus marsupium*) and *rosewood* were dibbled in. The experiment was only partially successful. The attempt to grow plants of valuable trees with *castor-oil* crops in *Singara tope* working circle was a failure and was abandoned. In *Madura* the *Eucalyptus globulus* plantation in *Gundenshola* was increased by 21,000 plants put out in compartment IX. In compartment X, 21,500 pits were dug and in compartment XI, 5,683 casualties replaced.

(3) EARLY THINNINGS, (4) OTHER OPERATIONS FOR THE IMPROVEMENT OF THE GROWING STOCK.

30. In *Kurnool* bamboo thinnings were conducted near *Chelama* in the *Nallamalai* hills. The work of cutting creepers was carried on systematically in *Cuddapah* in the *Balapalle* working circle. In *North Arcot* the dead and suppressed casuarinas in the plantations were thinned out. They were converted into billets and sold to the Central Jail at *Vellore* and to the *Ranipettai* Sugar Works as firewood. Seven hundred and forty-seven tons and 240 casuarina poles were cut, out of which 548 tons and 176 poles were sold at a net profit of Rs. 3-9-11 per ton and Rs. 3-8-11 per pole. Some prickly-pear clearings were also attended to in the plantations. In *South Canara* thinning operations were conducted over 44½ acres to free the *Hopea* from being overtopped and suppressed. Seventeen acres of the *Parappa* *teak* plantation were also thinned and 2,700 poles obtained. Climbers were cut in 65 acres. In *North Malabar*

most of the plantations were weeded and selection felling was carried on in the Kuri-chiyat block of 1,300 acres by leasing it out to contractors for three years at Rs. 4 per acre on the condition of their removing all trees marked by the ranger and all creepers. In *South Malabar* 736 acres of teak plantation were thinned but most of the produce was small. No weeding was done in plantations over ten years old. Parasites were cleared in some plantations. Caterpillars which were not successfully identified appeared in myriads as usual in April and completely defoliated many of the plantations. Such attacks are a standing menace in unmixed plantations. In *South Coimbatore* ten coupes of the Sholakarai working circle were given on contract for bamboo thinnings, the contractor leaving ten bamboos standing in each clump. In *Tinnevely* the growth of the seedlings of valuable species in the coupes was encouraged by a cleaning operation.

(5) EXPERIMENTS.

31. Experiments with exotics were continued during the year. An account of the various kinds tried and of the progress made is given below:—

Acer campbellii.—There are very few plants on the *Nilgiris*; their growth is slow.

African seeds.—In *South Malabar* these plants do not appear to thrive well; only 28 plants survive.

Agave istyle (Sissal hemp).—Fifty pits were planted with this in Kuppagal in *Bellary* and the plants are reported to be in a thriving condition.

Bamboos.—The various kinds in *South Malabar* are doing well. *Arundinaria Brandisii* planted in Ayaravallikava continues to flourish, the largest clump being 21" in circumference. Of the five clumps of *Bambusa vulgaris* (yellow bamboos) planted in 1879, only one continues to flourish; the rest are slow in growth though not unhealthy.

Bucklandia populnea.—The growth of those planted in 1887–88 on the *Nilgiris* is fairly good on the whole.

Ceara rubber.—Of the trees planted out in 1895–96 in Napier's Park in *Ganjām*, 111 are reported to be doing well. Of the 435 trees in *South Arcot* mentioned in the last year's report, one was carried away in flood. The trees in *South Malabar* are doing well. No attempt was made during the year to tap them. In *South Coimbatore* 5,000 seeds were obtained from Ceylon during the year and sown in nurseries, of which only 474 germinated at the close of the year. Four plants died and the remainder are reported to be in good condition.

Date.—Seeds were sown in some of the reserves in *Anantapur* and they freely germinated. The present condition of the plants in most cases is reported to be precarious for want of rains. Those planted in *North Arcot* in previous years have been fairly successful. In *South Arcot* some of the plants died from excessive rain. The 14 plants of 1881 in Vettangudi reserve in *Tanjore* survived with no improvement in their growth. In the North date garden, of the 221 plants of 1881 only 136 survived. Of the 61 plants of 1886, 37 died during the year leaving 24 surviving. They have not fruited. The date planting in the district is reported to be unsuccessful. The cultivation of these plants in *South Malabar* is reported to be a failure.

Dillenia indica.—Of the 95 seedlings in *South Coimbatore* mentioned in the last year's report, only 73 are alive and the rest have died.

Divi divi.—There are 225 plants in *South Arcot*, the height of these varying from 1 foot 2 inches to 13 feet 6 inches.

Ficus elastica.—The cuttings put out in 1897 at Begur and at Manantoddy in *North Malabar* are growing vigorously.

Grevillea robusta.—The plants put out in the Manantoddy office compound in *North Malabar* continue to do very well.

Hevea brasiliensis.—In *North Malabar* about 7,000 seeds of this species were obtained from the Botanical Garden, Ceylon, in September 1898 and were planted out in baskets in two different places.

Mahogany.—Nine plants are living in good condition in Napier's Park in *Ganjām*, while those planted in Russellkonda perished during the year. The seeds sown during the year in *Bellary* and *Kurnool* have failed to germinate. In *Kurnool*, the young trees at Gazulapalli and near Chelama do not show signs of improvement; those at Gazulapalli are withering away notwithstanding the efforts taken to protect them. In *Cuddapah* 440 seeds were sown in Balapalli nursery, of which only 153 germinated and were basketed. These are doing well. Of the 1,200 seeds sown in Madanpalli range, 300 germinated, and even many of these have since died. In *Chingleput* the seedlings put down in previous years are thriving. Among the 50 plants put down in Palamadi reserve in *North Arcot*, there were only three casualties and the rest are thriving. Out of the 303 planted in Mudivaripalli tope, only one survives, the failure of the rest being attributed to the barrenness of the soil. In *South Arcot* some of the plants died owing to excessive rains. In *Tanjore* 25 plants were planted in 1886 in the Vettangudi reserve (nursery), of

which 16 survived at the commencement of the year, 2 of these died during the year, leaving 14 varying in height from 11 feet 6 inches to 25 feet 16 inches and in girth from 9½ inches to 2 feet 11 inches. The two plants in the South date garden of Vettangudi reserve referred to in the last report are alive. The 4 plants of 1881 in the same reserve are surviving and they vary in height from 15 feet 3 inches to 32 feet and in girth from 1 foot 1 inch to 2 feet 11 inches. In *South Canara* the *Srietenia macrophylla* plants in Puttur have grown fairly but it is reported the growth is not satisfactory owing to the attack of Erya caterpillar. The minimum height of a 4 year old sapling is 22½ feet with a girth of 14 inches. The last supply of mahogany seed is reported to have failed completely. The few surviving plants at Kanoth in *North Malabar* are doing well, the number of plants being 11 with 30 feet in height. In *South Malabar* the *Srietenia Mahogany* planted in two of the plantations are thriving well in spite of their being dominated by the surrounding species. The growth is reported to be stunted, but this is said to add to its value as it produces fine figuring. The big show tree of the *macrophylla* species in Chathambarai now measures 88 feet 3 inches in height and 76 inches in girth against 87 feet in height and 74 inches in girth last year. The trees at Walayar are dying gradually but those at Dhona are doing well. 6 lb. or about 5,000 seeds were sown during the year and a majority of them have germinated. In the *Nilgiris* the mahogany seedlings in Mudumalai and Benne have all died out while those at Kullar nursery are doing well. In *South Coimbatore* 3 lb. of mahogany seeds were sown in three ranges and none of the seeds germinated. The plants in the other places mentioned in the previous year's report are doing fairly well with a few casualties during the year. The 3 plants in the Kuvandamalais in the *Madura* district referred to in the last report are doing well. Twenty-five *Srietenia macrophylla* plants were put out in front of the Alagar Hill bathing mantapam and they are growing well.

Peltaphorem ferrugineum.—The 24 trees in *Tanjore* referred to in the last year's report still survive and their height varies from 20 feet to 45 feet and the girth from 1 foot 9 inches to 4 feet 3 inches.

Sterculia alata.—Of the 67 plants that remained in *South Malabar* at the beginning of the year, only 56 now remain alive. The casualties were due to the bark being stripped off by sambhur.

Syncarpia Laurifolia.—The growth of these plants on the *Nilgiris* is good.

(d) Exploitation of Major Forest Produce.

(1) CLEAR OR REGENERATION FELLINGS.

32. In Kistna the Bomminipad plantation which contained a stunted and irregular growth of casuarina trees was cleared to make room for better species. In *South Arcot* and *Tanjore* the casuarina coupes were cut over. In the latter district, 45 acres were felled over by contractors, the trees being sold standing. The yield amounted to 492 tons of sized and 114 tons of unsized wood and realized a rate of Rs. 3-10-9 per ton for the former and As. 12 per ton for the latter. In *South Malabar* 80 acres of natural forest were felled departmentally for the purpose of planting the site with teak. The felled material was sold for Rs. 5,000, of which the sum of Rs. 3,000 was reported to be a clear profit.

(2) SELECTION FELLINGS.

33. The operation in *Ganjām* was confined to the supply to the Ordnance Department of 7,000 cubic feet of sal timber yielded by trees selected by Range officers. In *Gudavari* a large number of teak and other reserved trees were felled by contractors in the Bhadrachalam sub-division. In Peddapur and Yernagudem ranges selection fellings were carried on departmentally. Three hundred and eighty-six casuarina trees were selected and cut in the Nayanapalli plantation in the *Kistna* district and supplied to the Madras-Bezwada Railway as posts and piles. The felling in *Kurnool* was conducted departmentally and was confined to second and third class timbers for supply to depots and to the Military Department in Bellary. The operations in *Bellary* were limited to the felling of crooked and badly grown teak trees. Some babul trees were also cut to meet the requirements of the Ordnance Department and private firms. In *Anantapur* a few palmyra and babul trees were marked and sold. In *Chingleput* the departmental fellings consisted of babul wood for supply to the Ordnance Department and to the Conjeeveram Municipality—14 tons to the former and 268 tons to the latter—at a net profit of Rs. 5-2-0 and Rs. 8 per ton, respectively. In *North Arcot* bamboos were felled to meet the demands of the Police Department for tent poles and lathies and of Messrs. Leighton & Co. Sixty-six redwood trees were felled departmentally in the Chandragiri range for plague sheds at Pakala. In *Trichinopoly* selection fellings of

babul were carried out departmentally for the supply of fuel to the Central Jail, Trichinopoly. Five thousand and ten cubic feet of wood was obtained which realized a net profit of Rs. 336. In *Tanjore* dead trees were cut in the Vattangudi reserved forest and in the casuarina plantations. In *South Canara* 210 trees were felled during the year and yielded 377 logs. These, together with the previous year's stock of 513 logs which remained in the forest unremoved, amounted to 890 logs, of which 616 had been disposed of by sale in the forests or by removal to sale depot. Selection fellings in *North Malabar* were continued in Begur and Kurichiyat and yielded 98,349 cubic feet of timber. Two thousand five hundred and twenty-three *Terminalia tomentosa* trees were felled for seasoning and subsequent conversion into sleepers. Most of the reserves in *South Malabar* were worked on the system of selection fellings. In the *Nilgiris* a number of blue gum and *Acacia melanoxylon* trees were felled for seasoning and conversion into sleepers. In *Coonor* and *Ootacamund* fuel was cut in the plantations for supply to the public and for manufacture of charcoal. Sandalwood was obtained through the agency of the hill tribes at so much per billet, the trees being marked by the range officer. In *Tinnevely* 131 trees were marked and felled under departmental supervision and converted into scantlings and poles amounting to 8,110 cubic feet. The species removed were *Hopea Wightiana* and *Balanocarpus utilis*. In addition to this 14,531 cubic feet of timber were removed by contractors from the ever-green forests of the district, the trees being marked by departmental officers and paid for by contractors at a fixed rate per cubic foot of fashioned timber.

(3) IMPROVEMENT FELLINGS, AND (4) COPPICE FELLINGS AND COPPICE
WITH STANDARD FELLINGS.

34. No improvement fellings were carried on in any of the districts in *Northern Circle*; but coppice fellings and coppice with standard fellings were carried on in *Vizagapatam*, *Kistna* and *Bellary*. In *Vizagapatam*, 334 acres of coupes were felled in the Madalamakonda and Arlova reserves. The material obtained was sold as timber, fuel and charcoal, the net profit being Rs. 2-1-4 per acre. In *Kistna* coupe No. 6 of the Guntur babul working circle was sold in accordance with the provisions of the sanctioned working plan. Two hundred and eighty casuarina trees were cut from the unfelled stock of 1895 in the Gopuwanipalam reserve and 815 tons of wood from the Masulipatam mangrove working circle. In *Bellary* fellings were carried on in 6 (d), 10 (d) and 12 (a) sub-compartments of the Ramandrug range in Sandur leased forests, and the method adopted was coppice with standards. The cost of felling and haulage was Rs. 3,464, and a sum of Rs. 5,588 was realized from sale of a portion of the material. The unsold stock is expected to fetch Rs. 4,777, so that the net profit from the operation amounts to Rs. 6,901 over 588 acres.

In the *Central Circle* regulated fellings were made, over two compartments of 55 acres in the Balapalli working circle in *Cuddapah*. The method adopted was coppice with standards and the cutting was done by a contractor. In the Seshachalam reserve, Pullampet range, 43 tons of redwood poles were felled departmentally and most of them were sold to meet local demands. In *Chingleput* 15 coupes aggregating an area of 2,138 acres were sold, the method of working being coppice with standards. The purchasers of coupes were compelled to cut and remove all unprofitable thorny growth, and the material was used in fencing the areas exploited. The advantage of this operation has lately been much canvassed, as the removal of thorns is a harassing work for contractors, keeping down their bids, while the thorny trees in many cases protect seedlings. In *North Arcot* 238 tons of firewood were cut in Mamandur extension reserve for supply to the railway and 263 posts for Pakala plague sheds at a net profit of Rs. 124. Twenty-four coupes aggregating an area of 4,401 acres were felled for coppice under standards by contract and yielded an average price of Rupees 5-9-1 per acre on the total sale amount. In *South Arcot* more standards than usual were reserved in the coupe felled in the Annamalai reserve. A large area of coupes in *Salem* was felled on the coppice with standard system. In *Trichinopoly* five coupes of the Vaiyampatti hill reserved forests, with an area of 590 acres, were worked under the system of coppice with standards. The right of cutting was sold to contractors for Rs. 3,260. In *Tanjore* three coupes comprising 168 acres in the Vettangudi reserved forest were sold to a contractor.

In the *Southern Circle* an area of 289 acres was felled over by a contractor under coppice with standard system in *South Canara*. In *North Malabar* improvement fellings were carried out by contractors at Rs. 4 per acre, the contractor being bound to girdle or fell all marked trees and being at liberty to remove any that he pleased for his own purposes. Coppice with standards was the method of treatment applied to all firewood coupes in *North Coimbatore* and the treatment is reported to be fairly successful.

(5) UNREGULATED FELLINGS.

35. The system of removal of produce under cover of permits continues in almost all the districts for inferior classes of timber, fuel and bamboos required in most cases to meet local demands. In *North Arcot* bamboos in the reserves were sold on contract by blocks and the produce removed on permits issued by the contractors. In *North Malabar* unregulated fellings included also free grants made to poor ryots living in or near the forests and useful to the department in supplying labour when wanted. In *Tinnevely* *Acacia arabica* trees over 2½ feet in girth, situated in tank-beds, were marked for sale on permits.

(e) Extraction and transport of Major Forest Produce by land and water.

36. In *Ganjām* a supply of timber was made to the Ordnance department and the wood was carted to Gopalpore, where it was handed over to the shipping agents who acted for that department. In *Kurnool* timber is dragged over a rough and uneven track to the foot of the hills by bullocks and thence carted to the depots. The cuttings of coupes in the Sriharikota forests in *Nellore* are brought down by the tramway to the banks of the Buckingham Canal, whence they are removed by contractors. In *South Canara* lately a road has been made in the Someshwar block. Transport by water is carried on only in fair weather in the Haladi and Wandse rivers in the Coondapoor range and in parts of the Netravati and Payaswami in the Puttur range. In *North Malabar* timber felled departmentally is dragged by elephants to convenient depots on the forest roads and there sold by tender to merchants. No floating is done by Government agency though there is a very large private trade in floating timber down from the ghaut forests. A small number of bamboos was, however, floated as an experimental measure from Kanath to Tellicherry and disposed of there at a small profit. In *South Malabar* timber is extracted from the forests by means of elephants and then floated in rafts to Calicut. In the Chenai Nair reserve of the Palghat range it is carted from the edge of the forests. In *South Coimbatore* the produce extracted was dragged by elephants, then trammed and subsequently carted. The outturn in all the branches was poor. The produce in *Tinnevely* was as usual transported through roads or paths with the aid of carts, coolies or donkeys.

(f) Exploitation of Minor Forest Produce.

(1) EXTRACTION OF FODDER.

37. There was very little demand for fodder owing to early rains. Grass was removed from reserves either by departmental agency or by issue of permits on payment of fees or by the sale of the right to cut it. In *Bellary*, *Kurnool* and the *Nilgiris* it was removed under cover of permits and the revenue in the first-named district amounted to Rs. 815 against Rs. 2,435 in the preceding year. In *South Malabar* a sum of Rs. 110 was realized from sale of grass and in *South Canara* the right to cut it was sold for Rs. 390.

2. GRAZING.

38. In all the districts except *Godavari*, *Kurnool* and *Bellary* in the *Northern Circle*, *Chingleput*, *South Arcot* and *Salem* in the *Central Circle*, and *North Coimbatore* and *Madura* in the *Southern Circle*, the uniform rate of As. 6 for buffaloes and As. 3 for oxen was levied. In *Madura* and in the two ranges of *Dharmapuri* and *Hosur* in *Salem*, the increased rates of As. 8 for buffaloes and As. 4 for oxen were continued. In nine out of the eleven reserves classed as "special tracts" in *Godavari*, the enhanced rates of As. 12 per buffalo and As. 6 for oxen were charged. The rates sanctioned for the tracts inside the Sim's line in *Kurnool* are Rs. 2, 1 and

As. 8 for buffalo, cow and goat or sheep, respectively, but quarterly permits at one-fourth of the above rates were alone issued during the year. In the Ramandrug and the North East Ranges and the Donimalai range of the *Sandur* leased forests in *Bellary*, the special rates of As. 8 and As. 6 per buffalo and As. 4, As. 6 and As. 4, respectively, for oxen were levied, but cattle-owners did not come forward to take out licenses paying the enhanced rates and the anticipations were not realized. It has, therefore, been proposed to levy the usual fees prevailing in the Government forests. In *Chingleput* licenses were issued for 149 oxen at As. 4, being foreign cattle. The foreign cattle grazed in *South Arcot* were charged at the special rates of As. 4 per oxen and As. 2 per sheep. The full fees of As. 8 per buffalo and the corresponding rates for oxen and sheep were levied throughout the year in *North Coimbatore* and collected without difficulty.

The year under review shows an increase of Rs. 70,138 from grazing and grass removals. The increase occurred in all the circles and is satisfactory. The following abstract compares the results of the present with those of the previous year:—

Circle.	1897-98.	1898-99.	Increase or decrease.
	Rs.	Rs.	Rs.
Northern Circle	1,10,460	1,43,644	+ 33,064
Central "	1,77,021	2,08,121	+ 31,100
Southern "	76,404	82,378	+ 5,974
Total ..	3,63,905	4,34,043	+ 70,138

More than half the increase in the *Northern Circle* was contributed by *Kurnool*, the revenue in the district rising from Rs. 16,817 to Rs. 35,446. The increase was mainly due to the fact that during the year a permit was issued for one grazing reserve only and not for the whole district as was previously done. The levy of enhanced special rates and the notification of large areas as reserved lands also swelled the revenue. The increase of Rs. 4,822, Rs. 4,145 and Rs. 3,894 in *Bellary*, *Anantapur* and *Kistna*, respectively, was due to the favourable season. The admission of sheep into the reserves in *Anantapur* also accounted for the increase in the district. The increase of a little over Rs. 1,000 in *Goddavari* was due to the levy of enhanced rates in the special tracts and to more efficient supervision and check of cattle within the reserves. In *Ganjam* and *Vizagapatam* the increase was small and calls for no remark. All the districts in the *Central Circle* except *South Arcot*, *Salem* and *Trichinopoly* showed an advance in the revenue. The introduction of the permit system accounted for the increase of Rs. 9,446 in *Nellore*. In *Cuddapah* the improvement was marked, the figures for the two years 1897-98 and 1898-99 being Rs. 13,943 and Rs. 38,794, respectively, and was due to better season and the consequent absence of free grazing which was allowed during the previous year. The revenue in *Chingleput* increased by Rs. 4,706 due to better supervision and to crediting to this head the compensation fees collected for illicit grazing instead of to the head "Miscellaneous" in previous years. The increase in the number of animals for which licenses were taken contributed to the increase of Rs. 6,188 in *North Arcot*. There was a decrease of Rs. 9,554 and Rs. 4,644 in *South Arcot* and *Salem*. In the former district mortality among cattle by reason of the drought prevailing up to the end of August and even longer in places had some effect in causing the deficit, and want of cash or grain to sell had probably more effect in preventing people taking out permits. The reduction of revenue in *Salem* was due to the decrease in the number of foreign cattle that grazed in the reserves owing to the prevalence of plague in *Mysore* on the frontier of the district. The decrease in *Trichinopoly* was small.

In the *Southern Circle* in all the districts except the *Nilgiris* and *North Coimbatore* the revenue was larger than in 1897-98 due generally to more efficient supervision by the executive officers. The levying of fees in a larger number of reserves than in the previous year in *South Canara* also caused the increase (Rs. 1,188) in that district. The revenue in *Madura* increased by Rs. 4,774. The decrease in the two excepted districts was small.

(3) MISCELLANEOUS PRODUCE.

39. The collection of miscellaneous produce was, as stated in previous reports, leased out to contractors except in localities where want of contractors or adequate

offers necessitated the intervention of departmental agency. In *Vizagapatam* no bidders came forward to purchase the right of collecting minor produce from the Agency tracts owing to the loss sustained by the contractor during the previous year, and the result was that the produce was collected departmentally and realised a net profit of Rs. 14,497, the tamarind crop having been exceptionally good. In *Goddavari* produce is leased out in the *Ellore* range, while in the other ranges except in *Yernagudem* and in the sub-division it is removed on permits. In *Yernagudem* it was not leased out for want of bids. The right of collecting minor produce in *Kurnool* was leased out except in the *Nallamalais*, where it was allowed to *Chentzus* free of charge. In *Bellary* a small quantity of *Yepi* (*Hardwickia binata*) fibre was collected under departmental supervision and sold to betel-leaf gardeners. Leaves for manure were as usual removed on permits in this district as well as in *Anantapur*, *Tanjore* and *Madura*. The collection of *Divi-divi* (*Cassalpinia coriaria*) was undertaken departmentally in *Chingleput*, *North Arcot* and *Trichinopoly*. In *South Canara* departmental work consisted of the manufacture of catechu, cinnamon and sandalwood-oil and a small quantity of cardamom. Fifteen tons and 854 lb. of catechu, were manufactured during the year at a cost of Rs. 196 per ton and sold for Rs. 732 a ton against 16 tons and 685 lb. manufactured in the preceding year at a cost of Rs. 192 per ton and sold for Rs. 836 per ton. The decrease in the quantity manufactured was ascribed to the prevalence of fever amongst the *Malekudis* (hill-tribes), and the fall in the rate to the interruption of trade with the *Mysore* Province owing to plague. Cinnamon-oil distillation was carried on to a limited extent, and the rise in value of sandalwood-oil caused a great demand for stills. In *North Malabar* 3,000 lb. of liquid *gum-kino* were collected departmentally, and about 600 lb. of superior *kino* were dried in a shed specially constructed for the purpose. 1,000 lb. of dried *kino* were sold to a firm in *Madras* at Rs. 2 per lb. and 250 lb. were sold to a firm in *Paris* for £18³/₄. Some samples were also sent to many of the large druggists' shops in *England* and *Europe*.

CHAPTER III—GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

40. The subjoined abstract shows the total outturn under timber and other produce during the year as compared with that of the previous year:—

ABSTRACT I.—Comparative yield as per Forms Nos. 55, 56, 72A and 72B.

	Timber (in cubic feet) including sandalwood.		Fuel (in cubic feet).		Bamboos (in numbers).		Minor produce (gross value in rupees).	
	1897-98.	1898-99.	1897-98.	1898-99.	1897-98.	1898-99.	1897-98.	1898-99.
1	2	3	4	5	6	7	8	9
By Government Agency ..	413,399	662,916	2,086,473	2,889,534	258,738	397,177	50,921	41,649
By purchasers (including confiscations)	2,142,931	1,958,096	9,573,202	10,299,486	28,833,424	25,535,500	9,05,832	9,02,537
By free grants	62,652	54,058	5,168	3,183	203,573	126,970	1,829	2,334
By right-holders	1,811	1,423	257,586	257,528	21,314	21,370	40,411	40,304
Total ..	2,619,793	2,676,493	11,922,428	13,379,726	29,817,049	26,081,017	9,08,993	9,86,824
Increase or decrease in 1898-99 as compared with 1897-98	..	+ 56,700	..	+1,457,298	..	-3,236,032	..	- 12,169
Percentage of increase or decrease over the previous year's total	..	+ 2.1	..	+ 12.3	..	- 11.0	..	- 1.2

* Includes grazing fees.

As almost all Collectors have not given the outturn for each class of forests separately in Form No. 55, it was not possible to comply this year with the orders of the Government of India in paragraph 4 of its letter, dated 17th January 1899, Circular No. 1—229-14-F, printed in Board's Proceedings, Forest No. 226, dated 2nd June 1899.

The variations noted above are explained below under the respective heads.

Section I.—Departmental Operations.

41. The following abstract shows the produce collected and disposed of departmentally during 1898-99 as compared with that of the previous year:—

Produce collected.	During 1897-98.			During 1898-99.		
	Quantity.	Cost.	Average.	Quantity.	Cost.	Average.
1	2	3	4	5	6	7
Timber C. ft.	410,039	RS. 59,062	RS. A. P. 0 2 4	658,882	RS. 69,269	RS. A. P. 0 1 8
Fuel	2,086,473	1,01,118	0 0 9	2,889,534	1,18,410	0 0 8
Bamboos No.	258,738	4,761	0 0 4	397,177	6,489	0 0 3
Sandalwood C. ft.	2,360	2,766	1 2 8	4,034	4,454	1 1 8
Minor produce Mds. (25 lb.)	54,188	16,563	0 7 9	33,286	18,246	0 8 9
Total	..	1,84,260	..	..	2,16,868	..

Produce disposed of.	During 1897-98.			During 1898-99.			Stock on 1st July 1898.	Stock on 30th June 1899.
	Quantity.	Cost.	Average.	Quantity.	Cost.	Average.		
8	9	10	11	12	13	14	15	16
Timber C. ft.	418,996	RS. 2,29,669	RS. A. P. 0 8 11	418,522	1,67,411	0 6 6	319,434	559,794
Fuel	2,265,967	1,73,419	0 1 3	2,814,450	1,96,273	0 1 1	666,326	731,410
Bamboos No.	260,314	9,223	0 0 7	345,390	8,169	0 0 5	18,141	60,928
Sandalwood C. ft.	3,911	33,699	8 9 10	8,301	27,796	8 6 9	404	1,137
Minor produce Mds. (25 lb.)	71,821	32,291	0 7 2	69,927	60,008	0 13 4	41,875	16,234
Total	..	4,78,301	..	..	4,49,647	..	..	..

There was an increase in the total quantity of produce collected departmentally under all heads except "Minor produce." Taking the districts individually, there was a notable increase under "Timber" in *Ganjām*, *Bellary*, *Cuddapah*, *South Canara*, *North Malabar* and *South Coimbatore*, while *Kistna* and *South Arcot* showed a decrease. In *Ganjām* the increase is ascribed to the large number of darkhast applications put in during the year which necessitated the felling and removal by the Forest department of all the trees on such lands; and in *Bellary* to the fellings under the provisions of Mr. Hooper's working plan which was not adhered to during the previous year. The larger collections of redwood roots and stumps in *Cuddapah* when compared with that of the previous year contributed to the increase in that district, while that in *South Canara* was the result of brisk demand. In *North Malabar* the increase was due to the felling operations having been pushed on more vigorously than in the previous year (1) for conversion into railway sleepers, and (2) to meet the demand of the Ordnance Department. The larger quantity of timber felled in the Tekadileased forests as compared with that for the preceding year, the felling of a larger quantity (24,340 cubic feet) of timber in the area leased out for coffee cultivation on the Anamalais and the operations in the Ayirangal working circle accounted for the increase in *South Coimbatore*. The decrease in *Kistna* was as in the previous year due to the smaller number of casuarina trees available in the Gopuvanipalem plantation and to the absence of demand from the Madras-Bezwada Railway which was completed during the year; and in *South Arcot* to restriction of departmental felling in favour of removals by consumers or purchasers.

Under "Fuel" the increase occurred chiefly in *Bellary*, *Nellore*, *Chingleput*, *Salem*, and the *Nilgiris*. This increase was somewhat counterbalanced by decreases in *Kurnool*, *North Arcot*, *South Arcot*, *Trichinopoly*, *South Canara*, *Madura* and *Tinnevely*. The increase in *Bellary* was due to causes already noted under "Timber." The difficulty which was experienced during the previous year in procuring labour in *Nellore* was not met with during the year under report owing to absence of fever on the coast and this fact explains the increase in that district. A more extensive sale of babul wood to the Ordnance Department and to private contractors in *Chingleput* and the supply of a larger quantity of engine fuel to the Madras Railway Company from the *Salem* district accounted for the increase in those districts, while in the *Nilgiris* it was due to

increased demand for fuel and charcoal from the town of Ootacamund. The decrease in *Kurnool* was due to the fact that the improvement fellings at Chelama were not made during the year owing to contractors not forthcoming to purchase the white wood as advertised according to the approved working arrangements. The cessation of demand for engine fuel from the Madras and South Indian Railway Companies in the *North Arcot* and *South Arcot* districts, and the smaller indent received from the South Indian Railway for fuel from the *Trichinopoly* district accounted for the decrease in those districts. In *South Canara* the decrease was due to the curtailment of felling operations owing to the growth in a compartment of the Sabladi reserve having been subsequently found not fit to be exploited. The decrease in *Madura* and *Tinnevely* is ascribed to cessation of departmental felling in Patnam and Manjampatti coupes in Palamedu range in the former district and to the restricted operations of the Padarmalai coupe in the latter district.

Under "Bamboos" the increase was distributed chiefly over *Vizagapatam* and *North Coimbatore*. The increase in *Vizagapatam* was due to large exportation of bamboos to the Ganjām district, and that in *North Coimbatore* to the adherence to the strict regulations concerning fellings in the Bhavāni range.

Under "Sandalwood" the increase occurred in *Salem* and *North Coimbatore*. The increased collection in *Salem* was due to the digging during the year of old stumps and roots of sandalwood trees felled in previous years in Nāmakkal and Hosūr ranges, while that in *North Coimbatore* has not been explained.

Under "Minor produce" the decrease was small and occurred chiefly in *Nellore* and *North Coimbatore*. This decrease was partly counterbalanced by increase in *Vizagapatam*, *South Arcot* and *North Malabar*. The short crop of gallnuts and the low prices realized on account of plague which affected the skin market accounted for the decrease in *North Coimbatore*, while that in *Nellore* has not been explained. The increase in *Vizagapatam* and *North Malabar* was due to increased collection of avuru grass and gum kino, respectively. The variation in *South Arcot* has not been explained.

Under "disposals" the quantity of timber sold showed an increase on the sales of the preceding year. The increase occurred principally in *Ganjām*, *Kurnool*, *Bellary*, *Cuddapah* and *South Canara*, and was somewhat counterbalanced by decrease in *Kistna*, *South Arcot*, *North Malabar*, *South Malabar* and *South Coimbatore*. The explanation furnished under collection accounts for the variation in *Ganjām* and *South Canara*; in *Kurnool* to sale of a large quantity to the Military Department, and in *Bellary* to better demand from the people for timber cut and kept ready for sale. The increase in *Cuddapah* was due to brisk demand, while the decrease in *Kistna* and *South Arcot* was due to reduced collection. The decrease in *North Malabar* was due to the inability of the contractors to cart the wood to Mysore owing to the prevalence of plague in that province which is the chief market for the timber of that district. The variations in *South Malabar* and *South Coimbatore* have not been explained by the Collectors.

The quantity disposed of under "Fuel" shows an increase which occurred mainly in *Bellary*, *Nellore*, *Chingleput*, *Salem*, the *Nilgiris* and *South Coimbatore*, and a decrease in *Kurnool*, *North Arcot*, *South Arcot*, *South Canara*, *Madura* and *Tinnevely*. The explanation furnished under timber accounts for the increase in *Bellary*. The increase in *Nellore*, *Chingleput*, *Salem* and *Nilgiris* is ascribed to causes already explained under collections. The increase in *South Coimbatore* has not been explained. The decrease in the districts mentioned above was due to causes already explained under collections.

The increase in the disposals of "Bamboos" occurred mainly in *Kurnool* and *North Coimbatore* partly counterbalanced by decrease chiefly in *South Malabar* and *South Coimbatore*. The causes of increase and decrease have not been explained by the Collectors concerned.

The decrease under "Sandalwood" occurred chiefly in the *Nilgiris* and was due to sale in the previous year of the stock collected during 1896-97.

Under "Minor produce" the decrease was due chiefly to the inclusion under disposals in the previous year of a very large quantity of avuru grass written off the accounts in the *Vizagapatam* district.

As regards average cost of collection there was a decrease under all the heads except "Minor produce." The decrease was chiefly due to the low rates paid in *Ganjām* and *South Coimbatore* for cutting timber on darkhast lands, and on the area leased out for coffee cultivation, respectively, and the transport of a small number of logs to the

Sale depots in order to secure seasoned timber for the saw mill in the latter district. The decrease in the rates for "Fuel" and "Bamboos" is small and calls for no remark. That under "Sandalwood" was due principally to extra charges incurred during 1897-98 in *North Coimbatore* for bringing to head-quarters the stock of that year as well as that of 1896-97. The increase in the rate for "Minor produce" was due to collection of valuable produce such as deer and sambhur horns, wax, &c., in *North* and *South Coimbatore*.

The average rate of sales shows a decrease under all heads except "Minor produce." A considerable number of small trees on darkhast lands fit only for firewood was sold in *Ganjum* and consequently fetched a small price. This fact and the smaller quantity of valuable timber sold during the year in *North Malabar*, *South Malabar* and the *Nilgiris* account for the decrease under timber. Under "Fuel" the decreased average rate of sales was due (1) to deterioration in value of fuel cut in the previous year in *Kurnool*; (2) to better prices secured in *Bellary* during the previous year; and (3) to sale of a larger quantity of inferior fuel in *Salem* as compared with that sold in the previous year. The decrease under "Bamboos" was due to slack demand for the produce in *Kurnool*, to sale by auction of the bamboos rejected by the Ordnance Department in *Bellary* and *North Arcot* and to inferior kind of bamboos sold in *North Coimbatore*. Under "Sandalwood" the decrease occurred in *North Coimbatore* due mainly to dullness of home market for the produce. The increase under "Minor produce" was due to better selling rates obtained for the several kinds of produce during the year in *North Coimbatore*, to sale of valuable products in *South Coimbatore* and the *Nilgiris*, and to the inclusion in the previous years' disposals of a large quantity of avuru grass written off in *Vizagapatam*.

42. The subjoined abstract shows the quantity and value of timber and other produce removed by purchasers compared with the results of the preceding year:—

(Form No. 72A.)

ABSTRACT K.—Produce removed by purchasers.

		During 1897-98.			During 1898-99.		
		Quantity.	Amount of sales.	Average.	Quantity.	Amount of sales.	Average.
<i>Northern Circle.</i>		TONS.	RS.	RS. A. P.	TONS.	RS.	RS. A. P.
Timber	C. ft.	967,869	1,08,203	0 1 9	1,109,119	1,15,757	0 1 3
Firewood	"	2,077,816	47,746	0 0 4	2,885,329	59,575	0 0 4
Bamboos	No.	12,264,891	51,930	0 0 1	14,223,975	67,988	0 0 1
Grass and grazing	"	"	1,10,483	"	"	1,43,594	"
Minor produce	"	"	2,46,345	"	"	1,67,455	"
Total	"	"	5,74,687	"	"	5,54,354	"
<i>Central Circle.</i>							
Timber	C. ft.	778,857	92,689	0 1 11	510,855	59,030	0 1 10
Firewood	"	4,059,078	1,56,994	0 0 7	3,058,873	1,07,643	0 0 7
Bamboos	No.	12,302,451	98,693	0 0 2	7,291,137	44,050	0 0 1
Grass and grazing	"	"	1,78,968	"	"	2,08,171	"
Minor produce	"	"	2,12,738	"	"	2,12,071	"
Total	"	"	7,38,952	"	"	6,30,065	"
<i>Southern Circle.</i>							
Timber	C. ft.	344,351	43,393	0 2 3	275,561	31,215	0 1 10
Firewood	"	3,357,082	73,761	0 0 4	4,331,191	1,12,596	0 0 5
Bamboos	No.	4,178,282	24,079	0 0 1	3,978,548	18,728	0 0 1
Grass and grazing	"	"	76,814	"	"	82,402	"
Minor produce	"	"	81,243	"	"	88,054	"
Total	"	"	2,04,090	"	"	3,32,985	"
<i>Presidency.</i>							
Timber	C. ft.	2,890,577	2,49,185	0 1 11	1,895,545	2,04,002	0 1 9
Firewood	"	9,493,975	2,78,471	0 0 6	10,123,293	2,79,804	0 0 5
Bamboos	No.	28,745,574	1,84,792	0 0 1	28,493,605	1,30,781	0 0 1
Grass and grazing	"	"	3,64,045	"	"	4,34,167	"
Minor produce	"	"	5,41,820	"	"	4,67,580	"
Total	"	"	15,17,729	"	"	15,18,314	"
Grand Total of Sales	"	"	"	"	"	"	"

The total value of removals in the year under report, as compared with that of the previous year, shows a net decrease of Rs. 99,415 as shown in the margin.

	RS.
Timber	— 43,183
Fuel	+ 1,333
Bamboos	— 53,941
Grass and grazing	+ 70,122
Minor produce	— 73,746
	— 99,415

The decrease occurred under all classes of produce except "Fuel" and "Grass and grazing." Under "Timber" the decrease occurred chiefly in *Ganjum*, *Kurnool*, *Salem*, *South Malabar*, *South Coimbatore* and *Madura*, partly counterbalanced by a large increase in *Goddavari* due to large removals of teak poles from the unreserved lands of Bhadrachalam, Marrigudem and Rikapalli ranges and to the credit of the value of trees on darkhast lands collected by Revenue officers. In *Ganjum* unreserved lands were closed to felling of sal for eight months in the year pending valuation surveys and the closure resulted in the sales of inferior species which fetched lower prices. In *Kurnool* the issue of permits for third-class timber in Nandyal and Sirvel ranges was stopped and this accounts for the decrease in that district, while in *Salem* it was due to the restriction placed on removals by timber merchants and traders, of first class and reserved timber in large quantities pending regulation of such fellings on a proper system. In *South Malabar* the decrease was due to the cessation of fellings in the New Amampalem reserve. Contractors were rapidly working out all the accessible timber from the valuable forest and it was consequently found necessary to close it for further fellings, pending the preparation of a systematic working plan. In *South Coimbatore* the removals of inferior classes of timber accounted for the decrease. In *Madura* it was due to the credit of the value of trees removed from poramboke lands to II (b) instead of to II (a) as in the last year, because the timber removed was suitable only for fuel; besides, the number of darkhast applications put in during the year was less than that in the previous year. The net increase under "Fuel" was small. Taking the districts individually there was a large increase in *Goddavari*, *Madura*, and *Tinnevely*, partly counterbalanced by large decreases chiefly in *Cuddapah*, *Chingleput*, *North Arcot* and *South Arcot*. The increase in *Goddavari* was due chiefly to credit during the year of the lease amount of the Coringa reserve, of the proceeds of casuarina trees sold to Public Works Department, and of dead and windfall trees on Asalminha (lands held free of assessment), and unreserved lands to this head. The causes already explained under timber and the sale of coupes in Kanavoipatti, Palamedu and Cumbum ranges contributed to the increase in *Madura*, while that in *Tinnevely* was due to sales of a larger number of coupes. The decrease in *Cuddapah* was due to the discontinuance of the contracts for the supply of engine fuel, while that in *Chingleput* was due to disinclination on the part of purchasers to undertake felling operations on areas of more than moderate dimensions. The continuous rainfall in the closing months of the year tended also to restrict the sale of coupes in that district. The substitution of coal from the Singareni fields for engine fuel by the Madras Railway Company resulted in a fall in demand for the coupes in *North Arcot* and consequent decrease in sales; while in *South Arcot* there was no demand for most of the coupes. The decrease under "Bamboos," which was large, occurred mainly in *North Arcot* and *Salem* and was partly counterbalanced by increase chiefly in *Goddavari*. In *North Arcot* the whole amount of the leases running for fifteen months, from 1st April 1898 to 30th June 1899, was shown as sales during the previous year and this accounts for the decrease under this head in the district. The decrease in *Salem* was due to restrictions of fellings and to the prevalence of plague at Bangalore. The increase in *Goddavari* was due to brisk demand in the market at Rajahmundry.

As regards "Minor produce" the decrease occurred chiefly in *Bellary*, *Anantapur*, *Cuddapah*, *Chingleput* and *North Arcot*. The decrease is generally ascribed to the withholding of the sale of the tangedu leases in consequence of low rates tendered on account of plague and of depression in trade. It was also in a measure due to the unrealized balances from certain tangedu bark lessees in *Anantapur* and *Chingleput* and from the Kurivithittu shell contractors in the second mentioned district and the fall in the sales of amroy in *Cuddapah* consequent on the disinclination of the people to bid on account of the current Tamil year Vikari which, according to their ideas, forboded short produce and famine. In *Vizagapatam* and *Salem*, however, there was an increase. In

the former district it was due generally to better crop of tamarind fruits. The increase in *Salem* has not been explained.

The variation under grazing has already been explained in Chapter II.

43. The following abstract compares the cost of departmental and private working and shows the net profit derived under each system.

Items.	Measure.	Quantity sold.	Amount of sale-proceeds.	Charges.			Net profit or loss.	Rate of net profit (column 8 ÷ column 3) per measure in column 2.
				A. Conservancy and works.	B. Establishment and contingencies.	Total.		
1	2	3	4	5	6	7	8	9
Departmental Working—								
Timber	C.F.	4,188,708	1,07,411	69,269	89,842	1,09,111	+ 58,300	+0 2 3
Fuel	"	2,814,450	1,96,273	1,18,410	52,974	1,71,384	+ 24,889	+0 0 2
Bamboos	NO.	845,390	8,150	8,489	2,465	8,954	— 795	— ..
Sandalwood	C.F.	2,301	27,796	4,454	5,420	9,883	+ 17,913	+5 6 10
Minor produce	MDS.	59,927	50,008	18,246	11,490	29,736	+ 20,272	+0 5 5
Private Working—								
Timber	C.F.	1,895,545	2,06,002	12,716	86,810	49,536	+1,56,467	+0 1 4
Fuel	"	10,23,393	2,79,804	17,272	56,010	67,282	+2,12,522	+0 0 4
Bamboos	NO.	25,493,655	1,30,761	8,072	23,871	31,443	+ 99,318	+0 0 1
Grazing	"	"	4,84,167	26,800	77,599	1,04,399	+3,29,768	..
Minor produce	"	"	4,67,580	28,868	83,571	1,12,439	+3,55,146	..

The rate of profit in case of departmental working of "Timber" exceeds that in case of private working, while on the contrary "Fuel" and "Bamboos" show a loss. The increased rate of profit under "Timber" was due chiefly to the sale departmentally of more valuable timber than under private working. The loss under "Fuel" and "Bamboos" was mainly due to causes explained in comparing the average rate of sales under departmental working (paragraph 41).

Under departmental working the rates of profit under all the heads except "Bamboos" and "Minor produce" were less than those obtained during the previous year. The difference under "Bamboos" was small, but the rate under "Minor produce" was comparatively very high. The variations under this head and under "Timber" and "Fuel" were due to causes already explained in paragraph 41. The decrease under "Sandalwood" was due to the dullness of the home market. The difference under private working is small and calls for no remark.

44. The sales of confiscated produce during the year under report as compared with those of the preceding year are exhibited in the subjoined abstract:—

	During 1897-98.			During 1898-99.		
	Quantity.	Value.	Average.	Quantity.	Value.	Average.
Northern Circle.						
Timber	38,334	Rs. 3,172	Rs. A. P. 0 1 4	43,749	Rs. 3,492	Rs. A. P. 0 1 3
Firewood	53,454	927	0 0 3	76,312	1,245	0 0 3
Bamboos	74,237	681	0 0 2	80,788	289	0 0 2
Minor produce	..	200	..	..	83	..
Total	..	4,980	..	..	5,039	..
Central Circle.						
Timber	7,629	3,208	0 6 9	11,651	3,522	0 4 10
Firewood	7,967	731	0 1 6	6,057	284	0 0 9
Bamboos	6,107	123	0 0 5	4,299	102	0 0 5
Minor produce	..	1	..	..	455	..
Total	..	4,229	..	..	4,363	..
Southern Circle.						
Timber	6,391	1,670	0 4 2	7,151	1,960	0 4 5
Firewood	17,805	752	0 0 8	23,824	951	0 0 8
Bamboos	7,506	92	0 0 2	6,758	55	0 0 2
Minor produce	..	94	..	..	252	..
Total	..	2,608	..	..	3,218	..
Presidency Total.						
Timber	52,354	8,050	0 2 5	62,551	8,904	0 2 3
Firewood	79,226	2,410	0 1 0	1,06,193	2,480	0 0 4
Bamboos	86,850	896	0 0 2	1,18,445	446	0 0 2
Minor produce	..	461	..	..	790	..
Grand Total	..	11,817	..	..	12,620	..

The total amount of sales shows an increase of about Rs. 800. The increase is noticeable chiefly in *Ganjām* and *Salem*. In the former district it was due to seizure of good timber which fetched better prices and in the latter district to seizure and sale of sandalwood billets.

45. The following abstract statement shows the quantity and value of produce removed by right holders and free grantees:—

	Timber.		Fuel.		Bamboos.		Minor produce.	Grazing.	Total value.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	
<i>By Right-holders.</i>									
Northern Circle	1,311	Rs. 94	257,510	Rs. 4,828	20,489	Rs. 128	Rs. 38,450	Rs. 700	Rs. 44,200
Central Circle	..	..	..	..	..	..	..	356	356
Southern Circle	112	49	13	1	881	2	45	753	856
Total	1,423	143	257,523	4,829	21,370	130	38,495	1,809	45,406
<i>By Free-grantees.</i>									
Northern Circle	14,595	1,350	..	..	17,670	104	496	935	2,885
Central Circle	22,318	2,112	240	15	88,382	484	686	..	3,297
Southern Circle	17,245	5,122	2,943	58	20,918	303	217	..	6,700
Total	54,058	8,584	3,183	73	1,36,970	891	1,399	935	11,882

There were several cases of distress by fire in *Kistna*, *Cuddapah*, *Nellore*, *North Arcot*, *South Arcot*, *Trichinopoly*, and *North Coimbatore* and grants were freely given to rebuild the houses destroyed by fire. In *Anantapur* and *South Malabar* free grants were made for the erection of temporary plague sheds. Free grazing and removal of leaf fodder were allowed only in *South Arcot* for about one and-a-half months in the beginning of the year. In the other districts apparently there was no necessity for the grant, the rains having set in early.

CHAPTER IV.—FINANCIAL RESULTS.

46. The subjoined table compares the financial results of the year according to circles with those of 1897-98. The results show a decrease in the net revenue of Rs. 79,520.

Forest year.	Circle.	Revenue.	Expenditure.			Net results.
			A. "Conservancy and works."	B. "Establishments."	Total.	
1897-98	Northern	Rs. 5,99,870	Rs. 2,06,027	Rs. 2,61,999	Rs. 4,68,026	+ 1,31,844
	Central	8,88,834	2,78,206	2,78,281	5,56,487	+ 3,32,347
	Southern	6,62,610	2,84,977	2,78,999	5,63,976	+ 98,634
	Total	21,51,114	7,69,210	8,19,279	15,88,489	+ 5,62,625
1898-99	Northern	6,14,048	1,98,750	2,69,525	4,68,275	+ 1,45,771
	Central	8,73,772	2,45,912	2,81,023	5,26,935	+ 3,46,837
	Southern	6,87,436	3,20,139	2,83,800	6,03,939	- 16,503
	Total	20,75,254	7,67,801	8,24,348	15,92,149	+ 4,83,105

The gross receipts of the year, compared with those of the previous year, show a decrease of Rs. 75,860, and the variations are explained below. As compared with the previous year the revenue in the Southern Circle fell short during the year by Rs. 75,174 while the expenditure increased by Rs. 39,963. The net result in the Circle shows a deficit due to causes explained below under the several budget heads.

Departmental working.

Timber.—Rs. 62,258. Due mainly (1) to the retention of large stock in *South Malabar* and *South Coimbatore* for the purpose of seasoning the wood required for the supply of railway sleepers and for conversion in the Anamalai saw-mill; (2) to the failure to realize within the year the full value of teak saplings sold in *South Malabar*; (3) to the absence of demand for teak poles in the *Nilgiris* owing to the prevalence of plague; and (4) to the adjustment during the year in *North Malabar* of only Rs. 3,608 out of Rs. 13,783 worth of timber sold to the Ordnance Department.

Fuel.—Rs. 22,854. Due mainly to the larger supply of engine fuel to the Madras Railway in the *Salem District*.

Bamboos.—Rs. 1,064. Due to the fact that fewer bamboo rafts were floated to the Kallai depot in *South Malabar* where they are usually broken and sold.

Sandalwood.—Rs. 5,903. Due partly to the sale in the previous year of the two years' stock in the *Nilgiris* and partly to the restriction of fellings during the year in *Salem*.

Minor produce.—Rs. 17,717. Due mainly to sale of the previous year's collection of soapnuts and gallnuts in *Nellore* and *North Coimbatore*.

Removals by purchasers.

Timber.—Rs. 34,567. Due to realization of revenue during the previous year in *Salem* from sale of trees on darkhast lands and in reserved forests on the Shevaroy's leased out to planters for coffee cultivation and to absence of revenue from these sources during the year under review and to fall in the number of darkhast applications and to non-adjustment during the year of the value of timber and fuel supplied to the Superintendent, Reserve Remount Depot. The want of demand for first-class timber and palmyra trees in *Chingleput* and short removals of timber by contractors in *North* and *South Malabar* owing to prevalence of plague in *Mysore*, also contributed towards the decrease.

Fuel.—Rs. 12,840. Due mainly to improved sales of standing coupes in *Madura* and to the substitution in *Tinnevely* of the contract system for departmental agencies.

Bamboos.—Rs. 2,956. The decrease occurs in *Salem* due to restrictions of fellings and to prevalence of plague at *Bangalore*.

Grazing.—Rs. 70,138. (*Vide* explanation under grazing).

Other produce.—Rs. 49,096. The decrease was due to withholding of the sale of the tangedu bark lease on account of low bids and to low prices fetched for minor produce both in reserved and unreserved lands in the *Bellary district*; to failure in *Anantapur* to recover in full the balances due on account of the tangedu bark leases; and to fall in the sales of amroy in *Cuddapah*.

Confiscated wood and miscellaneous revenue.—Rs. 43,565. The decrease was due to the sale of a smaller number of captured elephants during 1898-99 than in the previous year in the *Southern Circle* and to the delay in the collection of rent from the lessees of forest lands in *North Malabar* and *South Coimbatore* and also to restrictions placed on sale of lands on the Anamalais during the year. The crediting of compensation fees in *Chingleput* and *South Arcot* to the appropriate budget heads instead of to head V as in the previous year, also contributed towards the decrease.

The total expenditure under "A. Conservancy and works" as compared with that of the previous year shows a fall of only Rs. 1,409. If the variations under each head are taken into account, noticeable increase occurs under I and decrease under VI, VIII and IX. The increased expenditure under I was due (1) to withdrawal of restrictions imposed in the previous year on the collection of red wood and small timber in *Cuddapah*; (2) the payment during the year of the cartage on timber sold to the Ordnance Department in *North Malabar*; and (3) to the large supply of engine fuel to the Madras Railway from *Salem*. The short expenditure under VI was due mainly to adjustment of the cost of tents supplied in 1897-98 and 1898-99 to the former year's account and to purchase of less stores during the year as compared with those purchased in the previous year. The decrease under VIII occurred mainly in *Northern* and *Central Circles* and was due to the restriction of operations by the Survey of India Party and that under IX was due to the payment during the previous year of damages and law charges in civil original suit No. 2 of 1895 on the file of the District Court of *North Arcot*. The cost of "B. Establishment" increased slightly by Rs. 5,069 due mainly to the employment of larger staff of subordinate establishment under the reorganization scheme. The following districts contributed chiefly to the net surplus: *Salem* over 25 per cent., *Cuddapah* and *North Arcot* 13, *Nellore* 12, *North Coimbatore* 11, *Kurnool* 10 and *South Arcot* 9.

CHAPTER V.—IMPORTANT ADMINISTRATIVE CHANGES.

47. **Realization of Revenue from the usufruct of Toddy-yielding trees in the Reserved Forests and Government Waste and Poramboke Lands.**—As reported last year, the revenue collected under this head in *Ganjām* was insignificant. In *Gōdāvari* it is expected to realize more in future by the change in the order on the subject, viz., that the revenue from trees on village porambokes (other than those held on patta), should be credited to "Forests." In *Kurnool* it is reported that the fixed fee system is working well, while in *Anantapur* it has resulted in a loss to the department. In *Bellary* and *Anantapur* the revenue fell short of that of the previous year. There was no demand for tapping in reserved forests and lands in the former district. In *North Arcot* the system of selling by public auction the lease of the usufruct of the toddy-yielding trees was continued during the year, and fixed fees were, as reported last year, levied on only a few trees in the reserved forests. The introduction of the fixed fee system was postponed to 1899-1900. In *Madura* there was no collection under this head, as the number of trees is small, and no purchasers came forward. In *Tinnevely* the revenue derived from this source amounted to Rs. 1,682. The reports from other districts contain little or no information on the subject.

48. *Measures adopted to encourage the growth of manure leaf yielding trees and shrubs.*—In the *Northern Circle* nothing was done to encourage the growth of manure leaf yielding trees by artificial means, as there was no demand for leaf-manure in some districts, while in others there was sufficient spontaneous growth of the necessary trees and shrubs outside the areas under conservation. In the *Central Circle* no steps were undertaken in this direction in any of the districts except *Chingleput* and *North Arcot*, as demands were satisfactorily met with from existing produce. In *Chingleput* some species were sown in coupes, and the result of the undertaking was, on the whole, unsatisfactory. In *North Arcot* the supply of leaves for manure is insufficient in some localities, but steps are being taken to sow some of the species in the reserves. In the *Southern Circle* it is reported that in *South Canara* the Range officers have been directed to encourage the growth of suitable shrubs; in *South Coimbatore* the demand for the leaves grown in the forest is scarce; in *Madura* the subject is receiving the attention of the officers, and provision is being made in the working plans now under preparation. In the other districts no action is considered necessary at present.

49. *Working of the Department—Improvement of the Forest growth and the wants of the people.*—In *Vizagapatam* permit-issuing stations are located at convenient centres, and the people experience no difficulty whatever in obtaining forest permits. In *Godavari* simple working plans are being prepared for working the plain village forests to provide small timber and fuel to the public at cheap rates, and it is proposed to open a depot in *Peddapur* to supply the surrounding population with small timber for agricultural and domestic purposes. In *Kurnool* the selling rates of timber in the depots have been reduced during the year restricting the price to seigniorage rates plus cost of extraction and carriage. The establishment of depots at various centres is being arranged for. In *Anantapur* the requirements of the people have been kept in view in dealing with the management of the reserved forests. In *Cuddapah* the demands were satisfactorily met with, while in *Nellore* the supply was more than enough for local requirements. In *Chingleput* and *North Arcot* coupes were opened to meet the requirements of the people in the matter of small timber and fuel. In the latter district permits on payment of seigniorage were also issued wherever necessary. In *South Arcot* facilities were afforded to meet the wants of the people by opening coupes; but they did not make much use of them, as they were able to procure firewood, &c., for domestic purposes from patta lands. In *Salem* the wants of the people were generally met with, and efforts are now being made to supply agricultural implements from every fuel depot. The departmental supply of charcoal from the *Salem* depot was commenced during the year, and by this means the people were able to obtain charcoal at a lower rate than that at which it could be obtained in the open market. In *Tanjore* and *Trichinopoly* no hardships were experienced by the ryots in the matter of obtaining forest produce. In *North Coimbatore* the introduction of a new bamboo depot at *Attani* has proved a success and the demand has greatly improved. In *Madura* the permit system was re-introduced in some places as its abolition caused inconvenience to the people. The required information on the improvement of standing growth and efforts to aid it are given in paragraphs 28 and 29 *supra*.

50. *Rules under the Forest Act.*—The timber transit rules in *Ganjam* are reported to require some modification. In *Vizagapatam* and *Kurnool* they worked satisfactorily, but in the latter the marking of timber by a pass hammer which was done away with during the year gave room to smuggling of timber. Rules under sections 35 and 36 of the Forest Act were introduced during the year in the districts of *Godavari* and *Tinnevely*. A portion of these rules relating to the registration of property marks and special rules applicable to all rivers, &c., were sanctioned during the year for *South Malabar*. In *South Coimbatore* timber transit rules were worked without any undue hardships to the people. A notification for constituting certain forests of the *Saptur Estate* as reserved lands has since been approved by the Court of Wards; but the District Forest-officer considers the sanctioned forest rules unsuitable and unlikely to improve the forests, as they are subject to the exercise of existing rights and privileges. In *Cuddapah* the timber transit rules have proved of great value in minimising the illicit removal of timber.

51. *Working of the rules under section 26 of the Forest Act.*—This subject is not noted by the Collectors of *Kistna*, *South Canara* and *South Coimbatore*. The concession allowed under rule 7 of the rules was availed of by the people generally in almost

all the districts. In *Vizagapatam* the exclusion of certain species from class III of the classified list of trees mentioned in the last year's report was widely made known and accepted freely by the public. In *North Coimbatore*, it is reported, the concessions are abused and in many parts unreserved forests are being gradually stripped of growth, much damage being done to the more valuable trees by graziers. It is however presumed that the Collector is taking steps to put a stop to this abuse. Separate lists of selected trees for each range referred to in the previous year's report have been received from most of the Collectors and approved of by the Board with certain modifications.

52. *Coffee cultivation in reserved forests.*—In *Salem* out of the total demand of Rs. 26,552 on account of the value of the growth on the lands assigned for cultivation on the Shevaroy, Rs. 3,474 were collected during the year under report, and Rs. 18,875 in previous years. The balance will be collected when the instalments fall due. A lease-deed for 46 acres of land on the Yelagiris was executed during the year. The proposal to throw open a portion of the *Minchiguli Valley* in *North Coimbatore* has been dropped for the present by Government. In *South Coimbatore* the terms of lease-deeds for leases on the Anamalais were finally settled and almost all the lessees have paid up the arrears of rent and the agreements are being executed. Of the 12 pending applications, 2 were rejected, 6 withdrawn, 3 advertised for sale in public auction and 1 assigned at the upset price of Rs. 5 per acre. The demand for land is slack as the price of coffee has considerably fallen. Government has ordered that no fresh applications for lands on the Anamalais should be admitted pending completion of bridle-path to *Sirukundru*.

53. *Tours of Forest Member.*—The Hon'ble Mr. J. Sturrock, I.C.S., was the Forest Member throughout the year. He proceeded to *Coimbatore* in September and October 1898, visited the wire ropeway and sawing machine at *Mount Stuart* and conferred with the Collector and the District Forest-officer on various forest matters. He also visited *Kurnool* in December 1898 and the *Nilgiris* in June 1899.

54. *Conservators' inspections.*—The usual statement showing the names of the Conservators that held charge of the three circles during the year, the time spent by them in camp and the names of the districts inspected by them is appended below:—

Circle.	Names of Conservators.	Number of days in charge.	Number of days spent in camp.	Districts inspected.	District Forest-offices inspected.
Northern	Mr. E. D. M. Hooper	Whole year.	212	All the districts ..	All except Kurnool.
Central	„ J. W. Cherry	Do.	228	All the districts except Tanjore.	All except North Arcot.
Southern	„ O. E. Brasier „ H. A. Gass	3 362	277	All the districts.	All the district Forest-offices.

Mr. Hooper was deputed to the annual meeting of the Forest School at *Dehra Dun* to serve as a Member in the Board of Control.

55. *Touring of District Forest-officers.*—More than half the year was spent in camp by all the District Forest-officers except *Bellary*, *Nellore*, *Tanjore* and *Trichinopoly* and the *Nilgiris*. The short touring of the District Forest-officer, *Nilgiris*, was due to repeated illness contracted during work in the *Mudumalai* forest and on the *Mysore* boundary. Explanations for short touring by the other officers have not been furnished.

56. *Inspection of Range offices by District Forest-officers.*—The ranges of all the districts except *Bellary*, *Nellore*, *North Arcot*, *South Arcot*, *South Canara*, *South Malabar*, the *Nilgiris*, *North* and *South Coimbatore* were inspected twice during the year. In the districts excepted some of the Range offices were inspected only once.

57. *Audit of the accounts of the District Forest offices.*—The accounts of all District Forest-offices except *North Arcot*, *Tanjore* and *South Coimbatore* were, as usual, audited

by the Local Fund inspecting staff of the Accountant-General's office, and the results were on the whole satisfactory. The Collector of the *Nilgiris* has not furnished any information on the point.

58. *Forest School*.—One Deputy Ranger from the Northern Circle and one Forester from the Southern Circle were deputed during the year to the Forest school for training. Three Deputy Rangers returned from the school with Rangers certificates, i.e., one to each circle.

59. *Conference of District Forest and Divisional Officers during Jamabandi*.—The instructions issued last year by the Board on the subject were observed in all the districts except *Vizagapatam*, *Kurnool*, *Nellore*, *Trichinopoly* and *North Malabar*; the chief complaints brought to notice were—

- (1) absence of timber trees for agricultural implements;
- (2) absence of browsing grounds for goats; and
- (3) insufficiency of manure-leaf-yielding areas.

These are receiving the consideration of the respective officers. In *Vizagapatam* the District Forest-officer was not able to meet the Divisional officers as he was appointed a working-plan officer at the time of jamabandi. In *Nellore* as Mr. Foulkes was busily engaged in the preparation of several working plans he had no opportunity to meet the Divisional-officers at the time of jamabandi. In *Trichinopoly* the non-compliance of orders is reported to be due to frequent changes of District Forest officers and to other important matters concerning the district which engaged the attention of the District Forest-officer during jamabandi. This explanation and that offered by the Collector of *Kurnool* are altogether unsatisfactory. *North Malabar* has not given any explanation.

60. *Conduct and work of the establishment*.—The conduct and work of the subordinate executive staff were on the whole good but still leave much room for improvement. In the *Northern Circle*, the prosecution of a Forester in *Gódavari* for bribery resulted in his acquittal. One Deputy Ranger in *Kistna* was suspended for misappropriation of grazing revenue and his prosecution was recently sanctioned. One supervisor was dismissed for neglect of duty and two were suspended for the same reason. A license-issuing gumastah, against whom a complaint was preferred, absconded before the issue of warrant and his whereabouts are not yet known. In *Bellary* two foresters were suspended—one for disobedience of orders and neglect of duty and the other for fraudulent conduct. In *Cuddapah* in the *Central Circle* one forester was suspended for disobedience of orders and the services of another were dispensed with. One Ranger and two foresters were suspended in *North Arcot*. The former has since been reduced to the bottom of his grade for irregularities in his office work. In *South Arcot* one forester was prosecuted for bribery and extortion, and was convicted on one of the charges. The conviction was upheld on appeal. One Deputy Ranger in *Salem* was suspended on charges of misappropriation and his prosecution has since been sanctioned. A forester was convicted of extortion and sentenced to six months' imprisonment. In the *Southern Circle*, a Ranger and a forester were suspended in *North Malabar*. In *South Coimbatore* the services of a forester were dispensed with for submitting false diaries and insubordination to the Range-officer and another was suspended. In *Tinnevely* the services of a forester were dispensed with and two more were suspended for laziness and gross neglect of duty. One Ranger was reduced four places in his grade for neglect of duty.

The conduct of the protective staff was, as usual, far from satisfactory. Several guards and watchers were convicted of extortion and some of criminal misappropriation. Some had also to be removed and suspended for misconduct and gross neglect of duty. A forest guard in *Cuddapah* was found dead bearing marks which point to his having been murdered; the accused persons were, however, discharged for want of evidence.

61. *Health of the establishment*. In the *Northern Circle*, *Vizagapatam*, *Gódavari* and *Kurnool* continued to be as bad as ever. In *Kurnool* a forester and some other subordinates died of malarial fever. In *Gandyam* the season was better than during the

previous year. In the *Central Circle* the subordinates of the *Cuddapah taluk*, as usual, suffered a good deal from fever. The health of the establishment was bad in *Nellore*, *North Arcot* and *Salem*. Mr. Batchelor, the Acting District Forest-officer, *North Arcot*, died of cholera. In the *Southern Circle* the health was, on the whole, better in *South Canara*, *Madura* and *Tinnevely*; fair in the *Nilgiris* except in *Mudumalai*; indifferent *North* and *South Coimbatore*, and bad in *North* and *South Malabar*.

62. *Service Books*.—These are reported to have been maintained and verified in all the districts.

63. *Inventory of valuable stock*.—Stock registers are reported to have been maintained and verified in all districts except the *Nilgiris*, the Collector of which district has not furnished the required information.

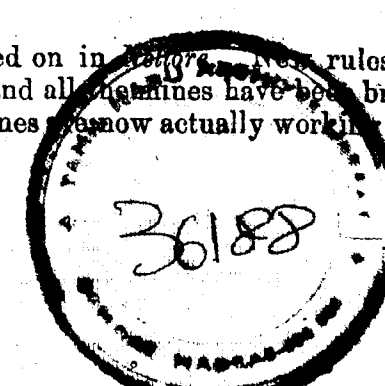
64. *Elephants*.—The elephant attached to the *Vizagapatam district* is reported to be weak and consequently of no use to the department. Twelve elephants were captured during the year—five in *North Malabar*, three in *South Malabar* and four in *South Coimbatore*. One calf was born in *North Malabar*. Four elephants died and four were sold; one was shot, one ran away and two were transferred to the Public Works Department. The number of elephants borne on the strength of the department is 53 as per Form No. 63 against 52 in the previous year.

65. *Rain-gauges*.—Rain-gauge readings are reported to have been properly recorded in all the districts, except *Ganjum* and *Anantapur* in the *Northern Circle*, *Nellore*, *Chingleput*, *Trichinopoly* and *Tanjore* in the *Central Circle* and *South Canara* and the *Nilgiris* in the *Southern Circle*. One of the rain gauges in *Anantapur* has been damaged.

66. *Iron industry in the Salem District*.—The Government of India in their despatch to the Secretary of State for India, dated Simla, the 3rd November 1893, No. 29, Public Works, considered that the unpromising results of the analyses of the samples of iron ore made at Middlesborough were due more or less to the fact that the ore on which experiments had been made could not be regarded as a fair sample of the ore which would in practice be selected for reduction by manufacturers in any iron works that might hereafter be opened, the consignment having consisted of average specimens of the whole rock as it would be quarried in the mass. The Government of India were further of opinion that the determination of the available quantity of such ore might better be left to the experts who will, no doubt, be employed by the syndicates who have applied for licenses to prospect the tract for minerals and decided that it would be unadvisable to continue experiments on sample ores selected by Government officers for the reason that whatever might be the result of such experiments it would be difficult to satisfy the promoters of a private enterprise that the selection had been conducted in such a way as to fairly indicate the commercial value of the Kanjamalai iron fields. With regard, however, to the experiments made to ascertain the coking qualities of the Bengal coal referred to in the report for the last year, the Government of India considered that the results obtained, though inconclusive, were distinctly hopeful and strongly recommended that a further series of experiments should be made under the supervision of an officer interested in a successful result, on samples of Bengal coal specially selected with a view to these experiments. The result of these further experiments has not yet been announced. Two firms have applied for and obtained the sanction of Government for prospecting the Kanjamalai reserve for iron ore for a period of two and a-half years. One of the applicants having sent out a mining expert to report on the quality of the deposit, advantage was taken of his presence in the country to collect 400 tons of ore in view to its being sent to Sweden for experimental treatment by magnetic concentrators, but the Government of India having decided that further investigation should be left to private enterprise no steps are being taken by Government for the despatch of the ore to Europe, and sanction has been accorded for its delivery to Messrs. Turner and McFadyen for the continuance of the investigation at their expense.

67. *Mica*.—Mining for this mineral is carried on in *Nellore*, where rules were framed on the subject and introduced in 1897-98, and all mines have been brought under these rules during the year. Twenty-six mines are now actually working in the

R,
J. B. 2011 2 14 98



district. The royalty collected during the year was Rs. 22,617 and it is expected to derive more in future. The industry is well established and every endeavour has been made to meet the wishes of the lessees and they are well satisfied with the working of the rules. In *Goddavari* the right to prospect for graphite for another year has been granted to Messrs. Hall, Wilson & Co. in Bhadrachalam sub-division.

68. *Work and Services of Superior Officers.*—The opinions of the Conservators are as follow :—

Northern Circle.—Mr. Hooper, the Conservator ; says—

“It would appear that all District Forest-officers have worked to the satisfaction of the Conservator.”

Central Circle.—Mr. Cherry, the Conservator, says—

“I have pleasure in stating that all the officers under me have worked very well and under trying circumstances.”

Southern Circle.—The Acting Conservator Mr. Gass writes—

“It is a pleasure to report satisfaction with the work done by officers in charge of divisions. All have worked hard and well and to select any one officer for special mention would be unfair to the others.”

Mr. W. C. Hayne, Deputy Conservator of Forests, second grade, retired during the year with effect from 12th May 1899.

APPENDICES.

ANNUAL FORM No. 44.
Forest Department, Madras Presidency.
Area of reserved forests and reserved lands, 1898-99.

ANNUAL REPORT OF THE

District.	Area of reserved forests.				Area of reserved lands.				Total area of reserved forests and lands on 30th June 1899 in square miles.
	Area on 1st July 1898.	Added during the year.	Excluded during the year.	Area on 30th June 1899.	Area on 1st July 1898.	Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1899.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Equivalent in square miles.
Northern Circle.									
Ganjam ..	156,436	116,885	7,552	265,619	203,350	18,515	137,793	79,072	123
Vizagapatam ..	87,700	3,149	..	90,849	176,446	..	40,764	135,682	212
Godavari ..	540,474	18,885	..	559,359	80,406	36	23,100	57,342	354
Kistna ..	451,560	27,144	8	478,696	291,960	1,611	39,969	253,602	90
Kurnool ..	1,255,902	26,648	176	1,282,374	453,155	151,613	34,516	573,282	396
Bellary ..	293,228	11,688	496	304,420	100,465	17,169	32,655	86,180	896
Anantapur ..	287,651	32,497	..	320,148	40,170	..	35,310	4,860	135
Total ..	3,073,001	231,996	8,232	3,296,465	1,845,953	187,574	343,567	1,190,020	7
Central Circle.									
Cuddapah ..	1,056,550	130,657	..	1,187,207	475,333	41,779	138,347	382,765	568
Nellore ..	354,516	62,744	..	417,260	80,967	25,785	71,051	35,701	6
Chingleput ..	128,731	5,516	..	134,247	8,886	..	5,867	3,099	708
North Arcot ..	670,344	136,842	58,780	718,406	52,340	6,214	15,715	42,819	5
South Arcot ..	432,543	5,895	..	438,438	22,253	..	6,743	15,310	67
Salem ..	784,791	5,155	526	791,420	108,474	19,132	6,277	119,329	24
Trichinopoly ..	122,851	15,236	..	138,087	65,263	31,423	18,493	68,293	186
Tanjore ..	11,519	..	..	11,519	..	..	..	..	323
Total ..	3,561,865	361,045	59,306	3,866,604	807,496	124,833	264,383	667,446	1,043
Southern Circle.									
South Canara ..	106,371	75,319	26	181,664	612,294	..	..	518,906	811
Malabar, North ..	100,851	1,117	155	101,843	74,578	..	..	72,256	113
Do. South ..	25,416	96,000	..	121,416	184,731	..	..	88,731	138
The Nilgiris ..	228,962	715	302	229,375	80,092	6,711	1,677	83,126	133
Coimbatore, North ..	674,382	1,692	176	676,058	341,357	..	4,700	356,657	537
Do. South ..	418,292	97	..	418,369	1,982	..	97	1,885	3
Madura ..	363,081	3,329	..	366,410	29,823	..	6,077	23,746	37
Tinnevely ..	263,971	2,835	50	266,759	7,505	3,923	3,988	7,490	12
Total ..	2,181,329	184,434	709	2,365,054	1,362,762	10,634	208,599	1,164,797	1,804
Grand Total ..	8,816,196	780,176	68,247	9,598,123	3,506,211	322,541	816,489	3,012,263	4,706

FOREST DEPARTMENT.

ii

ANNUAL FORM No. 44.

District.	Name of forest or land.	Area on 1st July 1898.		Added during the year.	Excluded during the year.	Area on 30th June 1899.		Number and date of notification of addition or exclusion.
		Acres.	Equivalent in square miles.			Acres.	Equivalent in square miles.	
Ganjam	Reserved forests.							
	Rayapada	..	..	7,025	..	7,035	..	No. 350, dated 25th July 1898.
	Paichalia	..	..	7,675	..	7,675	..	No. 409, dated 31st August 1898.
	Darpangia	..	..	24,312	..	24,312	..	No. 422, dated 14th September 1898.
	Dowgam	..	..	2,279	..	2,279	..	No. 424, dated 9th September 1898.
	Gulleri	..	..	27,614	..	27,614	..	No. 36, dated 24th January 1899.
	Gogodo	..	..	10,327	..	10,327	..	No. 191, dated 22nd April 1899.
	Ambozora	..	..	33,274	..	33,274	..	No. 226, dated 19th May 1899.
	Area notified in previous years.	156,486	245	4,169	7,552	153,103	..	....
	Total ..	156,486	245	116,685	7,552	265,619	415	....
Ganjam	Reserved lands (not transferred to reserved forests during the year).							
	Area notified in previous years.	104,349	..	..	{ + 121 + 25,156	79,072	123	....
Vizagapatam	Reserved forests.							
	Chinnugona Extension 1 ..	..	..	22	..	22	..	No. 583, dated 16th December 1898.
	Do. do. 2 A ..	..	..	13	..	13	..	
	Do. do. 3 and B ..	..	..	13	..	13	..	
	Do. do. 4 ..	..	..	184	..	184	..	
	Do. do. 5 ..	..	..	104	..	104	..	No. 245, dated 20th May 1898.
	Antikonda do. 1 ..	..	..	64	..	64	..	
	Do. do. 2 ..	..	..	76	..	76	..	No. 305, dated 23rd June 1898.
	Kadagandi do. 1 ..	..	..	237	..	237	..	
	Padinikonda do. 1 ..	..	..	66	..	66	..	No. 557, dated 3rd December 1898.
	Do. do. 2 ..	..	..	18	..	18	..	
	Arlova do. 2 ..	..	..	70	..	70	..	No. 252, dated 20th May 1898.
	Do. do. 4 ..	..	..	64	..	64	..	
	Do. do. 5 ..	..	..	51	..	51	..	No. 246, dated 20th May 1898.
	Sinivaram do. ..	..	..	124	..	124	..	
	Karaka do. 2-A ..	..	..	2,043	..	2,043	..	No. 253, dated 18th May 1898.
	Do. do. 2-B ..	..	..	..	..	..	..	
	Area notified in previous years.	87,700	137	..	..	87,700	..	No. 50, dated 26th January 1899.
	Total ..	87,700	137	3,149	..	90,849	142	
Vizagapatam	Reserved lands (not transferred to reserved forests during the year).							
	Bointi	..	..	..	32,960	..	..	No. 505, dated 2nd November 1898.
	Area notified in previous years.	173,297	..	..	{ + 2,975 + 1,680	..	..	
	Total ..	173,297	..	..	37,615	135,682	212	....
Godavari	Reserved forests.							
	Marlagudem	..	..	2,100	..	2,100	..	No. 304, dated 28th June 1898.
	Papikonda	..	..	11,785	..	11,785	..		No. 170, dated 11th April 1899.
	Area notified in previous years.	540,474	844	..	..	540,474	..	
	Total ..	540,474	844	13,885	..	554,359	866	....
Godavari	Reserved lands (not transferred to reserved forests during the year).							
	Doramamidi extension ..	..	..	36	..	36	..	No. 450, dated 29th September 1898.
	Area notified in previous years.	66,521	..	..	+ 9,215	57,306	..	
	Total ..	66,521	..	36	9,215	57,342	90	....

* Rectification.

† At settlement.

‡ Unreserved by Collector.

District.	Name of forest or land.	Area on 1st July 1898.		Added during the year.	Excluded during the year.	Area on 30th June 1899.		Number and date of notification of addition or exclusion.	
		Acres.	Equivalent in square miles.			Acres.	Equivalent in square miles.		
Reserved forests.									
Kistna	Venkatayapalem extension 3	..	..	1,420	..	1,420	..	....	
	Do. do. 6.	..	..	1,120	..	1,120	..	....	
	Bollapalli extension 8	..	..	1,500	..	1,500	..	....	
	Bapatla extension 3	..	..	607	..	607	..	....	
	Guttikonda extension 9	..	..	890	..	890	..	No. 351, dated 25th July 1898.	
	Nizampatam extension 1	..	..	1,500	..	1,500	..	No. 410, dated 1st September 1898.	
	Tummarcodu extension 4	..	..	405	..	405	..	No. 425, dated 9th September 1898.	
	Do. do. 5	..	..	432	..	432	..	No. 432, dated 17th September 1898.	
	Gadimetla	..	..	1,157	..	1,157	..	No. 433, dated 17th September 1898.	
	Rekullagadda	..	..	3,230	..	3,230	..	No. 518, dated 14th November 1898.	
	Pullaripalem	..	..	699	..	699	..	No. 569, dated 12th December 1898.	
	Perlavallapalem	..	..	889	..	889	..	No. 571, dated 6th December 1898.	
	Bollapalli extension 9	..	..	720	..	720	..	No. 673, dated 6th December 1898.	
	Gangalakunta addition Nos. I, II and III.	..	..	44	..	44	..	No. 16, dated 5th January 1899.	
	Muthayapalem extension	..	..	720	..	720	..	No. 37, dated 19th January 1899.	
	Tummarcodu II	..	..	2,720	..	2,720	..	No. .., dated 6th April 1899.	
	Bollapalli extension 7	..	..	2,565	..	2,565	..	No. 190, dated 22nd April 1899.	
	Koppukonda extension 1	..	..	3,336	..	3,336	..	No. 225, dated 20th May 1899.	
	Mekapad	..	..	1,428	..	1,428	..	No. 232, dated 19th May 1899.	
	Kuragallu extension	..	..	16	..	16	..	No. 283, dated 26th May 1899.	
	Yellamanda block No. II	..	..	1,045	..	1,045	..	....	
	Area notified in previous years.	451,560	706	* 701	* 8	452,263	..	....	
	Total	451,560	706	27,144	8	478,696	748	....	
Reserved lands (not transferred to reserved forests during the year).									
	Area notified in previous years.	265,517	..	1,611	$\begin{matrix} * & 34 \\ + & 5,658 \\ \hline & 7,834 \end{matrix}$	263,602	396	....	
Reserved forests.									
Kurnool	Gadidamadugu	..	2,891	..	176	2,715	..	No. 10, dated 5th January 1899.	
	Maduva	..	..	855	..	855	..	No. 340, dated 11th July 1898.	
	Sirvel addition No. III of Bachipalli.	..	..	11,546	..	11,546	..	No. 341, dated 11th July 1898.	
	Veldurti	..	..	976	..	976	..	No. 446, dated 28th September 1898.	
	Dudiyala	..	..	4,025	..	4,025	..	No. 491, dated 26th October 1898.	
	Betamcherla	..	..	9,245	..	9,245	..	No. 520, dated 11th November 1898.	
	Area notified in previous years.	1,253,011	1,958	..	..	1,253,011	..	....	
	Total	1,255,902	1,962	26,648	176	1,282,374	2,004	....	
	Reserved lands (not transferred to reserved forests during the year).								
	Mukhella date tope	..	..	141	..	141	..	No. 369, dated 10th August 1898.	
	Eastern Nallamalai block No. V.	..	..	8,939	..	8,939	..	No. 496, dated 26th October 1898.	
	Markapur addition	..	..	12	..	12	..	No. 522, dated 14th November 1898.	
	Eastern Nallamalai block No. IV	..	..	28,900	..	28,900	..	No. 101, dated 6th March 1899.	
	Area notified in previous years.	426,507	666	116,651	7,868	535,290	..	....	
	Total	426,507	666	154,643	7,868	573,282	896	....	

* Rectification.

† Unreserved by the Collector.

‡ At settlement.

§ Notified by the Collector under rule 5 of the rules under section 26.

Name of forest or land.	1898.		year.		year.		Number and date of notification of addition or exclusion.
	Acres.	Equivalent in square miles.	Acres.	Equivalent in square miles.	Acres.	Equivalent in square miles.	
Reserved forests.							
Kallam west	..	..	1,341	..	1,341	..	No. 495, dated 29th August 1898.
Kallagavathi	..	..	1,423	..	1,423	..	No. 345, dated 18th August 1898.
Kodda	..	..	1,101	..	1,101	..	No. 585, dated 16th December 1898.
Uttalagandi extension No. 141.	..	..	1,256	..	1,256	..	No. 18, dated 5th January 1899.
Bellachunahi	..	..	1,805	..	1,305	..	No. 93, dated 27th February 1899.
Rampasagaram	..	..	1,005	..	1,005	..	No. 197, dated 22nd April 1899.
Koyilaragatti extension	..	..	377	..	377	..	No. 63, dated 10th February 1899.
Area notified in previous years.	292,228	458	3,880	496	296,612	..	....
Total ..	292,228	458	11,688	496	304,420	476	....
Reserved lands (not transferred to reserved forests during the year).							
Tornagalli extension	..	..	167	..	167	..	No. 540, dated 19th November 1898.
Hollikunta	..	..	4,124	..	4,124	..	No. 380, dated 17th December 1898.
Gundlacheramanahalli	..	..	1,819	..	1,819	..	No. 17, dated 5th January 1899.
Somalapuram south-east extension	..	..	276	..	276	..	No. 682, dated 16th December 1898.
Appayinahalli	..	..	2,378	..	2,378	..	No. 481, dated 17th December 1898.
Shidagalla A	..	..	3,320	..	3,320	..	No. 685, dated 17th December 1898.
Do. B	..	..	898	..	898	..	No. 17, dated 5th January 1899.
Do. C	..	..	4,200	..	4,200	..	Do.
Area notified in previous years.	92,658	143	189	† 1,958 + 29,299	68,600	..	....
Total ..	92,658	143	17,799	24,117	68,600	126	....
Reserved forests.							
Kallabettu, north	..	..	7,329	..	7,329	..	No. 313, dated 1st July 1898.
Dallam extension	..	..	855	..	855	..	No. 262, dated 3rd June 1898.
Kallagiri	..	..	1,127	..	1,127	..	No. 447, dated 19th September 1898.
Manampalli	..	..	1,933	..	1,933	..	No. 482, dated 27th October 1898.
Tommihutti	..	..	1,790	..	1,790	..	No. 478, dated 27th October 1898.
Kondapalli	..	..	4,500	..	4,500	..	No. 505, dated 8th December 1898.
Pillabatti	..	..	1,885	..	1,885	..	No. 372, dated 6th December 1898.
Kallaveti	..	..	4,424	..	4,424	..	No. 166, dated 7th April 1899.
Chitturu	..	..	4,380	..	4,380	..	No. 167, dated 7th April 1899.
Appakurda	..	..	3,779	..	3,779	..	No. 198, dated 22nd April 1899.
Area notified in previous years.	297,451	469	..	..	297,451	..	....
Total ..	297,451	469	..	..	297,451	..	....
Reserved lands (not transferred to reserved forests during the year).							
Area notified in previous years.	7,678	12	..	† 2,815	4,863	..	....
Total ..	7,678	12	..	2,815	4,863	..	....

* At notification. † At settlement. ‡ Unreserved by the Collector.

District.	Name of forest or land.	Area on 1st July 1898.		Added during the year.	Excluded during the year.	Area on 30th June 1899.		Number and date of notification addition or subtraction.
		Acres.	Equivalent in square miles.			Acres.	Equivalent in square miles.	
Reserved forests.								
	Palacondas	..	..	87,958	..	87,958	..	No. 369, dated May 1898.
	Vongimalla	..	..	11,401	..	11,401	..	Do.
	Seshachellam extension B ..	..	..	1,793	..	1,793	..	No. 435, dated September 1898.
	Kanakalakonda extension ..	..	..	4,496	..	4,496	..	No. 29, dated January 1899.
	Patur extension	..	..	4,896	..	4,896	..	No. 98, dated February 1899.
	Dhodiya extension A	..	..	2,147	..	2,147	..	No. 114, dated March 1899.
	Do. do. B	..	..	1,655	..	1,655	..	No. 65, dated February 1899.
	Gandikota do. B	..	..	762	..	762	..	No. 63, dated February 1899.
	Do. do. C	..	..	254	..	254	..	No. 94, dated February 1899.
	Neridikonda	..	..	6,145	..	6,145	..	No. 92, dated February 1899.
	Seshachalam extension C ..	..	..	5,328	..	5,328	..	No. 436, dated September 1898.
	Musalikunta	..	..	2,161	..	2,161	..	No. 462, dated October 1898.
	Yellutla extension B	..	..	1,661	..	1,661	..	No. 587, dated December 1898.
	Area notified previous years.	1,066,550	1,651	..	..	1,066,550	..	....
	Total ..	1,066,550	1,651	130,657	..	1,197,207	1,855	....
Reserved lands (not transferred to reserved forests during the year).								
	Endugantapalli extension ..	..	..	3,136	..	3,136	..	No. 158, dated March 1899.
	Gottimanikona do. ..	108	..	5,404	..	5,602	..	No. 169, dated April 1899.
	Koder Hill do. ..	2,160	..	5,763	..	7,923	..	No. 97, dated January 1899.
	Kanamalapalli do. ..	..	..	3,738	..	3,738	..	No. 403, dated August 1898.
	Turupukonda do. ..	21,702	..	766	..	22,468	..	No. 255, dated May 1899.
	Kandaparam plantation ..	..	..	89	..	89	..	No. 584, dated December 1898.
	Gorivikanama extension ..	..	..	1,317	..	1,317	..	No. 106, dated March 1899.
	Gadikota do. ..	3,538	..	9,099	..	12,637	..	No. 208, dated May 1899.
	Seratha	..	..	5,571	..	5,571	..	No. 106, dated March 1899.
	Gandikota extension A ..	6,075	..	..	..	6,075	..	No. 264, dated June 1899.
	Sibyal extension south ..	594	..	..	..	594	..	No. 368, dated August 1898.
	Sellvendra extension A ..	..	..	2,520	..	2,520	..	No. 229, dated May 1899.
	Do. do. B	..	..	2,260	..	2,260	..	Do.
	Area notified previous years.	316,154	..	..	640	315,514	..	....
	Total ..	350,331	547	39,743	7,309	382,765	598	....
Reserved forests.								
	Sriharikota proper	..	..	25,314	..	25,314	..	No. 489, dated October 1898.
	Cherlopalli extension	..	..	320	..	320	..	No. 239, dated May 1898.
	Mugallur block B extension ..	..	..	550	..	550	..	No. 240, dated May 1898.
	Rapur-Veligonda extension ..	..	..	2,450	..	2,450	..	No. 241, dated May 1898.
	Palakonda	..	..	300	..	300	..	No. 245, dated May 1898.
	Tampalatalapur extension ..	..	..	700	..	700	..	No. 247, dated May 1898.
	Rapur-Veligonda extension ..	..	..	6,200	..	6,200	..	No. 263, dated June 1898.
	Syaspuram block A extension ..	..	..	450	..	450	..	No. 264, dated June 1898.
	Syaspuram block B extension ..	..	..	450	..	450	..	Do.

Name of forest or land.	Area on 1st July 1898.		Added during the year.	Excluded during the year.	Area on 30th June 1899.		Number and date of notification of addition or exclusion.
	Acres.	Equivalent in square miles.			Acres.	Equivalent in square miles.	
Reserved forests—cont.							
Tirumalapad reserve	..	..	400	..	400	..	No. 306, dated 23rd June 1898.
Chippinapi do.	..	..	420	..	420	..	No. 325, dated 8th July 1898.
Chagalam extension	..	..	500	..	500	..	No. 364, dated 30th July 1898.
Chintalapalam reserve	..	..	400	..	400	..	No. 482, dated 26th October 1898.
Rapur-Veligonda block B extension.	..	..	2,000	..	2,000	..	No. 484, dated 27th October 1898.
Mahimalur	..	..	9,840	..	9,840	..	No. 489, dated 26th October 1898.
Gavaravaram	..	..	6,490	..	6,490	..	No. 233, dated 20th May 1899.
Yerrukolla Gundamadakala. ..	..	..	3,600	..	3,600	..	No. 337, dated 15th July 1898.
Korinakonda extensions A and B.	..	..	1,640	..	1,640	..	No. 465, dated 4th October 1898.
Gundakonda	..	..	720	..	720	..	No. 538, dated 19th November 1898.
Area notified previous years.	354,516	554	..	..	354,516	..	....
Total ..	354,516	554	62,744	..	417,260	652	....
Reserved lands (not transferred to reserved forests during the year).							
Nandipad	..	..	2,670	..	2,670	..	No. 539, dated 19th November 1898.
Udayagiri-Yerrakonda extension.	..	..	600	..	600	..	No. 556, dated 3rd December 1898.
Thotachervupalli	..	..	1,400	..	1,400	..	No. 9, dated 5th January 1899.
Guvvadi, east	..	..	1,500	..	1,500	..	No. 15, dated 5th January 1899.
Do. west	..	..	1,800	..	1,800	..	Do.
Dugadathal extension	..	..	800	..	800	..	No. 543, dated 19th November 1898.
Pedda Alavalapad	..	..	1,150	..	1,150	..	No. 390, dated 18th August 1898.
Nandanavanam extension A.	..	..	680	..	680	..	Do.
Ayyavaripalli	..	..	1,200	..	1,200	..	Do.
Mosunur	..	..	1,000	..	1,000	..	No. 402, dated 29th August 1898.
Mogilicherla, west	..	..	860	..	860	..	No. 408, dated 29th August 1898.
Hajipuram	..	..	1,925	..	1,925	..	No. 537, dated 19th November 1898.
Nandanavanam block B, extension B.	..	..	600	..	600	..	No. 541, dated 19th November 1898.
Nandanavanam block B, extension C.	..	..	360	..	360	..	Do.
Pedacherlopalli	..	..	1,700	..	1,700	..	No. 560, dated 3rd December 1898.
Inimera	..	..	4,280	..	4,280	..	No. 31, dated 12th January 1899.
Ravigantapalli	..	..	1,400	..	1,400	..	No. 64, dated 10th February 1899.
Mogilicherla, north	..	..	1,120	..	1,120	..	No. 137, dated 27th March 1899.
Dasaripalli	..	..	760	..	760	..	No. 26, dated 12th January 1899.
Udayagiri-Veligonda extension. ..	2,560	..	..	2,560	..	..	No. 315, dated 28th June 1898.
Area notified previous years.	15,663	..	..	5,747	9,916	..	....
Total ..	18,223	28	25,785	8,307	35,701	56	....
Reserved forests.							
Tirumalavayal extension II. ..	..	..	122	..	122	..	No. 329, dated 8th July 1898.
Kavanur do. I.	..	..	39	..	39	..	No. 359, dated 30th July 1898.
Sonaller do. II.	..	..	224	..	224	..	No. 382, dated 13th August 1898.
Kattankulathur do. I.	..	..	180	..	180	..	No. 383, dated 13th August 1898.
Gadalar do. I.	..	..	27	..	27	..	No. 387, dated 13th August 1898.

* At settlement

District.	Name of forest or land.	Area on 1st July 1898.		Added during the year.	Excluded during the year.	Area on 30th June 1899.		Number and of notification addition or ext.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Reserved forests—cont.								
Chingleput —cont.	Sonallur extension I ..	..	..	40	..	40	..	No. 388, date August 1898.
	Madayathur do. I ..	..	..	133	..	133	..	No. 395, date August 1898.
	Gudalur do. II ..	..	..	95	..	95	..	No. 400, date August 1898.
	Tandrai do. I ..	..	..	175	..	175	..	No. 404, date August 1898.
	Ilalur do. II ..	..	..	187	..	187	..	No. 440, date September 18
	Alathur do. I ..	..	..	244	..	244	..	No. 441, date September 18
	Anjur do. ..	..	..	172	..	172	..	No. 490, date October 1898
	Kattur do. III ..	..	..	144	..	144	..	No. 493, date October 1898
	Vattambakkam do. I ..	..	..	120	..	120	..	No. 512, date November 18
	Sirunkundram B extension I.	..	..	94	..	94	..	No. 513, date November 18
	Acharavakkam extension I.	..	..	205	..	205	..	No. 542, date November 18
	Senkundram do. I.	..	..	362	..	362	..	No. 567, date December 18
	Madambakkam do. I.	..	..	211	..	211	..	No. 116, date March 1899.
	Kavanippakkam	..	..	677	..	677	..	No. 162, date April 1899.
	Edamachi	..	..	746	..	746	..	No. 164, date March 1899.
	Valluvappakkam	..	..	599	..	599	..	No. 179, date April 1899.
	Karunguli tope	..	..	17	..	17	..	No. 189, date April 1899.
	Selaiyur extension I ..	..	..	172	..	172	..	No. 193, date April 1899.
	Kattugudalur do. I ..	..	..	366	..	366	..	No. 196, date April 1899.
	Kattur do. I ..	..	..	165	..	165	..	No. 209, date May 1899.
	Area notified in previous years.	128,731	201	..	..	128,731	..	....
	Total ..	128,731	201	5,516	..	134,247	210	..
Reserved lands (not transferred to reserved forests during the year).								
Area notified in previous years.	3,370	5	..	..	341	3,029	5	....
Reserved forests.								
North Arcot.	Solavaram extension ..	..	..	874	..	874	..	No. 378, date August 1898
	Basavareddipalli extension A.	..	..	1,718	..	1,718	..	No. 519, date November 1
	Do. do. B.	..	..	5,758	..	5,758	..	Do.
	Pattikonda	..	..	5,190	..	5,190	..	No. 524, date November 1
	Kinaiipalli extension ..	..	..	24	..	24	..	No. 165, date April 1899.
	Alapalli	..	..	2,029	..	2,029	..	No. 194, date April 1899.
	Area notified in previous years.	670,344	1,047	† 121,249	† 58,780	732,813	..	....
	Total ..	670,344	1,047	136,842	58,780	748,406	1,169	..
Reserved lands (not transferred to reserved forests during the year).								
Talava Pushpagiri and 42 other topes.	..	..	834	..	834	..	No. 384, date August 1898	
Area notified in previous years.	36,727	57	† 5,380	[† 80 42]	41,985	..	....	
Total ..	36,727	57	6,214	122	42,819	67	..	
* At settlement. † Rectification.								

* At settlement.

† Rectification.

FOREST DEPARTMENT.

viii

FOREST DEPARTMENT.

VIII

District.	Name of forest or land.	Area on 1st July 1898.		Added during the year.	Excluded during the year.	Area on 30th June 1899.		Number and date of notification of addition or exclusion.
		Acres.	Equivalent in square miles.			Acres.	Equivalent in square miles.	
South Arcot.	<i>Reserved forests.</i>							
	Kattunayilur extension ..	..	..	459	..	459	..	No. 423, dated 14th September 1898.
	Sorakkolathur ..	..	..	5,436	..	5,436	..	No. 509, dated 4th November 1898.
	Area notified in previous years.	432,563	676	..	..	432,563	..	....
	Total ..	432,563	676	5,895	..	438,458	685	....
South Arcot.	<i>Reserved lands (not transferred to reserved forests during the year).</i>							
	Marur ..	840	..	..	840	..	..	No. 322, dated 5th July 1898.
	Area notified in previous years.	15,518	..	..	8	15,510	..	....
	Total ..	16,358	25	..	848	15,510	24	....
Salom	<i>Reserved forests.</i>							
	Poyyapatti ..	..	..	3,256	..	3,256	..	No. 437, dated 20th September 1898.
	Vellalakundam ..	..	..	3,329	..	3,329	..	No. 38, dated 24th January 1899.
	Area notified in previous years.	784,791	1,226	† 570	† 526	784,335	..	....
	Total ..	784,791	1,226	7,155	526	791,420	1,237	....
Salom	<i>Reserved lands (not transferred to reserved forests during the year).</i>							
	Nagaluthu extension ..	..	..	1,360	..	1,360	..	No. 159, dated 6th April 1899.
	Parigam extensions A and B.	..	..	16,627	..	16,627	..	No. 187, dated 22nd April 1899.
	Kallavi ..	4,080	..	..	..	4,080	..	No. 284, dated 19th June 1899.
	Area notified in previous years.	97,809	..	† 1,145	§ 1,692	97,262	..	....
Salom	Total ..	101,889	..	19,132	1,692	119,329	186	....
Trichinopoly.	<i>Reserved forests.</i>							
	Punganur tank-bed ..	..	..	303	..	303	..	No. 434, dated 20th September 1898.
	Kumarikutti Hill ..	..	..	1,499	..	1,499	..	No. 430, dated 20th September 1898.
	Kulumur extension I ..	..	..	280	..	280	..	No. 448, dated 28th September 1898.
	Naganur ..	..	..	878	..	878	..	No. 461, dated 4th October 1898.
	Biruvassur ..	..	..	1,984	..	1,984	..	No. 463, dated 4th October 1898.
	Periyavalayam east extension I.	..	..	80	..	80	..	No. 464, dated 4th October 1898.
	Kariyanur ..	..	..	774	..	774	..	No. 466, dated 4th October 1898.
	Pillankolam ..	..	..	1,267	..	1,267	..	No. 474, dated 12th October 1898.
	Adavattar tank-bed ..	..	..	269	..	269	..	Do.
	Kilakulathur ..	..	..	1,313	..	1,313	..	No. 492, dated 26th October 1898.
	Irrur ..	..	..	877	..	877	..	No. 521, dated 14th November 1898.
	Pulambadi No. 2 ..	..	..	3,910	..	3,910	..	No. 570, dated 6th December 1898.
	Mattavarai Mavalingai ..	..	..	912	..	912	..	No. 11, dated 5th January 1899.
	Edaiyuthangudi ..	..	..	890	..	890	..	No. 207, dated 5th May 1899.
	Area notified in previous years.	122,851	192	..	..	122,851	..	....
	Total ..	122,851	192	15,236	..	138,087	216	....

* At settlement.

† By rectification.

‡ Added to reserved land by Collector.

§ Unreserved by Collector.

District.	Name of forest or land.	Area on 1st July 1898.		Added during the year.	Excluded during the year.	Area on 30th June 1899.		Number and date of notification of addition or exclusion.
		Acres.	Equivalent in square miles.			Acres.	Equivalent in square miles.	
Reserved lands (not transferred to reserved forests during the year).								
Tribinopoly —cont.	Mettupalayam	1,878	..	..	1,878	..	..	No. 323, dated 6th July 1898.
	Omandur	321	..	732	..	1,053	..	
	Edumalai	959	..	521	..	1,480	..	
	Vellakkalpatti	1,224	..	634	..	1,858	..	
	Pulivalam	522	..	341	..	863	..	
	Mavilippatti	1,010	..	891	..	1,901	..	
	Maniyankurichi	..	..	1,160	..	1,160	..	
	Kottathur	..	..	2,556	..	2,556	..	
	Velur	..	..	3,239	..	3,239	..	
	Nakkasalem	..	..	3,094	..	3,094	..	
	Munmalai reserved forest extension.	..	..	692	..	692	..	
	Marmareddipalayam	..	..	1,055	..	1,055	..	
	Valkaradu	..	..	679	..	679	..	No. 195, dated 27th April 1899.
	Kurichimalai	..	..	1,125	..	1,125	..	
	Sathiramanai	..	..	1,960	..	1,960	..	
	Nedungur	..	..	655	..	655	..	
	T. Kanappadi reserved forest extension.	..	..	172	..	172	..	
	Appanallur	..	..	931	..	931	..	
	Virimaohampatti	..	..	4,788	..	4,788	..	
	Pagalavadi	..	..	1,057	..	1,057	..	
	Sathanur	..	..	808	..	808	..	
Sengathupatti reserved forest extension.	..	..	1,622	..	1,622	..		
Vairisettipalayam Talugai	..	..	1,965	..	1,965	..		
Valaiyur	..	..	725	..	725	..		
T. Kanapadi enclosure	..	..	21	..	21	..	No. 317, dated 1 July 1898.	
Area notified in previous years.	34,113	53	..	683 + 596	32,831	..		
Total ..	40,027	63	31,423	3,157	68,293	107		
Reserved forests.								
Tanjore ..	Area notified in previous years.	11,519	18	..	..	11,519	18	....
Tanjore	Dotinaiberu	..	..	646	..	646	..	No. 377, dated 18th August 1898.
	Hulimishapare	..	..	1,397	..	1,397	..	No. 407, dated 29th August 1898.
	Mavinaguli	..	..	1,357	..	1,357	..	No. 411, dated 1st September 1898.
	Mudugalpare	..	..	7,884	..	7,884	..	No. 449, dated 26th September 1898.
	Kamradihola	..	..	911	..	911	..	No. 487, dated 27th October 1898.
	Chittur	..	..	2,284	..	2,284	..	No. 507, dated 7th November 1898.
	Balkattechla	..	..	527	..	527	..	No. 508, dated 6th November 1898.
	Naganakalbare	..	..	5,400	..	5,400	..	No. 527, dated 14th November 1898.
	Vadanaheru hola	..	..	537	..	537	..	No. 548, dated 24th November 1898.
	Sevantagudde	..	..	317	..	317	..	No. 549, dated 28th November 1898.
	Baregundi	..	..	8,024	..	8,024	..	No. 13, dated 5th January 1899.
	Mettakallugudde	..	..	5,675	..	5,675	..	No. 83, dated 18th February 1899.
	Sunikodlu	..	..	3,855	..	3,855	..	No. 104, dated 3rd March 1899.
	Hullumurdibare	..	..	9,674	..	9,674	..	No. 136, dated 27th March 1899.
	Bairdur	..	..	5,795	..	5,795	..	No. 186, dated 22nd April 1899.
	Bakudihola	..	..	1,064	..	1,064	..	No. 192, dated 22nd April 1899.
	Koratikal bare	..	..	6,453	..	6,453	..	No. 188, dated 22nd April 1899.
	Jarvattukadu	..	..	418	..	418	..	No. 49, dated 30th January 1899.
	Mattakallugudde	..	..	251	..	251	..	No. 51, dated 30th January 1899.
	South Canara.	Charmadi kanapady	..	..	12,800	..	12,800	..	No. 267, dated 25th May 1898.
Area notified in previous years.		106,371	166	..	26	106,345	..	....
Total ..	106,371	166	75,619	28	181,964	284		

* At settlement.

† Unreserved by Collector.

‡ Rectification.

District.	Name of forest or land.	Area on 1st July 1898.		Added during the year.	Excluded during the year.	Area on 30th June 1899.		Number and date of notification of addition or exclusion.
		Acres.	Equivalent in square miles.			Acres.	Equivalent in square miles.	
Reserved lands (not transferred to reserved forests during the year).								
South Canara —cont.	Hulikuppana ane	284	..	..	284	..	..	No. 175, dated 18th April 1899.
	Miyar	17,550	..	..	..	17,550	..	No. 316, dated 1st July 1898.
	Nidale	3,286	..	..	..	3,286	..	Do.
	Nerankimale	3,960	..	..	..	3,960	..	No. 370, dated 11th August 1898.
	Kidu	6,436	..	..	..	6,436	..	No. 389, dated 17th August 1898.
	Kombar	9,471	..	..	..	9,471	..	No. 391, dated 17th August 1898.
	Mujur	10,250	..	..	..	10,250	..	No. 406, dated 29th August 1898.
	Konaji	6,642	..	..	..	6,642	..	No. 555, dated 3rd December 1898.
	Kunthur	3,945	..	..	..	3,945	..	No. 160, dated 6th April 1899.
	Padnur	3,173	..	..	..	3,173	..	No. 224, dated 20th May 1899.
	Kilarmale	9,685	..	..	..	9,685	..	No. 243, dated 1st May 1899.
	Area notified in previous years.	461,993	..	..	* 3,063 + 1,141 = 12,981	444,508	..	....
Total ..	536,675	839	..	17,769	518,906	811		
Reserved forests.								
North Malabar.	Nulpoya	3,613	6	..	155	3,458	..	No. 8, dated 6th January 1899.
	Kanoth extension A	..	..	1,147	..	1,147	..	No. 82, dated 18th February 1899.
	Area notified in previous years.	97,238	151	..	..	97,238	..	....
	Total ..	100,851	157	1,147	155	101,843	159	
Reserved lands (not transferred to reserved forests during the year).								
South Malabar.	Dindimal	1,575	..	..	1,575	..	..	No. 553, dated 28th November 1898.
	Area notified in previous years.	72,256	..	..	..	72,256	..	....
	Total ..	73,831	115	..	1,575	72,256	113	
Reserved forests.								
South Malabar.	Area notified in previous years.	25,416	40	90,000	..	121,416	190	No. 486, dated 25th October 1898.
	Area notified in previous years	88,731	138	..	..	88,731	138	....
Reserved forests.								
The Nilgiris.	Keraipadu	..	..	52	..	52	..	No. 386, dated 18th August 1898.
	Mullimalai	..	..	118	..	118	..	No. 438, dated 17th September 1898.
	Carritshola additions I to V.	..	..	196	..	196	..	No. 525, dated 14th November 1898.
	Belarumbhalla	..	..	138	..	138	..	....
	Arapillai	..	..	12	..	12	..	No. 93, dated 27th February 1899.
	Sampangi	..	..	8	..	8	..	....
	Bikkemara	..	..	21	..	21	..	....
	Neggilhada	..	..	17	..	17	..	....
	Thogallhatti	..	..	19	..	19	..	....
	Mokkai	..	..	16	..	16	..	No. 92, dated 6th March 1899.
	Uchukadavu	..	..	6	..	6	..	....
	Konemara	..	..	11	..	11	..	....
Selenara	..	..	10	..	10	..	No. 28, dated 12th January 1899.	
Naduvattam	..	..	..	3	..	..	....	

* At settlement.

† Rectification.

‡ Unreserved by Collector.

§ The new Amarampalem reserve.

District.	Name of forest or land.	Area on 1st July 1898.		Added during the year.		Excluded during the year.		Area on 30th June 1899.		Number and date of notification of addition or exclusion.	
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.				
Reserved forests—cont.											
The Nilgiris —cont.	Craigmore	..	..	..	..	34	..	..	No. 183, dated 26th April 1899.		
	Bokkepuram	..	..	..	..	135	..	..			
	Singara	..	..	..	..	32	..	..			
	Kullar	..	..	..	..	79	..	..			
	Kalhatti	..	..	..	..	18	..	..			
	Suttonshola	..	..	..	..	..	..	..	No. 348, dated 23rd July 1898.		
	Area notified in previous years.	228,962	358	† 91	..	..	229,053	..			
	Total ..	228,962	358	715	302	..	229,375	358			
	Reserved lands (not transferred to reserved forests during the year).										
	Doddahulla	..	..	..	..	874	..	874		No. 523, dated 14th November 1898.	
Devalahulla	..	..	..	..	..	..	..				
Mudidevaramund	..	..	..	..	..	..	..				
Sandynulla reserve No. II	..	..	..	..	..	..	..				
Pakulamund	..	..	..	..	..	..	..				
Attikallu	..	..	..	..	..	..	..				
Kalhatti road Nos. I and II	..	..	..	..	..	..	..				
Vokkanshola	..	..	..	..	..	..	..				
Dodabetta No. I addition	..	..	..	..	..	..	..				
Kodappamund	..	..	..	..	..	..	..				
Cairn hill addition	..	..	..	..	..	..	..				
North Coimbatore.	Red hill reserve No. I	..	..	..	..	..	..	..	No. 102, dated 3rd March 1899.		
	Curson valley I and II	..	..	..	..	..	..	..			
	Avarahalla	..	..	..	..	..	..	..			
	Mavada reserve addition	..	..	..	..	..	..	..			
	Vagappanai additions I and II	..	..	..	..	540	..	540			
	Uradihalli	..	..	..	..	..	..	..			
	Tamugai	..	..	..	..	..	..	..			
	Coonorali I and II	..	..	..	..	1,961	..	1,961			
	Cheramabadi reserve addition	..	..	..	..	2,398	..	2,398			
	Ammankovil additions I and II	..	..	..	..	..	..	..			
South Coimbatore.	Rock wood	..	..	..	..	938	..	938	No. 127, dated 20th March 1899.		
	Area notified in previous years.	79,468	124	..	..	† 1,050	..	78,415			
	Total ..	79,468	124	6,711	1,053	..	85,126	133			
	Reserved forests.										
	Guligy	..	..	..	..	1,120	..	1,120		No. 250, dated 27th May 1898.	
	Vellodu	..	..	..	..	51	..	51			
	Pandiyampalayam	..	..	..	..	1,088	..	1,088			
	Kanjikovil	..	..	..	..	422	..	422			
	Thambikalayan	..	..	..	..	273	..	273			
	Attavanai	..	..	..	..	52	..	52			
Arachalur (plain)	..	..	..	..	1,686	..	1,686				
Area notified in previous years.	674,382	1,054	..	..	† 176	..	674,206				
Total ..	674,382	1,054	4,692	176	..	678,898	1,061				
Reserved lands (not transferred to reserved forests during the year).											
South Coimbatore.	Area notified in previous years.	356,865	557	..	..	* 8	..	356,957	557	No. 431, dated 17th September 1898.	
	Reserved forests.										
	Area notified in previous years.	418,292	654	† 97	..	..	418,389	654			
	Reserved lands (not transferred to reserved forests during the year).										
	Area notified in previous years.	1,885	3	..	..	..	1,885	3	..		
	Reserved forests.										
	Area notified in previous years.	418,292	654	† 97	..	..	418,389	654			
	Reserved lands (not transferred to reserved forests during the year).										
	Area notified in previous years.	1,885	3	..	..	..	1,885	3	..		
	Reserved forests.										

* At settlement. † Rectification. ‡ Unreserved by Collector. § Sankararayanapuram.

District.	Name of forest or land.	Area on 1st July 1898.		Added during the year.		Excluded during the year.		Area on 30th June 1899.		Number and date of notification of addition or exclusion.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.			
Reserved forests.										
Madura ..	Kodimangalam	..	..	3,256	..	..	3,256	..	G.O., No. 261, dated 7th May 1898. Notification No. 86, dated 18th February 1899.	
	Anagirishola	..	..	73	..	..	73	..		
	Area notified in previous years.	363,081	567	..	..	..	363,081	..		
	Total ..	363,081	567	3,329	..	..	366,410	579		
	Reserved lands (not transferred to reserved forests during the year).									
..	Siruganimalai	399	..	..	399	..	..	..	No. 54, dated 4th February 1899.	
	Area notified in previous years.	26,095	..	..	* 2,349	23,746	..	..		
	Total ..	26,494	41	..	2,748	23,746	87	..		
Reserved forests.										
..	Mahendragiri	..	..	34	..	..	34	..	No. 249, dated 18th May 1898. No. 261, dated 6th June 1898. No. 363, dated 2nd August 1898. No. 511, dated 6th November 1898.	
	Nelliynthu	..	..	73	..	..	73	..		
	Shermalai	..	..	28	..	..	28	..		
	Alakonandal	..	..	62	..	..	62	..		
	Gengaikondan	..	..	1,391	..	..	1,391	..		
	Manpothai	..	..	1,242	..	..	1,242	..		
	Area notified in previous years.	263,974	412	† 5	† 50	263,929	..	..		
	Total ..	263,974	412	2,835	50	266,759	417	..		
Reserved lands (not transferred to reserved forests during the year).										
Tinnevely ..	Mullakadu A	920	..	..	920	..	..	..	No. 421, dated 9th September 1898. No. 535, dated 18th November 1898. No. 526, dated 14th November 1898.	
	Kadayanallur reserved forest No. III-C 2 extension A.	113	..	..	113	..	..	..		
	Kadayanallur reserved forest No. III-C 2 extension B.	35	..	..	35	..	..	..		
	Extension to Courtallam reserved forest No. III, blocks I, II and III.	..	..	3,923	..	3,923	..	..		
	Extension to Krishnapuram reserved forest.	..	..	..	..	..	..	..		
	Area notified in previous years.	3,607	..	..	* 40	3,567	..	..		
	Total ..	4,675	7	3,923	1,103	7,490	13	..		
	Reserved forests.									
Area notified in previous years.										
Reserved lands (not transferred to reserved forests during the year).										

* At settlement.

† Rectification.

STATEMENT showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.						Entire cost per square mile of areas finally settled during the year.
		Number and date of Government Order according to final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.			
					In forest accounts.	In other accounts.		
1	2	3	4	5	6	7	8	
								Northern
Ganjām	sq. MLS. 239	No. 411, dated 25th July 1898.	Rayapada	sq. MLS. 11	RS. ..	RS. ..	RS. A. P. ..	
		No. 503, dated 31st August 1898.	Paiphalia	12	..	..	..	
		No. 517, dated 9th September 1898.	Dowgam	4	..	..	..	
		No. 525, dated 14th September 1898.	Darpangia	38	..	..	..	
		No. 65, dated 24th January 1899.	Gullery	43	..	..	..	
		No. 256, dated 22nd April 1899.	Gogodo	16	..	..	..	
		No. 316, dated 19th May 1899.	Ambozora	52	..	..	..	
		No. 357, dated 6th June 1899.	Paluru block of the South Mohiri reserve.	1	..	..	..	
		No. 371, dated 18th June 1899.	Gundribadi and north and south extensions.	12	..	..	..	
			Total ..	189	..	..	..	
Vizagapatam.	138	No. 741, dated 3rd December 1898.	Pedimikonda extension No. 38-I.	4	..	..	..	
		No. 781, dated 16th December 1898.	Chinnagora extension No. 28-I.					
		Do.	Chinnagora extension No. 28-II.					
		Do.	Chinnagora extension No. 28-III.					
		Do.	Chinnagora extension No. 28-IV.					
		No. 72, dated 26th January 1899.	Karaka extension No. 41-II (a).	..	..	..		
		Do.	Do. „ 41-II (b).					
			Total ..	4	..	..	..	
Gōdāvari	847	No. 239, dated 11th April 1899.	Papikonda	19	10	..	0 8 5	
		No. 244, dated 2nd April 1899.	Kovvada *	30	..	..	..	
			Total ..	49	10	..	..	
Kistna	713	No. 335, dated 26th May 1899.	Yellamanda extension No. 2 ..	2	3,328	..	..	
		No. 227, dated 6th April 1899.	Bollapalli extension No. 7 ..	4				
		No. 752, dated 6th December 1898.	Gangalakunta additions Nos. 1, 2 and 3.	†				
		No. 322, dated 19th May 1899.	Kuragalla extension No. 1 ..	†				
		No. 358, dated 6th June 1899.	Pamidipad *	3				
		No. 327, dated 20th May 1899.	Mekapad	8				
		No. 260, dated 22nd April 1899.	Koppukonda extension No. 1.	5				
		No. 56, dated 19th January 1899.	Tammareodu block No. II ..	4				
		No. 518, dated 9th September 1898.	Do. „ IV ..	3				
		Do.	Do. „ V ..					

* Reservation takes effect from 1899-1900.

† Below one square mile.

No. 45.

Department.

incurred on, Forest Settlements during 1898-99.

Areas undergoing settlement.							
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		Estimate of areas in which settlement operations have not yet commenced.	
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.		
9	10	11	12	13	14		15
Circle.							
Kriamba	SQ. MLS. 35			SQ. MLS. ..	RS. 1,956	RS. ..	} 30
Tiliki	24			..	..	..	
Rogada	25			..	..	..	
Bsmagodo	10			..	..	..	
Bainamari	6			..	..	..	
South Mohiri Rampalli block.	5			..	..	..	
Chatrapur	1			..	..	..	
Podhara	1			..	..	..	
Rankuhannanthapuram ..	2			..	..	..	
Total ..	110			..	1,956	..	
Arlova extension No. 42 I-A ..	} 2	Sitakhandi		8	1,955	..	} 90
Do. 1-B ..				..	..	..	
Karaka extension No. 40-I ..				..	..	..	
Kadagandi				..	..	..	
Dharakonda				..	..	..	
Bharnakonda inclusive of Molalanka and Gadilavalasa.	21			..	..	..	
Total ..	114			8	1,955	..	
Kopalli	30	Doramamidi extension ..		† ..	} 19,590	..	} 49
Jitugumilli	5			..			
Dharbhagudem	3			..			
Singampalli	} 22			..			
Ultimathule				..			
Rajavomangi				..	..	..	
Total ..	60			..	19,590	..	
Nizampatam	} 12	Uppumagalur		4	} 3,725	..	} ..
Nayanapalli extension No. 1 ..				..			
Kothur extension No. 1 ..				..			
Gollapudi				13			
Rudavada extension No. 1 ..			4	Do. „ 2 ..			
Do. „ 2 ..		Nagaraznpalli extension No. 1.	3				
Do. „ 3 ..		Malleswaram	1				
Matsavaram	5	Guttikonda extension No. 3 ..	..				
Vemavaram		..	..				
Bollapalli extension No. 1 ..	20	..	..				
Vinukonda		..	..				
Muppala		..	..				
Kakirala extension No. 7 ..		..	..				
Darvemula do. „ 1 ..	19	..	..				
Goli		..	..				
Pasvemula extension No. 5 ..		..	..				
Vedullapalli do. „ 2 ..		..	..				
Ipurupalem		..	..				
Chirala	9	..	..				

† Below one square mile.

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according to final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8

Northern

Kistna—cont.	SQ. MLS. 713	No. 530, dated 17th September 1898.	Gadimetla	SQ. MLS.	RS.	RS.	RS. A. P.
		No. 749, dated 6th December 1898.	Bollapalli extension No. 9 ..	1			
		No. 10, dated 5th January 1899.	Muthayapalem extension No. 1 ..	1			
		No. 670, dated 14th November 1898.	Pullaripalem	3			
		No. 769, dated 12th December 1898.	Perlavallapalem				
		No. 529, dated 17th September 1898.	Rekullagadda	5			
		No. 507, dated 1st September 1898.	Nizampatam extension ..	4			
		No. 412, dated 25th July 1898.	Guttikonda extension No. 9 ..				
			Total ..	38	3,328		87 9 3
Kurnool ..	1,962	No. 385, dated 11th July 1898.	Maduva	1		2	
		No. 393, dated 16th July 1898.	Sirvel addition No. 3 ..	18		2	
		No. 558, dated 28th September 1898.	Veldurti	2		2	
		No. 618, dated 26th October 1898.	Dudyala	7		2	
		No. 668, dated 11th November 1898.	Betancherla	14		2	
			Total ..	42		10	
Bellary ..	464	No. 489, dated 29th August 1898.	Kulluru west	2			
		No. 461, dated 18th August 1898.	Molagavalli	2			
		No. 780, dated 16th December 1898.	Kodalu	1			
		No. 12, dated 5th January 1899.	Ubbalagandi extension ..	2			
		No. 146, dated 27th February 1899.	Bellahunshi	2	1,201		
		No. 263, dated 22nd April 1899.	Hampasagaram	2			
		No. 109, dated 10th February 1899.	Koilargatta extension ..	1			
		No. 321, dated 19th May 1899.	Basarakodu extension *	1			
			Total ..	13	1,201		
Anantapur.	458	No. 626, dated 27th October 1898.	Narsampalli	3			
		No. 751, dated 6th December 1898.	Kondapalli	7			
		No. 367, dated 1st July 1898.	Hottebetta, north	11			
		No. 557, dated 28th September 1898.	Ratnagiri	2			

* Reservation takes effect from 1899-1900.

incurred on, Forest Settlements during 1898-99—cont.

Areas undergoing settlement.							Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.			
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.		
9	10	11	12	13	14	15	

Oirels—cont.

Balusupad ..	SQ. MLS.		SQ. MLS.	RS.	RS.	SQ. MLS.
Jaggipet extension No. 5 ..						
Do. " 6 ..	7					
Do. " 7 ..						
Gandrayi ..						
Kandipad extension No. 1 ..						
Tangeda do. " 1 ..						
Do. " 2 ..	7					
Madinapad do. " 1 ..						
Do. " 2 ..						
Sitaramapuram ..						
Mukteswarum ..	2					
Mutukur extension No. 5 ..	32					
Kandlagunta do. " 1 ..						
Gamalapad ..						
Gangulakunta extension No. 1 ..	11					
Bentachintala ..						
Paluvayi ..						
Pasvempala extension No. 9 ..						
Koppuram block No. 1 ..	4					
Madugula ..						
Total ..	133			21	3,725	
Nandyal addition No. I ..	11					115
Do. No. II ..	20					220
Valgode ..	39					971
Guvvalagunta ..	18					254
Eastern Nallamalai block No. I ..	30			253		241
Do. do. " II ..	32					490
Do. do. " III ..	50					580
Loddipalli ..	2					25
Panem ..	46					480
Alamur ..	1					10
Gani ..	88					22
Giddalur block No. I ..	11					
Do. No. II ..	11					
Do. " III ..						
Do. " IV ..						
Do. " V ..						
Do. " VI ..						
Do. " VII ..						
Do. " VIII ..						
Do. " IX ..						
Do. " X ..						
Do. " XI ..						
Do. " XII ..						
Do. " XIII ..						
Do. " XIV ..						
Do. " XV ..						
Do. " XVI ..						
Do. " XVII ..						
Do. " XVIII ..						
Do. " XIX ..						
Do. " XX ..						
Do. " XXI ..						
Do. " XXII ..						
Do. " XXIII ..						
Do. " XXIV ..						
Do. " XXV ..						
Do. " XXVI ..						
Do. " XXVII ..						
Do. " XXVIII ..						
Do. " XXIX ..						
Do. " XXX ..						
Do. " XXXI ..						
Do. " XXXII ..						
Do. " XXXIII ..						
Do. " XXXIV ..						
Do. " XXXV ..						
Do. " XXXVI ..						
Do. " XXXVII ..						
Do. " XXXVIII ..						
Do. " XXXIX ..						
Do. " XL ..						
Do. " XLI ..						
Do. " XLII ..						
Do. " XLIII ..						
Do. " XLIV ..						
Do. " XLV ..						
Do. " XLVI ..						
Do. " XLVII ..						
Do. " XLVIII ..						
Do. " XLIX ..						
Do. " L ..						
Do. " LI ..						
Do. " LII ..						
Do. " LIII ..						
Do. " LIV ..						
Do. " LV ..						
Do. " LVI ..						
Do. " LVII ..						
Do. " LVIII ..						
Do. " LVIX ..						
Do. " LX ..						
Do. " LXI ..						
Do. " LXII ..						
Do. " LXIII ..						
Do. " LXIV ..						
Do. " LXV ..						
Do. " LXVI ..						
Do. " LXVII ..						
Do. " LXVIII ..						
Do. " LXIX ..						
Do. " LXX ..						
Do. " LXXI ..						
Do. " LXXII ..						
Do. " LXXIII ..						
Do. " LXXIV ..						
Do. " LXXV ..						
Do. " LXXVI ..						
Do. " LXXVII ..						
Do. " LXXVIII ..						
Do. " LXXIX ..						
Do. " LXXX ..						
Do. " LXXXI ..						
Do. " LXXXII ..						
Do. " LXXXIII ..						
Do. " LXXXIV ..						
Do. " LXXXV ..						
Do. " LXXXVI ..						
Do. " LXXXVII ..						
Do. " LXXXVIII ..						
Do. " LXXXIX ..						
Do. " LXXXX ..						
Do. " LXXXXI ..						
Do. " LXXXXII ..						
Do. " LXXXXIII ..						
Do. " LXXXXIV ..						
Do. " LXXXXV ..						
Do. " LXXXXVI ..						
Do. " LXXXXVII ..						
Do. " LXXXXVIII ..						
Do. " LXXXXIX ..						
Do. " LXXXXX ..						
Do. " LXXXXXI ..						
Do. " LXXXXXII ..						
Do. " LXXXXXIII ..						
Do. " LXXXXXIV ..						
Do. " LXXXXXV ..						
Do. " LXXXXXVI ..						
Do. " LXXXXXVII ..						
Do. " LXXXXXVIII ..						
Do. " LXXXXXIX ..						
Do. " LXXXXXX ..						
Do. " LXXXXXXI ..						
Do. " LXXXXXXII ..						
Do. " LXXXXXXIII ..						
Do. " LXXXXXXIV ..						
Do. " LXXXXXXV ..						
Do. " LXXXXXXVI ..						
Do. " LXXXXXXVII ..						
Do. " LXXXXXXVIII ..						
Do. " LXXXXXXIX ..						
Do. " LXXXXXXX ..						
Do. " LXXXXXXXI ..						
Do. " LXXXXXXXII ..						
Do. " LXXXXXXXIII ..						
Do. " LXXXXXXXIV ..						
Do. " LXXXXXXXV ..						
Do. " LXXXXXXXVI ..						
Do. " LXXXXXXXVII ..						
Do. " LXXXXXXXVIII ..						
Do. " LXXXXXXXIX ..						
Do. " LXXXXXXXX ..						
Do. " LXXXXXXXXI ..						
Do. " LXXXXXXXII ..						
Do. " LXXXXXXXIII ..						
Do. " LXXXXXXXIV ..						
Do. " LXXXXXXXV ..						
Do. " LXXXXXXXVI ..						
Do. " LXXXXXXXVII ..						
Do. " LXXXXXXXVIII ..						
Do. " LXXXXXXXIX ..						
Do. " LXXXXXXXX ..						
Do. " LXXXXXXXXI ..						
Do. " LXXXXXXXII ..						
Do. " LXXXXXXXIII ..						
Do. " LXXXXXXXIV ..						
Do. " LXXXXXXXV ..						
Do. " LXXXXXXXVI ..						
Do. " LXXXXXXXVII ..						
Do. " LXXXXXXXVIII ..						
Do. " LXXXXXXXIX ..						
Do. " LXXXXXXXX ..						
Do. " LXXXXXXXXI ..						
Do. " LXXXXXXXII ..						
Do. " LXXXXXXXIII ..						
Do. " LXXXXXXXIV ..						
Do. " LXXXXXXXV ..						
Do. " LXXXXXXXVI ..						
Do. " LXXXXXXXVII ..						
Do. " LXXXXXXXVIII ..						
Do. " LXXXXXXXIX ..						
Do. " LXXXXXXXX ..						
Do. " LXXXXXXXXI ..						
Do. " LXXXXXXXII ..						
Do. " LXXXXXXXIII ..						
Do. " LXXXXXXXIV ..						
Do. " LXXXXXXXV ..						
Do. " LXXXXXXXVI ..						
Do. " LXXXXXXXVII ..						
Do. " LXXXXXXXVIII ..						
Do. " LXXXXXXXIX ..						
Do. " LXXXXXXXX ..						
Do. " LXXXXXXXXI ..						
Do. " LXXXXXXXII ..						
Do. " LXXXXXXXIII ..						
Do. " LXXXXXXXIV ..						
Do. " LXXXXXXXV ..						
Do. " LXXXXXXXVI ..						
Do. " LXXXXXXXVII ..						
Do. " LXXXXXXXVIII ..						

ANNUAL REPORT OF THE

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.						Entire cost per square mile of areas finally settled during the year.
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Total	
					In-forest accounts.	In other accounts.		
1	2	3	4	5	6	7	8	

Central.								
Chingleput.	SQ. MLS.			SQ. MLS.	RS.	RS.	RS. A. P.	
	201	No. 447, dated 13th August 1898.	Kattankulathur					
		No. 609, dated 26th October 1898.	Anjur extension I					
		No. 447, dated 13th August 1898.	Sonallur extensions I and II ..					
		No. 748, dated 6th December 1898.	Senkundram extension I ..					
		No. 421, dated 30th July 1898.	Kavanur extension I					
		No. 458, dated 17th August 1898.	Gudalur extension I					
		No. 488, dated 29th August 1898.	Do. extension II					
		No. 473, dated 25th August 1898.	Madayathur extension I ..					
		No. 640, dated 22nd September 1898.	Alathur extension I					
		No. 660, dated 8th November 1898.	Sirukundram B. extension I ..					
		No. 295, dated 4th May 1899.	Kattur extension I					
		No. 617, dated 26th October 1898.	Do. extension II	9	..	..	..	
		No. 647, dated 22nd September 1898.	Illalur extension II					
		No. 264, dated 22nd April 1898.	Kattu Gudalur extension I ..					
		No. 700, dated 19th November 1898.	Acharavakkam extension I ..					
		No. 266, dated 22nd April 1899.	Karunguli tope					
		No. 234, dated 7th April 1899.	Kavanipakkam					
		No. 213, dated 29th March 1899.	Edamaebi					
		No. 241, dated 12th April 1899.	Valluvapakkam					
		No. 487, dated 29th August 1898.	Tandarai extension I					
		No. 878, dated 8th July 1898.	Tirumalavoyal extension II ..					
		No. 275, dated 26th April 1899.	Selayur extension I					
		No. 179, dated 11th March 1899.	Madambakkam extension I ..					
		No. 657, dated 8th November 1898.	Vattambakkam extension I ..					
		No. 360, dated 6th June 1899.	Madayathur extension II ..	1	..	..	..	
			Total	10	..	..	..	
	North Arcot	1,047	No. 233, dated 7th April 1899.	Kinatipalli extension B ..	8	..	..	..
		+ 98	No. 669, dated 14th November 1898.	Pattikonla	12	..	..	..
		1,145	No. 676, dated 14th November 1898.	Basavareddipalli extensions A and B.	3	..	..	..
			No. 239, dated 22nd April 1899.	Alapalli	1	..	..	..
			No. 446, dated 18th August 1898.	Solavaram extension				

* Named Illalar extension I in the report for the previous year. Reservation takes effect from 1899-1900.
† By rectification.

incurred on, Forest Settlements during 1898-99—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15

Circle—cont.

	SQ. MLS.	SQ. MLS.	RS.	RS.	SQ. MLS.
Sirakundram extension I ..	..				
Nemali extension II ..	..				
Kattur extension II ..	..				
Maiyur ..	..			1,386	Nil.
Marudam ..	..				
Nannagalam extension II ..	..				
Total ..	4			1,386	
Peddur extension ..	15	Meddigunta tops A and B ..			
Musalimadugu extension ..	3	Balampattu tops ..			
Fallelakuppam extension A ..	11	Chandragiri do. ..			
Kallapadi ..	11	Agarala ..			
Nellipatti ..	12	Mudivaripalli ..			
Viralabanda ..	4	Eucalyptus ..			
Totakanams ..	9	Venkatagirikota ..			
		Senuru ..			
		Pichastur ..			
		Morsapalli ..			
		Vallam ..			
		Tellore ..			
		Alapuram ..			
		Agramecheri ..			
		Nelvoy ..			
		Periyankuppam ..			

Statement showing the Progress made in, and the Expenditure on

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1.	2	3	4	5	6	7	8

Control

	SQ. M.L.A.	RS.	RS.	RS.	RS. A. P.
North Arcot —cont.—	1,047 98 1,145	..	..	..	..
South Arcot	676	No. 640, dated 4th November 1898. No. 526, dated 14th September 1898.	Borahothur .. Kattumylur extension	Total ..	24 ..
Malam	1,226	No. 64, dated 24th January 1899. No. 536, dated 26th September 1898. No. 384, dated 26th May 1899.	Vellalakundam .. Poyyappatti .. Ponnagarappatti †	Total ..	9 ..
Tirichinopoly	192	No. 546, dated 20th September 1898. No. 542, dated 20th September 1898. No. 549, dated 20th September 1898. No. 572, dated 4th October 1898. No. 559, dated 4th October 1898. No. 570, dated 4th October 1898. No. 567, dated 4th October 1898.	Kumarikutti hill .. Pungapur tank-bed .. Katukur extension No. I .. Srivanasur .. Periyavalagani eastern extension. Karayanur .. Naganur ..	Total ..	17 ..

- By rectification.

† Reservation takes effect from 1899-1900.

incurred on, Forest Settlements during 1898-99—cont.

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15

Circle—cont

SQ. MLS.		SQ. MLS.		RS.	RS. A. P.	SQ. MLS.
..	..	Ammundi	..	..	..	..
..	..	Tulava Pushpagiri	..	..	..	..
..	..	Elathur	..	..	..	..
..	..	Kunathur	..	..	..	..
..	..	Venmani	..	..	..	..
..	..	Tachambadi	..	..	..	..
..	..	Periyagaram	..	..	..	..
..	..	Kanipattu	..	..	..	..
..	..	Tamarapakham	..	..	..	..
..	..	Velapakam	..	..	..	..
..	..	Randam	..	..	..	..
..	..	Moranam	..	..	..	..
..	..	Serangathur	1	4,304	..	4
..	..	Ananthalai	..	..	..	..
..	..	Ponnai ancient	..	..	..	..
..	..	Vanian chattram	..	..	..	..
..	..	Nedunganam	..	..	..	..
..	..	Vallam	..	..	..	..
..	..	Kolipuliyur	..	..	..	..
..	..	Kodiyalam	..	..	..	..
..	..	Tennankur	..	..	..	..
..	..	Tandalam	..	..	..	..
..	..	Erumavettu	..	..	..	..
..	..	Echoor	..	..	..	..
..	..	(Mel) Nemili	..	..	..	..
..	..	Wandiwash	..	..	..	..
Total ..	66	..	1	4,304	..	..
Pinjur	12	..	..	..	..	..
Damarakadu	..	..	..	..	..	..
Odaiyanattam	..	..	..	..	..	..
Banharapuram tope, south	12	Nil.	Nil.	150	Information not available.	Nil.
Do. north	..	..	..	..	..	..
Kattavanjur tope	..	..	..	..	..	..
Puttai tope	..	..	..	..	..	..
Total ..	24	..	..	150	..	..
Pattimedu extension	3	Parigam A	..	..	..	..
Mavur	3	Do. B	..	..	..	..
Shelur	28	Naguluttu extension	36	1,586	..	..
Onnakkarai	6	Kallavi	..	..	..	..
Vathampatti	2	..	..	..	..	..
Morappur	9	..	..	..	..	..
Ubharani	19	..	..	..	..	..
Velampatti	5	..	..	..	..	..
Kurichi	4	..	..	..	..	..
Total ..	79	..	36	1,586	..	..
Thatchankurichi	4	T. Kanapadi enclosure No. 2 ..	..	..	..	..
Kundur Kalvarayankolam	3	Pulivalam	..	..	..	..
Peruvallappur	1	Edumalai	..	..	..	..
Mogavanur	2	Valaiyur	..	..	..	..
Shetumalai extension No. I	..	Maniyankurichi	..	..	..	..
Aniyappur western extension	4	Kottathur	..	..	..	..
Arasadi Arwathi	..	Vellakalpatti	..	..	..	..
Puliyur extension No. I	..	Vairisettipalayam Talugai ..	..	..	..	..
Kurumbalur	..	Mavilippatti	..	..	..	..
Naranamangalam	14	Vohur	..	..	..	..
Iyanarpalayam	..	Nakkasalem	..	..	..	..
Vannarampundi	..	Mamalai extension	..	..	..	..
Sirukodal	..	Marmareddipalayam	..	..	..	..
Kunnam	2	Valkaradu	..	..	..	..

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8

Central

Trichinopoly —cont.	SQ. MLS. 192	No. 593, dated 12th October 1898.	Adavathur tank-bed ..	SQ. MLS. 1	RS. ..	RS. ..	RS. ..
		No. 594, dated 12th October 1898.	Pillankolam ..	2	..	..	..
		No. 608, dated 26th October 1898.	Kilakkolattur ..	2	..	..	..
		No. 299, dated 5th May 1899.	Edaiyathangudi ..	1	..	..	..
		No. 760, dated 6th December 1898.	Pulambadi No. II ..	6	..	..	..
		No. 13, dated 5th January 1899.	Mattavarai Mavalangai ..	3	..	..	..
		No. 671, dated 14th November 1898.	Irur ..				
			Total ..	24	..	..	..
Tanjore ..	18	....	.....	..	..	..	..

Southern

South Canara.	186	No. 445, dated 13th August 1898.	Dottinabera	1
		No. 490, dated 29th August 1898.	Hulimishipare	3
		No. 508, dated 1st September 1898.	Mavinaguli	2
		No. 556, dated 28th September 1898.	Mudugulpare	12
		No. 558, dated 8th November 1898.	Balkatti Hota	1
		No. 676, dated 14th November 1898.	Naganakalbare	8
		No. 623, dated 27th October 1898.	Kamradi Hota	1
		No. 634, dated 7th November 1898.	Chittur	4
		No. 724, dated 28th November 1898.	Vadanabera Hota	1
		No. 725, dated 28th November 1898.	Savantagudde	13
		No. 11, dated 5th January 1899.	Baregundi	
		No. 81, dated 30th January 1899.	Jarvattukadu	1
		No. 71, dated 26th January 1899.	Mathalguddi	
		No. 205, dated 27th March 1899.	Hallumudibare	15
		No. 156, dated 3rd March 1899.	Surikodlu	6
		No. 128, dated 18th February 1899.	Mettukalingudde	9
		No. 254, dated 22nd April 1899.	Bakudi Hota	2
		No. 257, dated 22nd April 1899.	Koratikalbare	10
		No. 251, dated 22nd April 1899.	Raindur	9
		No. 223, dated 2nd April 1899.	Madibare	30

Approximately Rs. 1,361.

Approximately Rs. 9.

* The reservation of this block takes effect in 1899-1900.

incurred on, Forest Settlements during 1898-99—cont.

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15

Circle—cont.

Mangalam ..	SQ. MLS. 3	Kurichimalai ..	SQ. MLS. 56	RS. 2,383	RS. ..	SQ. MLS. 3
Sittali ..	..	Sittiramasai ..	..	..	..	..
Vempavur ..	3	Nedungur ..	..	..	..	..
Pulambadi No. I ..	4	T. Kanapadi extension ..	..	..	..	..
Puliyur extension No. II ..	1	Appanallur ..	..	..	..	..
Peraiyur ..	3	Viramachampatti ..	..	..	..	..
Periyavalayam western extension No. II ..	..	Pagalavadi ..	..	..	..	..
Sundareswarapuram extension ..	..	Sattanur ..	..	..	..	..
Uliyakkudi extension ..	..	Omandur ..	..	..	..	..
Pilakkurichi ..	..	Sengattupatti extension ..	..	..	..	..
Tirukonam extension ..	..					
Vilangudi extension No. I ..	..					
Do. .. II ..	2					
Vengaram ..	..					
Alavoy extension ..	1					
Karupakam extension ..	1					
Siluvacheri ..	1					
Total ..	51		56	2,383	..	..

Circle.

Halakki Hota ..	1	Miyar ..	28	Approximately Rs. 4,615.	Nil.	396
Naravi ..	101	Nidle ..	5			
Karka madi ..	2	Nerankimale ..	6			
Nerakimalekan † ..	..	Kidu ..	10			
Sampakere † ..	..	Kombar ..	15			
Doddinamane ..	6	Mujar ..	18			
Halesomeshwar ..	3	Konaji ..	10			
Megani valley ..	28	Kunthar ..	6			
Tombattu ..	20	Padnur ..	5			
Balimane ..	20	Kolarnale ..	15			
Maxinakodlu ..	2					
Someshwar ..	37					
Now Someshwar ..	4					
Hurabe ..	1					
Kalangimale ..	9					
Karadka ..	3					
Mullian ..	3					
Vinakhamba ..	2					
Kadiamale ..	2					
Panambari ..	1					
Nasaujimale ..	2					
Porkal ..	7					
Kadiambilla ..	3					
Shiradi extension ..	1					
Shibaji ..	5					

† Below one square mile.

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8

Southern

South Canara —cont.	SQ. MLS. 186	No. 243, dated 18th April 1899.	Surti Hols *	1	Approximately Rs. 1,251.	Nil.	Approximately Rs. 9.
		Do.	Jarkal Ane *	1			
		No. 319, dated 19th May 1899.	Mensinagudde *	1			
		No. 333, dated 26th May 1899.	Chingramale extension *	1			
		No. 320, dated 19th May 1899.	Menasinakan *	2			
North Malabar.	157	No. 370, dated 13th June 1899.	Jettukattumale *	4			
		Total ..		136			
		No. 129, dated 18th February 1899.	Kanoth extension ..	2	51	..	..
South Malabar.	40	Total ..		2	51	..	25 8 0
		No. 605, dated 25th October 1898.	The new Amarampalam forest.	150	..	..	..
		Total ..		150	..	..	..
The Nilgiris.	368 (c)—1	No. 462, dated 18th August 1898.	Keraipadu ..	1	..	..	..
		Do.	Mallimalai ..	1			
	357	No. 531, dated 17th September 1898.	Carrit Shola additions Nos. I, II, III, IV and V.	1			
		No. 672, dated 14th November 1898.	Bellrumbuhalla ..	1			
	No. 146, dated 27th February 1899.	Amappillai ..		1			
		Do.	Sampangi ..	1			
	No. 165, dated 6th March 1899.	Do.	Bikkavara ..	1			
		Do.	Neggihada ..	1			
	Do.	Do.	Thogalhatti ..	1			
		Do.	Mokkai ..	1			

* The reservation of these blocks takes effect in 1899-1900.

urred on, Forest Settlements during 1898-99—cont.

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15

—cont.

	SQ. MLS.		SQ. MLS.	RS.	RS.	SQ. MLS.
	261		116	..	..	..
ria ..	21	..	..	..	..	6
ria extension ..	2	..	2,881	..	..	..
dri ..	48	..	..	..	..	..
noth ..	40	..	..	..	..	..
Total ..	111	..	2,881	..	..	..
<i>Nilambur Range.</i>						
Nilambur block ..	..	..	..	..	..	..
Okote ..	..	..	..	..	..	..
Panangode ..	..	..	..	..	..	..
Valluvasherri ..	..	..	..	..	..	..
Kanakut ..	..	..	..	..	..	..
Krambadam ..	..	..	..	..	..	..
Ambalakandi ..	..	..	..	..	..	..
Arimbrakuttamala ..	18	..	..	..	..	37
Mangalashoriparamba ..	..	..	..	..	..	..
Puthalath and Chittarik-kalpambam ..	..	..	..	..	..	..
<i>Amarampalam Range.</i>						
Muriat ..	..	..	..	..	..	..
Kariem ..	..	..	..	..	..	..
<i>PALGHAT RANGE.</i>						
<i>Atapady Valley.</i>						
Block No. I ..	..	..	..	..	..	..
Do. " II ..	..	..	..	..	..	..
Do. " III ..	..	..	..	..	..	..
Do. " IV ..	..	..	..	..	..	..
Total ..	91	..	..	..	..	..
<i>Palghat Range.</i>						
enlock Downs ..	..	..	..	..	..	..
ambarakadava ..	..	..	..	..	..	..
lanni ..	..	..	..	..	..	..
lada ..	..	..	..	..	..	..
igodalu ..	..	..	..	..	..	..
lakallu ..	..	..	..	..	..	..
kkimalai ..	..	..	..	..	..	..
ijbey ..	..	..	..	..	..	..
thada ..	..	..	..	..	..	..
alakarni addition No. I ..	..	..	..	..	..	..
Do. " II ..	..	..	..	..	..	..
olphin reserve addition ..	..	..	..	..	..	..
upattarai ..	..	..	..	..	..	..
arimara ..	..	..	..	..	..	..
ack bridge addition ..	..	..	..	..	..	..
ack Heath ..	..	..	..	..	..	..
<i>Palghat Range.</i>						
Doddahalla ..	..	..	..	..	..	..
Devalahalla ..	..	..	..	..	..	..
Mudidevaramund ..	..	..	..	..	..	..
Sundinulla No. II ..	..	..	..	..	..	..
Pagalamund ..	..	..	..	..	..	..
Attekulla ..	..	..	..	..	..	..
Kalhatti road No. I ..	..	..	..	..	..	..
Do. " II ..	..	..	..	..	..	..
Vokkanahalla ..	..	..	..	..	..	..
Dodabettia addition No. I ..	..	..	..	..	..	..
Kodappamund ..	..	..	..	..	..	..
Quinn hill addition ..	..	..	..	..	..	..
Red hill No. II ..	..	..	..	..	..	..
Curzon valley block No. I ..	..	..	..	..	..	..
Do. " II ..	..	..	..	..	..	..
Avarahalla ..	..	..	..	..	..	..
Mavada reserve addition ..	..	..	..	..	..	..
Vagappanai addition No. I ..	..	..	..	..	..	..
Do. " II ..	..	..	..	..	..	..
Uradihalla ..	..	..	..	..	..	..

† Notification cancelling the proposed reservation of the blocks under section 4 of the Forest Act appeared in the Gazette at the end of the year.

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Areas finally settled during the year.			Entire cost per square mile of areas finally settled during the year.
				Area.	Expenditure incurred during the year on areas finally settled.		
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8

Southern								
The Nilgiris —cont.	Sq. Mls. 368 (c) — 1				Sq. Mls.	Rs. A. P.	Rs.	Rs. A. P.
				Total ..	1	..	..	..
North Coimbatore.	1,066	No. 392, dated 15th July 1898.	Kanjikovil	}	5	2,384	..	476 12 9
		No. 351, dated 16th July 1898.	Pandiyanpalayam					
		No. 541, dated 20th September 1898.	Tambikalayan					
		No. 619, dated 27th October 1898.	Attavanai					
		No. 720, dated 28th November 1898.	Arachalur (plain)					
			Total ..	5	2,384	..	476 12 9	
South Coimbatore.	654	No. 528, dated 17th Sept. 1898.	Sankararayapuram	96 acres.	..	..	..	
Madura ..	572	No. 127, dated 18th February 1899.	Anagiri shola	73 acres.	..	..	..	
			Total ..	73 acres.	..	..	..	
Tinnevely ..	413	No. 659, dated 8th November 1898.	Manpothai block	}	4	..	..	..
		No. 430, dated 2nd August 1898.	Gengaikondan block					
		No. 317, dated 19th May 1899.	Chintamani block *					
			Total ..					

* Reservation takes effect from 1899-1900.

incurred on, Forest Settlements during 1898-99—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
		Temugai Coonooralli block; No. I .. Do. do. " II .. Cherambady reserve addition .. Atamankovil addition No. I .. Do. do. " II .. Rockwood		3 2 2 1		
Total ..	34			11		
Yederalli	212	.....		..	..	} 74
Madeswaranmalai	246	.....		..	..	
Cowdalli	25	.....		..	..	
Sennimalai	3	.....		..	..	
Hanur	34	.....		..	..	
Total ..	520			..	..	
Nallimalai	3	.....		..	..	† 35
Andipatti, south	8	.....		..	..	} Nil.
Kadavumalai	2	.....		..	..	
Koviladi	1	.....		..	2,383	
Umayer	9	.....		..	..	
Sirumalai north-west slopes ..	11	.....		..	..	
Thoppasanimalai	6	.....		..	..	
Brakalamalai	37			..	2,383	
Vaippar	4	.....		..	..	} ..
Lands adjoining Srivilliputtur				..	..	
ghaut forests, block I. ..	1	.....		..	..	
Kabnesapuram				..	..	
Melavittan extension		Extension to Courtallam reserved forest No. III, blocks No. I, II and III.		6	..	† 37
.....		Extension to Krishnapuram reserved forest.				
Total ..	5			6	2,383	87

† Compensation for lands acquired.

APPENDIX A.

Forest Settlement.

PARTICULARS OF balance of Lands under Settlement.

District.	Total number and area of blocks brought under settlement up to end of 1898-99.		Total number and area of blocks constituted finally as reserved forests up to end of 1898-99.		Balance at end of 1898-99.	
	Number.	Area.	Number.	Area.	Number.	Area.
1	2	3	4	5	6	7
<i>Northern Circle.</i>						
Ganjām	{ (a) + 44 (b) - 1	{ (a) - 568 (d) - 24 320	32	{ (a) - 421 (d) - 6	13	123
Visagapatam	{ (b) - 61 (d) - 1	{ (b) - 320 (d) - 51 5	41	142	9	122
Górávari	1	{ (d) - 970 (d) - 14 914	73	566	8	90
Kistna	190	{ (a) + 2 (d) - 12 2,454	141	{ (a) + 747 (d) - 1	49	156
Kurnool	62	{ (d) - 12 (d) - 528	46	2,004	17	438
Bellary	135	{ (a) + 6 (d) - 3 512	115	{ (a) + 470 (d) - 6	20	50
Anantapur	75	{ (d) - 5 (d) - 5	74	500	1	7
Total, Northern Circle ..	{ (a) + 638 (b) - 1	{ (a) - 6,256 (d) - 16 (d) - 51 (d) - 52	521	{ (a) + 5,150 (d) - 1	117	986
<i>Central Circle.</i>						
Cuddapah	{ (a) + 189 (b) - 3	{ (a) - 2,413 (d) - 2 (d) - 10 707	157	1,555	33	546
Nellore	{ (b) - 176 (d) - 1	{ (b) - 707 (d) - 4 (d) - 9	154	652	21	43
Chingleput	199	{ (a) - 215 (d) - 1 1,129	192	210	7	5
North Arcot	192	{ (a) + 106 (d) - 711 (d) - 3	142	{ (a) + 1,071 (d) - 98	50	66
South Arcot	{ (b) - 158 (d) - 1	{ (b) - 711 (d) - 3 (d) - 1,358	150	483	7	24
Salem	157	{ (a) - 326 (d) - 1 (d) - 3	143	1,287	14	130
Trichinopoly	{ (b) - 135 (d) - 1	{ (b) - 326 (d) - 1 (d) - 1	79	216	55	107
Tanjore	15	{ (a) + 18 (d) - 1	15	18	..	..
Total, Central Circle ..	{ (a) + 1,221 (b) - 5	{ (a) + 6,877 (d) - 104 (d) - 19 (d) - 10	1,032	{ (a) + 5,944 (d) - 98	187	910
<i>Southern Circle.</i>						
South Canara	{ (b) - 103 (d) - 1	{ (b) - 705 (d) - 1 (d) - 5	60	284	42	415
North Malabar	{ (b) - 23 (d) - 1	{ (b) - 273 (d) - 2	18	159	4	111
South Malabar	27	{ (a) - 298 (d) - 404	11	190	16	109
The Nilgiris	301	{ (a) - 1 (d) - 1,582	258	{ (a) - 1 (d) - 1	43	45
North Coimbatore	41	{ (a) - 1 (d) - 1	36	1,061	5	520
South Coimbatore	18	{ (a) - 657 (d) - 613	17	654	1	3
Madura	{ (b) - 149 (d) - 1	{ (b) - 613 (d) - 4 (d) - 430	141	672	7	37
Tinnevely	{ (a) + 68 (b) - 3	{ (a) - 430 (d) - 2 (d) - 1	47	417	9	12
Total, Southern Circle ..	{ (a) + 720 (b) - 6	{ (a) - 4,962 (d) - 5 (d) - 1 (d) - 9	588	{ (a) - 3,696 (d) - 1	137	1,252
Grand Total ..	{ (a) + 2,579 (b) - 12	{ (a) + 18,095 (d) - 88 (d) - 75 (d) - 1 (d) - 71	2,141	{ (a) + 14,790 (d) - 99 (d) - 1	431	2,148

(a) Rectification.
(d) Excluded at settlement.

(b) Initial notifications cancelled.
(c) By rounding off fractions in previous year's figures.

(e) Disafforested.

APPENDIX A—cont.

Forest Settlement—cont.

Particulars of balance of Lands under Settlement—cont.

Classification of balance in columns 6 and 7.												
District.	Settled and reported on.											
	Notified under section 16 during 1898-99, but reservation effected only after 30th June 1899.		With Board or Government awaiting publication of notification under section 16.		Returned by the Board for revision and remaining either with Collector, District Forest-officer or Forest Settlement-officer.		Total settled and reported on.		Settled but not reported on.		Settlement proceeding.	
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
	8	9	10	11	12	13	14	15	16	17	18	19
<i>Northern Circle.</i>												
		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Ganjám	4	13	3	59	1	1	8	73	5	50	..	..
Visagapatam	..	..	1	73	..	..	1	73	3	21	5	28
Górávari	1	30	2	35	..	..	3	65	4	22	1	3
Kistna	1	3	5	7	3	8	9	18	11	42	29	96
Kurnool	..	..	2	20	3	63	5	83	1	1	11	354
Bellary	1	1	6	13	..	..	7	14	..	..	13	36
Anantapur	1	7	..	..	..	..	1	7	..	..	..	..
Total, Northern Circle.	8	54	19	207	7	72	34	333	24	136	59	517
<i>Central Circle.</i>												
Cuddapah	3	18	5	39	1	68	9	125	..	..	24	421
Nellore	..	..	..	..	..	..	..	..	3	6	18	36
Chingleput	1	1	..	..	..	..	1	1	4	2	2	3
North Arcot	..	..	1	3	1	11	2	14	10	† 11	38	41
South Arcot	..	..	..	..	1	12	1	12	5	12	1	† ..
Salem	1	6	1	9	5	42	7	57	9	9	5	54
Trichinopoly	..	..	12	16	1	1	13	17	..	..	42	90
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..
Total, Central Circle.	5	25	19	67	9	124	33	326	24	40	130	644
<i>Southern Circle.</i>												
South Canara	7	38	8	154	2	7	17	199	3	23	22	193
North Malabar	..	..	..	..	1	2	1	2	..	..	3	109
South Malabar	..	..	..	..	..	..	..	..	..	..	12	18
The Nilgiris	..	..	1	33	..	..	1	33	..	..	42	12
North Coimbatore	..	..	1	34	2	237	3	271	1	3	1	246
South Coimbatore	..	..	..	..	..	..	..	..	1	3	..	..
Madura	..	..	..	..	1	6	1	8	2	15	4	14
Tinnevely	1	1	1	† ..	..	..	2	1	2	1	5	10
Total, Southern Circle.	8	39	11	221	6	251	25	514	9	45	93	693
Grand Total, Presidency.	21	118	49	495	22	460	92	1,073	57	221	282	1,854

* Notified during 1897-98 but taking effect in 1899-1900.

† The area of nine blocks is not shown in this column being very much below one square mile.

‡ Below one square mile.

§ Nhambar blocks, the notification for the cancellation of which appeared in the Gazette at the close of the year.

APPENDIX A—cont.

Forest Settlement—cont.

Particulars of balance of Lands under Settlement—cont.

Of lands notified under section 4 in the year.

Of lands notified under section 4 in the year.																												
District.	1894-95.		1895-96.		1897-98.		1898-99.		1899-00.		1900-01.		1901-02.		1892-03.		1893-04.		1894-05.		1905-06.		1896-07.		1897-08.		1898-09.	
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
<i>Northern Circle.</i>																												
Ganjám ..	4	94	4	22	..	..	..	..	..	..	..	1	2	4	†6	..	..	..	..	..	..	..	..	..	..	..	..	..
Visagapatam ..	..	..	..	..	..	..	..	..	..	..	..	2	†37	1	73	..	..	2	†..	..	..	..	..	..	8	4	1	8
Godávari ..	..	..	..	..	..	..	..	..	4	68	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	22	1	†..
Kistna ..	..	..	..	..	..	..	..	2	8	..	..	1	13	1	†..	..	..	1	10	..	..	11	27	25	77	8	31	..
Kurnool ..	..	..	..	..	..	..	..	..	..	..	..	2	31	..	..	..	..	1	69	..	..	3	70	7	†209	4	59	..
Bellary ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5	6	11	8	4	10	39	..
Anantapur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	7	..	..	..	..	..	..	..
Total ..	4	94	4	22	..	..	..	6	70	..	..	6	83	6	78	..	..	4	79	2	12	20	108	41	316	24	118	..
<i>Central Circle.</i>																												
Cuddapah ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	68	..	..	6	168	4	132	4	17	7	66	11	105	..
Nellore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	19	40	..	..
Chingleput ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	6	4	..	..	..
North Arcot ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	†22	2	18	3	25	..	..	48	1	..
South Arcot ..	..	..	..	..	..	..	..	..	..	..	..	..	1	12	..	..	..	..	..	1	9	5	3	..	..	..	..	..
Salem ..	..	..	..	..	..	..	..	1	†3	..	..	..	..	..	..	1	6	3	15	8	52	..	..	2	9	4	35	..
Trichinopoly ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	51	..	..	24	66	..
Tanjore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	1	8	..	..	..	..	2	80	1	6	11	195	11	212	45	98	15	70	101	287	..
<i>Southern Circle.</i>																												
South Canara ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	6	7	189	4	63	9	22	5	19	10	116	..
North Malabar ..	2	69	1	40	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..
South Malabar ..	..	..	..	..	12	†18	4	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
The Nilgiris ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	34	27	11	..
North Coimbatore ..	..	..	..	..	..	..	..	..	..	2	458	..	..	..	..	1	34	1	8	..	..	1	25	..	..	..	..	..
South Coimbatore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	..	..	..	..	..	..	..
Madura ..	..	..	..	..	..	..	..	..	..	..	..	7	37	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tinnevelly ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	5	..	..	8	1	4	†6	..
Total ..	2	69	1	40	12	18	4	91	..	2	458	7	37	..	..	9	42	8	192	7	71	10	47	24	54	41	189	..
Grand Total ..	6	163	5	62	12	18	4	91	7	79	2	458	13	120	8	168	10	48	23	466	20	295	75	253	80	449	186	499

* By division of block.

† By rectification or exclusion at settlement or rounding off fractions.

‡ Below one square mile.

§ Notified during 1897-98 but reservation taking effect after 1898-99.

¶ Twelve blocks were notified under section 4 during the year, but one of them of three square miles was notified also under section 16 within the year.

* Excludes two square miles added to Valpar.

APPENDIX B.

Causes of delay in the submission of final Notifications of Forest Reserves.

Districts.	Causes of delay.															Total.
	Notified under section 16 during 1898-99, but with effect only after 30th June 1899.	With Board or Government awaiting publication of notification under section 16.	Pending preparation of maps.	Awaiting disposal of appeals.	Awaiting expiry of time prescribed for appeal.	Only recently notified or re-notified under section 1.	Awaiting payment of compensation or acquisition or exchange of lands.	Awaiting settlement of claims under enquiry.	Awaiting District Forest-officers' answers to claims, demarcation, &c.	Settled, but final report pending with the Collector or Forest Settlement-officer.	Pending with the Collector or Forest Settlement-officer for revision of notification.	Awaiting replies to references made to Collector or Board.	Awaiting inspection by the Forest Settlement-officer.	Other causes, e.g., awaiting information from Tahsildars, District Court, &c.	16	
1	21	49	9	7	9	37	10	49	29	52	22	2	99	36	481	
Ganjam ..	4	3	..	..	2	..	..	..	1	2	1	..	..	..	13	
Visagapatam ..	1	1	..	..	..	..	..	..	..	3	..	..	..	..	9	
Godavari ..	1	5	..	..	2	..	..	..	..	4	..	..	..	..	8	
Kistna ..	1	2	..	..	..	..	..	..	..	10	3	..	4	..	49	
Kurnool ..	1	6	..	..	..	..	..	..	..	1	..	..	..	..	17	
Bellary ..	1	2	..	..	..	..	..	..	..	1	..	..	..	..	20	
Anantapur ..	1	6	..	..	..	..	..	..	..	1	..	..	..	..	33	
Cuddapah ..	3	5	..	..	..	..	..	..	..	..	..	..	..	..	21	
Nellore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	
Chingleput ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	14	
North Arcot ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	55	
South Arcot ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	42	
South Arcot ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	4	
Salem ..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	16	
Trichinopoly ..	..	12	..	..	..	..	..	..	..	..	..	..	..	..	43	
Tanjore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	
South Canara ..	7	8	2	2	8	..	..	..	..	2	2	..	9	..	..	
North Malabar ..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	
South Malabar ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
The Nilgiris ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
North Coimbatore ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
South Coimbatore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Madura ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Tinnevely ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	21	49	9	7	9	37	10	49	29	52	22	2	99	36	481	

APPENDIX C.

RESERVED Lands not under Settlement in square miles.

Districts.	Up to 1897-98.	Added during 1897-98.	Added during 1898-99.	Total.	Transferred for settlement.				Balance remaining "reserved lands" not under settlement.
					Up to 1897-98.	During 1897-98.	During 1898-99.	Total.	
1	2	3	4	5	6	7	8	9	10
Northern Circle.									
Ganjām ..	556	{ (a) + 12 (b) - 5 }	{ (a) - 18 (b) - 1 (d) - 6 }	538	{ (b) - 551 (d) - 1 (e) - 6 304 }	(a) + 12	(a) - 18	538	..
Vizagapatam ..	415	{ (c) - 1 (e) - 3 }	{ (b) - 5 (e) - 54 }	354	{ (b) - 304 (e) - 51 }	8	8	264	90
Górávari ..	953	{ (a) - 22 (b) - 3 (c) - 10 }	{ (b) - 14 (a) + 2 (b) - 12 (c) - 9 (d) + 1 }	956	{ (b) - 948 (b) - 14 }	22	..	956	..
Kistna ..	1,164	{ (a) + 3 (b) - 2 (c) - 13 (d) + 1 }	{ (a) + 2 (b) - 12 (c) - 9 (d) + 1 }	1,114	{ (b) - 793 (b) - 12 (d) + 1 }	(a) + 2	(a) + 1	904	240
Kurnool ..	2,331	{ (b) - 352 (c) - 9 }	{ (b) - 12 (a) + 27 (b) - 3 (c) - 34 (d) + 6 }	2,900	{ (b) - 2,184 (b) - 12 }	211	59	2,442	458
Bellary ..	626	{ (a) - 8 (c) - 2 (e) - 1 }	{ (b) - 3 (c) - 34 (d) + 6 }	611	{ (b) - 490 (b) - 3 (d) + 6 }	(a) - 4	30	526	85
Anantapur ..	514	{ (b) - 1 (c) - 1 }	{ (b) - 5 }	507	{ (b) - 512 (b) - 5 }	..	..	507	..
Total ..	6,559	346	105	7,010	5,680	356	{ (a) - 118 (a) - 17 }	6,187	878
Central Circle.									
Cuddapah ..	2,360	{ (a) + 49 (c) - 18 }	{ (a) - 2 (c) - 10 (d) - 40 }	2,453	{ (c) - 2,209 (c) - 10 }	96	{ (a) - 108 (a) - 2 }	2,401	52
Nellore ..	683	(b) - 3	{ (b) - 9 (c) - 4 (e) + 1 }	708	{ (b) - 687 (c) - 9 (e) - 4 }	..	40	694	14
Chingleput ..	213	{ (b) - 1 (c) - 9 }	..	215	202	13	..	215	..
North Arcot ..	1,134	{ (b) - 2 (c) - 3 }	{ (a) + 8 (d) + 98 }	1,236	{ (d) - 1,128 (d) + 98 }	..	{ (a) + 8 }	1,235	1
South Arcot ..	715	{ (b) - 3 (c) - 1 (e) - 41 }	{ (a) - 2 (c) - 30 }	709	{ (c) - 711 (c) - 2 (e) - 1 (e) - 1 (e) + 1 }	..	..	709	..
Salem ..	1,439	{ (b) - 3 (c) - 2 }	{ (a) - 3 (b) - 1 (c) - 3 }	1,423	{ (a) - 1,314 (a) - 1 (b) - 1 (c) - 1 (e) + 1 }	..	56	1,367	66
Trichinopoly ..	297	{ (a) - 3 (c) - 16 }	{ (b) - 1 (c) - 3 }	323	{ (b) - 270 (b) - 1 (c) - 3 (e) + 1 }	..	..	323	..
Tanjore ..	18	..	..	18	18	..	..	18	..
Total ..	6,859	- 32	258	7,085	6,588	118	{ (a) - 240 (a) + 6 }	6,952	133
Southern Circle.									
South Canara ..	1,109	{ (c) - 11 (d) + 25 }	{ (a) - 2 (b) - 5 (c) - 21 }	1,095	{ (b) - 570 (b) - 5 (c) - 1 (e) - 1 }	19	116	699	396
North Malabar ..	274	..	(c) - 2	272	{ (c) - 272 (c) - 2 }	..	..	270	2
South Malabar ..	328	..	..	328	299	..	..	299	29
The Nilgiris ..	450	{ (a) - 34 (b) - 1 (c) - 2 }	{ (c) - 3 (e) - 11 }	491	{ (c) - 359 (c) - 1 }	34	11	403	88
North Coimbatore ..	1,623	{ (a) - 3 (b) - 2 (c) + 1 }	{ (c) - 1 (e) - 1 }	1,618	{ (c) - 1,582 (c) - 1 }	..	..	1,581	37
South Coimbatore ..	657	..	..	657	657	..	..	657	..
Madura ..	621	{ (a) - 2 (b) - 1 (c) - 5 (e) - 1 }	{ (b) - 4 (c) - 6 (e) + 1 }	609	{ (b) - 604 (b) - 4 (c) - 1 (e) + 1 }	(a) + 9	..	609	..
Tinnevely ..	427	{ (b) - 2 (c) - 2 }	{ (c) - 2 (e) + 1 }	429	{ (c) - 421 (c) - 2 (e) + 1 }	1	8	429	..
Total ..	5,489	32	- 22	5,499	4,749	63	135	4,947	552
Grand Total ..	18,907	346	341	19,594	17,017	537	{ (a) - 493 (a) - 11 }	18,036	1,558

(a) By rectification. (b) At settlement. (c) Unreserved or disafforested.
 (d) By rectification of areas already constituted reserved forests.
 (e) By rounding off fractions in previous year's returns.

ANNUAL FORM No. 46.

Forest Department, Madras Presidency.

RECORD of Demarcation and Maintenance of Boundaries.

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired during the year.	Length of previously existing boundaries not repaired during the year.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at close of year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.	
								On new work.	On repairs.
1	2	3	4	5	6	7	8	9	10
Northern Circle.									
Ganjām ..	130	108	633	871	160	138 Not known	1,169	(a) 1,400	176
Vizagapatam ..	91	100	94	285	215	..	500	1,448	325
Górávari ..	55	395	433	883	114	308	1,305	572	508
Kistna ..	90	30	827	947	70	..	1,017	(a) 1,424	115
Kurnool ..	60	574	..	634	646	157	1,487	1,370	229
Bellary ..	150	490	735	1,375	10	..	1,385	1,147	185
Anantapur ..	102	..	1,061	1,163	54	..	1,217	529	1,833
Total, Northern Circle ..	678	1,697	3,783	6,158	1,269	608	8,030	7,885	73
Central Circle.									
Cuddapah ..	(e) 193	(f) 80	2,424	2,697	14	..	2,711	1,349	366
Nellore ..	28	9	1,294	1,331	206	86	1,623	(a) 275	23
Chingleput ..	34	..	829	863	..	..	863	(a) 849	53
North Arcot ..	(h) 62	1,777	387	2,226	29	19	2,274	656	117
South Arcot ..	277	3	1,783	2,063	200	..	2,263	3,678	478
Salem ..	43	877	1,204	2,124	333	93	2,550	243	146
Trichinopoly ..	..	129	416	545	490	..	1,035	..	17
Tanjore ..	..	..	79	79	..	..	79	..	32
Total, Central Circle ..	637	2,875	8,416	11,928	1,272	198	13,398	7,050	85
Southern Circle.									
South Canara ..	136	1	1,563	1,700	..	2	1,702	1,348	20
Malabar, North ..	..	134	304	438	..	2	440	..	35
Do. South ..	..	20	106	126	96	92	314	..	1,358
The Nilgiris ..	11	90	996	1,097	40	187	1,324	134	66
Coimbatore, North ..	68	111	556	735	36	201	972	854	200
Do. South ..	6	9	468	483	9	77	569	50	1,460
Madura ..	25	40	1,403	1,468	22	139	1,629	(a) 875	145
Tinnevely ..	12	4	336	352	187	17	556	194	446
Total, Southern Circle ..	258	409	5,732	6,399	390	717	7,506	3,455	70
Grand Total, Presidency ..	1,573	4,981	17,931	24,485	2,931	1,518	28,934	18,390	196

N.B.—Boundaries include, besides the outer perimeter, the limits of enclosures of private or other lands within the forests, but not the limits of sub-divisions, such as blocks, compartments, coupes. The difference between the totals of columns 3 and 4 of this statement and column 5 of the previous year's statement, and the difference between column 7 and the corresponding column of previous year's statement are due to more correct computation of lengths and to the omission during the year of the boundaries of proposed reserves which were incorrectly included in the return for 1897-98 in some of the districts.

- (a) Includes cost of cairns erected or repaired.
 (b) Cost of temporary establishment.
 (c) Cost of demarcating the Rampa boundary.
 (d) Amount spent in cutting 48 miles of block lines in the interior of reserves.
 (e) Includes rectifying 42 miles of demarcation at a cost of Rs. 319.
 (f) Excludes lines recleared by the establishment free of cost.
 (g) Added as per Accountant-General's audited figures under A-VIII (a).
 (h) Includes rectifying 41 miles of demarcation at a cost of Rs. 450.
 (i) Amount spent for cutting compartment and coupe lines.
 (k) Includes amount spent for cutting coupe lines.

Forest Department, Madras Presidency.

STATEMENT of Forest Areas surveyed and under survey during the year 1898-99.

Districts.	Areas surveyed and under survey during the year 1898-99.															
	Special Surveys—Maps on 4-inch scale or over by Survey of India Department or Madras Survey.								Ordinary, included in district surveys.							
	With interior details.				Boundary surveys.				With interior details.				Boundary surveys.			
	Without details of growing stock.		Total cost.		Without details of growing stock.		Total cost.		Without details of growing stock.		Total cost.		Without details of growing stock.		Total cost.	
	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Ganjam ..	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	L. MLS.	L. MLS.	RS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	L. MLS.	L. MLS.	RS.
Vinayakam ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Giddavari ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kutna ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bellary ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Anantapur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Quddapah †	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore †	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chingleput ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tanjore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Canara ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Malabar ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
The Nilgiris ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madura ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tinnevely ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	6	..	5,107	977	1,42,947	1,232	718	10,791	18	..	1,036	145	803	225	63	2,384

N.B.—Due attention has not been paid in most of the districts to the instructions regarding the preparation of this form which is not therefore quite accurate.

* No entries have again been made by the Collector in the first 22 columns although it is stated in the district report that surveys are now approaching completion—vide Appendix E in which it is stated that all the reserves have been mapped.

† No entries have been made in the Collector's return in columns 9 to 30.

‡ All the columns except 24 have been left blank by the Collector.

§ Not known or reported.

FOREST DEPARTMENT.

Statement of Forest Areas surveyed and under survey during the year 1898-99—cont.

Districts.	Areas surveyed and under survey during the year 1898-99—cont.															
	Chain and compass or other surveys by local officers.								Cost.							
	With interior details.				Boundary surveys.				Total reserved area at end of year, as per Form No. 44.				Entire cost of all surveys to end of the year.			
	4-inch or over.		Under 4-inch.		Total cost.		Total cost.		Areas remaining to be taken under survey.		Total reserved area at end of year, as per Form No. 44.		Previous.		Of year.	
	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.	Previous.	Of year.
1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Ganjam ..	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	L. MLS.	L. MLS.	RS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	L. MLS.	L. MLS.	RS.
Vinayakam ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Giddavari ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kutna ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bellary ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Anantapur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Quddapah †	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore †	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chingleput ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tanjore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Canara ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Malabar ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
The Nilgiris ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madura ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tinnevely ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	286	..	..	..	362	805	408	15,614	4,352	14,888	1,66,562	45,558	2,12,110	..	..	..

N.B.—Due attention has not been paid in most of the districts to the instructions regarding the preparation of this form which does not pretend to be accurate.

* No entries have again been made by the Collector in the first 22 columns although it is stated in the district report that surveys are now approaching completion—vide Appendix E in which it is stated that all the reserves have been mapped.

† No entries have been made in the Collector's return in columns 9 to 30.

‡ The figures shown in these columns in the report for 1897-98 appertain also to proposed reserves. Hence the variation.

§ The figure "93" erroneously entered in this column has been transferred to column 23, its proper place.

¶ All the columns except 24 have been left blank by the Collector.

§ Not known or reported.

APPENDIX D.

ABSTRACT of District Reports in regard to the maintenance of maps in accordance with the provisions of section 81 of the Forest Code.

Northern Circle.

Ganjām.—Final maps were prepared for all reserved forests. The district and range reference maps have been maintained. Four district maps for the use of the District Forest-office and the other branches of the Collector's office were also prepared during the year.

Vizagapatam.—The district, range and reserve maps were maintained as usual.

Górávari.—The district map (1" = 4 miles) has been maintained; range maps and separate maps for each reserve are also kept.

Kistna.—Final maps for 18 blocks were printed during the year.

Kurnool.—All the maps prescribed in section 81 of the Forest Code except those for working circles were maintained during the year.

Bellary.—Instructions regarding the preparation of district, range and reserve maps were attended to.

Anantapur.—A fresh district key map was prepared and posted up to date. Final maps for some of the reserves were also prepared.

Central Circle.

Cuddapah.—The district and range maps prescribed in the Forest Code were maintained and posted up to date. Duplicate copies of reserve maps were prepared for issue to Range officers.

Nellore.—All the maps are kept up to date. Twenty-one final maps were prepared and supplied to Range officers during the year.

Chingleput.—The district and taluk maps have been maintained and posted up. Copies of 32 sketches of final maps have been made and supplied to Range officers.

North Arcot.—The district and taluk maps are kept up to date and a copy of the latter has been furnished to each Range officer. Maps received from the Survey of India Party were also distributed to Range officers. Maps of reserves, less than 10 square miles in area, are being prepared departmentally and Range officers are gradually being supplied with them.

South Arcot.—The district forest reference map has been maintained and posted up to date. The range and reserve maps have also been maintained; copies have been supplied to the Range officers.

Salem.—The district and range maps have been maintained. Maps for 74 reserves prepared by the Survey of India Party are available.

Trichinopoly.—The district and taluk maps were maintained and posted. The preparation of the map for the new Kulittalai Range, referred to in the last report, was completed during the year. The maps for the reserves in the Musiri and Perambalur ranges have not yet been received from the Survey of India Party.

Tanjore.—The district as well as the range reference, and Working plan maps are maintained. There are also separate maps for each reserve with topographical features and admitted rights indicated therein. The Vettangudi map which was not complete last year was finished during the year under report.

Southern Circle.

South Canara.—Forest maps for 18 blocks have been prepared during the year departmentally. Maps for all the reserved forests except Bhagimale are maintained.

North Malabar.—The district reference map has been posted up to 30th June 1899. Maps for some of the reserves have been sent to the Superintendent of Revenue Survey for taking litho copies.

South Malabar.—The district reference map has been posted up to 30th June 1899. Reserve and range reference maps were prepared during the year. There are also working circle maps for all areas for which working plans have been prepared.

Nilgiris.—The office reference map and the range reference maps have been posted up to date. There are no separate reserve maps, but settlement maps for each village in the district are properly maintained, all the reserves having been distinctly shown therein. Working circle maps are also maintained.

North Coimbatore.—The office reference map is maintained. The topographical sheets are used as range reference maps and are being posted. Maps have been prepared for 4 reserves in Erode taluk and are under preparation for 19 others. In the remaining cases the settlement map and the topographical sheets have been supplied to Range officers to be used as reserve maps until the survey is completed.

South Coimbatore.—The district forest reference Map has been maintained in duplicate. The taluk maps have been utilized for range reference maps and most of the particulars relating to 5 ranges have been entered. There are Survey of India maps for all reserves but some details have to be entered. There are separate maps for each of the working circles.

Madura.—The six reserve maps referred to in the previous year's report were sent to the Survey office for reproduction and have not yet been received. Maps for two blocks constituted as reserves during the year have to be fair copied and sent to the Survey office for reproduction.

Tinnevely.—The district reference map has been posted up to 30th June 1899. The Range officers are supplied with the India Survey maps of the existing reserves. Taluk maps in which the reserves have been incorporated have also been furnished to them.

APPENDIX E.

STATEMENT showing Area of Reserved Forests for which final Maps have been prepared.

Districts.	Area of reserved forests.	Area of reserved forests for which final maps have been prepared.
	SQ. MILES.	SQ. MILES.
Ganjām	415	415
Vizagapatam	142	(a) 14
Gōdāvari	866	93
Kistna	748	537
Kurnool	2,004	..
Bellary	476	325
Anantapur	500	431
Cuddapah	1,855	1,789
Nellore	652	600
Chingleput	210	(b) 210
North Arcot	1,169	(c) 512
South Arcot	685	685
Salem	1,237	904
Trichinopoly	216	49
Tanjore	18	18
South Canara	281	269
North Malabar	159	1
South Malabar	190	40
The Nilgiris	358	..
North Coimbatore	1,061	(d) 5
South Coimbatore	654	654
Madura	572	560
Tinnevely	417	407
Total ..	14,888	8,518

(a) The only reserve in the district which has a surveyed map with interior details is the Poddapalem reserve. The mapping of the other reserves is reported to await the survey of the reserves by the Survey of India Party.

(b) These are only copies of maps attached to the final notifications, but are, however, only approximately correct wherever the boundaries go through unsurveyed areas.

(c) Revised figure; of this area, maps for 17 square miles were made by the Madras Survey office and for the remaining 495 square miles by the Survey of India Party.

(d) No explanation has been furnished by the Collector for the variation between this figure and that entered in Appendix E to the report for 1897-98.

ANNUAL FORM NO. 48.

Forest Department, Madras Presidency.

PROGRESS made in Working Plans during 1898-99.

District.	Areas for which working plans have been completed and approved by the Board.		Areas for which working plans are being compiled or have been compiled but not sanctioned.		Areas for which working plans have still to be taken in hand.	Total forest area as in Form No. 44.	Entire cost per square mile of working plans completed.	Remarks.
	At commencement of year.	During year.	At commencement of year.	Taken in hand during year.				
1	2	3	4	5	6	7	8	9
Northern Circle.								
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	RS.
Ganjām	..	..	..	21	517	538	..	38
Vizagapatam	..	..	..	..	354	354	..	..
Gōdāvari	..	† 3	† 22	138	793	966	..	37
Kistna	8	..	768	..	868	1,144	..	3
Kurnool	..	..	..	..	2,900	2,900	..	36
Bellary	12	..	..	..	599	611	..	..
Anantapur	..	..	1	..	506	507	..	..
Total ..	20	3	791	159	6,037	7,010	..	114
Central Circle.								
Cuddapah	3	..	..	..	2,450	2,453	..	5
Nellore	..	..	134	40	534	708	..	249
Chingleput	..	..	..	..	215	215	..	..
North Arcot	..	..	..	..	1,236	1,236	..	..
South Arcot	..	..	99	..	610	709	..	336
Salem	1	..	..	..	1,422	1,423	..	52
Trichinopoly	1	..	38	..	289	323	..	136
Tanjore	4	..	4	..	10	18	..	..
Total ..	9	..	270	40	6,766	7,085	..	778
Southern Circle.								
South Canara	1	..	..	..	1,094	1,095	..	..
North Malabar	..	..	..	28	244	272	..	110
South Malabar	34	..	24	..	270	328	99	55
The Nilgiris	6	..	..	..	485	491	83	..
North Coimbatore	..	..	..	..	1,618	1,618	..	..
South Coimbatore	10	..	7	..	640	657	..	..
Madura	..	..	12	240	357	609	..	..
Tinnevely	56	..	..	..	378	429	49	1,006
Total ..	107	..	43	268	5,081	5,499	..	1,171
Grand Total ..	136	3	1,104	467	17,884	19,594	..	2,063

* The figures in this column represent the cost incurred during the year under A-VIII (d).

† Preliminary working plans.

‡ Upputteru reserve, the working plan for which was brought up to date during the year.

ANNUAL
Forest Department,
Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
<i>Northern</i>						
Direction ..	....	RS.	....	M.L.S. F.	RS.	RS.
Ganjám ..	(c) Houses for subordinate establishments	96	....	..	..	..
	Total, Ganjám ..	96	Total ..	..	..	96
Vizagapatam.	(b) Rest-houses	100	(a) Cart roads	2 6	243	..
	(c) Houses for subordinate establishments	255				
	(d) Others	202				
	Total, Vizagapatam ..	557	Total ..	2 6	243	800
Górávari ..	(b) Rest-houses	1,413	(a) Cart roads	11 0	2,836	..
	(c) Houses for subordinate establishments	122	(b) Bridle-paths	14 3	252	..
	(d) Others	332				
	Total, Górávari ..	1,867	Total ..	25 3	3,088	4,955
Kistna ..	(b) Rest-houses	63	(a) Cart roads	2 6	4,302	..
	Total, Kistna ..	63	Total ..	2 6	4,302	4,365
Kurnool ..	(b) Rest-houses	1,459	(a) Cart roads	14 0	1,704	..
	(c) Houses for subordinate establishments	328	(a) Others	..	786	..
	Total, Kurnool ..	1,787	Total ..	..	2,490	4,277
Bellary ..	(b) Rest-houses	755	(b) Bridle-paths	15 0	936	..
	(c) Houses for subordinate establishments	74				
	Total, Bellary ..	829	Total ..	15 0	936	1,755
Anantapur ..	(b) Rest-houses	1,096	(b) Bridle-paths	3 2	88	..
	Total, Anantapur ..	1,096	Total ..	3 2	88	1,184
Total North-ern Circle.	(b) Rest-houses	4,886	(a) Cart roads	30 4	9,085	..
	(c) Houses for subordinate establishments	875	(b) Bridle-paths	32 5	1,276	..
	(d) Others	594	(c) Others	..	786	..
	Total, Northern Circle ..	6,295	Total ..	63 1	11,147	17,442

* Rupees 281 have been deducted from the Collector's figures to make them agree with the Accountant-General's audited figures under A VII (a). The Collector has not clearly explained the variation.

FORM No. 49.
Madras Presidency.
and Buildings.

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expenditure on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
<i>Cheroje.</i>					
(a) Head-quarter houses	60	(c) Others	..	49	10
(c) Houses for subordinate establishments	1,313	(a) Cart roads	1 0	46	..
		(b) Bridle-paths	74 0	342	..
			75 0	388	1,701
		Add A-VII (c) ..	..	..	33
Total ..	† 1,313	Total ..	..	..	1,734
(b) Rest-houses	215				
(c) Houses for subordinate establishments	273	(a) Cart roads	7 0	125	..
(d) Others	142	(c) Others	..	25	..
			7 0	150	780
		Add A-VII (c) ..	..	..	305
Total ..	630	Total ..	..	..	1,085
(b) Rest-houses	764	(a) Cart roads	33 0	808	..
(c) Houses for subordinate establishments	92	(b) Bridle-paths	25 0	156	..
(d) Others	141				
			58 0	964	3,276
Add pay of watchers ..	997	Add A-VII (c) ..	..	..	500
	1,315	Total ..	..	..	3,776
Total ..	2,312				
(b) Rest-houses	297	(a) Cart roads	19 4	234	..
(c) Houses for subordinate establishments	11		19 4	234	582
(d) Others	40	Add A-VII (c) ..	..	..	3
		Total ..	..	..	585
Total ..	348				
(a) Head-quarter houses	61	(a) Cart roads	16	916	..
(b) Rest-houses	1,747	(c) Others	..	36	..
(c) Houses for subordinate establishments	457				
(d) Others	52				
	‡ 278				
	2,595		16	952	4,083
Add pay of watchers ..	486	Add A-VII (c) ..	..	..	160
Total ..	3,081	Total ..	..	..	4,193
(c) Houses for subordinate establishments	82	(a) Cart roads	12 6	373	..
		(b) Bridle-paths	29 2	285	..
			42 0	658	740
Total ..	82	Total ..	..	..	
(a) Head-quarter houses	144	(b) Bridle-paths	10 7	195	..
(b) Rest-houses	97				
(c) Houses for subordinate establishments	60				
(d) Others	42				
	343				
Add pay of watchers ..	599				
Total ..	942	Total ..	10 7	195	1,187
(a) Head-quarter houses	265	(a) Cart roads	89 2	2,502	..
(b) Rest-houses	3,120	(b) Bridle-paths	139 1	978	..
(c) Houses for subordinate establishments	2,258	(c) Others	..	110	..
(d) Others	695				
	6,888				
Add pay of watchers ..	2,400	Add A-VII (c) ..	228 3	3,590	12,358
Total ..	8,768	Total ..	..	..	1,001
					13,359

† Includes pay of watchers.

‡ Rupees 23 have been deducted from the Collector's figures in order to make them agree with the Accountant-General's audited figures under A-VII (b). The variation has not been explained by the Collector.

§ Added as per Accountant-General's audited figures under A-VII (b).

Communications.

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
<i>Central</i>						
Onddappah ..	(c) Houses for subordinate establishments	Rs. 645	(a) Cart roads	M.L.S. F. 7 0	Rs. 186	Rs. ..
	Total, Onddappah ..	645	Total ..	7 0	186	831
Nellore ..	....	..	....	..	..	..
	Total, Nellore ..	..	Total ..	..	..	..
Chingleput ..	(b) Rest-houses	12	(a) Cart roads	2 4	83	..
	(c) Houses for subordinate establishments	25				
	Total, Chingleput ..	87	Total ..	2 4	83	120
North Arcot ..	(b) Rest-houses	950	(a) Cart roads	2 1	1,792	..
	(c) Others	40	(c) Others	..	9	..
	Total, North Arcot ..	990	Total ..	2 1	1,801	2,791
South Arcot ..	....	..	....	..	..	..
	Total, South Arcot ..	..	Total ..	..	..	..
Salem ..	(a) Head-quarter houses ..	197	(a) Cart roads	..	1,194	..
	(b) Rest-houses	451				
	(c) Houses for subordinate establishments	268				
	(d) Others	99				
	Total, Salem ..	1,013	Total ..	..	1,194	2,907
Trichinopoly ..	....	..	....	..	..	..
Tanjore ..	(c) Houses for subordinate establishments	14	....	..	..	14
Total, Central Circle.	(a) Head-quarter houses ..	197	(a) Cart roads	11 5	3,255	..
	(b) Rest-houses	1,413	(c) Others	..	9	..
	(c) Houses for subordinate establishments	950				
	(d) Others	139				
	Total, Central Circle ..	2,699	Total ..	11 5	3,264	5,063

* Length not reported.

† Three and a half miles repaired by watchers without cost.

‡ The Collector explains that a sum of Rs. 148 was transferred to A I (a) under the Conservator's sanction order No. 1414, dated 21st June 1899, and that the transfer was intimated to the Accountant-General in reply to his objection statement for March 1899. Nevertheless the Accountant-General has allowed the item to stand under this head. Hence, the difference.

and Buildings—cont.

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
<i>Circle.</i>					
(b) Rest-houses	Rs. 532	(a) Cart roads	M.L.S. F. 2 4	Rs. 1,405	Rs. ..
(c) Houses for subordinate establishments	390	(b) Bridle-paths	..	113	..
(d) Others	44	(c) Others	..	190	..
	966				
Add pay of watchers ..	266	Add A-VII (c) ..	2 4	1,708	2,930
Total ..	1,222	Total ..	..	..	155
(c) Houses for subordinate establishments	1,088	....	..	..	1,111
Add pay of watchers ..	73				
Total ..	1,111	Total ..	..	..	1,111
(b) Rest-houses	202	....	..	..	208
(c) Houses for subordinate establishments	6				
	208	Add A-VII (c) ..	..	..	161
Total ..	208	Total ..	..	..	369
(a) Head-quarter houses	38	(a) Cart roads	† 11 5	418	..
(b) Rest-houses	841				
(c) Houses for subordinate establishments	† 147				
	92				
Add pay of watchers ..	1,113	Add A-VII (c) ..	11 5	418	2,263
Total ..	1,845	Total ..	..	..	235
(b) Rest-houses	21	(a) Cart roads	..	293	..
(c) Houses for subordinate establishments	78				
	99				
Add pay of watchers ..	332	Add A-VII (c) ..	..	283	714
Total ..	431	Total ..	..	..	4
(a) Head-quarter houses	159	....	..	..	1,076
(b) Rest-houses	439				
(c) Houses for subordinate establishments	409				
(d) Others	69	Add A-VII (c) ..	..	..	34
Total ..	1,076	Total ..	..	..	1,110
(b) Rest-houses	103	(c) Others	..	40	143
(b) Rest-houses	4	....	..	..	4
(a) Head-quarter houses	192	(a) Cart roads	14 1	2,106	..
(b) Rest-houses	2,289	(b) Bridle-paths	..	113	..
(c) Houses for subordinate establishments	2,013	(c) Others	..	230	..
(d) Others	113				
	4,607				
Add pay of watchers ..	1,893	Add A-VII (c) ..	14 1	2,449	8,449
Total ..	6,000	Total ..	..	..	589
					9,038

§ Rupees 32 have been deducted from the Collector's figures to correspond with the Accountant-General's audited figures under Act VII-(b). The Collector has not explained the variation.

|| The cost of maintaining and improving the Sogapuram-Sengathupatti ghat road in the Musiri range has not been shown in this return as the Forest Department does the repairs and recovers the amount spent from the Local Fund Department at the end of each year.

Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
<i>Southern</i>						
South Canara.	(b) Rest-houses	1,308	(a) Cart roads	M.L.S. 3 P. 3	RS. 723	RS. ..
	Total, South Canara ..	1,308	Total ..	3	3	723
North Malabar.	(b) Rest-houses	2,049	....	..	..	..
	(c) Houses for subordinate establishments	160				
	(d) Others	650				
	Total, North Malabar ..	2,859	Total ..	..	..	2,859
South Malabar.	(a) Head-quarter houses ..	18	(a) Cart roads	4	0	480
	(b) Rest-houses	480	(b) Bridle-paths	..	13	..
	Total, South Malabar ..	498	Total ..	4	0	493
The Nilgiris..	(c) Houses for subordinate establishments	62	(a) Cart roads	0	3	46
	Total, The Nilgiris ..	62	Total ..	0	3	46
North Coimbatore.	(b) Rest-houses	711	...	..	..	..
	(c) Houses for subordinate establishments	913				
	(d) Others	2,176				
	Total, North Coimbatore ..	3,799	Total ..	..	..	3,799
South Coimbatore.	(b) Rest-houses	762	(c) Others	..	99	..
	(c) Houses for subordinate establishments	1,379				
	(d) Others	1,745				
	Total, South Coimbatore ..	3,886	Total ..	..	99	3,985
Madura ..	(b) Rest-houses	1,534	....	..	..	..
	(d) Others	2				
	Total, Madura ..	1,536	Total ..	..	..	1,536

* Rupees 105 have been deducted from the Collector's figures to make them agree with the Accountant-General's audited figures under A-VII (b). The Collector has not explained the variation.

and Buildings—cont.

Repairs executed during the year.					
Buildings.		Roads and paths			Total expenditure on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
<i>Circle.</i>					
(e) Houses for subordinate establishments.	168	(e) Others	M.L.S. 9 P. 0	RS. 42	RS. 256
(d) Others	46				
		Add A-VII (e) ..	..	..	64
	Total ..	Total ..	..	..	320
(a) Head-quarter houses	285	(a) Cart roads	66	0	1,837
(b) Rest-houses	373	(e) Others	..	..	293
(c) Houses for subordinate establishments	339				
(d) Others	511				
	Total ..		66	0	2,130
		Add A-VII (e) ..	..	..	487
	Total ..	Total ..	..	..	4,125
(a) Head-quarter houses	129	(a) Cart roads	4	6	215
(b) Rest-houses	241				
(c) Houses for subordinate establishments	265				
(d) Others	60				
	Total ..		4	6	215
		Add A-VII (e) ..	..	..	910
	Total ..	Total ..	..	..	974
(e) Houses for subordinate establishments	878	(e) Cart roads	75	0	1,366
			75	0	1,366
	Total ..		..	..	2,244
		Add A-VII (e) ..	..	..	157
	Total ..	Total ..	..	..	2,401
(b) Rest-houses	551	(a) Cart roads	70	0	4,022
(c) Houses for subordinate establishments	307	(e) Others	..	..	28
(d) Others	44				
	Add pay of watchers ..		70	0	4,050
	Total ..		..	..	5,316
		Add A-VII (e) ..	..	..	1
	Total ..	Total ..	..	..	5,317
(b) Rest-houses	263	(a) Cart roads	† 8	0	† 2,182
(c) Houses for subordinate establishments	1,009	(b) Bridle-paths	2	0	35
(d) Others	85	(e) Others	..	..	48
	Total ..		10	0	2,265
		Add A-VII (e) ..	..	..	8,622
	Total ..	Total ..	..	..	8,465
(b) Rest-houses	427	(b) Bridle-paths	15	6	409
(c) Houses for subordinate establishments	1,754				
	Add pay of watchers ..		15	6	409
	Total ..		..	..	2,823
		Add A-VII (e) ..	..	..	324
	Total ..	Total ..	..	..	3,147

† Includes repairs to tram line and timber slide.

‡ Includes Rs. 1,200 contribution for the upkeep of Anamalai Sethumadi road.

§ Includes pay of road watchers.

Communications

Districts.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
Southern						
Tinnevely ..	(b) Rest-houses	Rs. 849	(a) Cart roads	MLS. F. 2 5	Rs. 613	Rs.
	(c) Houses for subordinate establishments	924	(b) Bridle-paths	7 0	1,820	
	(d) Others	90				
	Total, Tinnevely ..	1,863	Total ..	9 5	2,433	4,296
Total, Southern Circle.	(a) Head-quarters	18	(a) Cart roads	10 3	1,861	
	(b) Rest-houses	7,693	(b) Bridle-paths	7 0	1,833	
	(c) Houses for subordinate establishments	3,437	(c) Others		99	
	(d) Others	4,663				
	Total, Southern Circle ..	15,811	Total ..	17 3	3,793	19,604
Grand Total, Presidency.	(a) Head-quarters	215	(a) Cart roads	52 4	14,201	
	(b) Rest-houses	13,992	(b) Bridle-paths	39 5	3,109	
	(c) Houses for subordinate establishments	5,262	(c) Others		894	
	(d) Others	5,336				
	Total, Presidency ..	24,805	Total ..		18,204	43,009

and Buildings—cont.

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expenditure on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
(b) Rest-houses	Rs. 1,017	(a) Cart roads	MLS. F. 78 0	Rs. 3,181	Rs.
(c) Houses for subordinate establishments	390	(b) Bridle-paths	35 2	691	
(d) Others	97	(c) Others		22	
			113 2	3,894	5,398
		Add A-VII (c) ..			224
	Total ..				5,622
	1,504				
(a) Head-quarter houses	414	(a) Cart roads	301 6	12,803	
(b) Rest-houses	2,872	(b) Bridle-paths	53 0	1,135	
(c) Houses for subordinate establishments	5,110	(c) Others	9 0	433	
(d) Others	843				
	9,239				
Add pay of watchers ..	597		363 6	14,371	24,207
		Add A-VII (c) ..			3,786
	Total ..				27,993
	9,836				
(a) Head-quarter houses	871	(a) Cart roads	405 1	17,411	
(b) Rest-houses	5,281	(b) Bridle-paths	192 1	2,226	
(c) Houses for subordinate establishments	9,411	(c) Others	9 0	773	
(d) Others	1,651				
	20,214				
Add pay of watchers ..	4,390		606 2	20,410	45,014
		Add A-VII (c) ..			5,378
	Total ..				50,390
	24,604				

ANNUAL FORM No. 65.

Tramway Statement.

STATEMENT showing the results of transport of wood by tramway.

I.—Nellore District.

(i) Sriharikota Range.

Capital Account.

	1897-98.	1898-99.		1897-98.	1898-99.
	Rs.	Rs.		Rs.	Rs.
To balance from the previous year	17,277	16,240	By depreciation at 6 per cent.	1,037	974
			„ balance of stock	16,240	15,266
Total	17,277	16,240	Total	17,277	16,240

Revenue Account.

	1897-98.	1898-99.		1897-98.	1898-99.
	Rs.	Rs.		Rs.	Rs.
To working expenses	734	901	By balance written off	2,684	2,762
„ road-making and repairs	222	237			
„ interest at 4 per cent.	691	650			
„ depreciation at 6 per cent.	1,037	974			
Total	2,684	2,762	Total	2,684	2,762

	1897-98.					1898-99.				
	Number of tons of wood carried.	Number of miles carried.	Total ton miles.	Actual charge for carrying.	Rate per ton mile.	Number of tons of wood carried.	Number of miles carried.	Total ton miles.	Actual charge for carrying.	Rate per ton mile.
Work done	3,728	5½	21,436	Rs. 2,684	Rs. A. P. 0 2 0	5,319	4½	25,265	Rs. 2,762	0 1 9

(ii) Casuarina Plantation Range.

Capital Account.

	1897-98.	1898-99.		1897-98.	1898-99.
	Rs.	Rs.		Rs.	Rs.
To balance from the previous year	12,515	11,764	By depreciation at 6 per cent.	751	706
			„ balance of stock	11,764	11,058
Total	12,515	11,764	Total	12,515	11,764

Revenue Account.

	1897-98.	1898-99.		1897-98.	1898-99.
	Rs.	Rs.		Rs.	Rs.
To working expenses	710	426	By balance written off	1,962	1,602
„ interest at 4 per cent.	501	470			
„ depreciation at 6 per cent.	751	706			
Total	1,962	1,602	Total	1,962	1,602

Statement showing the results of transport of wood by tramway, &c.—cont.

(ii) Casuarina Plantation Range—cont.

Revenue Account—cont.

	1897-98.					1898-99.				
	Number of tons of wood carried.	Number of miles carried.	Total ton miles.	Actual charge for carrying.	Rate per ton mile.	Number of tons of wood carried.	Number of miles carried.	Total ton miles.	Actual charge for carrying.	Rate per ton mile.
Work done	1,705½	4	6,822	Rs. 1,962	Rs. A. P. 0 4 7	919½	4	3,677	Rs. 1,602	0 6 11

II. Cuddapah District.

Capital Account.

	1897-98.	1898-99.		1897-98.	1898-99.
	Rs.	Rs.		Rs.	Rs.
To balance from the previous year	10,251	9,636	By depreciation at 6 per cent.	615	578
			„ balance of stock	9,636	9,058
Total	10,251	9,636	Total	10,251	9,636

Revenue Account.

	1897-98.	1898-99.		1897-98.	1898-99.
	Rs.	Rs.		Rs.	Rs.
To working expenses	57	9	By revenue	246	246
„ road repairs	8	87	„ balance written off	844	1,213
„ depreciation at 6 per cent.	615	578			
„ interest at 4 per cent.	410	385			
„ Tramway repairs	..	400			
Total	1,090	1,459	Total	1,090	1,459

	1897-98.					1898-99.				
	Number of tons of fuel carried.	Number of miles carried.	Total ton miles.	Actual charge for carrying.	Rate per ton mile.	Number of tons of fuel carried.	Number of miles carried.	Total ton miles.	Actual charge for carrying.	Rate per ton mile.
Work done	320	1½	400	Rs. 844	Rs. A. P. 2 11 7	335	1½	502½	Rs. 1,213	2 14 6

III.—South Coimbatore District.

Capital Account.

	1897-98.	1898-99.		1897-98.	1898-99.
	Rs.	Rs.		Rs.	Rs.
To balance from the previous year	45,086	42,745	By depreciation at 6 per cent.	2,728	2,565
„ extension of tram line	388	..	„ balance of stock	42,745	40,180
Total	45,473	42,745	Total	45,473	42,745

Statement showing the results of transport of wood by tramway, &c.—cont.

III.—South Coimbatore District—cont.

Revenue Account.

	1897-98.	1898-99.		1897-98.	1898-99.
To working expenses ..	Rs. 2,871	Rs. 2,728	By balance written off ..	Rs. 7,597	Rs. 5,526
.. depreciation at 6 per cent. ..	2,728	2,565			
.. interest at 4 per cent. ..	1,819	1,710			
.. repairs to road way ..	44	330			
.. repairs to tram trucks ..	135	153			
Total ..	7,597	5,526	Total ..	7,597	5,526

	1897-98.					1898-99.				
	Number of tons of timber carried.	Number of miles carried.	Total ton miles.	Actual charge for carrying.	Rate per ton mile.	Number of tons of timber carried.	Number of miles carried.	Total ton miles.	Actual charge for carrying.	Rate per ton mile.
Work done ..	1,022 tons (8,270½ candies or 40,880 c. ft.).	5½	5,621	Rs. 7,597	Rs. 1 5 7	116½ tons (372½ candies or 4,866 c. ft.). 227½ tons (727½ candies or 9,099 c. ft.). 30½ tons (98½ candies or 1,234 c. ft.).	5½ 3½ 3	611 868 93	Rs. 5,526	Rs. 3 8 9
								1,557		

ANNUAL FORM No. 80
Forest Department, Madras Presidency.
REGISTER OF BREACHES OF FOREST RULES DURING 1898-99.

District.	Cases pending from 1897-98.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Un-authorized 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.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.		Cases.		Persons.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Northern Circle.														
Ganjam ..	A	56	136	34	25	195	251	192	456	27	127	219	583	32
	B	11	136	13	19	168	179	..	..	..	..	42	405	21
	C	6	44	4	4	52	58	..	..	..	..	16	131	..
Total ..		73	316	51	48	415	488	192	456	27	127	435	1,119	53
Vizagapatam ..	A	52	224	119	47	395	447	363	1,132	47	139	410	1,271	37
	B	50	214	11	..	225	275	..	..	..	..	275	907	..
	C	3	194	65	..	189	192	..	..	..	..	192	516	..
Total ..		105	562	195	47	809	914	363	1,132	47	139	877	2,694	37
Godavari ..	A	17	79	17	15	115	132	89	235	19	45	409	283	24
	B	25	67	106	62	237	262	..	..	..	..	237	501	25
	C	..	94	..	8	101	101	..	..	..	..	82	250	..
Total ..		42	240	125	80	453	455	89	235	19	48	446	1,034	49
Krishna ..	A	29	46	39	9	154	183	141	493	24	108	165	601	18
	B	31	279	394	22	696	727	..	..	..	..	712	1,811	15
	C	..	25	128	8	161	161	..	..	..	..	41	110	..
Total ..		60	350	621	39	1,011	1,071	141	493	24	108	1,038	2,622	33
Kurnool ..	A	142	303	136	21	521	663	397	857	45	108	442	1,056	221
	B	111	185	148	16	349	460	..	..	..	..	348	893	112
	C	..	43	22	9	74	74	..	..	..	..	74	..	..
Total ..		253	531	306	46	944	1,107	397	857	45	193	864	1,948	333

• Cases undetected or withdrawn.

• Cases undetected.

* Cases undetected.

C. Cases undetected or withdrawn.

B. Cases compounded.

A. Cases taken into Court.

Register of Breaches of Forest Rules during 1898-99—cont.

District.	Cases pending from 1897-98.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		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.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Northern Circle—cont.														
Bellary ..	19	..	29	67	26	122	141	88	281	21	39	109	320	32
.. {	59	..	292	108	10	398	457	..	..	..	..	416	1,199	41
.. {	..	..	49	7	..	75	75	..	..	..	..	75	139	..
Total ..	78	..	370	180	86	596	673	88	281	21	39	600	1,658	73
Anantapur ..	31	..	123	90	10	223	254	176	572	63	320	239	902	15
.. {	23	..	69	145	8	222	245	..	..	..	..	209	626	36
.. {	..	..	19	20	6	56	56	..	..	..	..	{ 43 }	109	..
Total ..	64	..	211	255	24	601	555	176	572	63	320	504	1,537	51
Total, Northern Circle.	346	..	940	622	153	1,725	2,071	1,446	4,026	246	989	1,692	5,015	379
.. {	310	..	1,212	925	127	2,395	2,605	..	..	..	..	2,355	6,242	260
.. {	9	..	398	246	40	708	717	..	..	..	..	{ 168 }	1,255	..
Grand Total, Northern Circle ..	665	35	2,580	1,783	320	4,728	5,393	1,446	4,026	246	989	4,764	12,512	629
Central Circle.														
Cuddapah ..	43	1	149	137	5	292	335	269	665	41	199	310	864	25
.. {	45	..	235	368	5	608	653	..	..	..	..	666	1,487	67
.. {	13	2	113	109	13	237	250	..	..	..	..	250	602	..
Total ..	101	3	497	614	23	1,137	1,239	269	665	41	199	1,146	2,963	92
Nellore ..	45	..	103	266	12	371	416	335	673	29	94	364	767	52
.. {	3	..	45	24	2	71	74	..	..	..	..	66	183	8
.. {	6	..	13	62	1	76	82	..	..	..	..	82	..	..
Total ..	54	..	161	342	15	518	572	335	673	29	94	512	950	60
Chingleput ..	..	..	65	52	10	127	127	104	190	23	67	127	257	..
.. {	56	..	455	166	36	697	753	..	..	..	..	736	761	17
.. {	..	..	..	91	..	91	51	..	..	..	..	91	108	..
Total ..	56	..	550	309	45	915	971	104	190	23	67	954	1,126	17

A. Cases taken into Court.

B. Cases compounded.

C. Cases undetected or withdrawn.

* Cases undetected.

Register of Breaches of Forest Rules during 1898-99—cont.

District.	Cases pending from 1897-98.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Un-authorized 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.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Central Circle—cont.														
North Arcot	85	..	91	118	24	233	318	262	733	39	174	301	907	17
	122	..	632	1,057	44	1,733	1,855	..	..	..	..	1,552	3,608	303
	..	..	44	110	6	160	160	..	..	..	..	155	339	..
Total ..	207	..	787	1,285	74	2,126	2,333	262	733	39	174	2,013	4,914	320
South Arcot	63	1	433	371	62	867	930	681	1,843	65	221	746	2,061	154
	249	..	784	900	75	1,759	2,008	..	..	..	..	1,759	4,190	249
	2	8	228	81	23	340	342	..	..	..	..	342	422	..
Total ..	314	9	1,445	1,352	160	2,966	3,280	681	1,843	65	221	2,847	6,676	433
Salem	80	..	305	243	25	574	654	474	1,452	96	532	570	1,984	84
	156	..	539	601	25	1,165	1,320	..	..	..	..	1,168	3,106	152
	..	3	190	6	..	199	199	..	..	..	..	187	64	..
Total ..	235	3	1,035	850	50	1,938	2,173	474	1,452	96	532	1,937	5,744	236
Trichinopoly	33	1	197	88	14	300	333	254	840	64	163	318	1,003	15
	72	1	148	379	12	540	612	..	..	..	..	492	1,430	120
	1	..	27	19	1	47	48	..	..	..	..	48	..	..
Total ..	106	2	372	486	27	887	993	251	840	64	163	858	2,433	135
Tanjore	2	..	17	11	4	32	34	28	75	3	27	31	102	3
	1	..	25	13	1	39	40	..	..	..	..	31	57	9
	2	..	..	2	1	3	5	..	..	..	..	6	..	..
Total ..	5	..	42	26	6	74	79	28	75	3	27	67	159	12
Total, Central Circle.	351	3	1,361	1,276	156	2,796	3,147	2,407	6,471	360	1,477	2,767	7,948	380
	703	1	2,903	3,408	200	6,612	7,315	..	..	..	..	6,330	14,882	925
	24	13	615	480	45	1,153	1,177	..	..	..	..	1,160	2,125	..
Grand Total, Central Circle	1,078	17	4,879	5,264	401	10,561	11,639	2,407	6,471	360	1,477	10,334	24,955	1,305

A. Cases taken into Court.

B. Cases compounded.

C. Cases undetected or withdrawn under section 49 of the Forest Act.

* Cases undetected.

† The Collector has not explained the discrepancy between the closing balance of 1897-98 and the opening balance of 1898-99.

Register of Breaches of Forest Rules during 1898-99—cont.

District.	Cases pending from 1897-98.	New cases of the year.						Total cases.	Disposed of during the year.						Cases pending at close of year.
		New cases of the year.							Disposed of during the year.						
		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.	Convictions.		Acquittals.		Total.				
		3	4	5	6	7	8	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.		
1	2							9	10	11	12	13	14	15	
Southern Circle.															
South Canara †	69	4	140	16	31	191	251	171	832	50	108	221	440	30	
A	39	33	257	1	42	300	329	..	..	..	..	264	451	75	
B	2	..	7	1	1	42	41	..	..	..	..	44	81	..	
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	101	37	404	18	74	533	634	171	332	50	108	529	976	103	
North Malabar	3	..	..	6	4	10	13	7	9	4	7	11	16	2	
A	4	..	..	2	1	3	7	..	..	..	..	7	7	..	
B	..	..	..	..	2	2	2	..	..	..	..	2	2	..	
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	7	..	..	8	7	15	22	7	9	4	7	20	25	2	
South Malabar	3	1	14	..	..	15	18	13	32	..	..	13	32	5	
A	..	..	4	..	..	4	4	..	..	..	..	4	11	..	
B	..	..	1	..	..	2	2	..	..	..	..	2	..	..	
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	3	1	19	..	1	21	24	13	32	..	..	19	43	5	
The Nilgiris	44	..	36	52	23	111	155	115	329	5	44	120	373	35	
A	3	1	11	5	1	18	21	..	..	..	..	21	42	..	
B	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
C	11	7	4	..	..	11	22	..	..	..	..	7	41	..	
Total	58	8	51	57	24	140	198	115	329	5	44	156	459	36	
North Coimbatore.	19	5	80	115	12	212	261	192	543	31	138	223	681	38	
A	9	1	63	75	3	142	151	..	..	..	..	137	360	14	
B	7	..	30	58	6	94	101	..	..	..	..	101	299	..	
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	35	6	173	278	21	475	513	192	543	31	138	461	1,340	52	
South Coimbatore..	29	2	81	19	8	110	139	95	309	15	53	110	362	29	
A	44	..	128	77	5	240	254	..	..	..	..	232	651	22	
B	17	..	27	14	4	45	62	..	..	..	..	62	113	..	
C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	90	2	236	110	17	365	455	95	309	15	53	404	1,020	51	

A. Cases taken to Court.

* Cases undetected.

B. Cases compounded.

C. Cases withdrawn and undetected.

† Excludes 1,846 petty offences committed by 2,142 persons let off with a warning.

Register of Breaches of Forest Rules during 1898-99—cont.

District.	Cases pending from 1897-98.	New cases of the year.						Total cases.	Disposed of during the year.						Cases pending at close of year.
		New cases of the year.							Disposed of during the year.						
		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 offenses.	Total new cases of the year.	Convictions.		Acquittals.	Total.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Southern Circle—cont.															
Madara ..	{ A .. B .. C .. Total ..	77	5	214	325	19	563	640	456	1,291	37	127	493	1,418	117
		13	..	127	124	1	252	265	..	..	..	..	265	690	..
		17	..	27	13	6	45	63	..	..	..	..	63	..	..
		† 107	5	368	462	26	891	968	456	1,291	37	127	821	2,108	117
Tinnevely ..	{ A .. B .. C .. Total ..	1	1	44	6	2	53	51	41	106	6	21	47	127	7
		48	..	222	182	19	373	421	..	..	..	..	395	1,212	26
		7	32	96	36	3	167	174	..	..	..	..	{ 99 75 }	..	..
		56	33	362	174	24	593	649	41	106	6	21	616	1,339	33
Total, Southern Circle.	{ A .. B .. C .. Total ..	236	18	609	569	99	1,295	1,531	1,090	2,951	148	498	1,238	3,449	293
		160	2	812	416	73	1,302	1,462	..	..	..	..	1,325	3,324	137
		61	72	192	122	23	409	470	..	..	..	..	{ 388 82 }	542	..
		457	92	1,613	1,107	194	3,006	3,463	1,090	2,951	148	498	3,033	7,315	430
Total, Presidency..	{ A .. B .. C .. Grand Total, Presidency ..	933	31	2,910	2,467	408	5,816	6,749	4,943	13,448	754	2,964	5,697	16,412	1,032
		1,173	4	4,957	4,840	399	10,209	11,382	..	..	..	..	10,070	24,448	1,312
		94	109	1,205	848	108	2,270	2,364	..	..	..	..	{ 2,097 267 }	3,922	..
		2,200	144	9,072	8,164	915	18,295	20,495	4,942	13,448	754	2,964	18,131	41,782	2,364

A. Cases taken to Court.

* Cases undetected.

B. Cases compounded.

C. Cases withdrawn and undetected.

† The closing balance of the previous year was 112. The Collector has not explained the variation.

AREA of Forest Tracts protected from Fire during 1898-99.

District.	Forest tracts.	Year in which protection commenced.	During dry season of 1899.			Cost during the season.	Remarks.
			Area protected during the previous year.	Area attempted to be protected.	Fires.	Actually protected.	
1	2	3	4	5	6	7	8
Ganjām— Kukuluba.	<i>Northern Circle.</i>						
	Gogodo	1890 ..	ACS. 16,160	ACS. 15,240	ACS. 150	ACS. 15,090	RS. 64
	Chodnapalli ..	1891 ..	907	907	100	807	..
	Chendragiri ..	1885 ..	18,090	18,320	800	18,020	128
	Brahmanos i ..	1889 ..	7,980	8,080	150	7,930	62
	Total, Kukuluba ..	..	42,137	42,547	700	41,847	252
Mojja- guda.	Tiliki	1889 ..	3,900	4,000	93	3,907	31
	Dhinirijholi ..	1889 ..	5,306	5,486	110	5,376	31
	Darpangia	1889 ..	5,760	6,000	125	5,875	47
	Gulleri	1889 ..	22,890	23,860	358	23,502	123
	Kallamba	1889 ..	8,776	8,896	111	8,785	62
	Baiballi	1889 ..	9,925	10,000	70	9,930	47
	Total, Mojjagudā ..	..	56,657	58,242	867	57,375	341
Suradā ..	Dabuki	1890 ..	1,250	1,450	140	1,310	48
	Dougam	1889 ..	2,200	2,400	400	2,000	10
	Pippalapunka ..	1889 ..	3,200	4,000	620	3,350	64
	Total, Surada ..	..	6,650	7,850	1,160	6,690	128
Buguda ..	Panchabhuthi ..	1889 ..	4,320	4,320	600	3,720	64
	Kurcholi	1889 ..	4,920	5,520	400	5,120	64
	Total, Buguda ..	..	9,240	9,840	1,000	8,840	128
Berhampore	Ramagoda	1885 ..	6,613	6,620	117	6,503	28
	Batnamari	1885 ..	3,746	3,750	68	3,682	28
	South mohiri ..	1885 ..	3,749	3,750	46	3,704	28
	Total, Berhampore ..	..	14,108	14,120	231	13,889	84
	Total, Ganjām ..	..	128,792	132,599	3,958	128,641	928
Vizaga- patam.	Peddapalli	1889 ..	9,075	9,077	..	9,077	58
	Barnakonda	..	15,740	16,405	833	15,672	60
	Chinnagora	..	2,040	2,047	86	1,981	45
	Itchapuram	..	899	900	675	225	20
	Antikonda	..	6,750	6,829	20	6,809	50
	Paakonda	1897 ..	5,098	8,320	89	8,231	40
	Kadagandi	..	9,820	9,920	1,933	7,987	80
	Do. III	..	1,657	816	305	511	..
	Garugubilli	1899 ..	..	27	2	25	..
	Arlova	1892 ..	2,685	2,473	..	2,473	27
	Madalammakonda ..	..	3,508	3,600	25	3,575	15
	Karakakonda	..	5,738	6,270	145	6,125	51
	Pedimikonda	..	4,260	3,227	1	3,226	24
	Kakarlakonda	..	4,052	1,924	..	1,924	6
	Kodavatipudi	..	1,544	1,544	40	1,504	7
Gódávári (Special)— Bhadra- chalam.	Venkatapuram ..	..	508	..	..	508	..
	Boddapalem	1899 ..	..	380	..	380	6
	Sitakhadi	..	..	4,570	250	4,320	..
	Total, Vizagapatam ..	..	73,470	78,837	4,404	74,433	492 + 15
Marrigudem range.	Dummagudem reserved forest.	1887 ..	6,049	6,110	2	6,108	203
	Arlagudem reserved forest	1888 ..	6,124	6,136	6	6,130	218
	Gogubaka	1887 ..	1,866	1,665	1	1,665	50
	Total, Bhadrachalam ..	..	13,839	13,912	9	13,903	471
Ekapalli range.	Repak	1887 ..	5,760	7,000	3,000	4,000	111
	Ramschandram ..	1887 ..	10,220	10,300	..	10,300	218
	Tallanka	1887 ..	10,665	12,000	65	11,935	228
	Total, Marrigudem ..	..	26,645	29,300	3,065	26,235	557
	Mattapalli reserve ..	1889 ..	7,794	9,500	1,630	7,964	218
	Total, Gódávári (Special).	..	48,278	52,712	4,610	48,102	1,241

Added as per Accountant-General's audited figures.

Area of Forest Tracts protected from Fire during 1898-99—cont.

District.	Forest tracts.	Year in which protection commenced.	Area protected during the previous year.	During dry season of 1899.		Cost during the season.	Remarks.
				Area attempted to be protected.	Fires.	Actually protected.	
1	2	3	4	5	6	7	8
Gódávári (General)— Rajahmundry range.	<i>Northern Circle—cont.</i>						
	Devacheruvu reserved forest.	1887 ..	ACS. 2,051	ACS. 2,051	ACS. ..	ACS. 2,051	RS. 40
	Kovida reserved forest.	1889 ..	1,280	1,280	..	1,280	40
	Murari d.o. ..	1889 ..	700	700	..	700	22
	Sudikonda d.o. ..	1887 ..	6,849	6,880	760	6,120	34
Peddapuram range.	Tirumalayapalem reserved forest.	1887 ..	5,150	5,150	56	5,094	52
	Mallavaram reserved forest.	1887 ..	7,600	7,600	256	7,344	38
	Molleru reserved forest.	1887 ..	8,236	8,250	1,264	6,986	18
	Lakkonda d.o. ..	1887 ..	13,094	13,104	1,622	11,482	34
	Total, Rajahmundry ..	..	44,960	45,015	3,658	41,057	278
Yernagudem range.	Thotapalli	1890 ..	2,050	2,150	20	2,130	30
	Jilugumalli reserved forest.	1898 ..	3,300	3,300	10	3,290	60
	Boddadavols reserved forest.	1890 ..	14,760	15,000	48	14,952	220
	Marlagudem reserved forest.	1890 ..	2,099	2,100	4	2,096	102
	Barrinkalapadu reserved forest.	1898 ..	1,650	1,650	5	1,645	57
	Total, Yernagudem ..	..	21,809	22,050	67	21,983	439
Ellore range.	Barrikonda reserved forest.	1888 ..	3,500	3,500	325	3,175	140
	Bandamcherla reserved forest.	1888 ..	5,200	5,200	..	5,200	102
	Erragontapalli reserved forest.	1888 ..	7,941	8,640	..	8,640	161
	Total, Ellore ..	..	16,641	17,340	325	17,015	403
	Total, Gódávári (General).	..	85,460	86,556	4,370	82,185	1,150
Kistna (Special)— Bezawada range.	Grand Total, Gódávári (Special and General).	..	133,738	133,267	8,980	130,287	2,391
	Kondapalli reserve compartments 6, 10, 13, 14.	1884-85 ..	5,758	5,570	30	5,540	181
	Total, Kistna (Special) ..	..	5,758	5,570	30	5,540	181
	Kistna (General)—Bezawada range.	..	..	..	..	..	..
	Kistur extension 1 ..	1894-95 ..	700	700	..	700	..
Guntūr ..	Dasullapalem	1896-97 ..	1,260	1,260	..	1,260	..
	Total, Bezawada ..	..	1,960	1,960	..	1,960	..
	Karlapudi	1896-97 ..	619	619	..	619	..
	Tadepalli	1889-1890 ..	1,000	2,305	..	2,305	..
	Kondavid	1888-89 ..	4,516	12,857	..	12,857	..
	Total, Guntūr ..	..	6,135	15,781	..	15,781	..
Sattenapalli.	Venkatayapalem reserve compartments 2, 5, 6, 13, 15.	1894-95 ..	15,588	15,588	288	15,300	5
	Total, Sattenapalli ..	..	15,588	15,588	288	15,300	5
Palnad ..	Gangalakunta reserve ..	1890-91 ..	24,840	24,461	..	24,461	..
	Pasvinula reserve compartments 1 to 3.	1892-93 ..	10,158	10,158	..	10,158	..
	Total, Palnad ..	..	34,998	34,619	..	34,619	..
Vinukonda.	Hollapalli reserve compartments I to VI.	1885-86 ..	20,700	20,700	..	20,700	..
	Total, Kistna (General) ..	..	79,381	88,648	288	88,360	5
	Grand Total, Kistna (Special and General).	..	85,139	94,218	318	93,900	186

Cost of establishment.

Cost of putting out fire.

Area of Forest Tracts protected from Fire during 1898-99—cont.

District.	Forest tracts.	Year in which protection commenced.	Area protected during the previous year.	During dry season of 1899.			Cost during the season.	Remarks.
				Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
	<i>Northern Circle—cont.</i>		ACS.	ACS.	ACS.	ACS.	RS.	
Kurnool	North and South Banduti blocks.	1887 ..	15,150	17,700	1,978	15,722	130	
	"A" block	1889 ..	7,200	8,000	3,200	4,800	369	
	South Chelama	1891 ..	..	8,000	650	7,350	613	
	South Chelama addition ..	1894 ..	..	4,000	..	4,000	81	
	Gummalakonda	1893 ..	4,100	6,000	80	5,920	203	
	Diguvametta	1891 ..	..	800	800	..	28	
	Zangambhavi	1891 ..	140	140	..	140	28	
	Western Veligonda	1889 ..	6,582	17,780	4	17,776	85	
	East and West Ramalla-kota reserves.	1890 ..	4,720	..	..	..	12	
	Gadidamadugu	1893 ..	1,752	..	..	..	8	
	Tekulakonda	1891 ..	715	..	..	..	3	
	Tuvvakonda	1891 ..	6,700	..	..	..	12	
	Chelama Improvement felling block.	1895 ..	1,000	2,000	300	1,700	75	
	Total, Kurnool	..	48,357	64,120	6,962	57,158	1,947 + 578	Represents cost of protecting district, taluk and reserve boundary lines in Sirvel range and of cutting grass on each side of the railway line in Nandyal and Cumbum.
Bellary (Special)—Sandur ..	Ramantray range	1883 ..	14,385	14,785	55	14,730	780	
	North-East range	1883 ..	16,010	16,010	..	16,010	853	
	Dominialui	1883 ..	9,205	9,205	1,000	7,305	689	
	Total, Sandur	..	39,600	40,000	1,955	38,045	2,302	
Bellary ..	Malapanagudy	1886-87 ..	1,066	1,066	..	1,066	..	
	Kaddigi	..	18,163	..	..	..	..	
	Total, Bellary range ..	..	19,229	1,066	..	1,066	..	
	Total, Bellary (Special) ..	..	58,829	41,066	1,955	39,111	2,302	
Bellary (General)—Adoni ..	Kuppigal	1892-93 ..	430	500	40	460	9	
	Tungabhadra	..	..	60	10	50	..	
	Ganekal	1890-91 ..	1,074	1,074	100	574	..	
	Tornagal	1889 ..	..	50	..	50	12	
	Total, Bellary (General) ..	..	1,504	1,684	150	1,534	21 + 11	Incurred in putting out fires, &c., in Bandri and Jangal-gutta.
	Grand Total, Bellary (Special and General) ..	..	60,333	42,750	2,105	40,645	2,334	
Anantapur—Special ..	Koljipalli	1889 ..	342	342	..	342	32	
	Anantapur	1889 ..	129	129	..	129	20	
	Machukota	1884 ..	10,879	7,000	10	6,990	277	
	Dargam	1894 ..	8,640	3,640	..	3,640	198	
	Kotakota	1884 ..	10,516	11,016	1,060	9,956	418	
	Total, Anantapur (Special) ..	..	25,506	22,127	1,070	21,057	945	
General ..	Amagondapalayam	1884 ..	15,314	15,360	300	15,160	160	
	Gopidevarapalli	1891 ..	1,884	1,884	..	1,884	36	
	Nyalakota	1890 ..	12,128	12,156	800	11,356	128	
	Dokkalakonda	1898 ..	7,420	7,420	300	7,220	64	
	Guttur, West	1887 ..	3,880	3,880	1,000	2,880	69	
	Kekathi	1898 ..	1,235	1,235	..	1,235	..	
	Koderu	1887 ..	10,714	..	..	..	..	
	Ramagiri	1890 ..	9,527	..	..	..	..	
	Penukonda	1880 ..	4,642	..	..	..	..	
	Yerralampalli	1890 ..	2,959	..	..	..	..	
	Mallappakonda	1886 ..	4,370	..	..	..	..	

Area of Forest Tracts protected from Fire during 1898-99—cont.

District.	Forest tracts.	Year in which protection commenced.	Area protected during the previous year.	During dry season of 1899.			Cost during the season.	Remarks.
				Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
Northern Circle—cont.			ACS.	ACS.	ACS.	ACS.	RS.	
General—cont.	Narsanipalli	1886 ..	2,210	..	..	..	..	
	Somandapalli	1891 ..	9,232	..	..	..	..	
	Somarazmalai	1885 ..	2,115	..	..	..	..	
	Total, Anantapur (General).	..	87,655	41,935	2,200	39,735	457	
	Grand Total, Anantapur (Special and General).	..	113,161	61,062	3,270	60,792	1,402	
	Total, Northern Circle (Special).	..	138,371	121,475	7,665	113,810	4,669	
	Total, Northern Circle (General).	..	504,619	491,678	22,332	472,346	5,609	
	Grand Total, Northern Circle.	..	642,990	615,153	29,997	586,156	10,278	
Central Circle.								
Special	Lankamalai	1883 ..	5,550	7,000	660	6,340	680	This area was shown under "General" last year.
	Kottakota-Dasaripalli ..	1883-85-89	99,620	51,200	460	50,740	636	
	Yerakonda and its extension.	1899 ..	..	32,000	2,706	29,294	85	
	Total, Special	..	105,170	90,200	3,826	86,374	1,401	
General	Kodur reserve	1874 ..	5,990	7,440	990	6,450	171	
	Bettigunta do.	1871 ..	8,950	8,960	362	8,608	179	
	Tunukonda do.	1874 ..	1,020	1,048	..	1,048	51	
	Seshachalam do.	1867-73-90	163,777	176,200	5,993	170,207	1,628	
	Vattalur do.	1887 ..	2,880	2,880	..	2,880	56	
	Nigadi do.	1881 ..	13,990	14,000	..	14,000	93	
	Kondakemarla do. .. ..	.. ..	3,700	3,700	..	3,700	14	
	Tummalamala do.	1890 ..	8,500	8,500	60	8,460	52	
	Kokanti do.	1881 ..	1,940	2,000	..	2,000	14	
	Tadukonda do. .. ..	.. ..	2,200	2,200	..	2,200	14	
	Madugumala do. .. ..	.. ..	1,400	1,400	..	1,400	16	
	Horsleykonda do. .. ..	.. ..	15,485	15,500	..	15,500	105	
	Nirruakupalakonda reserve.	.. ..	3,600	3,600	..	3,600	52	
	Yellutla reserve .. ..	.. ..	3,500	3,500	..	3,500	14	
	Ankalammakonda reserve.	.. ..	2,000	2,000	..	2,000	53	
	Gorantlapalli reserve .. ..	.. ..	4,000	4,000	..	4,000	14	
	Mamtilapalli do.	1883-88 ..	5,000	5,000	..	5,000	99	
	Palkonda do.	1890 ..	..	1,000	..	1,000	255	
	Guvvalacheruvu do.	1883 ..	7,600	7,600	..	7,600	1	
	Bekkalakonda do.	1887 ..	1,200	1,200	..	1,200	14	
	Urakonda do.	1881 ..	8,960	8,960	..	8,960	19	
	Gadikota do.	1883 ..	12,480	12,480	1,720	10,760	111	
	Sibiyala do.	1887 ..	3,500	3,500	..	3,500	39	
	Kanamalapalli do. .. ..	.. ..	3,805	4,435	286	4,149	84	
	Tandupalli do. .. ..	.. ..	3,000	3,000	..	3,000	17	
	Kondasunkesala and Diguva Kalwasala reserve.	1881 ..	858	858	..	858	22	
	Dhodi-Morapandi reserve.	.. ..	1,105	1,345	..	1,345	22	
	Kodur Malamidi-Kampildinne reserve.	.. ..	1,366	1,366	..	1,366	22	
	Gandiliah reserve .. ..	.. ..	372	372	..	372	22	
	Zamavaram-Maddanur reserve.	.. ..	200	200	..	200	14	
	Kosinipalli-Kalamella reserve.	.. ..	730	730	..	730	14	
	Aratipalle-Poddadudyala reserve.	.. ..	750	750	..	750	14	
	Niduguvvi reserve .. ..	.. ..	696	696	..	696	14	
	Total, General	..	294,554	310,420	9,301	301,119	3,809	
	Total, Special and General, Cuddapah.	..	399,724	400,620	13,127	387,493	4,710	

Area of Forest Tracts protected from Fire during 1898-99—cont.

Districts.	Forest tracts.	Year in which protection commenced.	Area protected during the previous year.	During dry season of 1899.			Cost during the season.	Remarks.
				Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
Nellore— Udayagiri range. Atmakur range. Rapur range. Kanigiri			Central Circle—cont.		ACB.	ACB.	ACB.	RS.
	Udayagiri-Veligonda	1883	59,336	60,000	..	60,000	333	
	Rapur-Veligonda	1883	28,799	30,720	..	30,720	222	
	Kanigiri-Veligonda	1883	25,000	25,000	..	25,000	53	
	Total, Nellore General	..	113,135	115,720	..	115,720	608	
Chingleput— Special	Kambakkam reserved forest.	1883-84	14,951	14,951	..	14,951	91	
	Nagalapuram reserved forest.	1883-84	8,295	8,345	..	8,345	48	
	Pulambakkam	1883-84	555	577	..	577	..	
	Total, Chingleput Special.	..	23,801	23,873	..	23,873	139 + 170	Added as per Accountant-General's audited figures.
North Arcot— Special Chittoor range.	Irala	1888	15,570	15,622	1	15,621	106	
	Chittapara	1888	4,250	4,250	..	4,250	18	
	Mahimodalam	1888	2,516	2,528	..	2,528	10	
	Cherlopalli	1884	1,296	1,296	..	1,296	10	
	Pachigunta	1888	1,800	1,801	..	1,801	20	
	Paradarami	1880	15,003	13,402	..	13,402	44	
	Virisetipalli	1888	7,287	7,287	..	7,287	12	
	Puthalpet	1891	2,442	2,442	10	2,432	15	
	Parappumalai	..	..	..	..	2,227	33	
	Tavanampalli	..	..	1,802	..	1,802	25	
	Total, Chittoor range	..	50,164	52,657	11	52,646	293	
Chandragiri.	Napier	1880	8,380	8,380	..	8,380	139	
	Mamandur	1874	1,747	1,776	..	1,776	48	
	Do. extension	1883	8,000	8,000	..	8,000	143	
	Mungilpatpur	1890	22,689	22,700	..	22,700	56	
	Panapakam	1880	6,350	6,400	..	6,400	76	
	Chamala	1880	5,760	9,600	..	9,600	118	
	Nagapatla	1890	8,075	8,266	..	8,266	63	
	Tirupati hill	1888	16,000	16,000	90	15,910	92	
	Do. extension	1891	4,930	5,840	255	5,585	29	
	Panapakam extension	1892	9,730	9,730	..	9,730	8	
	Padipatlabylu	1880	2,560	2,560	..	2,560	4	
	Sanambhalu	1892	4,864	..	..	..	..	
	Damalcherla	..	..	2,417	..	2,417	8	Transferred to General protection.
	Total, Chandragiri	..	99,985	101,669	845	101,324	784	
Palmanér	Peddanaidrug	1880	12,759	14,419	..	14,419	22	
	Mordana	1884	12,098	11,655	..	11,655	50	
	Charagal	1888	18,911	18,285	..	18,285	33	
	Peldur	1880	8,017	16,526	20	16,506	39	
	Naikaneri	1880	3,170	6,840	..	6,840	5	
	Musilnadugu	1884	7,833	5,642	..	5,642	88	
	Palmanér	1892	1,791	1,791	..	1,791	26	
	Total, Palmanér	..	64,579	75,058	20	75,036	263	
Gudiyattam.	Panunadangi	1887	9,340	10,515	..	10,515	78	
	Naikaneri	1884	2,830	5,179	..	5,179	32	
	Mordana	1884	10,450	12,691	..	12,691	58	
	Ambur drug	1884	5,060	10,139	..	10,139	48	
	Kampasamudram	1893	1,238	1,415	..	1,415	20	
	Naikaneri	1887	1,280	1,568	25	1,543	28	
	Mordana	1891	9,598	9,094	50	9,044	59	
	Gundlapalli	1894	8,358	7,354	..	7,354	36	
	Do. extension	1894	800	928	..	928	..	
	Sayanagunta	1891	6,400	6,400	..	6,400	32	
	Do. extension	1892	4,395	4,395	..	4,395	34	
	Kallapadi	1894	8,300	7,283	..	7,283	10	
	Kanjapur	1893	2,480	1,549	..	1,549	20	
	Paradarami extension	1889	1,900	1,888	..	1,888	7	
	Karapet	1892	7,698	8,383	415	7,918	61	
	Total, Gudiyattam	..	78,102	88,781	490	88,241	623	

Area of Forest Tracts protected from Fire during 1898-99—cont.

District.	Forest tracts.	Year in which protection commenced.	Area protected during the previous year.	During dry season of 1899.			Cost during the season.	Remarks.
				Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
North Arcot— Special—cont.			Central Circle—cont.		ACB.	ACB.	ACB.	RS.
	Arasampattu	1887	31,480	17,890	..	17,890	233	
	Ambur fuel	1879	3,310	5,453	..	5,453	151	
	Vellakal	1889	5,269	5,037	..	5,037	66	
	Ambur block	1887	24,885	27,878	..	27,878	182	
	Athiyur	1889	4,808	4,800	..	4,800	32	
	Palamadi	1880	6,200	8,160	100	8,160	105	
	Thellai (Vellore portion)	1891	9,151	1,330	..	1,330	60	
	Karuthamalai	1882	11,856	20,486	..	20,486	190	
	Kylasagiri	1892	1,095	2,534	20	2,514	101	
	Kaniambadi	1892	1,114	5,472	..	5,472	28	
	Nellimalai	1892	1,490	2,797	..	2,797	15	
	Sanankuppam	1893	5,421	13,843	..	13,843	51	
	Pannamalai	1892	3,962	2,078	..	2,078	34	
	Vellore	1892	..	2,413	5	2,408	20	
	Pallikondai	1892	1,990	3,898	..	3,898	11	
	Appukal	1892	700	800	..	800	25	
	Total, Vellore	..	113,261	124,869	125	124,744	1,304	
Pólár	Karnatighur	1881	7,069	7,270	..	7,270	240	
	Malayalam	1887	9,822	28,615	5	28,610	147	
	Malakad	1890	16,457	15,714	20	15,724	179	
	Santavasal	1890	7,988	9,670	..	9,670	46	
	Poriyanalai	1892	1,157	6,970	10	6,960	50	
	Paruvadamalai	1892	3,750	5,779	..	5,779	41	
	Thellai (Pólár portion)	1891	5,670	14,862	..	14,862	24	
	Vellimalai	1893	992	2,003	..	2,003	22	
	Kelur	1884	2,866	2,989	..	2,989	7	
	Virappanur	1886	68,950	31,469	..	31,469	96	
	Total, Pólár	..	119,721	125,371	35	125,336	852	
Arcot-Wallajah.	Banavaram	1880	1,050	1,051	..	1,051	..	
	Pingannur	1884	3,635	13,498	2,136	11,262	94	
	Ammut	1884	5,872	5,139	200	4,939	43	
	Total, Arcot-Wallajah	..	10,557	19,688	2,336	17,352	137	
	Total, Special, North Arcot.	..	535,499	588,013	3,362	584,681	4,156 + 40	
General.			Kinatipalle		1884	1,417	1,417	..
	Santhapet	1882	2,096	2,096	..	2,096	..	
	Basavapalli	1888	1,937	1,784	..	1,784	..	
	Bommasamudram	1891	1,242	1,242	..	1,242	..	
	Vadilatata	1891	2,495	2,495	..	2,495	..	
	Tavanampalli	1891	1,830	..	..	..	..	
	Chittoor	1882	300	300	..	300	..	
	Bommasamudram extension.	1892	1,500	1,312	..	1,312	..	
Chittoor	Kinatipalli extension	1893	1,500	1,500	..	1,500	..	
	Basavapalle do.	1894	830	830	..	830	..	
	Reddigunta	1893	2,479	2,479	..	2,479	..	
	Obase's hill	1893	1,773	1,773	..	1,773	..	
	Irala extension	1893	3,092	3,092	..	3,092	..	
	Penumur	1891	2,097	1,082	..	1,082	..	
	Parappumalai	1893	1,741	..	..	..	..	
	Penamur	1893	3,392	3,392	..	3,392	..	
	Santhapet extension	1893	477	477	..	477	..	
	Total, Chittoor	..	30,228	25,271	..	25,271	..	
Chandragiri.	Chandragiri hill	1892	983	983	..	983	..	
	Damalcherla	1892	2,417	..	..	..	..	
	Sanambhalu	1892	5,000	..	6	4,991	..	
	Pakala A and B	1894	2,170	..	..	2,170	..	
	Total, Chandragiri	..	5,570	8,315	6	8,147	..	

* Deducted as per Accountant-General's audited figures.

rs.
Amount spent on fire patrol .. 1,606
Amount spent on fire line .. 2,510
clearing 945 miles
Total .. 4,116

Transferred to special protection during 1898-99.

Transferred to special protection during 1898-99.

Area of Forest Tracts protected from Fire during 1898-99--cont.

District.	Forest tracts.	Year in which protection commenced.	Area protected during the previous year.	During dry season of 1899.			Cost during the season.	Remarks.
				Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
North Arcot-- cont.	Central Circle--cont.		ACS.	ACS.	ACS.	ACS.	RS.	
General--cont.	Basavareddipalli ..	1884 ..	10,190	5,952	..	5,952	..	
	Palmanér tope ..	1881 ..	2	2	..	2	..	
	Nagamangalam ..	1884 ..	31	20	..	20	..	
	Moduviripalli ..	1881 ..	20	4	..	4	..	
	V. Kota tope ..	1884 ..	4	9	..	9	..	
	Bairreddipalli tope ..	1884 ..	4	4	..	4	..	
	Melmoyt ..	1884 ..	960	1,568	..	1,568	..	
	Jangalappalle ..	1884 ..	3,124	3,034	..	3,034	..	
Palmanér ..	Pattikonda ..	1893 ..	4,480	5,190	..	5,190	..	
	Poddur extension ..	1895 ..	9,550	9,550	..	9,550	..	
	Musalimadaga extension ..	1895 ..	1,849	1,849	..	1,849	..	
	Basavareddipalli A ..	1895 ..	1,760	1,760	..	1,760	..	
	Do. B ..	1895 ..	3,320	5,758	..	5,758	..	
	Alapalli ..	1895 ..	2,100	2,029	..	2,029	..	
	Nelipatla ..	1895 ..	7,680	7,705	..	7,705	..	
	Veerlaburda ..	1895 ..	2,620	2,611	..	2,611	..	
	Thotakanama ..	1895 ..	5,210	5,498	..	5,498	..	
	Total, Palmanér ..		52,904	52,543	..	52,543	..	
	Tiruvallam plantation ..	1884 ..	435	431	..	431	..	
	Virinjipuram do. ..	1884 ..	260	260	..	260	..	
	Cheynur ..	1884 ..	130	130	..	130	..	
	Ammundi ..	1884 ..	160	160	..	160	..	
	Tandrayaganta ..	1884 ..	2	8	..	3	..	
	Vikramasi ..	1884 ..	161	129	..	129	..	
	Pallelakuppam ..	1892 ..	6,212	6,822	..	6,822	..	
	Do. extension A ..	1893 ..	6,400	6,822	..	6,822	..	
	Do. extension B ..	1893 ..	925	907	..	907	..	
	Total, Gudiyattam ..		14,655	15,661	..	15,664	..	
	Amerdi plantation ..	1884 ..	25	25	..	25	..	
	Patrakad ..	1881 ..	18,000	25,254	..	25,254	..	
	Puttur ..	1879 ..	12,794	18,468	..	18,458	..	
	Thapalur ..	1884 ..	1,114	1,504	..	1,504	..	
	Alalamangalam ..	1884 ..	10,027	10,027	..	10,027	..	
	Santavasal extension ..	1892 ..	260	260	..	260	..	
	Total, Pólár ..		42,220	55,528	..	55,528	..	
	Ambar tope ..	1884 ..	5	5	..	5	..	
	Vellore ..	1892 ..	997	..	..	..	..	
	Total, Vellore ..		1,002	5	..	5	..	
	Brahmanamateri ..	1884 ..	635	635	..	635	..	
	Kodiyalam ..	1884 ..	125	125	..	125	..	
	Badur ..	1884 ..	783	783	..	783	..	
	Vengunam ..	1884 ..	1,288	1,288	..	1,288	..	
	Nambudu ..	1884 ..	707	707	..	707	..	
	Vishamangalam ..	1884 ..	1,148	1,148	..	1,148	..	
	Ponnur ..	1884 ..	769	769	..	769	..	
	Nedungul ..	1884 ..	3,280	3,280	..	3,280	..	
	Nedungunam ..	1884 ..	1,697	1,697	..	1,697	..	
	Nambudu extensions A, B and C ..	1895 ..	327	327	..	327	..	
	Total, Wandiwash ..		10,769	10,769	..	10,769	..	
	Kilminal plantation ..	1884 ..	150	150	..	150	..	
	Saunleri ..	1884 ..	1,675	1,675	..	1,675	..	
	Sathur ..	1884 ..	709	750	..	750	..	
	Tandappanthangal ..	1884 ..	1,092	1,099	..	1,099	..	
	Enadanadi ..	1884 ..	1,565	1,565	..	1,565	..	
	Solavaram ..	1884 ..	1,143	1,143	..	1,143	..	
	Do. extension ..	1895 ..	700	874	..	874	..	
	Tandappanthangal ..	1895 ..	292	310	..	310	..	
	Total, Arcot ..		7,326	7,568	..	7,568	..	

Transferred to special protection during 1898-99.

Area of Forest Tracts protected from Fire during 1898-99--cont.

District.	Forest tracts.	Year in which protection commenced.	Area protected during the previous year.	During dry season of 1899.			Cost during the season.	Remarks.
				Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
North Arcot-- cont.	Central Circle--cont.		ACS.	ACS.	ACS.	ACS.	RS.	
General--cont.	Vannivedu plantation ..	1884 ..	39	39	..	39	..	
	Arkenam tope ..	1884 ..	37	37	..	37	..	
	Gudalur ..	1884 ..	535	535	..	535	..	
Wallajah ..	Ananthapuram ..	1880 ..	546	540	..	540	..	
	Anmur ..	1880 ..	203	203	..	203	..	
	Kolattur ..	1881 ..	1,729	1,729	..	1,729	..	
	Arkenam Head Assistant Collector's compound ..	1884 ..	4	4	..	4	..	
	Total, Wallajah ..		3,078	3,078	..	3,078	..	
	Total, General ..		167,772	178,567	6	178,561	..	
	Total, Special and General, North Arcot ..		703,241	766,619	3,368	763,242	4,116	
South Arcot.	Annamal reserved forest ..	1878 ..	2,580	2,640	..	2,640	158	
Special-- Tiruvannamalai.	Kavuthi reserved forest ..	1878 ..	7,055	7,085	..	7,085	127	
	Total, Special, Tiruvannamalai ..		9,635	9,725	..	9,725	285	
Kallakurichi ..	Tagarai reserved forest ..	1883-84 ..	14,188	14,338	18	14,320	43	
	Total, Special South Arcot ..		23,823	24,063	18	24,045	328	
	Tennalai reserved forest ..	1877 ..	31,092	31,706	105	31,601	637	
	Nallipet reserved forest ..	1889 ..	4,687	5,094	..	5,094	285	
	Pelamarudur ..	1889 ..	5,030	5,075	..	5,075	311	
General.	Paramanandal ..	1895 ..	1,517	1,517	..	1,517	..	
Tiruvannamalai.	Modur ..	1898 ..	7,046	7,046	..	7,046	..	
	Valasamalai ..	1883-84 ..	10,759	12,369	..	12,369	136	
	Nattampalli ..	1889 ..	6,750	7,270	..	7,270	110	
	Perunkolattur Swamimalai ..	1883-84 ..	8,162	9,312	10	9,302	97	
	Total, General, South Arcot ..		75,043	79,389	115	79,274	637 + 285	
	Total, Special and General, South Arcot ..		98,846	103,452	133	103,319	1,270	
Salem--	Vadugampatti block No. 1 ..	1831 ..	1,976	1,976	..	1,976	103	
	Morur block No. 2 ..	1881 ..	799	799	..	799	78	
	Ammanur block No. 8 ..	1882 ..	252	252	..	252	43	
General.	Pelapallikombai block No. 7 ..	1882 ..	981	981	..	981	75	
Salem West.	Kanjeri ..	1882 ..	1,929	1,929	..	1,929	74	
	Pannikaradu ..	1882 ..	2,645	2,645	..	2,645	47	
	Karunattuparai ..	1883 ..	837	837	..	837	42	
	Total, Salem, West ..		9,419	9,419	..	9,419	462	
Uttankarai ..	Harur ..	1882 ..	1,176	1,176	..	1,176	56	
	Mallapuram ..	1882 ..	1,952	1,952	..	1,952	51	
	Kuriappukombai ..	1897 ..	450	450	..	450	40	
	Kourumalai coupes ..	1898 ..	609	609	..	609	11	
	Total, Uttankarai ..		4,187	4,187	..	4,187	158	
	Alingayam ..	1891 ..	1,572	2,082	..	2,082	11	
	Narasimapuram ..	1893 ..	2,000	2,000	..	2,000	32	
	Kalaripatti ..	1895 ..	1,400	1,840	..	1,840	36	
	Vellakuttai ..	1896 ..	620	620	..	620	10	
	Punkulam Coupes Nos. 1 & 2 ..	1895 96 ..	844	1,000	..	1,000	41	
	Andappanur ..	1894 ..	1,075	1,100	..	1,100	24	
	Mambakkam ..	1894 ..	840	900	..	900	37	
	Govindapuram ..	1895 ..	1,095	1,100	..	1,100	15	
	Madakadipatti ..	1896 ..	308	313	..	313	19	
	Singarapet Coupes and S. P. B. ..	1881 ..	1,960	2,000	..	2,000	77	
	Kottur Yelagiris ..	1885 ..	1,200	1,200	..	1,200	27	
	Ondur ..	1897 ..	300	300	..	300	21	
	Burgur block ..	1892 ..	2,000	2,000	..	2,000	66	

* Added as per Accountant-General's audited figure under A-VIII (f).

+ The Collector has not explained the variation in the opening balance.

Area of Forest Tracts protected from Fire during 1898-99—cont.

District.	Forest tracts.	Year in which protection commenced.	During dry season of 1899.				Cost during the season.	Remarks.
			Area protected during the previous year.	Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
Salem—cont.	Central Circle—cont.		ACS.	ACS.	ACS.	ACS.	RS.	
Tirupattūr	Kottur block	1883 ..	2,350	2,350	..	2,350	77	
	Nerakottai	1893 ..	1,227	1,227	..	1,227	63	
	Maharajagadai	1896 ..	1,000	1,000	..	1,000	30	
	Thogarapalli	1884 ..	750	750	..	750	33	
	Total, Tirupattūr ..	..	† 20,931	21,782	..	21,782	619	† The Collector has not explained the variation in the opening balance.
	Melagiri block	1885 ..	5,411	5,411	..	5,411	20	
	Kanavokottapalli block XVII.	1885 ..	742	742	..	742	4	
	Gulhatti S. P. block ..	1885 ..	3,248	3,248	..	3,248	16	
	Manchi block	1885 ..	3,155	3,155	..	3,155	16	
	Kananaragasandram-Tholuvabetta reserved forest.	1885 ..	216	216	..	216	8	
	Javalagiri S. P. block ..	1899 ..	..	..	..	..	16	† Area not reported.
	Nogalur coupes Nos. 1 to 6.	1899 ..	..	..	..	..	8	
	Total, Hosur ..	..	12,772	12,772	..	12,772	88	
Salem, East.	Portion of Kurumbapatti reserve including coupes.	1897-98 ..	1,772	4,000	25	3,975	123	† Added as per Accountant-General's audited figures under A-VIII (f). The Collector has not explained the variation.
	Kapputtu reserve coupes.	1897-98 ..	570	1,000	30	970	123	
	Total, Salem, East ..	..	2,342	5,000	55	4,945	123	
	Total, Salem, General ..	..	49,042	53,150	55	53,105	1,450	† + 29
Trichinopoly—	Sengattupatti	1885-86 ..	3,000	3,000	20	2,980	..	
	Manmalai	1887-88 ..	6,935	6,000	20	5,980	..	
	T. Kanappadi	1887-88 ..	12,000	12,000	..	12,000	..	
	Karuppan Kadu Thittu ..	1887-88 ..	2,000	2,000	..	2,000	..	
	Melur	1885-86 ..	3,000	3,000	..	3,000	..	
	V. Kanappadi	1887-88 ..	10,000	10,000	..	10,000	..	
	Palamalai	1888-89 ..	10,900	10,000	..	10,000	..	
	Kaliamankoil Thittu ..	1889-90 ..	1,500	1,500	5	1,495	..	
	Kanappadi Kannimarsolai.	1889-90 ..	2,560	2,560	..	2,560	..	
	Total, Musiri ..	..	49,995	50,060	45	50,015	150	These blocks were in former years protected by fire lines and patrols. Since 1898-99 no money has been spent on fire lines as the Conservator and District Forest-officer considered them unnecessary.
Perambalur Range.	Manalodai	1885-86 ..	5,000	5,000	..	5,000	..	
	Sholamathi	1885-86 ..	6,000	6,000	..	6,000	..	
	Selaiyur	1889-90 ..	1,600	1,600	..	1,600	..	
	Puliyur	1890-91 ..	10,000	10,000	..	10,000	..	
	Sengathur	1890-91 ..	9,975	10,000	..	10,000	..	
	Total, Perambalur ..	..	32,575	32,600	..	32,600	..	
	Total, Trichinopoly ..	..	82,570	82,660	45	82,615	150	
Tanjore ..	Tanjore	..	..	..	..	..	..	
	Total, Special, Central Circle.	..	688,263	720,179	7,206	718,973	6,154	
	Total, General, Central Circle.	..	782,116	819,916	9,522	810,394	6,488	
	Grand Total, Central Circle.	..	1,470,379	1,546,095	16,728	1,529,367	12,642	
South Canara General—	Southern Circle.							
	Sarapanamane	1886-87 ..	142	1,259	61	1,238	40	
	Savantgadde	1896-97 ..	1,157	..	..	..	..	
	Honnekodla	1894-95 ..	507	507	..	507	29	
	Herkur	1893-94 ..	840	840	60	780	17	
	Kadike	1895-96 ..	2,784	2,781	14	2,767	32	
	Chittur	1895-96 ..	2,237	2,237	..	2,237	33	
	Karnigudde	1895-96 ..	1,190	1,190	..	1,190	32	
	Darigudde	1893-94 ..	141	141	..	141	9	
	Herur	1893-94 ..	2,492	2,492	20	2,472	38	
	Talabur Ane	1895-96 ..	610	610	50	560	29	
	Kasarakatte	1893-94 ..	180	180	..	180	15	
	Muduragudde	1893-94 ..	407	407	..	407	114	

* This represents the amount paid to the Malayali with whom agreements were entered into for keeping the lines clear and preserving the forests safe from fire.

Area of Forest Tracts protected from Fire during 1898-99—cont.

District.	Forest tracts.	Year in which protection commenced.	During dry season of 1898-99.				Cost during the season.	Remarks.
			Area protected during the previous year.	Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
South Canara—cont.	Southern Circle—cont.		ACS.	ACS.	ACS.	ACS.	RS.	
Coondapoor Range—cont.	Abbigudde	1897-98 ..	1,434	1,434	..	1,434	29	
	Baindur	1897-98 ..	6,174	6,174	210	5,964	12	
	Sabladi	1881-85 ..	208	208	..	208	6	
	Total, Coondapoor ..	..	20,500	20,500	415	20,085	335	
	Chinkramale	1885-86 ..	2,879	2,879	300	2,579	37	
	Pilarkan	1883-84 ..	320	320	..	320	6	
	Manaje	1886-87 ..	423	423	..	423	11	
	Jarvattu	1894-95 ..	417	417	..	417	6	
	Mensinkan	1896-97 ..	610	610	5	635	6	
	Jatkatmale	1897-98 ..	1,500	1,500	..	1,500	30	
	Matkulgudde	1897-98 ..	259	259	..	259	4	
	Tenkahola	1888-87 ..	1,979	1,979	..	1,979	28	
	Mavinakodlu	1895-96 ..	1,900	1,900	..	1,900	35	
	Hale Someshwar	1895-96 ..	1,294	1,294	..	1,294	10	
	Huvakladi	1895-96 ..	639	639	..	639	28	
	Durgamale	1897-98 ..	1,580	1,580	10	1,570	26	
	Total, Udipi ..	..	13,830	13,830	315	13,515	226	
	Hospet	1889-90 ..	350	350	8	342	22	
	Todar	1889-90 ..	372	372	6	366	20	
	Mujimale	1894-95 ..	2,495	2,495	..	2,495	15	
	Chembugudde	1884-85 ..	75	75	..	75	..	
	Kuthiar	1884-85 ..	25	25	..	25	..	
	Pottaje and Kayarpalla ..	1885-86 ..	50	50	..	50	..	
	Naninje	1897-98 ..	1,465	1,465	7	1,459	17	
	Total, Mangalore ..	..	4,873	4,873	21	4,852	74	
Uppinangadi Range.	Darmasthala	1887-88 ..	4,545	4,545	..	4,545	77	
	Parappa	1895-96 ..	2,410	2,410	..	2,410	38	
	Veerakamba	1897-98 ..	1,683	1,683	..	1,683	9	
	Kanjanimala	1898-99 ..	..	7,680	..	7,680	16	New area added. Not protected this year.
	Pumale	1897-98 ..	7,680	..	..	..	..	
	Total, Puttur ..	..	11,773	11,773	..	11,773	63	
	Total, General, South Canara.	..	55,521	55,521	751	54,770	775	• 2
North Malabar.	Special—							
Begur Range.	Begur	1882-83 ..	1,962	4,100	1,990	2,260	517	
Chedaleth ..	Kurchiyat	1887-88 ..	5,965	6,025	6,025	..	320	
Kanoth ..	Kanoth teak, bamboo, &c. plantations ..	1894-95 ..	224	264	..	264	49	
	Total, Special ..	..	8,151	10,389	7,925	2,464	895	
General—	Tirunelli	1894-95 ..	5,474	5,474	474	5,000	..	
Begur ..	Begur	1882-83 ..	..	12,000	12,000	..	..	Sholas protected by burning grass.
	Total, Begur ..	..	5,474	17,474	12,474	5,000	..	
	Kurchiyat	1887-88 ..	..	12,029	12,029	..	..	
	Mavanhulla	1891-95 ..	..	12,577	12,577	..	..	
	Rampur	1894-95 ..	..	18,854	18,854	..	..	
	Total, Chedaleth ..	..	..	43,460	43,460	..	..	
Kanoth ..	Kanoth teak, &c., plantations.	1894-95 ..	..	6,400	..	6,400	..	
	Total, General ..	..	5,474	67,334	55,934	11,400	18	† Added as per Accountant-General's audited figures.
	Total, Special and General North Malabar.	..	13,625	77,723	63,859	13,864	913	

Area of Forest Tracts protected from Fire during 1898-99—cont.

District.	Forest tracts.	Year in which protection commenced.	During dry season of 1899.				Cost during the season.	Remarks.
			Area protected during the previous year.	Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
South Malabar.			ACS.	ACS.	ACS.	ACS.	RS.	
Special—								
Nilambur Range.	Amarampalem reserve ..	1860-61 ..	468	468	..	468	70	
	Chathamborai reserve ..	1872-73 ..	700	700	..	700	140	
	Teak plantations ..	1842-43 ..	3,507	3,517	..	3,517	632	
	Edakode natural forests ..	1898-99 ..	..	50	..	50	15	
	Total, Nilambur ..	..	4,675	4,735	..	4,735	857	
Amarampalam Range.	Karimpaya reserve ..	1884-85 ..	3,955	4,035	..	4,035	175	† Includes 160 acres of teak plantations.
	Nellikutta do. ..	1883-84 ..	1,824	1,824	..	1,824	135	
	New Amarampalam reserve ..	1889-90 ..	75,000	75,000	..	75,000	190	
	Total, Amarampalam ..	..	80,779	80,859	..	80,859	500	
Palghat Range.	Walayar reserve ..	1873-74 ..	3,017	3,017	..	3,017	509	† One-fourth of an acre. Not protected during the year.
	Chonai Nair do. ..	1884-85 ..	15,203	15,203	6	15,197	415	
	Tamparathi pottai reserve ..	1891-92 ..	124	..	..	..	..	
	Dhoni reserve ..	1898-99 ..	..	45	..	45	15	
	Total, Palghat ..	..	18,314	18,265	6	18,259	939	
Total, Special, South Malabar.			103,798	103,859	6	103,853	2,296	
The Nilgiris.								
Special	Mudumalai teak plantations.	1883 ..	62	25	..	25	..	698
	Bonne teak plantation ..	1886 ..	40	40	40	..	..	
	Bonne experimental block ..	1893 ..	179	179	..	179	..	
	Marigudi block ..	1898 ..	2,781	2,781	..	2,781	..	
	Marigudi block Nos. IV and V ..	1898 ..	..	2,686	..	2,686	..	
	Moyar reserved forest ..	1886 ..	4,000	4,000	450	3,550	..	194
	Northernhay Sandalwood plantation.	1883 ..	22	180	..	180	..	
	Chennunguli ..	1883 ..	25	25	..	25	..	
	Arvakal ..	1883 ..	9	9	..	9	..	
	Governor's shola No. I ..	1883 ..	25	25	..	25	..	
	Do. No. II ..	1883 ..	30	30	..	30	..	270
	Andi ..	1883 ..	17	17	..	17	..	
	Upatti ..	1883 ..	12	12	..	12	..	
	Sheffield ..	1883 ..	25	25	..	25	..	
	Colli ..	1883 ..	17	17	..	17	..	
General	Chowghat Colli ..	1883 ..	26	26	..	26	..	582
	Madana ..	1883 ..	8	8	..	8	..	
	Baikie ..	..	50	50	..	50	..	
	Arambi ..	..	430	430	1	429	..	
	Marlimund ..	..	11	11	..	11	..	
	Cairn hill ..	..	405	405	..	405	..	..
	Muthaadi ..	1898 ..	..	80	..	80	..	
	Kallar reserve ..	1883 ..	919	919	8	911	..	
	Burliyar ..	1883 ..	178	178	..	178	..	
	Ghaut reserve ..	1883 ..	247	247	5	242	..	
	Coonoor peak ..	1883 ..	259	259	..	259	..	..
	Bandishola ..	1883 ..	111	111	..	111	..	
	Sim's park block No. I ..	1883 ..	48	48	..	48	..	
	Blackbridge plantation ..	1883 ..	40	40	..	40	..	
	Little Rallia ..	1883 ..	10	10	..	10	..	
General	Newman ..	1883 ..	35	35	1	34	..	145
	Rallia Ecoties ..	1883 ..	60	60	..	60	..	
	Long wood and addition ..	1886 ..	350	350	..	350	..	
	Devashola plantation ..	1883 ..	4	4	..	4	..	
	Kunjapanai sandalwood ..	1898 ..	..	640	..	640	..	
Total, Special			10,398	13,997	505	13,492	1,744	
General	Ulnad ..	1883 ..	838	839	..	839	..	..
	Mukarti ..	1888 ..	1,324	1,324	..	1,324	..	
	Kururmond ..	1883 ..	1,552	1,552	..	1,552	..	
	Kundah ..	1885 ..	42,505	42,505	..	42,505	..	
	Pichelbettu ..	1886 ..	1,668	1,668	..	1,668	..	..
	Kadkapa ..	1886 ..	1,622	1,622	..	1,622	..	
	Nanjana ..	1893 ..	914	914	..	914	..	
	Karpakan ..	1886 ..	391	391	..	391	..	
	Vellingiri ..	1886 ..	643	643	..	643	..	
	Pykara ..	1883 ..	844	844	..	844	..	
Total, General			58,259	58,259	6	58,259	939	

* This is the area attempted to be protected last year. As the details of individual blocks actually protected during the last year is not available in the Board's office, the Collector's figure has been adopted.

Area of Forest Tracts protected from Fire during 1898-99—cont.

District.	Forest tracts.	Year in which protection commenced.	Area protected during the previous year.	During dry season of 1898-99.			Cost during the season.	Remarks.
				Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
Nilgiris—cont.			ACS.	ACS.	ACS.	ACS.	RS.	
General—cont.	Southern Circle—cont.							
	Yemmalikal ..	1883 ..	465	465	..	465	..	145
	Hirashige ..	1887 ..	3,026	3,026	..	3,026	..	
	Thiasholai ..	1885 ..	1,551	1,551	..	1,551	..	
	Muthanad ..	1883 ..	* 420	310	..	310	..	
	Bikkapathi ..	1894 ..	1,945	1,945	..	1,945	..	
	Naduvattam ..	1885 ..	3,411	3,411	..	3,411	..	
	Oucherlony ..	1886 ..	973	973	..	973	..	
	Nilgiri Peak ..	..	5,962	5,962	..	5,962	..	
	Chinnacoonor ..	1891 ..	14	14	..	14	..	
	Kongal ..	..	14	14	..	14	..	
	Kadanad ..	1895 ..	40	40	..	40	..	
	Hippatti ..	..	491	491	..	491	..	
	Kaguchi ..	..	475	475	..	475	..	
	Liuhatti ..	..	15	15	..	15	..	
	Batheri shola ..	1884 ..	34	34	..	34	..	
	Dodabetta ..	..	758	758	..	758	..	
	Jakuntha ..	..	373	373	..	373	..	
	Honnathalai ..	..	320	320	..	320	..	
	Keraiyala ..	..	276	276	..	276	..	
	Keugodu ..	..	451	451	..	451	..	
	Brookland ..	..	177	177	..	177	..	
	Lovedale east ..	..	127	127	..	127	..	
	Benhope reserve ..	1885 ..	75	75	..	75	..	
	Black bridge ..	1883 ..	350	350	..	350	..	
	Devashola north and south ..	1883 ..	211	211	..	211	..	
	Total, General ..	..	74,256	74,176	..	74,176	145	
	Total, Nilgiris ..	..	81,654	88,173	505	87,668	1,889	
Coimbatore (North). Special—	Hasanur sandalwood compartment—Satyamangalam Range.		1895-96 ..	2,098	2,098	1	2,097	127
	Bylar sandalwood compartment—Kollegal Range.		1895-96 ..	2,475	2,475	4	2,471	159
	Odiarpalayam sandalwood compartment—Kollegal Range.		1895-96 ..	1,504	1,504	4	1,500	109
	Jadathadivulla sandalwood compartment—Kollegal Range.		1895-96 ..	215	218	42	176	77
	Total ..		..	4,194	4,197	50	4,147	345
	Badagalli sandalwood compartment—Talamalai Range.		1896-97 ..	* 685	685	..	685	..
	Talamalai sandalwood compartment—Talamalai Range.		1897-98 ..	589	589	..	589	10
	Ramarani sandalwood compartment—Ramarani Range.		1897-98 ..	1,122	..	..	..	..
	Total ..		..	2,396	1,274	..	1,274	10
	Total, Special, Coimbatore (North).		..	8,688	7,669	51	7,518	482
Coimbatore (South)—Special—Tunacadvu.	Tekadi leased forests and portion of Tunacadvu reserve No. I.		1882-83 ..	13,574	26,374	400	25,974	937
	Punachi reserve No. II.		1888-89 ..	2,827	2,880	..	2,880	319
	Dhali block.		1883-84 ..	485	485	..	485	82
	Singaritope W. C. of Odanthorai block.		1891-92 ..	777	777	..	777	75
	Total ..		..	..	..	..	..	..

* Of this 80 acres were transferred to special protection during the year.

Area of Forest Tracts protected from Fire during 1898-99—cont.

District.	Forest tracts.	Year in which protection commenced.	Area protected during the previous year.	During dry season of 1898-99.			Cost during the season.	Remarks.
				Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
	<i>Southern Circle—cont.</i>		ACS.	ACS.	ACS.	ACS.	RS.	
Bolampatti (Block I).	Sholakarai	1883-84 ..	43,793	1,157	..	1,157	637	
	Thenkaradu			393	..	393		
	Keerspatti			2,269	..	2,269		
	Oratti			1,136	..	1,136		
	Kuchimalai			1,515	..	1,515		
Bolampatti (Block II).	Noyel	1883-84 ..	43,793	10,920	..	10,920	637	
	Velliyangiri			5,240	..	5,240		
	Varadimudi			7,960	..	7,960		
	Kanavarai			13,880	..	13,880		
	Total, Special ..			61,456	75,007	400	74,607	2,053
General—	Tunacadavu reserve No. I.	..	..	..	..	..	..	* Revised figure.
Pollachi ..	Panachi reserve No. II.	..	..	256,544	..	256,544	..	
Udamalpet ..	Anuravati	..	..	..	..	..	..	
Tunacadavu, Pollachi, and Udamalpet.	Anamalai	..	..	..	..	..	..	
Bolampatti.	Bolampatti	..	..	..	..	..	..	
Bolampatti.	Do.	..	..	..	..	..	..	
Bolampatti and Mettupalaiyam.	Do.	..	..	..	..	..	..	
Mettupalaiyam.	Tadayam	..	..	74,694	..	74,694	..	
Mettupalaiyam.	Goparai	..	..	..	..	..	..	
Bolampatti.	Kempampalayam reserve No. VI.	..	..	..	..	..	..	
Mettupalaiyam.	Nellithorai reserve No. VII.	..	..	..	..	..	..	
Bolampatti.	Small Sholakarai reserve No. X.	..	..	..	..	..	..	
Mettupalaiyam.	Odanthorai reserve No. VIII.	..	..	5,335	..	5,335	..	
Udamalpet.	Modur reserve No. IX.	..	..	5,805	..	5,805	..	
	Elayamthur reserve ..	..	..	762	..	762	..	
	Dhadi reserve	..	..	145	..	145	..	
	Total, General ..	..	..	355,104	343,285	..	343,285	..
	Total, Special and General, Coimbatore (South).	..	..	416,560	418,292	400	417,892	..
Madura—	Mela Gudalur	1885-86 ..	1,093	..	..	..	..	Rs. 389
	Vannathiparai	1884-85 ..	4,440	24,557	400	24,157	118	
	Gundan shola plantation.	1886-87 ..	335	257	15	242	130	
	Poombarai Vilpatti Valley.	1884-85 ..	17,174	17,594	..	17,594	53	
	Aliyanuthu	1888-89 ..	4,352	4,352	..	4,352	28	
Special	Kudarayar	1886-87 ..	9,395	13,235	..	13,235	233	Amount spent from July 1898 to December 1898 .. 389
	Kookal	1886-87 ..	11,725	11,725	..	11,725	45	
	Ambaruni	1886-87 ..	10,641	13,971	..	13,971	266	
	Shengulvarayar	1885-86 ..	4,608	7,098	..	7,098	154	
	Karungal Dhoni Medu ..	1885-86 ..	..	3,469	..	3,469	24	
Special	Pambar	1883-84 ..	..	4,741	..	4,741	224	Amount spent from January to June 1899 .. 2,367
	Adukam	1885-86 ..	2,400	7,520	..	7,520	531	
	Perumal Malai	1886-87 ..	..	2,032	..	2,032	70	
	Kallar	1885-86 ..	2,172	..	..	..	..	
	Arunkaval	1883-84 ..	1,261	..	..	..	..	
Special	Vannilai	1885-86 ..	1,800	..	..	..	..	Miscellaneous for putting out fires .. 10
	Kaniankadu	1885-86 ..	1,560	..	..	..	..	
	Marudunadiyar	1885-86 ..	3,523	..	..	..	..	
	Wahuthumalai	1884-85 ..	5,860	..	..	..	24	
	Siramalai	1885-86 ..	20,446	..	..	..	104	
Special	Alagar Hill	1882-83 ..	16,818	16,838	..	16,838	612	Total .. 2,556
	Karandamalai	1887-88 ..	20,860	..	..	..	80	
	Perumalai	1891-92 ..	6,087	..	..	..	34	
	Mudimalai	1884-85 ..	4,235	..	..	..	16	
	Total, Special ..	..	..	139,060	127,389	415	126,974	2,746
							+	10

Amount spent from July 1898 to December 1898 .. 389
 Amount spent from January to June 1899 .. 2,367
 Miscellaneous for putting out fires .. 10
 Total .. 2,556

Amount spent in putting out fires.

Area of Forest Tracts protected from Fire during 1898-99—cont.

District.	Forest tracts.	Year in which protection commenced.	Area protected during the previous year.	During dry season of 1898-99.			Cost during the season.	Remarks.
				Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8	9
	<i>Southern Circle—cont.</i>		ACS.	ACS.	ACS.	ACS.	RS.	
Madura—	Thoppaswami Malai ..	..	9,080	..	..	..	..	
	Gallnut block, Machoor ..	..	6,400	..	..	..	..	
	Vannathiparai	..	19,477	..	..	..	..	
	Total, General ..	..	34,957	..	..	..	..	
	Total, Special and General, Madura.	..	174,917	127,389	415	126,974	2,756	
Tinnevely—	Padamalai Working Circle.	1895-96 ..	2,045	405	..	405	38	
	Panniamaduku Working Circle.	1896-97 ..	1,018	218	8	210	..	
	Koilterai Working Circle.	1896-97 ..	1,936	335	100	235	..	
	Sivasailam Working Circle.	1896-97 ..	3,154	241	..	241	..	
	Total, Ambasamudram ..	..	9,153	1,199	108	1,091	38	
Nanganeri ..	Kalakad Working Circle.	1896-97 ..	2,918	689	..	689	20	
	Tirukurugudi Working Circle.	1897-98 ..	2,538	47	..	47	..	
	Total, Nanganeri ..	..	5,456	736	..	736	20	
	Coortallam Working Circle.	1896-97 ..	1,852	358	69	289	22	
	Kadayanallur Working Circle.	1897-98 ..	1,899	219	10	209	11	
Tenkasi ..	Total, Tenkasi ..	..	3,751	577	79	498	33	
	Karuppasamikovil Working Circle.	1897-98 ..	6,155	368	6	362	..	
	Rangarkovil Working Circle.	1896-97 ..	2,265	422	..	422	..	
	Aiyankovil Working Circle.	1896-97 ..	4,286	945	6	939	24	
	Valaikalam Working Circle.	1896-97 ..	1,145	331	..	331	..	
Srivilliputur.	Muthaliarutha rest-house and forest guards lines.	1897-98 ..	..	320	..	320	15	
	Total, Srivilliputtur ..	..	7,696	2,018	6	2,012	39	
	Total, Special ..	..	32,211	4,898	199	4,699	130	
	General—	..	..	..	..	..	..	
	Ambasamudram.	..	..	..	..	..	..	
Nanganeri ..	Ghaut forests II and II-(b).	..	77,782	86,872	2,518	84,354	82	
	Do. II-(a) ..	..	2,177	2,187	70	2,117	..	
	Do. I and I-(a) ..	..	47,174	52,919	316	52,603	166	
	Ghaut forests III, III-(a) (b), (c), (d) and Chinnakadu.	..	19,214	21,282	1,569	22,712	81	
	Ghaut forests IV and IV(a).	..	20,779	27,321	137	27,184	16	
Sankaranayanarkovil.	Do. V and V-a ..	..	34,713	41,272	998	40,274	293	
	Total, General ..	..	201,830	234,853	5,608	229,245	572	
	Total, Special and General, Tinnevely.	..	234,050	239,751	5,807	234,944	446	
	Total Southern Circle ..	..	363,762	313,168	9,501	333,607	10,356	
	General ..	..	727,151	775,169	62,293	712,876	1,256	
Grand Total, Southern Circle.	Total, Presidency—	..	1,990,913	1,118,277	71,794	1,046,483	11,612	
	Special ..	..	1,190,395	1,190,762	24,372	1,165,390	21,179	
	General ..	..	2,013,886	2,089,763	94,147	1,995,616	12,363	
	Total, Presidency—	..	3,204,282	3,280,525	118,519	3,162,096	34,532	
	Grand Total Presidency.	..	..	..	..	..	..	

Deducted as per Accountant-General's audited figures.

N.B.—Where Collectors have not reported the figures separately for special areas, they are shown under "general."

ANNUAL FORM No. 53.

Forest Department, Madras Presidency.

AREA closed and open to Grazing during 1898-99.

District.	Area in square miles.						Total forest area as per Form No. 44.
	Closed to all animals.		Closed to both goats and sheep.		Closed to goats only.	Open to all animals.	
	Whole year.	Part of year.	Whole year.	Part of year.			
1	2	3	4	5	6	7	8
<i>Northern Circle.</i>							
Ganjaū	113	..	..	..	{ 415 123 }	..	{ sq. MLS. 415 123 }
Vizagapatam	1	..	{ 142 212 }	..	..	..	{ 142 212 }
Gōdāvari	..	..	..	..	{ 866 90 }	..	{ 866 90 }
Kistna	{ 164 5 }	..	..	..	{ 605 293 }	143 103	{ 748 396 }
Kurnool	101	..	..	..	{ 2,002 609 }	2	{ 2,004 896 }
Bellary	83	..	..	..	{ 150 500 }	461	{ 611 500 }
Anantapur	37	..	..	..	{ 7 }	..	{ 7 }
Total ..	501	..	354	..	5,660	996	7,010
<i>Central Circle.</i>							
Cuddlappah	8	..	..	..	2,388	• 65	{ 1,855 598 }
Nellore	7	..	..	..	{ 634 56 }	• 18	{ 652 56 }
Chingleput	29	..	..	..	202	• 13	{ 210 5 }
North Arcot	{ 96 2 }	{ 43 9 }	..	..	{ 1,157 67 }	• 12	{ 1,169 67 }
South Arcot	15	..	..	..	{ 685 21 }	..	{ 685 21 }
Salem	63	..	..	..	1,408	• 15	{ 1,287 186 }
Trichinopoly	{ 21 1 }	{ 8 }	..	..	{ 216 107 }	..	{ 216 107 }
Tanjore	1	..	..	..	18	+ ..	{ 18 }
Total ..	243	60	..	..	6,962	• 123	7,085
<i>Southern Circle.</i>							
South Canara	{ 15 1 }	..	{ 284 811 159 }	..	..	..	{ 284 811 159 }
Malabar, North	52	..	{ 113 190 }	..	..	..	{ 113 190 }
Do. South	{ 190 138 }	..	{ 190 138 }	..	..	..	{ 190 138 }
The Nilgiris	{ 4 6 }	..	..	..	{ 358 133 }	..	{ 358 133 }
Coimbatore, North	115	..	5	..	{ 1,066 557 }	..	{ 1,061 557 }
Do. South	265	..	..	..	{ 654 3 }	..	{ 654 3 }
Madura	29	2	..	..	{ 572 37 }	..	{ 572 37 }
Tinnevelly	262	70	..	..	{ 417 12 }	..	{ 417 12 }
Total ..	1,077	72	1,700	..	3,799	..	5,499
Grand Total, Presidency ..	1,824	132	2,054	..	16,421	{ 996 • 123 1,119 }	19,594

* Reserved for goats.

† Goats were allowed in 168 acres in Vettangudi reserved forest.

N.B.—The totals of columns 4, 6 and 7 equal column 8. The figures in columns 6 and 4 include the figures in columns 2 and 3. Of the figures in brackets the upper one denotes area of reserved forests and the lower the area of reserved lands.

FORM No. 53.

RETURN of Grazing in the State Forests of the Madras Presidency during 1898-99.

FORM

Return of Grazing in the State Forests of the
(b) *Reserved*

Grazing on payment. Number of animals.

Districts.	At enhanced rates.				At full rates.				Fees received.
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	
<i>Northern Circle.</i>									RS.
Ganjām	..	..	..	..	1,726	4,005	(a) 615	..	1,456
Vizagapatam	..	..	..	..	..	..	..	..	..
Gōdāvari	..	..	..	..	..	..	..	..	..
Kistna	..	..	..	..	..	..	..	..	..
Kurnool	..	..	..	..	3,558	33,893	51,191	..	12,541
Bellary (a)	11	663	..	..	163	422	2,349	9,870	1,524
Anantapur	..	..	..	..	45	205	..	..	55
Total, Northern Circle ..	11	663	..	..	163	5,891	40,452	61,076	15,576
<i>Central Circle.</i>									
Cuddapah	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	660	1,540	2,557	..	776
Chingleput	..	..	..	..	(c) 1,479	6,559	20,996	..	3,753
North Arcot	..	..	..	..	..	..	..	..	2,007
South do.	..	..	..	..	122	4,781	(a) 2,456	..	1,173
Salem	..	..	..	..	29	2,503	(a) 1,455	..	614
Tiruchinopoly	..	..	..	..	332	13,767	196	..	2,721
Tanjore	..	..	..	..	81	3,394	(a) 18,096	..	2,364
Total, Central Circle ..	..	..	..	..	2,699	32,547	45,756	..	13,411
<i>Southern Circle.</i>									
South Canara	..	..	..	..	1,920	13,380	..	..	3,229
North Malabar	..	..	..	..	..	..	..	..	..
South do.	..	..	..	..	..	..	..	..	..
The Nilgiris	..	..	..	..	212	398	..	..	154
North Combaratore	..	..	..	..	..	..	..	..	..
South do.	..	..	..	..	..	925	..	..	(f) 173
Madurai	..	1,063	(a) 80	..	276	..	..	..	..
Tinnevely	..	..	..	..	31	691	(a) 812	..	217
Total, Southern Circle ..	..	1,063	80	..	276	2,163	15,394	812	3,773
Grand Total, Reserved Lands, Presidency ..	11	1,726	80	..	139	10,753	88,393	108,244	32,760
Northern Circle, Reserved Forest and Reserved Lands ..	2,245	55,910	3,791	..	15,360	50,075	271,324	502,865	163
Central Circle, Reserved Forest and Reserved Lands ..	..	22,712	191	..	5,702	27,152	582,344	632,796	3
Southern Circle, Reserved Forest and Reserved Lands ..	7,164	182,026	39,362	145	51,100	14,135	93,349	30,305	91
Grand Total, Presidency ..	9,769	258,678	43,347	115	75,362	91,362	917,017	1,165,966	257

(a) Sheep.

(b) Ramandrag range
North-east range
Donimalai

Buffaloes.	Bulls, &c.
RS. A. P.	RS. A. P.
0 8 0	0 4 0
0 8 0	0 6 0
0 6 0	0 4 0

No. 53—*cont.*Madras Presidency during 1898-99—*cont.*

lands.

Grazing free. Number of animals.

Districts.	At privileged rates.				By right under settlement.				During pleasure of Government or otherwise than under settlement.				Total value of fees at full rates for animals grazed free.	Grand total of value at full and enhanced rates.
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Actual.	Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Value of fees at full rates.		
<i>Northern Circle.</i>														
Ganjām	..	..	..	..	..	..	..	..	..	..	..	..	..	1,456
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gōdāvari	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kistna	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bellary (a)	11	663	..	..	163	422	2,349	9,870	..	..	..	..	..	12,541
Anantapur	..	..	..	..	45	205	..	..	..	..	..	..	..	1,687
Total, Northern Circle ..	11	663	..	..	163	5,891	40,452	61,076	..	..	..	..	..	15,576
<i>Central Circle.</i>														
Cuddapah	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South do.	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tiruchinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total, Central Circle ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<i>Southern Circle.</i>														
South Canara	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South do.	..	..	..	..	..	..	..	..	..	..	..	..	..	..
The Nilgiris	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Combaratore	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South do.	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madurai	..	1,063	(a) 80	..	276	..	..	..	..	..	..	..	..	..
Tinnevely	..	..	..	..	31	691	(a) 812	..	..	..	..	..	..	..
Total, Southern Circle ..	..	1,063	80	..	276	2,163	15,394	812	..	..	..	..	..	..
Grand Total, Reserved Lands, Presidency ..	11	1,726	80	..	139	10,753	88,393	108,244	..	..	..	..	..	..
Northern Circle, Reserved Forest and Reserved Lands ..	2,245	55,910	3,791	..	15,360	50,075	271,324	502,865	163	..	..	..	..	..
Central Circle, Reserved Forest and Reserved Lands ..	..	22,712	191	..	5,702	27,152	582,344	632,796	3	..	..	..	..	..
Southern Circle, Reserved Forest and Reserved Lands ..	7,164	182,026	39,362	145	51,100	14,135	93,349	30,305	91	..	..	..	..	..
Grand Total, Presidency ..	9,769	258,678	43,347	115	75,362	91,362	917,017	1,165,966	257	..	..	..	..	..

(c) On unreserved lands.

(d) Kancha rent.

(f) Besides, Rs. 244 were realized by grazing contract.

(e) Lease granted to Mr. MacDonald, a planter at Kurtikulam, for grazing not more than 900 cattle in the adjoining reserves.

(g) The numbers represent the cattle admitted free in the Yernagudem range.

AREA of Plantations, Cultural Operations and Topes, 1898-99.

District.		Number of plantations and topes.	Area in acres.				Receipts.	Charges.
			On 1st July 1898.	Added during the year.	Excluded during the year.	Area on 30th June 1899.	Of the year.	
1		2	3	4	5	6	7	8
A. Regular Plantations.								
Northern Circle.	Ganjām	1	348	..	..	348	28	939
	Gôdāvari	2	421	..	..	421	958	887
	Kistna	19	1,702	220	..	1,922	719	{ 2,400 (a) 347
	Total, Northern Circle ..	22	2,471	220	..	2,691	1,705	3,879
Central Circle.	Cuddapah	2	19	207	..	226	..	(b) 441
	Nellore	2	86	..	..	86	15	2,899
	Chingleput	6	1,048	117	1	1,161	..	460
	North Arcot	12	8,618	..	8	8,610	7,020	766
	South Arcot	4	539	..	..	539	1,900	2,214
	Tanjore	..	..	..	..	..	..	1,285
Total, Central Circle ..		26	10,310	324	12	10,622	8,935	8,065
Southern Circle.	South Canara	3	193	..	88	95	500	{ 103 +(a) 17
	North Malabar	(c) 7	327	91	10	408	..	441
	South do.	19	4,640	80	..	4,720	19,099	{ 7,033 (a) 76
	The Nilgiris	22	1,610	35	..	1,645	10,845	253
	South Coimbatore	4	28	..	..	28	..	..
	Madura	(a) 5	233	40	(d) 7	266	..	729
	Tinnevelly	1	..	(e) 25	..	25	..	..
Total, Southern Circle ..		61	7,023	271	105	7,187	30,443	8,500
Grand Total, Regular Plantations Presidency.		109	19,802	815	117	20,500	41,083	20,444
B. Cultural Operations.								
Northern Circle.	Direction	..	..	..	..	..	21	(a)+ 350
	Ganjām	..	104	..	..	404	..	156
	Vizagapatam	..	..	..	..	..	..	(a)+ 118
	Kistna	..	65	..	..	65	1	405
	Kurnool	..	..	..	..	..	..	80
	Bellary	..	164	193	85	262	..	{ 916 (a)+ 300
Anantapur		..	22	83	{ (f) 4 (g) 69 }	32	..	387
Total, Northern Circle ..		..	645	276	158	763	22	2,712
Central Circle.	Cuddapah	..	596	..	..	596	28	{ 193 (a)+ 134
	Nellore	..	1,136	..	..	1,136	..	(a)+ 529
	Chingleput	..	250	..	..	250	384	{ 89 (a)+ 5
	North Arcot	..	1,252	1	137	1,116	..	1,725
	South Arcot	..	..	..	..	..	..	(a)+ 98
	Salem	..	..	..	..	..	..	(a)+ 36
	Trichinopoly	..	{ MLS. 90 104 }	..	(d) 80	{ MLS. 90 24 }	1,118	(a)+ 1,006
Tanjore		..	1,076	..	..	1,076	..	..
Total, Central Circle ..		..	{ 4,411 MLS. 90 }	1	217	{ 4,198 MLS. 90 }	1,530	3,815
Southern Circle.	North Malabar	..	..	..	..	..	..	(a)+ 1,439
	South do.	..	..	..	..	..	..	(d) 93
	The Nilgiris	..	485	..	1	484	9	{ 475 (a)+ 672
	South Coimbatore	..	242	..	..	242	..	{ 146 (a)+ 326
	Tinnevelly	..	3,422	1	25	3,398	..	248
Total, Southern Circle ..		..	4,149	1	26	4,124	9	3,399
Grand Total, Cultural Operations, Presidency.		..	{ 9,208 MLS. 90 }	278	401	{ 9,085 MLS. 90 }	1,561	9,926

ANNUAL FORM No. 55.
Forest Department, Madras Presidency.
OUTTURN (in cubic feet, solid) of Timber and Fuel during the year 1898-99, and Agency of Exploitation.

District.	Timber.				Fuel.				Total.				
	Government.		Right-holders.		Free-grantees.		Purchasers.						
	1	2	3	4	5	6	7	8		9	10	11	12
Northern Circle.													
Gaujam ..	109,096	123,516	..	..	232,612	355	573,796	..	..	574,151	806,763		
Vizagapatam ..	2,199	77,073	..	..	79,906	29,109	322,220	..	..	361,329	431,235		
Godavari ..	1,334	441,013	4,556	..	447,403	406	695,847	..	..	696,252	1,143,655		
Kistna ..	4,165	238,000	7,905	..	250,070	935	392,561	..	..	393,496	643,566		
Kurnool ..	14,398	156,279	1,500	1,311	173,488	2,950	351,649	257,510	..	612,109	785,597		
Bellary ..	37,421	62,308	..	..	99,729	162,820	237,786	..	..	400,606	500,335		
Anantapur ..	..	10,930	..	..	10,930	..	109,370	..	..	109,370	120,300		
Total ..	169,113	1,109,119	14,595	1,311	1,294,138	196,574	2,683,229	257,510	..	3,137,313	4,431,451		
Central Circle.													
Cuddapah ..	41,718	136,938	7,480	..	186,166	5,033	604,954	..	..	509,987	796,153		
Nellore ..	739	87,153	1,940	..	89,832	279,049	135,467	..	..	141,516	504,348		
Chingleput ..	20	70,178	660	..	70,858	42,650	124,764	..	..	167,414	238,272		
North Arcot ..	520	26,112	6,182	..	32,814	82,405	215,228	..	..	300,633	333,447		
South Arcot ..	30	29,687	1,636	..	31,353	1,030	303,389	240	..	304,709	336,062		
Baleen ..	964	127,903	1,999	..	130,866	1,354,551	265,542	..	..	1,660,123	1,790,989		
Salem ..	..	16,800	2,341	..	19,141	163,398	890,700	..	..	1,073,239	1,073,239		
Trichinopoly ..	..	16,044	..	..	16,044	300	515,829	..	..	516,129	532,173		
Tanjore ..	43,991	510,865	22,218	..	577,074	1,968,496	3,058,873	240	..	5,027,669	5,604,683		
Total ..	..	..	..	..	..	..	..	..	..	..	..		
Southern Circle.													
South Canara ..	46,684	8,255	235	..	55,174	3,704	804,565	..	..	58,269	923,443		
North Malabar ..	98,349	2,188	10,290	..	110,827	400	1,560	2,600	..	116,387	116,387		
South Malabar ..	166,145	22,896	395	..	189,436	1,074	15,771	..	..	16,845	206,281		
The Nilgiris ..	33,669	4,680	1,404	112	39,865	511,701	33,305	343	13	545,362	583,227		
North Coimbatore ..	4,031	20,977	684	..	25,682	238,192	238,192	..	..	238,192	263,884		
South Coimbatore ..	91,993	21,406	..	..	113,399	166,940	886,263	..	..	1,053,903	1,156,592		
Madura ..	578	150,292	184	..	151,064	8,317	381,000	..	..	392,317	543,371		
Tinnevely ..	8,373	44,867	4,053	..	57,293	32,828	1,957,535	..	..	1,983,863	2,047,156		
Total ..	449,812	275,561	17,245	112	742,730	724,464	4,381,191	2,943	13	5,108,611	5,831,341		
Grand Total ..	662,916	1,965,645	51,068	1,423	2,613,942	2,899,534	10,123,293	3,183	257,623	13,273,533	15,887,475		

ANNUAL FORM No. 56.
Forest Department, Madras Presidency.
(OUTTURN of Minor Forest Produce during the year 1898-99.

Circle.	Description of produce.	Produce removed or utilized.										Total.
		By Government Agency.		By purchasers.		By free grants.		By night-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
1	2	3	4	5	6	7	8	9	10	11	12	
Northern Circle.	Bamboos ..	NO. 14,588	RS. 292	NO. 14,223,975	RS. 67,583	NO. 17,670	RS. 104	NO. 20,489	RS. 128	NO. 14,276,722	RS. 68,507	
	Grass and grazing ..	MDS. 320	3	..	1,43,594	..	955	..	700	..	1,45,232	
	Stones, gravel and earth ..	..	..	C. L. 19,700	4,294	400	25	..	..	..	4,319	
	Tamarind, soapnuts, gallnuts ..	..	..	..	208	..	100	..	..	..	308	
	Horns, honey, wax ..	..	..	MDS. 1,624	133	..	..	..	..	..	133	
	Miscellaneous ..	MDS. 5,840	91	..	1,62,820	..	371	..	38,450	..	2,01,732	
	Total	..	386	..	3,79,032	..	1,535	..	39,278	..	4,20,281	
Central Circle.	Bamboos ..	NO. 5,428	1,276	NO. 7,291,137	44,050	89,382	484	..	..	NO. 7,384,947	45,810	
	Grass and grazing ..	..	..	..	2,18,171	..	..	..	356	..	2,08,527	
	Stones, gravel and earth ..	..	..	{ C. PT. 100,859	2,308	..	..	..	..	..	2,308	
	Tamarind, soapnuts, gallnuts ..	MDS. 3,327	980	{ C. L. 14,759	207	..	..	..	..	..	1,157	
	Horns, honey, wax ..	..	19	..	..	..	..	..	..	..	19	
	Miscellaneous ..	..	1,432	..	2,09,556	..	686	..	..	..	2,11,674	
	Total	..	3,707	..	4,64,292	..	1,170	..	356	..	4,69,525	
Southern Circle.	Bamboos ..	NO. 377,161	5,360	NO. 3,978,543	18,723	20,918	303	881	2	NO. 4,377,503	24,393	
	Grass and grazing ..	..	..	..	82,402	..	..	..	763	..	83,155	
	Stones, gravel and earth ..	..	..	{ C. L. 10,054	1,326	30	4	..	..	..	1,330	
	Tamarind, soapnuts, gallnuts ..	MDS. 13,042	12,310	{ C. PT. 185,700	903	..	..	..	..	..	1,3213	
	Horns, honey, wax ..	..	957	MDS. 9	41	..	..	..	..	..	5,185	
	Catechu ..	..	1,378	..	..	..	..	..	..	..	11,666	
	Miscellaneous ..	..	10,104	..	85,784	..	213	..	45	..	96,146	
	Total	..	44,484	..	1,89,184	..	520	..	800	..	2,34,988	
	Grand Total	..	48,577	..	10,32,508	..	3,225	..	40,434	..	11,24,744	

ACCOUNT of Timber cut or collected by Government Agency and brought to depots sold locally, &c., or otherwise disposed of during the year 1898-99.

Name of district.	Balance at commencement of the year in forests and sale depots.	Received during the year.	Total	Disposed of during the year.	Balance in hand at the close of the year in forests and sale depots.
1	2	3	4	5	6
TIMBER (CUBIC FEET).					
<i>Northern Circle.</i>					
Ganjam	2,446	109,096	111,542	105,435	6,107
Vizagapatam	..	2,199	2,199	2,199	..
Godavari	..	1,834	1,834	..	1,738
Kistna	685	4,165	4,850	4,850	..
Kurnool	10,240	14,398	24,638	17,496	7,142
Bellary	6,951	37,421	44,372	23,979	20,393
Anantapur	..	..	..	..	..
Total ..	20,322	169,113	189,435	154,055	35,380
<i>Central Circle.</i>					
Cuddapah	12,806	41,718	54,524	54,430	94
Nellore	24	739	763	763	..
Chingleput	..	20	20	..	..
North Arcot	193	520	713	713	..
South Arcot	4	30	34	11	23
Salem	541	964	1,505	1,165	360
Trichinopoly	..	..	..	..	..
Tanjore	..	..	..	..	..
Total ..	13,568	43,991	57,559	57,092	467
<i>Southern Circle.</i>					
South Canara	23,121	46,684	69,805	16,668	53,137
Malabar (North)	44,817	98,349	143,166	41,998	101,168
Do. (South)	120,183	166,146	286,328	93,326	193,003
Nilgiris	5,449	33,669	39,118	29,900	9,218
Coimbatore (North)	2,401	4,031	6,432	4,564	1,868
Do. (South)	89,820	91,983	181,803	16,827	164,976
Madura	5	578	583	583	..
Tinnevely	152	8,373	8,525	6,811	1,714
Total ..	285,948	449,812	735,760	210,676	525,084
Grand Total ..	319,838	662,916	982,754	421,823	580,931

FUEL (CUBIC FEET).					
<i>Northern Circle.</i>					
Ganjam	6	355	361	361	..
Vizagapatam	..	29,109	29,109	29,109	..
Godavari	..	406	405	405	..
Kistna	..	935	935	935	..
Kurnool	11,682	2,950	14,632	8,482	6,150
Bellary	24,918	162,820	187,738	103,338	84,400
Anantapur	..	..	..	..	..
Total ..	36,606	196,674	233,180	142,630	90,550
<i>Central Circle.</i>					
Cuddapah	600	5,033	5,633	2,553	3,080
Nellore	106,870	279,049	385,919	315,944	69,975
Chingleput	3,367	42,650	46,017	43,665	2,352
North Arcot	11,090	82,405	93,495	62,135	31,360
South Arcot	320	1,080	1,400	900	500
Salem	939	1,394,581	1,395,520	1,387,270	8,250
Trichinopoly	105,594	163,398	268,992	166,701	102,291
Tanjore	..	300	300	300	..
Total ..	228,780	1,968,496	2,197,276	1,979,468	217,808
<i>Southern Circle.</i>					
South Canara	821	3,704	4,525	4,523	2
Malabar (North)	..	400	400	400	..
Do. (South)	367	1,074	1,441	1,441	..
Nilgiris	279,748	511,701	791,449	446,229	346,220
Coimbatore (North)	..	..	..	..	..
Do. (South)	103,659	166,940	270,599	196,089	74,510
Madura	1,545	8,317	9,862	8,342	1,520
Tinnevely	4,800	32,328	37,128	36,328	800
Total ..	390,940	724,469	1,116,404	692,352	423,052
Grand Total ..	656,326	2,889,534	3,545,860	2,814,450	731,410

Account of Timber cut or collected by Government Agency and brought to depots sold locally, &c., or otherwise disposed of during the year 1898-99—cont.

Name of district.	Balance at commencement of the year in forests and sale depots.	Received during the year.	Total	Disposed of during the year.	Balance in hand at the close of the year in forests and sale depots.
1	2	3	4	5	6
MINOR FOREST PRODUCE (MAUNDS OF 25 LB.).					
<i>Northern Circle.</i>					
Ganjam	11,848	5,779	17,627	17,627	..
Vizagapatam	..	..	..	..	..
Godavari	167	13	180	5	175
Kistna	389	320	709	667	42
Kurnool	82	48	130	130	..
Bellary	..	..	..	..	..
Anantapur	..	..	..	..	..
Total ..	12,486	6,160	18,646	18,429	217
<i>Central Circle.</i>					
Cuddapah	8	555	563	496	67
Nellore	13,331	4,490	17,821	15,643	2,181
Chingleput	..	30	30	..	30
North Arcot	..	131	131	131	..
South Arcot	..	1,120	1,120	1,120	..
Salem	..	179	179	179	..
Trichinopoly	..	398	398	373	25
Tanjore	..	..	..	..	..
Total ..	13,342	6,903	20,245	17,912	2,303
<i>Southern Circle.</i>					
South Canara	33	1,458	1,491	1,475	16
Malabar (North)	86	3,744	3,830	2,706	124
Do. (South)	111	141	252	115	137
Nilgiris	72	908	980	907	191
Coimbatore (North)	15,661	12,554	28,215	16,350	12,147
Do. (South)	84	1,017	1,101	1,002	99
Madura	..	..	..	..	..
Tinnevely	..	1	1	1	..
Total ..	16,047	20,228	36,270	23,556	12,714
Grand Total ..	41,875	33,286	75,161	59,927	15,234
BAMBOOS (MAUNDS).					
<i>Northern Circle.</i>					
Ganjam	..	6,500	6,500	6,500	..
Vizagapatam	..	..	..	..	..
Godavari	..	..	..	..	..
Kistna	..	..	..	..	..
Kurnool	9,404	7,920	16,424	15,844	580
Bellary	3,275	1,068	4,341	2,642	1,699
Anantapur	..	..	..	..	..
Total ..	12,677	14,588	27,265	24,986	2,279
<i>Central Circle.</i>					
Cuddapah	..	..	..	..	..
Nellore	..	..	..	..	..
Chingleput	..	..	..	..	..
North Arcot	..	..	..	..	..
South Arcot	2,069	2,181	4,250	3,954	296
Salem	..	..	..	..	..
Trichinopoly	..	3,247	3,247	3,244	3
Tanjore	..	..	..	..	..
Total ..	2,069	5,428	7,497	7,198	299
<i>Southern Circle.</i>					
South Canara	175	..	175	175	..
Malabar (North)	1,000	50	1,050	1,050	..
Do. (South)	..	26,426	26,426	16,771	9,655
Nilgiris	..	..	..	..	..
Coimbatore (North)	2,220	348,775	350,995	293,300	57,695
Do. (South)	..	1,910	1,910	1,910	..
Madura	..	..	..	..	..
Tinnevely	..	..	..	..	..
Total ..	3,395	377,161	380,556	313,206	67,350
Grand Total ..	18,141	397,177	415,318	345,390	69,928

ANNUAL FORM No. 72-A (Old Code).
Forest Department, Madras Presidency.

TIMBER and other Produce cut, collected and removed by Consumers or Purchasers during 1898-99.

MONEY VALUE OF SALES.												
District.	Timber.		Firewood and charcoal.	Bamboos.		Firewood and charcoal.		Bamboos.		Grazing and fodder Grass.		Total.
	C. FEET.	RS.		C. FEET.	RS.	C. FEET.	RS.	C. FEET.	RS.	RS.	RS.	
Northern Circle.												
Ganjam ..	123,516	11,909	573,786	1,439,140	5,549	5,722	5,721	7,220	7,221	4,250	36,650	Amount actually realized during the year.
Vizagapatam ..	71,073	4,702	322,226	822,706	6,519	7,147	7,147	2,955	2,955	14,758	36,121	Amount realized during the year.
Giddavari ..	441,013	63,755	655,817	7,389,444	16,791	34,735	24,755	10,698	10,698	6,505	1,32,719	Amount realized during the year.
Kistna ..	238,000	15,065	392,661	164,820	10,114	1,111	1,115	35,148	35,148	15,441	1,01,049	Amount realized during the year.
Kurnool ..	156,279	13,617	351,619	4,048,120	11,029	17,292	35,446	35,446	35,446	29,045	1,07,840	Amount realized during the year.
Bellary ..	62,308	4,781	237,786	37,050	4,746	1,941	1,941	20,517	20,517	43,719	75,421	Amount realized during the year.
Anantapur ..	10,930	1,924	109,370	2,695	2,137	63	63	7,590	7,590	30,199	61,413	Amount realized during the year.
Total ..	1,109,119	1,15,577	2,683,229	14,223,975	58,880	67,983	67,984	1,43,594	1,43,544	1,47,155	5,34,304	5,49,331
Central Circle.												
Cuddapah ..	136,988	10,672	604,954	1,718,320	14,048	5,696	5,696	38,754	38,791	50,147	1,19,358	Amount realized during the year.
Nellore ..	87,193	8,874	130,167	2,102	6,986	103	100	34,471	34,472	20,440	70,846	Amount realized during the year.
Chingleput ..	70,178	5,610	124,764	33,728	7,630	8,435	70	13,972	13,959	10,169	11,265	Amount realized during the year.
North Arcot ..	26,112	218,228	31,608	4,862	17,052	22,155	494	27,413	27,413	26,309	31,743	Amount realized during the year.
South do. ..	29,687	303,389	40,882	3,711	18,952	23,822	2,275	40,036	40,036	21,244	21,244	Amount realized during the year.
Salem ..	127,903	265,542	3,088,508	23,161	12,236	32,721	41,912	42,217	42,217	69,195	39,084	Amount realized during the year.
Trichinopoly ..	16,800	1,686	890,700	373,960	20,197	18,765	2,469	10,801	10,450	9,774	18,000	Amount realized during the year.
Tanjore ..	16,044	1,025	515,829	2,329	10,532	492	296	739	739	4,793	17,431	Amount realized during the year.
Total ..	510,865	59,030	3,068,973	7,291,137	1,07,643	1,14,232	44,050	70,871	2,08,121	2,12,071	1,97,158	6,30,966
Southern Circle.												
South Canara ..	8,265	2,374	864,565	123,015	13,031	12,988	1,761	5,381	5,381	8,524	9,218	Amount realized during the year.
North Malabar ..	2,188	1,870	1,560	10,358	913	27	155	1,188	1,189	421	800	Amount realized during the year.
South do. ..	22,896	3,939	15,771	71,378	219	1,299	1,299	7,560	7,560	1,430	1,370	Amount realized during the year.
Nilgiris ..	4,680	851	33,305	278,827	851	1,371	3,335	2,870	2,870	2,870	15,915	Amount realized during the year.
North Coimbatore ..	20,977	238,192	288,192	1,627,320	2,155	13,086	4,217	42,182	42,182	9,067	9,014	Amount realized during the year.
South do. ..	21,406	886,263	1,677,080	69,186	3,889	15,356	3,024	6,723	6,723	4,880	3,310	Amount realized during the year.
Madura ..	150,252	384,000	384,000	69,186	12,264	21,172	21,331	12,136	12,138	36,122	33,034	Amount realized during the year.
Tinnevely ..	44,867	1,937,535	121,379	121,379	4,995	41,646	1,391	6,797	6,796	24,740	24,809	Amount realized during the year.
Total ..	275,501	31,215	4,331,191	3,975,543	33,586	1,06,624	15,728	20,856	82,402	88,034	86,488	3,32,985
Grand Total ..	1,895,545	2,06,002	10,123,293	25,493,655	2,05,708	2,79,804	2,80,036	1,30,761	1,39,711	4,34,167	4,67,580	15,18,514
Add outstandings at the close of 1897-98 2,33,495												
												Total .. 17,71,809
												Deduct amount realised as per Form No. 59 15,29,490

Add outstandings at the close of 1897-98

Deduct amount realized as per Form No. 59

Total

17,71,809

15,29,490

ANNUAL FORM No. 72-B (Old Code).

Forest Department, Madras Presidency.

TIMBER and other Produce Confiscated and Sold during the year 1898-99.

District.	TIMBER.		FIREWOOD.		BAMBOOS.		Minor produce in value.	Total amount of sales.	Amount actually realized.
	Quantity in cubic feet	Amount of sales.	Quantity in cubic feet.	Amount of sales.	Number.	Amount of sales.			
Northern Circle.									
Ganjam	2,469	373	3,763	62	2,569	12	1	448	448
Vizagapatam	1,102	84	659	20	1,116	6	20	130	130
Gódlávári	32,320	2,020	69,952	1,093	19,470	238	..	3,351	3,351
Kistna	827	42	328	9	1,671	26	20	97	97
Kurnool	7,083	859	368	27	6,962	7	35	928	931
Bellary	148	26	347	17	..	..	..	37	37
Anantapur	100	24	900	17	..	..	7	48	..
Total	43,749	3,422	76,312	1,245	30,788	289	83	5,039	4,994
Central Circle.									
Cuddapah	8,293	2,232	584	27	129	3	4	2,316	2,316
Nellore	280	69	160	9	..	..	9	87	87
Chingleput	656	67	83	3	..	..	316	386	386
North Arcot	436	72	416	38	1,136	11	13	134	134
South do.	453	56	1,052	66	..	1	50	173	173
Salem	1,348	902	237	11	2,718	84	6	1,003	1,003
Trichinopoly	180	73	3,125	124	316	3	56	256	256
Tanjore	5	1	400	6	..	..	1	8	8
Total	11,651	3,522	6,057	284	4,299	102	455	4,363	4,363
Southern Circle.									
South Canara	2,206	1,241	4,800	350	93	15	32	1,638	1,606
Malabar, North	..	31	20	..	..	..	..	..	..
Do. South	230	..	..	..	..	..	1	32	32
Nilgiris	14	24	5	..	..	..	..	24	24
Coimbatore, North	732	126	114	7	6,652	37	8	178	178
Do. South	2,469	382	3,622	46	..	1	24	453	453
Madura	1,422	109	1,323	29	13	..	170	308	308
Tinnevely	78	47	13,910	519	..	2	17	585	585
Total	7,151	1,960	23,821	951	6,758	55	252	3,218	3,186
Grand Total	62,551	8,904	106,193	2,480	41,845	446	790	12,620	12,543
Add outstandings at the close of 1897-98								3	
Deduct amount realized as per Form No. 59 + Rs. 48 shown against Anantapur								12,623	
Balance outstanding on 30th June 1899								32	

* The Collector states that the amount was credited to head 11 and so the figure does not appear in the Accountant-General's Form No. 59.

ABSTRACT showing the Value of Timber and other Produce at sale depots, for the year 1898-99.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
Northern Circle.									
Ganjān	Sal	..	901	336	..	3,917	1,469	1,133	..
	Miscellaneous	..	1,545	382	..	2,190	548	168	..
	Total, timber	..	2,446	718	..	6,107	2,017	1,299	..
	Fuel	..	6	..	..	..	..	..	..
Vizagapatam.	Minor produce	MDS. 11,848	..	64	..	..	..	..	64
Gōlāvāri	Miscellaneous timber	..	..	..	..	1,738	3,000	3,000	..
Kistna	Miscellaneous timber	..	685	173	..	..	..	..	173
	Minor produce	MDS. 167	..	351	MDS. 175	..	350	..	1
	Teak	..	1,177	1,846	..	827	827	..	1,019
	Miscellaneous	..	8,763	7,317	..	6,315	3,348	..	3,969
Kurnool	Total, timber	..	10,210	9,163	..	7,142	4,175	..	4,988
	Fuel	..	11,682	1,062	..	6,150	338	..	724
	Bamboos	2,404	..	282	..	580	11	..	271
	Minor produce	MDS. 389	..	96	MDS. 42	..	42	..	54
Bellary	Teak	..	1,564	1,955	..	2,472	3,125	1,170	..
	Miscellaneous	..	5,387	617	..	17,921	2,055	1,438	..
	Total, timber	..	6,951	2,572	..	20,393	5,180	2,608	..
	Fuel	..	24,918	5,625	..	84,400	11,253	5,628	..
Anantapur.	Bamboos	3,273	..	193	1,699	..	98	..	95
	Minor produce	MDS. 82	..	5	..	..	..	..	5
		..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..
Central Circle.									
Chādapah	Redwood	..	12,290	3,761	..	..	..	..	3,761
	Miscellaneous	..	516	67	..	94	25	..	42
	Total, timber	..	12,806	3,828	..	94	25	..	3,803
	Fuel	..	600	11	..	3,080	159	148	..
Nellore	Minor produce	MDS. 8	..	20	MDS. 67	..	129	109	..
	Miscellaneous timber	..	24	6	..	..	..	..	6
	Fuel	..	106,870	16,194	..	69,975	12,110	..	4,084
	Minor produce	MDS. 13,334	..	6,999	MDS. 2,181	..	1,237	..	5,792
Chingleput.	Fuel	..	3,367	336	..	2,352	235	..	101
	Minor produce	..	..	..	MDS. 30	..	45	45	..
	Miscellaneous timber	..	193	48	..	..	..	..	48
	Fuel	..	11,090	645	..	31,360	1,677	1,632	..
North Arcot.	Bamboos	2,069	..	487	296	..	9	..	478
	Miscellaneous timber	..	4	2	..	23	6	4	..
	Fuel	..	320	24	..	500	12	..	12
		..	..	..	..	..	..	..	..

Abstract showing the Value of Timber and other Produce at sale depots, &c.—cont.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	<i>Central Circle—cont.</i>			Rs.			Rs.	Rs.	Rs.
Salem	Miscellaneous timber	..	244	244	..	..	..	..	244
	Fuel	..	939	19	..	8,260	245	226	..
	Sandalwood	..	297	2,970	..	350	3,500	530	..
	Bamboos	..	..	..	3	..	1	1	..
Trichinopoly	Fuel	..	105,594	7,303	..	102,291	6,966	..	327
	Minor produce	..	..	..	MDS. 25	..	37	37	..
Tanjore	.....	..	..	..	..	..	..	..	..
	<i>Southern Circle.</i>								
South Canara.	Teak	..	..	..	..	18	18	18	..
	Rosewood	..	118	117	..	889	1,710	1,593	..
	Miscellaneous	..	23,003	2,142	..	52,230	36,540	34,398	..
	Total, timber	..	23,121	2,259	..	53,137	38,268	36,009	..
	Fuel	..	821	129	..	2	..	..	129
	Bamboos	..	175	26	..	..	..	..	26
	Minor produce	MDS. 33	..	41	MDS. 16	..	16	..	25
		..	..	..	..	..	..	..	..
North Malabar.	Teak	..	31,072	22,982	..	39,786	24,011	1,029	..
	Rosewood	..	2,238	839	..	1,839	690	..	149
	Vengai	..	2,686	1,049	..	5,955	1,861	812	..
	Miscellaneous	..	8,821	1,862	..	53,588	15,624	18,762	..
	Total, timber	..	44,817	26,732	..	101,168	42,186	15,603	149
	Bamboos	..	1,000	150	..	..	..	..	150
	Minor produce	MDS. 86	..	5,088	MDS. 124	..	3,724	..	1,364
		..	..	..	..	..	..	..	..
South Malabar.	Teak	..	19,915	62,000	..	22,269	65,000	3,000	..
	Rosewood	..	751	..	..	1,929	..	..	..
	Vengai	..	1,034	..	..	659	..	..	..
	Miscellaneous	..	98,483	..	..	168,146	..	..	..
	Total, timber	..	120,183	62,000	..	193,003	65,000	3,000	..
	Fuel	..	367	42	..	..	..	..	42
	Bamboos	..	..	..	..	2,655	580	580	..
	Minor produce	MDS. 111	..	317	MDS. 137	..	210	..	107
Nilgiris	Teak	..	4,419	5,892	..	150	200	..	5,692
	Rosewood	..	3	3	..	3	3	..	..
	Vengai	..	5	3	..	5	3	..	..
	Miscellaneous	..	1,022	90	..	9,060	810	720	..
	Total, timber	..	5,449	5,988	..	9,218	1,016	720	5,692
	Fuel	..	279,748	2,380	..	346,220	2,971	591	..
	Minor produce	MDS. 72	..	72	MDS. 191	..	191	119	..
		..	..	..	..	..	..	..	..
North Coimbatore.	Teak	..	206	200	..	..	..	..	200
	Vengai	..	1,110	1,000	..	298	270	..	730
	Miscellaneous	..	978	778	..	783	563	..	215
	Total, timber	..	2,294	1,978	..	1,081	833	..	1,145
	Bamboos	2,220	..	50	57,695	..	1,010	960	..
	Sandalwood	..	107	1,302	..	787	7,022	5,720	..
	Minor produce	MDS. 15,661	..	20,039	MDS. 12,147	..	13,420	..	6,619
		..	..	..	..	..	..	..	..

ANNUAL FORM No. 59—cont.

Forest Department, Madras Presidency, Northern Circle.

ANNUAL FORM No. 59—cont.

Forest Department, Madras Presidency, Northern Circle.

SUMMARY of Expenditure of the different Districts for the Forest year 1898-99.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godavari.	Kistna.	Kurnool.	Bellary.	Anantapur.	Total.
A.—Conservancy and Works.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—									
(a) Timber ..	..	4,576	89	62	133	6,063	1,625	1	12,549
(b) Firewood and charcoal ..	..	..	973	10	17	190	3,451	..	4,641
(c) Bamboos ..	..	..	48	..	..	18	97	..	163
(d) Sandalwood ..	..	..	..	..	..	..	..	..	..
(e) Grass and other minor produce ..	..	..	47	..	3	..	..	..	50
II. Timber and other produce removed from the forests by consumers or purchasers ..	..	5,105	4,321	12,135	6,635	13,098	2,873	1,194	45,361
III. Confiscated drift and waifwood ..	..	33	42	454	14	45	8	2	598
IV. Revenue from forests not managed by Government ..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests and payments to share-holders in forests managed by Government ..	..	..	..	..	..	..	..	..	..
VI. Live-stock, stores, tools and plant—	..	..	..	..	..	..	10,000	..	10,000
(a) Purchase of cattle ..	..	..	..	..	..	..	..	..	..
(b) Feed and keep of cattle ..	36	..	866	1,412	..	640	..	..	2,954
(c) Stores, tools and plant ..	43	800	730	901	329	125	11	45	2,984
VII. Communications and buildings—	..	..	..	..	..	..	..	..	..
(a) Roads and bridges ..	49	388	393	4,052	4,536	3,442	1,594	283	14,737
(b) Buildings ..	60	1,409	1,187	4,179	411	4,868	911	2,038	15,063
(c) Other works ..	..	33	305	500	3	160	..	..	1,001
VIII. Demarcation, improvement and extension of forests—	..	..	..	..	..	..	..	..	..
(a) Demarcation ..	..	1,706	2,828	1,444	2,015	3,676	3,328	602	15,598
(b) Cost of forest settlement; compensation for land and rights ..	..	..	1,046	87	5,645	253	38	278	7,347
(c) Survey of (1) Local ..	..	2,068	467	1,215	1,035	1,120	496	319	6,720
(d) Survey of India ..	19,430	..	..	..	..	..	..	..	19,430
(e) Working plans ..	..	38	..	37	3	36	..	..	114
(f) Sowing and planting ..	350	1,095	300	887	2,715	214	1,276	387	7,224
(g) Protection from fire ..	..	933	507	2,391	186	2,525	2,334	1,402	10,278
(h) Other works ..	..	..	5	..	11,612	57	3,527	3,488	18,689
IX. Miscellaneous—	..	..	..	..	..	..	..	..	..
(a) Refunds ..	..	731	28	569	132	267	981	278	2,986
(b) Law charges ..	..	9	..	1	172	8	..	498	308
(c) Other charges ..	12	66	14	223	130	113	4	9	671
Total, A.—Conservancy and Works.	19,980	18,990	14,196	30,559	35,726	36,917	32,554	9,828	1,98,750

MADRAS,
25th August 1899.

(Signed)

P. V. KRISHNASWAMI,
Offg. Chief Superintendent.

SUMMARY of Expenditure of the different Districts for the Forest year 1898-99—cont.

Budget heads.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	Total.
A.—Conservancy and Works.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—										
(a) Timber ..	..	33	7,411	..	318	360	1,053	..	..	9,175
(b) Firewood and charcoal ..	..	15,025	23	1,629	1,742	78	71,409	3,310	4	93,220
(c) Bamboos ..	..	..	..	..	226	26	190	..	..	442
(d) Sandalwood ..	..	..	..	..	..	..	189	..	..	189
(e) Grass and other minor produce ..	..	2,443	44	9	21	5	..	20	..	2,542
II. Timber and other produce removed from the forests by consumers or purchasers ..	..	2,249	10,211	2,305	267	2,759	10,865	1,950	423	31,059
III. Confiscated drift and waifwood ..	..	..	46	7	5	5	25	..	..	88
IV. Revenue from forests not managed by Government ..	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests and payments to share-holders in forests managed by Government ..	..	..	..	..	..	..	..	..	..	..
VI. Live-stock, stores, tools and plant—	..	..	..	..	..	..	10	..	..	10
(a) Purchase of cattle ..	..	..	..	..	..	..	..	..	..	..
(b) Feed and keep of cattle ..	..	..	..	..	..	..	..	..	..	..
(c) Stores, tools and plant ..	32	188	512	450	1	412	14	..	2	1,911
VII. Communications and buildings—	..	..	..	..	..	..	..	..	..	..
(a) Roads and bridges ..	..	..	1,894	83	2,219	283	1,194	40	..	5,713
(b) Buildings ..	..	1,111	1,807	245	2,835	431	2,089	103	18	8,699
(c) Other works ..	..	..	155	161	235	4	34	..	..	589
VIII. Demarcation, improvement and extension of forests—	..	..	..	..	..	..	..	..	..	..
(a) Demarcation ..	..	809	1,910	1,414	802	3,695	1,021	85	1	9,767
(b) Cost of forest settlement; compensation for land and rights ..	..	..	..	..	..	..	..	..	..	..
(c) Survey of (1) Local ..	..	..	..	..	441	125	..	158	..	724
(d) Survey of India ..	432	666	371	948	532	252	1,198	195	..	4,594
(e) Working plans ..	20,120	..	..	..	..	..	..	..	..	20,120
(f) Sowing and planting ..	..	249	5	..	..	336	52	136	..	778
(g) Protection from fire ..	..	3,428	1,073	554	2,920	2,358	36	1,168	1,285	12,822
(h) Other works ..	..	608	4,710	309	4,116	1,270	1,479	150	..	12,642
IX. Miscellaneous—	..	1,188	3,053	1,974	6,450	5,348	7,249	3,015	474	28,751
(a) Refunds ..	..	903	132	119	385	375	1,328	812	263	4,317
(b) Law charges ..	..	150	..	..	..	..	58	7	..	215
(c) Other charges ..	32	10	57	68	55	123	156	42	2	545
Total A.—Conservancy and Works ..	20,616	29,366	33,474	10,305	23,570	18,275	99,649	11,191	2,472	2,48,912

MADRAS,
25th August 1899.

(Signed)

P. V. KRISHNASWAMI,
Offg. Chief Superintendent.

ANNUAL FORM No. 59—cont.

Forest Department, Madras Presidency, Southern Circle.

SUMMARY of Expenditure of the different Districts for the Forest year 1898-99—cont.

Budget heads.	Direction.	Nilgiris.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevely.	North Malabar.	South Malabar.	South Canara.	Total.
A.—Conservancy and Works.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—										
(a) Timber ..	..	2,179	448	8,724	..	6,921	7,307	14,967	6,999	47,545
(b) Firewood and charcoal ..	..	16,722	61	1,715	681	2,261	11	..	97	20,540
(c) Bamboos ..	..	..	4,434	33	..	..	44	1,373	..	5,884
(d) Sandalwood ..	..	603	3,653	..	..	..	9	..	..	4,265
(e) Grass and other minor produce ..	..	227	7,588	2,990	..	..	1,115	145	3,580	15,654
II. Timber and other produce removed from the forests by consumers or purchasers ..	..	1,056	2,910	5,480	2,492	912	369	2	4,082	17,303
III. Confiscated, drift and waifwood ..	..	28	28	75	66	4	..	..	573	774
IV. Revenue from forests not managed by Government ..	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government ..	..	4,500	..	2,500	..	..	..	491	..	7,491
VI. Live-stock, stores, tools and plant—										
(a) Purchase of cattle ..	..	..	..	797	..	..	2,392	1,109	..	4,298
(b) Feed and keep of cattle ..	..	4,516	..	4,880	..	..	7,807	7,394	1,047	25,644
(c) Stores, tools and plant ..	34	257	68	739	283	407	369	422	338	2,917
VII. Communications and buildings—										
(a) Roads and bridges ..	..	1,411	4,050	2,364	409	6,327	2,130	708	765	18,164
(b) Buildings ..	..	940	5,065	5,243	3,950	3,367	4,367	1,193	1,522	25,647
(c) Other works ..	..	157	1	2,465	324	224	487	64	64	3,786
VIII. Demarcation, improvement and extension of forests—										
(a) Demarcation ..	..	2,375	1,507	316	1,741	217	1,458	496	1,955	10,065
(b) Cost of forest settlement; compensation for land and rights ..	..	..	68	35	..	3,479	18,000	..	..	21,582
(c) Surveys { (1) Local ..	..	360	364	304	531	328	363	202	2,090	4,532
(2) Survey of India ..	28,432	..	..	..	..	1,006	110	..	..	28,432
(d) Working plans ..	..	..	..	..	..	..	..	..	..	1,171
(e) Sowing and planting ..	..	1,400	244	472	729	307	2,115	7,050	120	12,437
(f) Protection from fire ..	..	1,889	482	2,053	2,756	446	913	2,296	777	11,612
(g) Other works ..	..	285	5,356	1,273	5,311	4,152	1,089	1,371	289	19,826
IX. Miscellaneous—										
(a) Refunds ..	..	..	61	4,001	290	1,168	37	..	507	6,064
(b) Law charges ..	1	..	..	3	..	..	..	9	..	31
(c) Other charges ..	15	3,227	32	940	49	4	60	95	44	4,466
Total A.—Conservancy and works ..	28,482	41,832	36,420	47,403	19,612	31,530	50,542	39,442	24,876	3,20,139

MADRAS,
25th August 1899.(Signed) P. V. KRISHNASWAMI,
Offg. Chief Superintendent.

ANNUAL FORM No. 59—cont.

SUMMARY of Expenditure of the different Districts for the Forest year 1898-99.

Budget heads.	Northern Circle.							Central Circle.							Southern Circle.															
	Direction.	Canjannur.	Vizagapatnam.	Godavari.	Krishna.	Kurnool.	Bellary.	Amalapur.	Total.	Direction.	Kolleru.	Gundlupet.	Chitradupet.	North Arcot.	South Arcot.	Salem.	Tiruchinopoly.	Tanjore.	Total.	Direction.	Nilgiris.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevely.	North Malabar.	South Malabar.	South Canara.	Total.	
I.—“Establishments.”	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
Light forwarded, Total A and B ..	10,980	15,142	11,440	1,047	11,122	170	4,385	3,559	18,848	17,646	7,800	354	1,258	5,541	6,541	1,213	1,213	1,213	1,213	1,213	1,213	1,213	1,213	1,213	1,213	1,213	1,213	1,213	1,213	
(a) Conservancy ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(b) Superior officers ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(c) Subordinate officers ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(d) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(e) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(f) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(g) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(h) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(i) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(j) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(k) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(l) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(m) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(n) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(o) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(p) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(q) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(r) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(s) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(t) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(u) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(v) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(w) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(x) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(y) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(z) Office establishments ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	55,061	77,785	18,248	12,220	31,027	39,198	35,282	94,230	2,50,925	53,027	59,400	40,490	20,737	58,707	31,463	44,607	18,972	3,396	2,810	253	41,602	34,892	52,237	33,077	30,631	21,462	22,515	21,581	20,524	2,83,849
Total B.—“Establishments.”	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Grand Total of Expenditure.	75,644	40,735	12,144	72,775	69,753	70,015	53,597	34,148	4,58,275	74,340	58,520	44,743	31,666	62,307	42,306	1,40,636	30,123	5,871	5,299	525	77,564	71,037	80,486	50,273	53,912	73,072	61,022	55,296	6,03,550	

SUMMARY of Receipts and Expenditure during 1898-99 for each Circle and for the Presidency prepared in the Board's office from the Accountant-General's Statement.

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Grand Total, Presidency.	
				1898-99.	1897-98.
1	2	3	4	5	6
RECEIPTS.					
I. Timber and other produce removed from the forests by Government Agency—					
(a) Timber	26,958	22,273	1,18,180	1,67,411	2,29,669
(b) Firewood and charcoal	8,135	1,61,297	26,841	1,96,273	1,73,419
(c) Bamboos	356	725	7,078	8,159	9,223
(d) Sandalwood	..	1,365	26,431	27,796	33,699
(e) Grass and other minor produce	111	6,181	43,713	50,008	32,291
Total, I	35,560	1,91,844	2,22,243	4,49,647	4,78,301
II. Timber and other produce removed from the forests by consumers or purchasers—					
(a) Timber	1,15,577	59,545	33,586	2,08,708	2,43,275
(b) Firewood and charcoal	58,880	1,14,232	1,06,924	2,80,036	2,67,196
(c) Bamboos	67,984	70,871	20,856	1,59,711	1,62,667
(d) Grazing and fodder grass	1,43,544	2,08,121	82,378	4,34,043	3,68,905
(e) Other produce	1,63,346	1,97,158	86,488	4,46,992	4,96,088
Total, II	5,49,331	6,49,927	3,30,232	15,29,490	15,33,131
III. Confiscated drift and waifwood					
.. .. .	4,594	4,363	3,186	12,543	11,895
V. Miscellaneous—					
(a) Fines and forfeitures	1,072	2,420	570	4,062	4,173
(b) Refunds	23,089	25,218	31,205	79,512	1,23,614
(c) Other sources	..	..	..	..	..
Total, V	24,161	27,638	31,775	83,574	1,27,787
Grand Total, Receipts	6,14,046	8,73,772	5,87,436	20,75,254	21,51,114
EXPENDITURE.					
A.—Conservancy and Works.					
I. Timber and other produce removed from the forests by Government Agency—					
(a) Timber	12,519	9,175	47,545	69,260	59,062
(b) Firewood and charcoal	4,611	93,220	20,549	1,18,410	1,01,118
(c) Bamboos	163	442	5,881	6,489	4,751
(d) Sandalwood	..	189	4,265	4,454	2,756
(e) Grass and other minor produce	50	2,542	15,654	18,246	16,563
Total, A-I	17,403	1,05,568	93,897	2,16,868	1,94,250
II. Timber and other produce removed from the forests by consumers or purchasers					
.. .. .	45,361	31,059	17,303	93,723	88,368
III. Confiscated drift and waifwood					
.. .. .	598	88	774	1,460	1,392
V. Rent of leased forests and payments to shareholders in forests managed by Government					
.. .. .	10,000	10	7,491	17,501	17,566
VI. Live-stock, stores, tools and plant—					
(a) Purchase of cattle	2,954	..	4,298	4,298	3,240
(b) Feed and keep of cattle	2,984	1,911	25,644	28,598	30,428
(c) Stores, tools and plant	..	..	2,917	7,812	24,404
Total, A-VI	5,938	1,911	32,859	40,708	58,072
VII. Communications and buildings—					
(a) Roads and bridges	14,737	5,713	18,164	38,614	33,689
(b) Buildings	15,063	8,699	25,647	49,409	44,205
(c) Other works	1,001	589	3,786	5,376	5,782
Total, A-VII	30,801	15,001	47,597	93,399	83,677
VIII. Demarcation, improvement and extension of forests—					
(a) Demarcation	15,598	9,767	10,065	35,430	37,733
(b) Cost of forest settlement, compensation for land and rights	7,347	724	21,582	29,653	11,359
(c) (1) Local surveys	6,720	4,594	4,532	15,846	17,621
(d) (2) Survey of India	19,430	20,120	28,432	67,982	1,00,507
(e) Working plans	114	778	1,171	2,063	1,360
(f) Sowing and planting	7,224	12,822	12,437	32,483	37,927
(g) Protection from fire	10,278	12,642	11,612	34,532	36,515
(h) Other works	18,689	28,751	19,826	67,266	68,121
Total, A-VIII	85,400	60,198	1,09,657	2,55,255	3,11,143

Summary of Receipts and Expenditure during 1898-99 for each Circle and for the Presidency prepared in the Board's office from the Accountant-General's Statement—cont.

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Grand Total, Presidency.	
				1898-99.	1897-98.
1	2	3	4	5	6
EXPENDITURE—cont.					
A.—Conservancy and Works—cont.					
IX. Miscellaneous—					
(a) Refunds	2,986	4,317	6,064	13,367	8,081
(b) Law charges	308	215	31	62	9,706
(c) Other charges	571	545	4,166	5,582	6,955
Total, A-IX	3,249	5,077	10,561	18,887	24,742
Total, A.—Conservancy and Works	1,98,750	2,48,912	3,20,139	7,67,801	7,69,210
B.—Establishments.					
I. Salaries—					
(a) Conservators	13,142	17,040	13,204	43,386	48,905
(b) Superior officers	78,987	86,830	95,407	2,61,224	2,68,543
(c) Subordinate forest and depot establishments	63,926	79,505	73,283	2,16,714	1,95,076
(d) Office establishments	32,835	32,287	36,064	1,01,186	1,00,664
(e) Deputation and Special allowances	170	358	195	723	805
(f) Exchange compensation allowances	4,285	5,030	5,973	15,288	22,499
Total, B-I	1,93,845	2,21,050	2,24,126	6,38,621	6,36,492
II. Travelling allowances—					
(a) Conservators	3,559	2,113	3,003	8,675	7,581
(b) Superior officers	18,898	14,851	14,925	48,674	53,466
(c) Subordinate forest and depot establishments	17,646	20,223	20,885	58,754	51,325
(d) Office establishments	7,390	4,450	5,470	17,310	18,346
Total, B-II	47,493	41,637	44,283	1,33,413	1,30,718
III. Contingencies—					
(a) Stationery	..	..	..	..	..
(b) Carriage of tents	354	357	124	835	590
(c) Rents, rates and taxes	1,258	691	558	2,507	2,995
(d) Official postage	5,541	7,761	5,028	18,330	15,987
(e) Service telegrams	769	296	371	1,436	1,588
(f) Sundries	10,765	9,231	9,310	29,306	29,909
Total, B-III	18,687	18,336	15,391	52,414	52,069
Total, B.—Establishments	2,59,525	2,81,023	2,83,800	8,24,348	8,19,279
Grand Total, Expenditure	4,58,275	5,29,935	6,03,939	15,92,149	15,88,489
Surplus	1,55,771	3,43,837	..	4,99,608	..
Deficit	..	..	16,503	16,503	..
Total	6,14,046	8,73,772	5,87,436	20,75,254	21,51,114

ANNUAL FORM No. 60.

Forest Department, Madras Presidency.

OUTSTANDINGS and Liabilities on account of Contractors and Disbursers for the Forest year 1898-99.

District.	Department Debtor.			Department Creditor.			Balance due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Northern Circle.								
Conservator, Northern Circle ..	..	4,407 12 0	4,407 12 0	434 12 4	4,131 14 2	4,566 10 6	158 14 6	..
Forest Settlement-officer, Ganjam, &c., districts ..	..	611 13 2	611 13 2	1 10 5	648 13 3	650 7 8	38 10 6	..
Forest Settlement-officer, Nellore, &c., districts ..	..	603 4 5	603 4 5	47 12 9	606 9 2	654 5 11	51 1 6	..
Forest School, Dehra Dun ..	..	60 0 0	60 0 0	18 10 8	60 0 0	78 10 8	18 10 8	..
Ganjam ..	..	32,236 4 8	32,236 4 8	1,376 8 2	31,570 5 0	82,946 13 2	710 8 6	..
Vizagapatam ..	..	21,929 8 4	21,929 8 4	1,027 4 8	21,420 3 1	22,447 7 9	617 15 5	..
Goddavari ..	..	59,464 4 11	59,464 4 11	2,672 11 3	57,950 9 0	60,623 4 3	1,158 15 4	..
Kistna ..	..	63,753 10 10	63,753 10 10	1,890 1 9	63,525 5 1	66,415 6 10	1,661 12 0	..
Kurnool ..	..	68,924 5 3	68,924 5 3	1,637 15 2	74,935 5 1	76,573 4 3	7,648 13 0	..
Bellary ..	..	45,950 6 7	45,950 6 7	899 8 0	46,489 11 11	47,389 8 11	1,438 13 4	..
Anantapur ..	..	23,680 2 6	23,680 2 6	1,032 5 9	23,672 0 2	24,704 5 11	1,024 3 5	..
Total ..	..	8,21,621 8 8	8,21,621 8 8	11,030 4 11	3,25,010 11 11	3,36,050 0 16	14,428 8 2	..
Central Circle.								
Conservator, Central Circle ..	..	1,022 11 7	1,022 11 7	45 11 2	1,062 5 4	1,108 0 6	85 4 11	..
Forest Settlement-officer, North Arcot, &c., districts ..	..	48 3 5	48 3 5	4 11 6	58 5 11	63 1 5	14 14 0	..
Forest Settlement-officer, Trichinopoly, &c., districts ..	..	1,508 5 6	1,508 5 6	4 3 2	1,525 8 10	1,529 12 0	21 6 6	..
Nellore ..	..	41,094 6 7	41,094 6 7	1,842 10 4	40,515 11 1	42,358 5 5	1,263 14 10	..
Cuddapah ..	..	51,891 5 0	51,891 5 0	831 4 5	52,244 15 6	53,076 3 11	1,184 14 11	..
Chingleput ..	..	23,982 12 2	23,982 12 2	800 6 1	23,800 5 6	24,690 11 7	707 15 5	..
North Arcot ..	..	51,886 2 5	51,886 2 5	1,642 13 4	55,163 7 6	56,806 4 10	1,970 2 5	..
South do. ..	..	39,590 8 11	39,590 8 11	1,041 0 8	39,444 14 5	40,485 15 1	895 6 2	..
Salem ..	..	1,30,224 0 10	1,30,224 0 10	3,778 12 0	1,36,944 5 2	1,40,723 1 2	1,049 0 4	..
Trichinopoly ..	..	21,294 11 11	21,294 11 11	249 0 5	21,687 4 9	21,936 5 3	641 9 3	..
Tanjore ..	..	7,921 15 0	7,921 15 0	131 3 5	7,935 10 5	8,066 13 10	144 14 10	..
Total ..	..	3,73,415 3 4	3,73,415 3 4	10,371 12 6	3,80,472 14 5	3,90,844 10 11	17,429 7 7	..
Southern Circle.								
Conservator, Southern Circle ..	..	7,583 9 3	7,583 9 3	24 15 10	7,602 8 1	7,627 7 11	43 14 8	..
Forest Settlement-officer, Malabar, &c., districts ..	..	389 7 8	389 7 8	49 7 3	378 0 3	428 0 6	38 8 10	..
Forest Settlement-officer, Trichinopoly, &c., districts ..	..	1,508 5 8	1,508 5 8	4 2 10	1,525 9 4	1,529 12 2	21 6 0	..
Forest School, Dehra Dun ..	..	240 0 0	240 0 0	198 5 4	120 0 0	318 5 4	78 5 4	..
The Nilgiris ..	..	52,963 13 5	52,963 13 5	1,271 4 2	53,053 9 7	54,324 13 9	1,361 0 4	..
North Coimbatore ..	..	81,023 10 4	81,023 10 4	1,882 9 3	81,015 11 10	82,898 5 1	1,874 10 9	..
South do. ..	..	46,809 13 1	46,809 13 1	1,834 0 10	46,336 2 9	48,170 9 7	1,360 12 6	..
Madura ..	..	43,247 15 9	43,247 15 9	45,352 9 3	45,352 9 3	45,352 9 3	1,454 0 8	..
Tinnevely ..	..	60,157 7 5	60,157 7 5	7,322 13 11	55,476 4 10	62,799 2 9	2,641 11 4	..
North Malabar ..	..	35,671 13 6	35,671 13 6	2,005 14 1	35,251 5 4	37,257 3 5	1,585 5 11	..
South do. ..	..	54,661 13 10	54,661 13 10	2,023 0 6	53,825 0 6	55,848 0 6	1,186 2 8	..
South Canara ..	..	37,393 3 11	37,393 3 11	1,089 8 1	36,856 8 2	37,946 0 3	550 12 4	..
Total ..	650 8 10	4,21,653 1 10	4,22,303 10 8	17,706 8 1	4,16,793 14 5	4,34,500 6 6	12,196 11 10	..

MADRAS,
25th August 1899.(Signed) P. V. KRISHNASWAMI,
Offg. Chief Superintendent.

ANNUAL FORM No. 61.

Forest Department, Madras Presidency.

REVENUE received and Outstandings on account of Revenue during the Forest year 1898-99.

District.	Particulars.	Outstandings at commencement of year.		Value of sales and other revenue during year.		Total.		Amount realized during year.		Balance due to the department at end of year.	
		RS.	A. P.	RS.	A. P.	RS.	A. P.	RS.	A. P.	RS.	A. P.
Direction ..	Timber and other forest produce.	..	..	10 0 0	..	10 0 0	..	10 0 0	..	..	..
Ganjam ..	Do. do.	..	..	50,247 1 7	..	50,247 1 7	..	50,246 11 3	..	0 6 4	..
Vizagapatam ..	Do. do.	..	..	39,391 1 1	..	39,391 1 1	..	39,391 1 1	..	..	..
Goddavari ..	Do. do.	292 8 9	..	1,12,165 12 2	..	1,12,758 4 11	..	1,39,083 9 11	..	3,621 11 0	..
Kistna ..	Do. do.	994 12 8	..	1,07,561 10 9	..	1,08,556 6 8	..	1,07,862 10 0	..	693 12 8	..
Kurnool ..	Do. do.	2,137 6 7	..	1,27,122 11 1	..	1,29,860 1 8	..	1,25,233 4 7	..	4,627 0 4	..
Bellary ..	Do. do.	35,249 9 0	..	68,551 7 2	..	1,03,801 0 2	..	88,612 5 2	..	15,188 11 0	..
Anantapur ..	Do. do.	41,233 0 0	..	35,855 9 2	..	77,088 9 2	..	63,576 6 7	..	13,512 2 7	..
Total ..	..	80,207 5 0	..	5,77,505 4 3	..	6,51,712 9 3	..	6,14,046 0 7	..	37,305 11 11	..
Direction ..	Timber and other forest produce.	..	..	7 0 0	..	7 0 0	..	7 0 0	..	..	..
Nellore ..	Do. do.	3,920 0 0	..	1,17,187 6 1	..	1,21,117 6 1	..	1,18,183 15 0	..	2,933 7 1	..
Cuddapah ..	Do. do.	5,336 14 4	..	1,12,666 2 1	..	1,48,003 0 5	..	1,41,487 3 1	..	6,242 15 4	..
Chingleput ..	Do. do.	15,315 1 10	..	42,918 1 11	..	58,293 3 9	..	47,797 3 8	..	10,196 0 1	..
North Arcot ..	Do. do.	63,768 6 2	..	92,226 0 6	..	1,55,994 6 8	..	1,26,628 1 10	..	26,517 6 1	..
South Arcot ..	Do. do.	27,211 9 0	..	77,821 7 5	..	1,05,033 0 5	..	95,003 14 5	..	10,032 2 0	..
Salem ..	Do. do.	15,363 13 10	..	2,89,351 13 9	..	3,04,715 11 7	..	2,64,169 0 7	..	40,246 11 0	..
Trichinopoly ..	Do. do.	18,819 9 6	..	59,393 13 11	..	69,213 7 5	..	63,368 7 2	..	5,774 0 3	..
Tanjore ..	Do. do.	1,656 14 0	..	17,771 6 5	..	19,428 4 5	..	18,919 7 5	..	2,508 13 0	..
Total ..	..	1,51,432 4 8	..	8,30,373 4 1	..	9,81,805 8 9	..	8,73,861 5 2	..	1,04,751 6 10	..
Direction ..	Timber and other forest produce.	..	..	..	..	..	..	..	..	..	..
The Nilgiris ..	Do. do.	1,622 13 10	..	60,324 5 2	..	61,947 3 0	..	60,885 8 8	..	1,061 10 4	..
North Coimbatore ..	Do. do.	528 12 0	..	1,25,421 4 4	..	1,25,950 0 4	..	1,25,843 7 4	..	106 9 0	..
South do. ..	Do. do.	5,307 7 11	..	63,107 3 11	..	68,414 11 10	..	66,180 3 10	..	2,234 8 0	..
Madura ..	Do. do.	59,418 11 9	..	1,03,000 1 6	..	1,62,418 13 3	..	1,53,639 7 4	..	74,719 15 5	..
Tinnevely ..	Do. do.	5,525 1 0	..	98,777 0 8	..	1,04,302 1 8	..	95,967 12 11	..	8,334 4 9	..
North Malabar ..	Do. do.	1,209 2 11	..	418 15 0	..	1,627 7 11	..	1,585 5 11	..	42 2 0	..
South do. ..	Do. do.	7,478 12 0	..	71,196 10 4	..	78,675 6 4	..	67,261 15 9	..	11,413 6 7	..
South Canara ..	Do. do.	1,019 0 7	..	57,528 7 9	..	58,547 8 4	..	57,631 6 4	..	916 2 0	..
Total ..	..	82,109 14 0	..	6,35,754 5 9	..	7,17,864 1 9	..	6,87,435 15 0	..	1,26,398 12 3	..

* Written off under Government Order, No. 132, Revenue, dated 21st February 1899.
† Written off under Government Order, No. 726, Revenue, dated 29th November 1898.
‡ Written off under Government Order, No. 173, Revenue, dated 22nd March 1898.
§ Written off under Government Order, No. 374, Revenue, dated 2nd July 1898.
|| This is the figure shown in form No. 9 for June 1899 of this district.

MADRAS,
25th August 1899.(Signed) P. V. KRISHNASWAMI,
Offg. Chief Superintendent.

ANNUAL FORM No. 62.

Forest Department, Madras Presidency.

Financial Results of the year 1898-99.

Districts.	Timber and other produce removed from the forests by Government Agency.		Other revenue		Formation, protection and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.			
<i>Northern Circle.</i>	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjām	12,235	8,178	38,015	23,023	20,875	50,250	52,076
Vizagapatam ..	1,856	2,534	37,536	16,864	16,594	39,392	35,992
Godavari	3,379	1,517	1,35,706	54,151	25,949	1,39,085	81,647
Kistna	1,117	1,020	1,06,748	33,617	42,759	1,07,865	77,396
Karnool	13,134	8,546	1,12,101	47,468	50,974	1,25,235	1,06,988
Bellary	7,638	9,357	81,005	25,319	28,257	88,643	62,933
Anantapur	..	1	63,576	23,978	17,264	63,576	41,243
Total	39,359	31,183	5,74,687	2,21,420	2,02,672	6,14,046	4,58,275
<i>Central Circle.</i>							
Cuddapah	18,720	11,789	1,22,767	40,459	53,502	1,41,487	1,05,750
Nellore	46,309	26,207	71,875	19,383	18,593	1,18,181	64,183
Chingleput	3,211	1,861	44,497	17,884	13,972	47,708	33,717
North Arcot	5,486	6,208	1,21,142	27,348	36,825	1,26,628	70,381
South Arcot	2,122	3,727	92,879	24,763	28,890	95,001	57,380
Salem	1,05,917	84,198	1,58,559	38,499	33,089	2,64,476	1,55,786
Trichinopoly ..	10,069	5,358	53,300	17,007	13,161	63,369	35,526
Tanjore	10	399	16,909	3,866	2,947	16,919	7,212
Total	1,91,841	1,39,747	6,81,928	1,89,209	2,00,979	8,73,772	5,29,935
<i>Southern Circle.</i>							
South Canara ..	20,258	29,572	37,378	11,807	18,204	57,631	59,583
North Malabar ..	21,849	29,775	8,177	638	48,400	30,026	78,813
South Malabar ..	57,809	42,469	9,463	64	23,298	67,262	65,831
The Nilgiris	39,588	48,596	21,298	4,272	29,836	60,886	82,704
North Coimbatore	51,219	27,130	74,624	4,963	75,879	1,25,843	1,07,972
South Coimbatore	20,206	40,651	45,974	14,415	31,755	66,180	86,821
Madura	592	3,127	83,048	7,520	43,590	83,640	54,287
Tinnevely	10,727	21,943	85,241	3,238	42,797	95,968	67,978
Total	2,22,243	2,43,263	3,65,193	46,917	3,13,759	5,87,436	6,03,939
Grand Total ..	4,53,446	4,14,193	16,21,808	4,60,546	7,17,410	20,75,254	15,92,149

ANNUAL FORM No. 64.

Forest Department, Madras Presidency.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for 1898-99.

Districts.	Surveying, &c., instruments			Tools			Machinery			Furniture			Building materials, small stores, tents, boats, &c.		
	On hand at commencement of the year.		Value.	On hand at commencement of the year.		Value.	On hand at commencement of the year.		Value.	On hand at commencement of the year.		Value.	On hand at commencement of the year.		Value.
	Number.	Value.		Number.	Value.		Number.	Value.		Number.	Value.		Number.	Value.	
<i>Northern Circle.</i>	24	452	4,481	525	4,481	4,481	525	4,481	4,481	525	4,481	4,481	525	4,481	4,481
Ganjām	45	535	442	301	154	154	301	154	154	301	154	154	301	154	154
Vizagapatam ..	42	814	685	299	269	269	299	269	269	299	269	269	299	269	269
Godavari	111	517	581	501	288	288	501	288	288	501	288	288	501	288	288
Kistna	73	890	827	501	288	288	501	288	288	501	288	288	501	288	288
Karnool	80	803	83	859	547	547	80	803	83	859	547	547	80	803	83
Bellary	97	253	97	247	560	560	97	253	97	247	560	560	97	253	97
Anantapur	53	210	293	293	669	669	53	210	293	293	669	669	53	210	293
Total, Northern Circle.	525	4,481	4,481	525	4,481	4,481	525	4,481	4,481	525	4,481	4,481	525	4,481	4,481
<i>Central Circle.</i>	43	744	744	43	744	744	43	744	744	43	744	744	43	744	744
Cuddapah	125	1,058	1,058	125	1,058	1,058	125	1,058	1,058	125	1,058	1,058	125	1,058	1,058
Nellore	69	622	622	68	542	542	69	622	622	68	542	542	69	622	622
Chingleput	19	153	153	37	388	388	19	153	153	37	388	388	19	153	153
North Arcot	44	534	534	73	665	665	44	534	534	73	665	665	44	534	534
South Arcot	115	1,825	1,825	111	1,804	1,804	115	1,825	1,825	111	1,804	1,804	115	1,825	1,825
Salem	135	1,450	1,450	136	1,455	1,455	135	1,450	1,450	136	1,455	1,455	135	1,450	1,450
Trichinopoly ..	67	510	510	53	499	499	67	510	510	53	499	499	67	510	510
Tanjore	20	90	90	20	90	90	20	90	90	20	90	90	20	90	90
Total, Central Circle.	527	7,036	7,036	527	7,036	7,036	527	7,036	7,036	527	7,036	7,036	527	7,036	7,036
<i>Southern Circle.</i>	41	444	444	41	444	444	41	444	444	41	444	444	41	444	444
South Canara ..	116	1,145	1,145	116	1,145	1,145	116	1,145	1,145	116	1,145	1,145	116	1,145	1,145
North Malabar ..	72	1,482	1,482	72	1,482	1,482	72	1,482	1,482	72	1,482	1,482	72	1,482	1,482
South Malabar ..	33	875	875	33	875	875	33	875	875	33	875	875	33	875	875
The Nilgiris	64	1,062	1,062	66	1,077	1,077	64	1,062	1,062	66	1,077	1,077	64	1,062	1,062
North Coimbatore	70	1,236	1,236	63	913	913	70	1,236	1,236	63	913	913	70	1,236	1,236
South Coimbatore	89	1,546	1,546	101	1,487	1,487	89	1,546	1,546	101	1,487	1,487	89	1,546	1,546
Madura	82	1,838	1,838	87	1,902	1,902	82	1,838	1,838	87	1,902	1,902	82	1,838	1,838
Tinnevely	105	1,611	1,611	91	1,596	1,596	105	1,611	1,611	91	1,596	1,596	105	1,611	1,611
Total, Southern Circle.	672	11,220	11,220	672	11,220	11,220	672	11,220	11,220	672	11,220	11,220	672	11,220	11,220
Total, Presidency ..	1,824	22,737	22,737	1,824	22,737	22,737	1,824	22,737	22,737	1,824	22,737	22,737	1,824	22,737	22,737

* Correction.

† Revised figures.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for 1898-99—cont.

Districts.	Buildings				Live-stock				Miscellaneous				Totals			
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Direction ..	29	15,886	31	15,984	..	..	..	..	1	103	1	100	116	2,022	117	1,510
Ganjum ..	18	1,035	41	5,852	..	..	..	..	199	407	61	108	470	17,918	524	18,430
Vizagapatam ..	60	29,656	71	32,069	..	..	..	..	289	342	656	782	1,456	37,567	603	41,555
Godavari ..	69	11,081	77	12,335	..	..	..	..	15	337	36	223	796	16,020	811	16,447
Karnool ..	60	33,593	61	35,037	..	..	..	..	30	165	33	116	1,317	39,950	1,323	40,819
Bellary ..	22	3,729	25	4,365	..	..	..	..	33	128	..	..	769	6,030	773	6,520
Anantapur ..	15	15,610	15	14,619	..	..	..	..	..	..	..	..	482	17,783	570	16,798
Total, Northern Circle.	274	1,10,599	321	1,20,361	4	1,600	4	1,600	547	1,482	687	1,329	6,131	1,41,349	6,97	1,50,644
Direction ..	115	20,618	118	21,321	..	..	..	..	38	639	39	608	210	3,015	212	2,785
Cuddapah ..	10	3,537	10	4,434	..	..	..	..	317	6,419	228	3,019	952	33,868	94	34,246
Nellore ..	20	5,970	17	4,985	..	..	..	..	43	68	115	169	617	7,977	170	9,219
Chingleput ..	46	9,450	51	10,460	..	..	..	..	..	..	..	..	1,332	12,119	1,40	13,608
North Arcot ..	20	19,803	19	19,746	..	..	..	..	508	1,546	590	1,552	1,322	26,446	3,226	26,811
South Arcot ..	21	15,900	22	16,590	..	..	..	..	22	1,312	32	2,000	2,133	33,482	2,39	25,711
Salem ..	8	2,670	8	2,795	..	..	..	..	1,291	922	2,305	952	2,520	5,993	3,540	6,212
Tiruchinopoly ..	7	631	7	631	..	..	..	..	45	105	41	104	177	1,393	173	1,115
Tanjore ..	247	78,579	252	81,072	2	56	2	56	2,264	11,209	3,350	8,404	10,321	1,62,114	13,774	1,59,648
Total, Central Circle.	14	7,603	14	7,603	14	24,400	15	23,550	676	610	630	625	332	2,690	637	2,619
Direction ..	32	39,678	35	37,374	16	26,386	18	23,700	223	1,894	264	1,334	1,066	70,984	675	26,617
North Malabar ..	63	9,354	62	9,911	7	7,900	7	7,900	23	198	19	158	1,031	22,031	1,215	25,449
South do. ..	57	18,339	60	25,400	..	..	..	..	107	253	118	186	1,031	23,413	1,945	28,919
Madura ..	53	29,909	57	30,227	8	18,300	7	13,500	142	987	177	977	9,306	72,274	8,591	66,918
Tinnevely ..	52	25,211	51	25,143	..	..	..	..	541	568	608	445	3,061	31,030	1,981	30,910
Total, Southern Circle.	118	28,768	70	28,821	..	..	..	..	..	..	..	..	1,312	35,198	1,311	35,011
Direction ..	389	1,58,857	347	1,64,779	47	79,485	49	78,650	2,347	5,937	2,487	5,518	19,882	3,01,266	17,321	3,03,964
Total, Presidency ..	910	3,48,035	920	3,66,112	53	81,141	55	80,306	5,158	18,628	6,524	15,251	36,334	6,04,729	38,681	6,13,866

ANNUAL FORM No. 63.

Forest Department, Madras Presidency.

STATEMENT of Elephants during the year 1898-99.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep, including servants and food.
1	2	3	4
PART I.			
Elephants in possession of the Reporting Officers throughout the year.			
Vizagapatam ..	Ethel ..	Transferred from Southern Circle on 3rd December 1897.	Per head .. Rs. A. P. 72 2 8
Godavari ..	1. Surat Pari ..	Purchased in November 1894 in Sonepur fair.	Do. .. 58 13 4
	2. Captain Gunning ..	Purchased in July 1888 and transferred from direction Northern Circle on 15th November 1897.	Do. .. 58 13 4
Kurnool ..	Byrangi Piri ..	Purchased in November 1894 in Sonepur fair.	Do. .. 53 6 4
North Malabar ..	1. Phyllis ..	Purchased in January 1878	Do. .. 57 10 8
	2. Peri ..	Captured in April 1889 ..	Do. .. 60 4 1
	3. Kalyani ..	Purchased in October 1889 ..	Do. .. 61 3 3
	4. Lallameah ..	Captured in March 1891 ..	Do. .. 57 8 8
	5. Krishna ..	Do. on 3rd March 1896 ..	Do. .. 57 11 4
	6. Pyramus ..	Do. on 15th April 1897 ..	Do. .. 53 3 9
	7. Zelia ..	Do. on 17th February 1898 ..	Do. .. 63 3 3
	8. Isabella ..	Do. on 17th February 1896 ..	Do. .. 61 6 1
	9. Chakravarthini ..	Do. on 10th March 1896 ..	Do. .. 63 15 10
South Malabar ..	1. Vixen ..	Transferred from Wynad in 1882 ..	Do. .. 37 9 2
	2. Peyru ..	Purchased from Mr. Morgan in 1885 ..	
	3. Samson ..	Captured on 3rd January 1886 ..	
	4. Eva ..	Do. on 17th February 1886 ..	
	5. Theobow ..	Do. on 9th January 1887 ..	
	6. Juniper ..	Transferred from Wynad on 29th September 1888 ..	
	7. Jupiter ..	Captured on 11th February 1889 ..	
	8. Maharajah ..	Do. on 10th February 1890 ..	
	9. Gordon ..	Do. on 21st April 1890 ..	
	10. Eddy ..	Do. on 24th December 1890 ..	
	11. Loo ..	Do. on 25th February 1893 ..	
	12. Hercules ..	Do. on 23rd November 1894 ..	
	13. Tippu ..	Do. on 4th October 1891 and transferred from South Coimbatore on 18th June 1896 ..	
	14. May ..	Captured on 3rd January 1896 and transferred from North Malabar on 3rd September 1897.	
	15. Abdul ..	Captured on 8th February 1896 and transferred from North Malabar on 3rd September 1897.	
South Canara ..	1. Mohidien Khan ..	Captured on 3rd January 1896 and transferred from North Malabar on 3rd September 1897.	Do. .. 43 10 2
	2. Padmini ..	Captured on 8th February 1896 and transferred from North Malabar on 3rd September 1897.	
The Nilgiris ..	1. Latchmi ..	Transferred from the Anamalais on the 30th January 1882 ..	Do. .. 53 12 2
	2. Chinna Latchmi ..	Born on 22nd February 1888 ..	
	3. Akbar Baksh ..	Do. in 9th April 1889 ..	
	4. Meenatchi ..	Purchased in September 1894 ..	
	5. N. Latchmi ..	Transferred from North Malabar in June 1896.	
	6. Seetha ..	Captured on 14th March 1896 and transferred from North Malabar on the 12th November 1896.	
	7. Zahara ..	Arrived from South Malabar, August 1888.	
South Coimbatore.	1. Karthiyayini ..	Do. do. on the 19th August 1891 ..	Do. .. 43 3 2
	2. Sinna Rani ..	Captured on 25th September 1892 ..	
	3. Phyllis, II ..	Do. on 23rd July 1893 ..	
	4. Jumbo, II ..	Do. on 16th March 1894 and transferred from South Malabar on 25th December 1896.	
	5. Ranger ..	Do. on 16th March 1894 and transferred from South Malabar on 25th December 1896.	
	6. Dora ..	Do. on 16th March 1894 and transferred from South Malabar on 25th December 1896.	

ANNUAL REPORT OF THE FOREST DEPARTMENT.

Statement of Elephants during the year 1898-99—cont.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of keep including servants and food.	How disposed of.
1	2	3	4	5

PART II.

Elephants received in the year.

				RS. A. P.		
				Per head.		
North Malabar.	1. Begum Johan ..	By birth on 8th January 1899.	Do.	3 3 0	....	
	2. Tippu Sultan ..	Captured on 22nd February 1899.	Do.	64 13 10	....	
	3. Lala Ruk ..	Captured on 13th March 1899.	Do.	38 1 9	....	
	4. Smith ..	Do. on 14th May ..	Do.	44 15 9	....	
	5. Sirdar ..	Do. on 11th June ..	Do.	42 5 0	....	
	6. Emily ..	Do. on 23rd June ..	Do.	36 9 4	....	
South Malabar.	1. Nurmahal ..	Transferred from North Malabar.	Do.	37 6 8	....	
	2. Devagi ..	Captured on 16th January 1899.	Do.	45 12 7	....	
	3. Tommy ..	Do.	Do.	21 11 11	....	
	4. Janaki ..	Captured on 8th February 1899.	Do.	44 14 10	....	
South Coimbatore.	1. Peria Rani ..	Received back from Public Works Department on 13th July 1898.	Do.	49 12 11	....	
	2. Bamboosa ..	Captured on 27th July 1898.	Do.	25 14 10	....	
	3. Hugh ..	Do. on 28th ..	Do.	10 6 9	....	
	4. Christie ..	Do. on 8th August ..	Do.	28 10 10	....	
	5. Mona ..	Received from North Malabar on 23rd November 1898.	Do.	30 2 7	....	
	6. Kunjunni ..	Received from Public Works Department on 10th December 1898.	Do.		....	
	7. Bagatathi ..				....	

PART III.

Elephants gone off the list during the year.

				RS. A. P.		
				Per head.		
North Malabar.	1. Cherry ..	Captured in May 1892	Do.	52 5 7	Died on 7th January 1898.	
	2. Kunjunni ..	Do. on 17th March 1897.	Do.	50 9 10	Sent to South Coimbatore on 28th October 1898.	
	3. Minie ..	Do. on 8th June ..	Do.	118 7 6	Shot on 5th August 1898.	
	4. Hyderali ..	Do. on 8th Feb. 1898.	Do.	60 12 1	Ran away on 19th September 1898.	
	5. Nurmahal ..	Do. on 25th Feb. ..	Do.	51 8 0	Sent to South Malabar on 28th October 1898.	
	6. Lala Ruk ..	Do. on 13th March 1899.	Do.	38 1 9	Died on 23rd March 1899.	
South Malabar.	1. Rose ..	Do. on 8th Feb. 1898 ..	Do.	35 14 11	Sold in auction in September 1898.	
	2. Tommy ..	Do. on 16th Jan. 1899.	Do.	21 11 11	Given to the Zamorin on payment of three-fourths of the value in June 1899.	
South Coimbatore.	1. Chloe ..	Arrived from North Malabar on 28th June 1888.	Do.	48 12 10	Died on 17th October 1898.	
	2. Parvathi ..	Arrived from South Malabar on 23rd June 1898.	Do.	47 4 6	Transferred to Public Works Department on 7th December 1898.	
	3. Bamboosa ..	Captured on 27th July 1898.	Do.	25 14 11	Died on 17th March 1899.	
	4. Hugh ..	Do. on 27th July ..	Do.		Sold to the Manager of Deval's Circus for Rs. 800.	
	5. Christie ..	Do. on 28th ..	Do.		Sold to the Manager of Deval's Circus for Rs. 700.	
	6. Kunjunni ..	Captured on 17th March 1897 and received from North Malabar on 23rd November 1898.	Do.	28 10 10	Transferred to Public Works Department on 7th December 1898.	

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue (Land Revenue), Forest No. 491, dated 15th November 1899 :—

Resolution—Forest No. 491, dated 15th November 1899.

The Board submits to Government the progress report of Forest Administration in the Madras Presidency for the year ending 30th June 1899, which, in accordance with the usual practice, has been compiled by Mr. Peet, the Acting Senior Conservator of Forests.

2. Further information had to be called for from several districts and replies from some of them were not received until the last week of October. Mr. Peet was consequently unable to submit the report in print to the Forest Member until the 14th November. The Board has to acknowledge the cordial assistance which has been rendered by the Conservators and by the District Forest-officers almost without exception. A specially careful and interesting report on the possibility of undertaking the supply of railway sleepers was submitted during the year by Mr. Gass, Acting Conservator of Forests, Southern Circle.

(True Extract.)

(Signed) W. FRANCIS,
Acting Secretary.

To the Secretary to Government, Revenue Department,
with 3 copies of the report.

ORDER—No. 406, Revenue, dated 30th April 1900.

Forest No. 88.

With its Proceedings read above the Board of Revenue submits its report on the administration of the Forest department during the year 1898-99. The report has been compiled by Mr. Peet, the senior Conservator on duty. It deals with the work of the department during the sixth and last year that it has been under the charge of the Hon'ble Mr. J. Sturrock, late a member of the Board of Revenue.

Mr. Sturrock's administration has been marked with zeal for the professional success of the department accompanied by a clear perception of and keen sympathy with the needs of the people. The results achieved have been conspicuously successful.

His Excellency the Governor in Council desires to take this opportunity of placing on record his recognition of the excellent services rendered by Mr. Sturrock as head of the Forest department.

2. The important features of the past year's work will be noticed.

EXTENSION AND CONSTITUTION OF STATE FORESTS.

3. *Alteration of Area.*—The following table exhibits the changes under the two main heads, reserved forests and reserved lands, that took place during the year in the area under the control of the department.

	Area on 1st July 1898.	Area added during 1898-99.	Area excluded during 1898-99.	Net increase or decrease.	Area on 30th June 1899.
	SQ. MILES.	SQ. MILES.	SQ. MILES.	SQ. MILES.	SQ. MILES.
Reserved forest	13,775	1,219	106	+ 1,113	14,888
.. .. . lands	5,478	504	1,276	- 772	4,706
Total	19,253	1,723	1,382	+ 341	19,594

The total area under control on 30th June 1899 was 37·87 per cent. of the unoccupied area of the Presidency excluding zamindari tracts and whole inam villages. Complaints of undue extension of control have been made in the Kurnool district only; and the Government is glad to notice that the Board has instituted the necessary enquiries into the matter.

4. *Forest Settlement.*—Settlement work made greater progress than in the previous year. Not only were a larger number and a greater area of blocks finally constituted reserved forests as shown in the following statement, but the work done by the Forest Settlement-officers generally was greater:—

	1895-96.		1896-97.		1897-98.		1898-99.	
	Number of blocks.	Area in square miles.	Number of blocks.	Area in square miles.	Number of blocks.	Area in square miles.	Number of blocks.	Area in square miles.
Finally constituted reserved forests.	185	858	136	845	132	652	206	1,015

5. There were initially notified for reservation 167 blocks with an area of 493 square miles. This is scarcely an improvement on the previous year when 128 blocks with an area of 515 square miles were so notified. The Board remarks that the number of blocks ready for settlement in the southern districts was insufficient to justify the appointment of a *locum tenens* during the absence of Mr. Gompertz on leave. It would appear therefore that the work of selection and initial notification is not keeping pace with that of settlement. The Government notes from Board's Proceedings, No. 455, dated 26th October 1899, that the Board is taking special measures to prevent delay in the issue of initial notifications. It is essential to the preparation of proper and well considered plans of operations that reservation in all districts should be practically completed at as early a date as possible.

6. From the statements submitted by the Board it would appear that 131 blocks of a total area of 3,148 square miles have been initially notified but not yet finally constituted reserved forests; that there are 1,558 square miles of reserved lands not yet brought under settlement; and that an area of some 652 square miles has been or is likely to be selected but has not yet been brought under the Forest Act. Thus on the whole an area of about 5,358 square miles remains still to be dealt with. At the present rate of progress the work of Forest Settlement may be estimated to take some six years more to complete.

7. *Preliminary survey and demarcation.*—It is noticed that the work of the departmental surveyors and draughtsmen was generally satisfactory. The nature and cost of the preliminary demarcation varied as usual in different districts. On the whole 1,575 miles, or 119 miles more than in the previous year, were demarcated at the average cost of Rs. 3-1-9 per mile against Rs. 3-7-10 in the previous year.

8. *Permanent demarcation survey and mapping of settled reserves.*—The following statement compares the amount of permanent demarcation newly done and of reclearing of permanent lines during the last three years:—

	Permanent demarcation.			Reclearing of old lines, &c.		
	1896-97.	1897-98.	1898-99.	1896-97.	1897-98.	1898-99.
	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.
Northern circle	509	595	678	1,150	1,106	1,397
Central circle	629	1,021	637	1,327	1,001	2,875
Southern circle	238	348	258	549	697	499
Total	1,376	1,964	1,573	3,026	2,804	4,771
Average cost per mile	RS. A. P. 12 2 5	RS. A. P. 11 3 10	RS. A. P. 11 11 0	RS. A. P. 4 12 0	RS. A. P. 3 12 6	RS. A. P. 2 7 0

The year's work was thus, on the whole, considerably in excess of the average outturn. The length of line newly demarcated was less than in the preceding year, but that of old lines recleared was very considerably greater. The cost per mile of the demarcation was about the average of the last three years.

9. As in the previous year the Survey of India Parties Nos. 9 and 19 were at work in the Presidency. A total area of 1,350 square miles was topographically surveyed, this being a larger outturn than in any previous year; at the same time the cost per square mile fell from Rs. 119 to Rs. 74. This satisfactory result is ascribed to better organization.

10. The preparation of forest maps continues to keep pace with the extension of reserved forests. During the year final maps were prepared for 1,004 square miles of reserves. Maps are now ready for a total area of 8,518 square miles.

MANAGEMENT OF STATE FORESTS.

11. *Working plans and plans of annual operations.*—The Government is glad to note that more attention was paid during the year under review to the preparation of working plans; but the progress made in this direction can hardly be yet considered adequate. According to the report under review there were at the beginning of the year working plans in force over 136 square miles of reserves, while plans for 1,104 square miles were under preparation. During the year plans were sanctioned for 3 square miles only, but in addition 467 square miles were taken in hand. Thus at the end of the year working plans were ready or in preparation for only 1,710 square miles out of a total area of 19,594 square miles of reserves.

The Board has, however, recently taken special measures to push on the compilation of working plans; and the Inspector-General of Forests has recently visited the Presidency to consult with, and to advise, Conservators on this subject. The Government therefore hopes that future reports will show greater advance in the direction of bringing the reserves under suitable working plans.

The annual plans of operations were generally adhered to in all districts except South Coimbatore. In this district the annual plan seems to have been entirely departed from for reasons which are not definitely indicated in the report. Such changes are apt to engender bad work and the Government trusts that the Board is satisfied that they were necessary.

12. *Communications and buildings.*—There was a substantial increase in the outlay on roads and bridges—Rs. 38,614 having been expended as against Rs. 33,689 in the previous year. The Board has not yet been able to devise a satisfactory

method of estimating the utility of the various forest tramways; but it seems fairly certain that the Cuddapah tramway does not pay its way and it is noted that it is to be transferred to Nellore.

13. *Forest offences.*—The following table exhibits the number and mode of disposals of cases relating to forest offences during the last three years:

Years.			Number of cases for disposal.			Number of cases disposed of.				Number of acquittals.	Percentage of cases compounded to cases disposed of.	Percentage of acquittals to cases dealt with by the Magistracy.
			Cases pending.	New cases.	Total.	Withdrawn.	Compounded.	Dealt with by the Magistracy.	Total.			
1896-97	..	..	1,580	11,638	13,218	1,624	5,793	4,025	11,442	672	50.6	16.7
1897-98	..	..	1,776	14,993	16,769	2,420	7,694	4,474	14,588	650	52.7	14.5
1898-99	..	..	2,200	18,295	20,495	2,364	10,070	5,697	18,131	754	55.5	13.2

The total number of cases reported during 1898-99 increased by 22 per cent. over those of the previous year. The increase has mainly to be ascribed to the strengthening of the subordinate establishments in recent years. Cases of grave crime were comparatively absent. The increase was chiefly under the heads "Unauthorized felling, &c.," and "Illicit grazing," that is, under those classes of offences most likely to escape detection by an insufficient establishment.

In Trichinopoly, the increase in forest offences reported is ascribed to the prohibition imposed during the first half of the year—the manuring season—on the removal of manure-yielding leaves from the Pachamalai reserve. The prohibition was, however, the Government understands, necessary in the interest of good forest management in order to give the forests rest. It is unsatisfactory to note that the increase under "Illicit grazing" in Kurnool is ascribed to the injudicious extension of reservation noticed in paragraph 3 above. No material decrease in forest offences is to be expected until the methods and aims of forest management are better understood and appreciated by the people.

Of the total number of cases disposed of during the year, 31.4 per cent. were taken into Court, the remainder being either withdrawn or compounded.

Of the cases prosecuted the percentage of acquittals fell from 14.5 in the previous year to 13.2. It is also satisfactory to note, as showing that doubtful or trivial cases were less frequently reported, that the number of cases withdrawn was smaller than in the previous year, notwithstanding the fact that in some districts undetected cases were returned as withdrawals. The number of cases compounded increased from 7,694 to 10,070, but the amount of compensation levied increased but slightly from Rs. 61,883 to Rs. 63,643. As pointed out by the Board, the fact that a smaller amount of compensation was levied in each case goes to show that important cases were not compounded as a rule; but it must not be forgotten that the ryots will, in general, be willing to pay a small sum to avoid the trouble and worry of being prosecuted even on a false charge. The Board and Collectors should continue carefully to watch the manner in which the power to compound is exercised.

14. *Fire Protection.*—Measures of protection were taken over 5,126 square miles of reserves at a cost of Rs. 34,582, and were successful as regards 96.3 per cent. of this area. This is an improvement on the results of the previous year, when only 93.6 of the protected area escaped from fire. The most serious loss was in North Malabar, where nearly 64,000 acres of forest were burnt through. Malicious firing was fortunately much less rife than in the previous year and led to the burning of 1,789 acres only. The most important case of this kind appears to have been in North Coimbatore, where a deliberate attempt was made to destroy a sandalwood plantation.

15. *Regulation of Grazing.*—The following statement shows the extent to which the forests were opened to grazing:—

Year.	Total area under control.	Closed to all animals.		Closed to goats or sheep or both.		Open to all animals.
		Whole year.	Part of year.	Whole year.	Part of year.	Whole year.
1897-98	SQ. MILES. 19,253	SQ. MILES. 1,792	SQ. MILES. 233	SQ. MILES. 13,029	SQ. MILES. 4,851	SQ. MILES. 1,373
1898-99	19,594	1,824	132	18,476	..	+ 1,119

* Of these 16,421 square miles were closed to goats only.
+ Of these 123 square miles were reserved for goats.

The question of providing for goats continues to be one of great difficulty. In South Arcot the demand is most pressing and cases of illicit goat-browsing are comparatively frequent; but it has been found that after providing for cattle and sheep no provision can be made for goats in the reserves. It is satisfactory, however, to note that in Cuddapah, North Arcot and Madura, where also illicit goat-browsing is common, schemes have been put in working or are under consideration for throwing open larger areas to the goat. It is also satisfactory to observe that steps have been taken to modify the grazing arrangements complained of in Kurnool.

From statement No. 53 appended to the report it will be seen that during the year the Government reserves afforded grazing representing at full rates a value of Rs. 4,20,756 to 2,618,824 head of cattle of all kinds.

16. *Improvement in forest growth.*—The season was, on the whole, favourable to natural reproduction except in Cuddapah and Nellore.

A good deal of interesting work was done under artificial reproduction, plantations, and cultural operations. In particular, it is noted that the *teak*-planting undertaken in South Canara promises to be a success. A special report is due on *bamboo*-planting in South Arcot. Experiments were continued. *Ceara rubber* does not appear to have begun well at Mount Stuart, only 474 seeds having germinated out of 5,000 sown in nurseries. The *date*-planting undertaken during the year was not more successful than in the previous year, and from North Arcot alone it is reported that the existing plants are doing fairly. *Mahogany* failed at Mudumalai and Benne in the Nilgiris and also in Bellary and Kurnool, but has been more or less successful in Cuddapah, Chingleput, North and South Arcot, Tanjore, North and South Malabar and South Coimbatore.

17. *Exploitation of major and minor produce.*—In all districts inferior classes of timber, fuel and bamboos were removed under permit to meet local demands.

Selection fellings were conducted chiefly to obtain wood for seasoning and subsequent conversion into sleepers, to meet the demands of the Ordnance Department and to supply fuel.

Grazing yielded a substantially larger revenue than in the previous year. This is ascribed chiefly to the improved season and to more careful supervision.

Due attention was paid to the exploitation of various kinds of minor produce.

GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

18. The following statement compares the total yield of the forests for the years 1897-98 and 1898-99:—

Years.	Timber including sandalwood.	Fuel.	Bamboos.	Minor produce, gross value.
1897-98	C. FT. 2,619,793	C. FT. 11,922,428	NO. 29,817,049	RS. 9,98,998
1898-99	2,676,493	13,379,726	26,081,017	9,86,824
Increase or decrease in 1898-99 as against 1897-98	+ 56,700	+ 1,457,298	— 3,236,032	— 12,169
Percentage of the increase or decrease abovementioned	+ 2.16	+ 12.22	— 11.03	— 1.21

There was an increase in the outturn of timber and fuel, but a fall in that of bamboos and minor produce.

The increase was due chiefly to more extended departmental operations undertaken to accumulate stock for railway sleepers and to meet the demands of the Ordnance Department. The quantity of produce disposed of departmentally was somewhat greater than in the previous year except as regards sandal-wood and minor produce, but its value was less being Rs. 4,49,647 as compared with Rs. 4,78,301. As regards produce removed directly by purchasers there were marked decreases both in quantity and value under the heads of *Timber*, *Bamboos* and *Minor Produce* which were only partly counterbalanced by an increase under *Grazing*. On the whole, the total value of removals by purchasers amounted to Rs. 15,18,314 as compared with Rs. 16,17,729 in the previous year. The principal causes of the fall appear to be restricted fellings in the interests of forest management and want of demand owing to depression of trade on account of plague. The total value of the forest revenue during the year was Rs. 20,37,914, a fall of Rs. 2,17,754 as compared with the previous year. Excluding the decreases noticed above in the value of the produce removed by departmental and by private agency which amount to Rs. 1,28,069, the balance Rs. 89,685 must have occurred under the head of miscellaneous revenue. This decrease is not fully explained in the report which only touches on the fall in collections under this head.

FINANCIAL RESULTS.

19. The following statement exhibits the financial results of the year:—

	Receipts.	Charges.	Surplus.	Proportion of surplus to gross revenue.
	RS.	RS.	RS.	PER CENTUM.
1897-98.				
Northern Circle	5,99,670	4,68,026	+ 1,31,644	22
Central "	8,88,834	5,66,487	+ 3,22,347	37
Southern "	6,62,610	5,63,976	+ 98,634	15
Total	21,51,114	15,88,489	+ 5,62,625	26
1898-99.				
Northern Circle	6,14,046	4,58,275	+ 1,55,771	25
Central "	8,73,772	5,29,935	+ 3,43,837	39
Southern "	5,87,436	6,03,929	- 16,503	A decrease of 2 per cent.
Total	* 20,75,254	15,92,149	+ 4,83,105	23
Increase or decrease in 1898-99.				
Northern Circle	+ 14,376	- 9,751	+ 24,127	..
Central "	- 16,062	- 26,552	+ 11,490	..
Southern "	- 75,174	+ 39,963	- 1,15,137	..
Total	- 76,860	+ 3,660	- 79,520	..

* Taken from the Board's report.

20. The outstanding balance at the beginning of the year was Rs. 3,13,749. Adding Rs. 20,37,914 the value of sales during the year, the total revenue for collection was Rs. 23,51,663. Of this sum, Rs. 20,75,343† was collected, Rs. 7,583 was written off, and there remained a balance at the end of the year of Rs. 2,68,737.

Under expenditure there was a slight decrease of Rs. 1,409 under *Conservancy and Works*, which was more than counterbalanced by an increase of Rs. 5,069 under *Establishments*, due to augmentation of the subordinate staff under the sanctioned re-organization scheme.

21. The net result of the year was a surplus of 4.83 lakhs of rupees being 23 per cent. of the total collections.

† Taken from statement No. 61, appended to the report.

GENERAL.

22. The Government is glad to see from paragraph 49 of the report that efforts are being made in every direction to meet the convenience and wants of the people as regards forest produce. In particular, the measures taken in Salem to supply agricultural implements from every fuel depot seem worthy of imitation in other districts. The rules framed under the Act appear generally to have worked with success. The Government would like to see special notice taken in the report of the working of the rules which are in force in private estates. The rules sanctioned for Saptūr are said to be unsuitable; and at the close of the year those in force in Jeypore were cancelled.

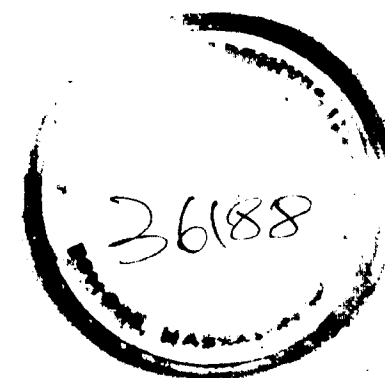
23. All superior officers have worked well and zealously. Under orders of the Board, conferences between the Revenue Divisional officers and the Forest officers at the jamabandi or annual revenue settlement to hear and settle the ryots' grievances were held in most districts, and should prove most helpful in district administration.

24. The conduct of the subordinate executive was on the whole satisfactory; but there is still much room for improvement in the case of the protective staff whose conduct is the subject of frequent complaint. The Board should consider whether the controlling officers of the department should not be instructed to apply severer disciplinary measures: for now that the status and prospects of these establishments have been improved, there is less excuse for misconduct, and there should be no hesitation in ridding the department of unworthy subordinates.

25. *Conclusion.*—The marked progress in forest settlement work, the extension of departmental operations to meet the demand for railway sleepers and the increased attention paid to the compilation of working plans have been salient and satisfactory features of the year's work.

(True Extract.)

(Signed) G. S. FORBES,
Secretary to Government.



R
J.B. 2117 M 28
NOS

செப்பனிருபவற் பெயர்
 செப்பனிருவதற்காக எடுத்த
 கொள்ளப்பட்ட நாள் 12/95
 செப்பனிடம் முடிந்த நாள் 11/96.
 சரிபார்க்கும் கிராப்கள்
 மு. பா. 193 உட்கிராப்கள்
 வகையாப்பம் கையொப்பம் 11/96
 31/12