GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue, dated 18th October 1884, No. $\frac{3597}{\text{Forest } 341}$:—

PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE SOUTHERN CIRCLE, MADRAS,

FOR THE YEAR 1883-84.

CHAPTER I.

INTRODUCTORY REMARKS.

In submitting the Annual Administration Report for the Forests of the Southern Circle, which have been under my charge throughout the year 1883-84, I adopt the arrangement prescribed in the draft Forest Code for Madras now before Government, which is based on that of the Forest Department under the Government of India.

2. Under present circumstances, it is impossible to make the several chapters and sections as complete as could be wished, especially as the district reports are submitted in the old form; but we shall, I hope, improve in these respects year by year.

3. *Inspection Tours.*—My inspections commenced on the 4th of July 1883, and continued until the 28th of March 1884, when I left Coimbatore for the hills. Every division was visited except Nilambúr, and special attention directed to the working of the Act, including the selection of reserved forests, framing of rules, general and local, and re-organizing the Forest establishments.

4. Inspection memoranda, with an outline of operations for the year, were submitted to Collectors on completion of inspection, and by them communicated to District Forest Officers for guidance. My suggestions, in all but a few trivial cases, met with approval and concurrence.

5. The results of my tour in South Canara, which had not been visited since 1874, were especially satisfactory. I remained in that district from the 17th November till the 8th December, making a thorough inspection with the Collector and District Forest Officer (Mr. Bradley, C. S.)

The result is that, for the first time since the department commenced operations in that district, the Collector, Conservator and District Forest Officer are in complete accord as to the system of working to be pursued and the limits within which the privileges of the people may be exercised. Our views are summarized in a joint memorandum printed with Board's Proceedings, No. 120, dated 16th January 1884.

The rules under Sections 26, 33 (*b*) and 35, submitted with the same, have since met with the approval of Government and were promulgated in the *Fort St. George Gazette* of the 20th May 1884.

6. My nine months' inspection was chiefly devoted to the forests proper (in addition to the re-organization generally), when I propose on my next cold weather tour to give special attention to the late jungle reserves, chiefly conservancy tracts in the plains, and to the formation of fuel and fodder reserves, which are engaging on the selection and settlement of reserved forests and initiating tech[illegible]al arrangements for working the reserved forests already constituted under prop[illegible] principles of forestry.

7. The time spent on inspection by the District Forest Officers is entered in the following table :—

Name of Officer.	Designation or Rank in the Department.	Name of Division.	No. of Days absent from Head-quarters.	Remarks.
Mr. C. E. Brasier ..	Assistant Conservator.	Chingleput	95	For six months. No Forest Officer during six months of the year prior to 1st October 1883.
,, T. Sheffield	Deputy Conservator.	North Arcot ..	189	
,, H. L. Wooldridge ..	Do. ..	South Arcot ..	177	
,, A. W. C. Stanbrough.	Do. ..	Salem	*151	* Relates to Mr. Cherry only.
,, J. W Cherry ..	Do. ..			
,, H. G. Joseph, C. S..	Head Assistant Collector.	Trichinopoly ..	1	
,, H. A. Gass ..	Deputy Conservator.		63	For 2½ months. Assumed charge in the middle of June 1883.
,, A. W. C. Stanbrough.	Do. ..		48	For seven months. Assumed charge at the end of August 1883.
,, W. Carroll ..	Sub-Assistant Conservator.	Tanjore	118	For 7½ months subsequent to 14th September 1883—the date on which Mr. Carroll took charge as District Forest Officer.
,, A. W. Peet ..	Deputy Conservator of Forests.	North Coimbatore ..	194	On leave for two months during the year.
T. Muhammad Alí Sáhib Bahádur.	Sub-Assistant Conservator.	South Coimbatore ..	151	
Mr. F. E. Robinson, C.S.	Assistant Collector.	Madura	27	From 1st April to 24th Aug. 1883.
,, H. A. Gass	Deputy Conservator of Forests.		141	The rest of the year for seven months.
,, W. C. Hayne ..	Do.	Tinnevelly	49	On privilege leave for three months during the year.
,, R. W. Morgan ..	Do.	Wynaad and Pálghat	174	On privilege leave for one month during the year.
,, J. Ferguson ..	Do.	Nilambúr	41	
,, G. Hadfield ..	Assistant Conservator of Forests.			
,, W. Carroll ..	Sub-Assistant Conservator.	South Canara ..	46	1st April to 7th September 1883.
,, M. D. Bell ..	Assistant Collector.		7	
,, H. Bradley, C. S. ..	Acting Head Assistant Collector and District Forest Officer.	Do. ..	151	From 24th September to end of the year.

8. Messrs. Peet, Gass, Sheffield and Bradley have been most energetic, but all the officers appear to have travelled sufficiently except Mr. Stanbrough. The Collector of Trichinopoly has been asked to impress upon that officer the necessity of more frequent inspection and personal supervision, which will doubtless have the desired effect.

9. *Rules under Section* 26 *of Forest Act.*—Towards the end of the year, general rules under Section 26 of the Act, a copy of which accompanies this report, were promulgated by Government, but no action had been taken under them up to the close of the year. Special rules under Sections 26 and 33 (*b*) for South Canara District were promulgated on the 20th May.

10. *Rules under Section* 35.—Draft rules under Section 35 have been submitted for approval, and lists of reserved trees and seigniorage rates are in active preparation district by district.

11. *Special Duty Office.*—Mr. Cherry, the Deputy Conservator on special duty for the preliminary selection of forests to be reserved, assumed charge of the Salem Division as District Forest Officer on the 1st April 1883, from which date the special duty office was abolished. His report on selections has since been before Government.

12. *Forest Settlement Officers.*—Mr. Wolfe-Murray, C. S., was appointed Special Forest Settlement Officer for the circle on the 3rd July 1883, and has made good progress with settlement in the South Coimbatore Division, where he was still employed at the end of the year.

Divisional Officers (Revenue Department) were appointed Forest Settlement Officers in the districts of Malabar, Trichinopoly, Madura and North Arcot.

CHAPTER II.

Areas and Boundaries.

13. The subjoined statement gives approximately the area of reserved forests; details are furnished in the Appendix.

District.	Area on 1st April 1883.		Added during the Year.		Excluded or transferred to other Heads		Area on 31st March 1884.	
	Acres.	Equivalent in Square Miles.	Acres.	Equivalent in Square Miles.	Acres.	Equivalent in Square Miles.	Acres.	Equivalent in Square Miles.
Chingleput	53,808·21	84 06	2,558·65	3·94	..	..	56,366·86	88·
North Arcot	173,480·	271·05	58,437·	91·04	..	..	231,917·	362·09
South Arcot	255,821·	399·69	2,117·	3·34	..	..	257,938·	403·03
Salem	28,188·79	44·03	1,344·10	2·11	..	..	29,532·89	46·14
Trichinopoly ..	4,176·	6·52	507·	·79	..	..	4,683·	7·31
Tanjore	..	..	11,092·	17·30	..	..	11,092·	17·30
Coimbatore .. North ..	16,118·61	25·18	..	..	13,754·80	21·48	2,363·81	3·70
Coimbatore .. South ..	104,878·72	163·87	13,565·66	21·13	..	..	118,444·38	185·
Madura	196,182·32	306·54	..	..	14,319·15	22·37	181,863·17	284·17
Tinnevelly	201,923·40	315·50	..	..	9,469·	14·81	192,454·40	300·69
Malabar. Wynaad ..	186,161·24	290·87	..	..	..	..	186,161·24	290·87
Malabar. Pálghat ..	19,386·	30·29	1,250·	1·94	..	..	20,636·	32·23
Malabar. Nilambúr ..	20,000·	31·25	..	..	4,642·80	7·25	15,357·20	24·
South Canara ..	879·	1·43	..	..	57·	·14	822·	1·29
Total ..	1,261,003·29	1,970·28	90,871·41	141·59	42,242·75	66·05	1,309,631·95	2,045·82

14. In the report for last year, the area of reserved forest is entered as 1,261,003 acres or 1,970 square miles. The district returns for this year exhibit a total area of 1,309,631 acres, or 2,045 square miles, being an addition of 75 square miles; but it must be clearly understood that these figures represent the areas locally classed as reserves, and are subject to revision and modification as settlement under the Act progresses. Of the 2,045 square miles, however, areas estimated at 683 square miles have actually been constituted "Reserved Forests," under Section 25 of the Act during the year, and 261 square miles notified for settlement under Section 4. The 683 square miles of reserved forests proper are situated in the following Forest divisions :—

	Approximate Areas. SQ. MILES.
Trichinopoly	4·12
North Coimbatore	3·
South Coimbatore	162·
Madura	216·77
Tinnevelly	286·81
Malabar—	
Wynaad and Pálghat	4·75
Nilambúr	6·

The 261 square miles notified for settlement are in North Arcot, besides which, settlement is in progress in other divisions with regard to forests, some of which are included in the total area claimed as reserved and some are not, being new selections or extensions, such as the Bolampatti, Tadágam Forests, and the whole of the Ánaimalai Forests not already constituted reserved forests in South Coimbatore, three blocks on the Pachaimalais in Trichinopoly and three in Madura.

As the area of these tracts has, as a rule, not even been estimated, I think it better to exclude them altogether, pending settlement, and restrict the entries to those shown last year, supplemented by the addition of former Jungle Conservancy reserves, &c., the areas of which are known with sufficient accuracy to justify their inclusion.

In Madura, the Zemindari reserves have been excluded altogether, pending further action under Chapter IV of the Act. In Tinnevelly, the area of Kudiraimalai Reserve (9,469 acres) has been excluded from the reserved area and shown under plantations. The Sholakarai Reserve and areas, known as the H, K and M Reserves were transferred from North to South Coimbatore, and further selections explain the increase in other districts.

15. This area—605,760 acres or 944 square miles—classed as "Reserved," does not represent a tithe of that under the departmental officers, the bulk of which consists in scattered forests, "jungles" and "topes" extending over many thousands of square miles. Our efforts are now directed to selecting out of this large extent the areas to be constituted reserved forests under the Act to form the permanent Forest estate, and those to be protected as reserved lands under Section 26 of the Madras Forest Act corresponding to "Protected Forest" in other provinces, and including, *pro tem.* at all events, the fuel and fodder reserves or "District Forests," pending settlement.

16. As remarked by the Inspector-General to the Government of India in his review of Forest Administration for the year 1882-83, "owing to the passing of the Madras Forest Act No. V of 1882, an entirely new classification must be made, so that the areas recorded as reserves will, for some years to come, undergo considerable changes."

17. The boundaries of the reserved forests are, as a rule, only demarcated in a preliminary manner, but sufficiently for ready identification. In the case of those now legally constituted under Section 25 of the Act, permanent demarcation is in progress in the Coimbatore and Madura Districts, to be followed by survey and the erection of forest boundary pillars. The best progress in this direction has been made in Madura, where Mr. Gass has demarcated three of his reserved forests placed under special fire-protection with an aggregate area (estimated) of 71 square miles and 32½ acres. The survey and mapping of these areas is in progress by the Revenue Survey Department, and operations in this direction will be steadily continued during the current and future years.

18. The description of forest boundary pillars adopted varies according to circumstances. Long slabs of stone firmly fixed in the ground and standing at least six feet above it, with consecutive numbers for each reserved forest, form excellent land-marks, but unless procurable on the spot, their price is prohibitive.

Cairns of rough stones with posts bearing consecutive numbers are the common type of forest boundary pillars in the Madura and Coimbatore hill forests, the cost varying from Rs. 1 to As. 8 per pillar. Longitudinal mounds of earth with trenches at intervals are also being tried as boundary marks, chiefly in the plains of the South Arcot District.

The details under this chapter for each division are as follows:—

19. *Chingleput.*—Three blocks in the Chingleput Taluk, *viz.*, Tirukalikundram, Uragadam and Madayattúr, with an estimated area 696,540 and 697 acres, respectively, have been proposed for reservation under Section 4 of the Forest Act. All the tracts have been preliminarily demarcated.

The Tandrai jungles in the Saidápet Taluk measuring 827 acres, and the Kámbákam in the Tiruvallúr Taluk with 11,363 acres, and forty others in the same taluk extending over 42,242 acres, have also been selected for notification under Section 4 of the Act; but the draft notifications had not been submitted at close of the official year.

20. *North Arcot.*—Of the reserves shown in last year's list, those situated on the ghâts and main ranges have been notified for Settlement under Section 4 of the Act; those on detached hills as well as areas of waste land in the plains are being dealt with as fuel and fodder reserves under Section 26 of the Act. The former are shown in dark-green color and the latter in pale green on the map appended to this report and their respective estimated areas are given separately in Return No. 1. Most of these reserves have been demarcated and some have also been surveyed. About 200 miles of boundary lines around reserves were cleared.

21. *South Arcot.*—None of the forests in this district were notified under Sections 4 or 25 of the Act. One hundred and twenty-seven trenches, $6' \times 2' \times 1'$ each, at intervals of about one chain were cut along a distance of 5 miles to demarcate the eastern limit of Tagarai Forest in Kallakurchi Taluk, and 2,275 yards of the western boundary was also cleared of dense undergrowth to a width of four yards.

A distance of 5 miles of the northern boundary of Damarakádu Forests on North Arcot forest frontier attached to Tiruvannámalai Range, 10 miles of block lines of

Tenmalai Forest and 1 mile of the Parúr Forest boundary were cleared—the first named to a width of 7 yards, the second 3½ yards and the third 2 yards.

The Kalráyan boundary dispute has not yet been finally settled, the appeal to the District Court being still pending.

22. *Salem.*—As already noted, the special duty office was abolished, and Mr. Cherry's report on the selection of reserves embodied in Board's Proceedings, No. 532. of 16th February 1884, now awaits the orders of Government.

The total area of all the selections amounted to 866·21 square miles. Further selections extending over 39 square miles were also made by the District Forest Officer during the year in the low-lands of Krishnagiri, Salem and Tiruchengód Taluks. A notification under Section 25 of the Act was submitted for fifteen reserves with an aggregate area of 22·14 square miles.

The Sellandampalli boundary dispute in the Tirupatúr Taluk was settled in favor of Government, but the Mittádár has appealed to the District Court. Seven miles of an important boundary line between Kótapatti Valley and Ariyagoundannád, in the Uttankarai Taluk, demarcated in 1876, has been re-cleared to a width of six yards.

Twenty-five miles of the boundaries of the Munchi and Gulhatti sandalwood reserves (selected), which had been roughly demarcated, was also cleared.

A boundary line, which will make a better separation of the Javadis between Salem and North and South Arcot Districts, was decided upon in consultation with the District Forest Officers concerned; but the proposals have not yet been placed before the Board and Government.

23. *Trichinopoly.*—Four blocks on the Pachaimalais, viz., Sengattupatti, Mélúr and Manalodai, in the Musiri Taluk, and Solamatti in the Perambalúr Taluk, with a total estimated area of about 12,000 acres, were notified for settlement as reserves under Section 4 of the Act; but the settlement was not proceeded with, owing to transfer of officer appointed for the purpose.

The three so-called railway fuel reserves in the Manapárai Sub-division known as Panjantangai, Minnakaradu and Tainimalai were notified as reserved forests under Section 25 of the Act. A draft notification of the padugai (river banks) reserves and plantations was submitted by Mr. Gass, whilst Acting District Forest Officer, but the Collector has doubts as to the inclusion of certain areas. A preliminary demarcation and survey is in progress.

24. *Tanjore.*—There are no "Reserved Forests" in this district. Those shown in Return No. 1 are only locally recognized as "Fuel Reserves," and the areas entered are also approximate, as none of them have yet been surveyed.

25. *North Coimbatore.*— Three sandalwood blocks in the Kollegál Taluk, *viz.*, Jadatalaihalla, Udayárpálaiyam and Bailúr, with an area of 361·01, 209·63 and 1,186·39 acres, respectively, and one block named Gairmalam in the Satyamangalam Taluk covering an area of 519·78 acres, were notified as reserved forests under Section 25 of the Act, and they have all been demarcated, surveyed and mapped.

Fuel and fodder reserves were selected in the Erode Taluk, but no report or definite proposals have yet been received.

A preliminary demarcation was made round the Vellamundai block in the Satyamangalam Taluk.

26. *South Coimbatore.*—The two blocks of Tunakadavu and Púnáchi in the Polláchi Taluk, and the Amarávati valley block in the Udamalpet Taluk, comprising in all about 162 square miles, were notified as reserved forests under Section 25 of the Act.

The western boundary of the first-named block was cleared, demarcated and surveyed during the year to a distance of 5 miles from Pálakadavu to Mudiyantód and of 5½ miles from Kalyánapandal to Pannimédkuttu; but the final settlement of this district boundary awaits ratification by the Cochin Sirkar.

The following were notified under Section 4 of the Act:—

(*a*) Three blocks in the Bolamputti Valley, Coimbatore Taluk.
(*b*) Tadágam Forest in the Coimbatore Taluk.
(*c*) The whole of the Anaimalais in the Polláchi and Udamalpet Taluks not already included in Nos. I, II and III Reserved Forests.

The Settlement Officer (Mr. Wolfe-Murray) commenced operations in the Bolamputti Valley in the early part of July, and the following is an account of the progress made as given in the District Forest Officer's report:—

Two hundred and thirty claims were preferred, of which 206 were admitted and 24 rejected. Out of these 230, 11 were to rights-of-way and to the use of water; 14 by the hill people to right of collecting the forest produce, such as honey, &c., and to patta rights over the hills; 4 to a right of grazing cattle and cutting wood for fuel and agricultural purposes; and 194 to patta rights over lands within the reserved limits; and 7 to miscellaneous rights such as mortgage and so forth.

The 194 claims preferred to patta rights over lands were for Acres 8,708, of which 182 claims for 7,020 acres were admitted, and 12 claims for 1,688 acres were rejected. Of the 7,020 acres of land the claims to which were admitted, 1,739 acres were acquired for the reserves as follows:—

One hundred and fifty-five acres by grant of fresh land in exchange outside the reserve limits, and 1,584 acres on payment of compensation of Rs. 7,927.

Four thousand two hundred and sixty-seven acres were excluded from the limits of the reserve as they were not required. Negotiations are still being carried on for the acquisition of about 125 acres of land in Block No. I, east of and adjoining Sholakarai Big Reserve, and it may be possible to acquire it by giving the little Sholakarai Reserve, south of the Railway, in exchange.

There are also 233 acres of land in the shrotriem village of Vellamalaipatnam 2nd Bit. It has not yet been decided whether the Forest Department will acquire this land or not, as, in addition to these 233 acres, the Shrotriemdár claims 802 acres adjoining. The Forest Settlement Officer rejected his claim, and the case will come on in appeal before the District Judge in the month of June.

Appeals have been filed against the decisions of the Forest Settlement Officer in two claims—one in the District Court by the Shrotriemdar of Vellamalaipatnam relating to the 802 acres of patta land included in Block No. II of the Bolampatti Valley; the other appeal was by one Shanmuga Véláyudam Pillai, of Sundakámuttúr, for the right of pasturage in Block No. I of the said valley, filed in the Collector's Court.

As regards the Ánaimalai Reserve (*c*), the District Forest Officer reports that nearly all the notices had been served and that several claims had already been preferred, but the Settlement Officer had not gone up to the Ánaimalais, season being unfavorable.

The Tadágam (*b*) Settlement had not commenced at close of the official year, the three months' notice required by the Act not having expired.

Selections are being made for fuel and fodder reserves in the Palladam Taluk, but no special report has yet been received.

27. *Madura.*—The reserves notified under Section 25 of the Act are shown in Return No. 1 with their approximate areas, &c. The two small plantations of the Forest Department on the Palni Hills and a number of small hills, plantations and topes of the late Jungle Conservancy Department, the areas of which were not known, were also notified under the above section. A fine shola on the Aggamalais, named Tambirankánal, estimated at 250 acres, and two small tracts of forests at foot of the Cumbum Valley named Mela Gúdalúr and Mutchakal, Periyakulam Taluk, were notified for settlement under Section 4 of the Act.

Two other blocks named "Velankombai" and "Parappár" were also selected for notification.

The following reserves were demarcated by means of special boundary pillars during the year:—

	Area.
Alagármalais	20 square miles.
Pámbár	8 do.
Vannattipárai	43 do.
The Kodaikánal plantations—	
Eucalyptus	14½ acres.
Acacia	18 do.

A statement of rights admitted in the demarcated reserves was recorded and published.

The boundary of the Kannivádi Zemindari was marked out in accordance with the decree of the District Court.

The hill known as Vagguttamalai, lying to the south-east of the Sirumalai Range, was notified as a fuel and fodder reserve. Another tract was also selected for the purpose and demarcated with boundary pillars.

28. *Tinnevelly.*—Certain forests on the Tinnevelly Ghâts in the taluks of Nángunéri, Ambásamudram, Tenkási, Sankaranainárkoil and Srívilliputur, with an aggregate estimated area of 286·81 square miles, were constituted reserved forests under Section 25 of the Act.

The demarcation of the unsettled portion of the Tinnevelly-Travancore boundary line to the north and south of Shenkóta, in the Tenkási Taluk, and at Mahéndragiri, in the Nángunéri Taluk, was completed and sent for the approval of the Travancore Government.

Two miles and 410 yards of the Tinnevelly-Travancore boundary in the Ambásamudram Taluk was re-cleared.

Fifty-one miles of boundary lines between Government and other private forests were also cleared to a width of six feet.

The boundary line between Government and Tiruvadutoraimatam, at the foot of the Vadagarai Hills, in the Nángunéri Taluk, was cleared under the immediate supervision of the Tahsildar and Revenue Inspector, but the Sub-Assistant Conservator of Forests, who inspected the line, has brought to notice certain deviations from the actual line, as decided by Mr. Broadfoot, the Acting Head Assistant Collector, acting under Act XXVIII of 1860.

29. *Malabar District—Wynaad and Pálghat Division.*—The Bégúr Teak Forest, in the Wynaad Taluk, was notified for settlement under Section 4 of the Act, and the Settlement Officer (Mr. Ross, Sub-Collector, Tellicherry) issued his proclamation under Section six (6) and fixed the first day of June for hearing claims. The Chenat Náir Forest, in the Pálghat Taluk, was also notified under Section 4, and the Settlement Officer (*i.e.*, the Head Assistant Collector) is reported to have enquired into and decided sixteen claims, of which fourteen referred principally to rights to water, &c., and very small blocks of lands of a few acres in extent, alleged to have been wrongly included in the survey of 1880-81. Of the other two claims, one was to a block of some four square miles in the Kalladikót section of the forests, and was admitted by the Settlement Officer. The late Mr. Ratnavélu Chetti would also appear to have inquired into the same claim, and decided in the claimant's favor.

The remaining one was for a tract of some five square miles in the Elivál section, and was rejected by the Settlement Officer, as it had already been decided in favor of Government by a Court of Law in 1862.

The two blocks of Pulamparai and Warlapadi covering the Wálayár Forests, in the Pálghat Taluk, were constituted "Reserved Forests" under Section 25 of the Act.

The demarcation and survey of one-half of the Kánot block, in Kóttayam Taluk, had been completed. The taluk boundary between Wynaad and Kóttayam was definitely settled, but it had neither been demarcated nor surveyed.

30. *Nilambúr Division.*—The Karimpoya Forest block, in the Ernád Taluk, with an area of six square miles, and the Amarampulam block (forests) in the same taluk

measuring ·09 square miles, and the teak plantations, ·64 square miles, were constituted reserved forests under Section 25 of the Act.

31. *South Canara.*—The area of the existing old reserves is shown in Return No. 1. None of them was legally declared "Reserved Forests" under the Act during the year. They have all been demarcated and enclosed by a ditch or small fence.

CHAPTER III.

Surveys, Working Schemes and Annual Plans of Operations.

32. The progress made in the preliminary demarcation and survey of forests was, on the whole, satisfactory. In South Arcot and Trichinopoly, the department carried on considerable survey operations, whilst in Madura, the Revenue Survey Department commenced the survey of the Lower Palnis—a work of great importance to this department. No working schemes were prepared, but plans of operations for the year, based on the budget estimates, were drawn up for each division and generally adhered to. Such annual outlines of operations will gradually become more detailed and reliable, and develop into working schemes extending over a series of years. The following is the summary of districtwár operations under this section :—

33. *South Arcot.*—6,574 acres of forests and 2,040 acres of plantations in the taluks of Tindivanam, Cuddalore, Vriddháchalam and Tiruvannámalai were surveyed departmentally. Seven hundred and eighty-seven stations were fixed and 3,824 linear yards of theodolite traverses and chain lines cleared to obtain bearings and measurements. The length of survey circuits aggregated 56½ miles. Eight blocks were surveyed and plotted to scale, and the aggregate area was computed to be 8,620 acres.

The following areas were surveyed :—

	Circuit. MILES.	Areas. ACRES.
The Merkanam Plantation	13	690
The Fort St. David do.	1¼	18
Talankádu Plantation	2¼	32
Nochikádu do.	3	80
Periyakuppam do.	11	1,600
The Donaidurair do.	5	200
Tiruvannámalai do.	9	3,000
The Parúr Forests do.	12	3,000

A detailed survey of the Tiruvannámalai Hill was made for the purpose of obtaining two views (photographs) to illustrate the special report on Tiruvannámalai Hill chain. Two other views, of an excavation made in silt which had filled up a tank fed by a stream direct from the reserved portion of the hill, were also obtained, principally to show strata of detritus caused by action of the weather, fires and excessive fellings on the surface of the hill over a long course of years, to aid scientific observations on rainfall and the result of excessive unregulated clearing and grazing.

Copies of the views are attached to the district report.

Mr. Brasier, Assistant Conservator of Forests, while working in this district, appears to have discovered certain valuable data as to growth and yield of casuarina of different ages and planted at various distances along the coast. These results would appear to show that close planting gives the heaviest annual acre increment in the district. An instance is quoted of nine-year old trees in a closely-planted good plantation yielding 90 tons of dry wood per acre, 56 lb. being equal to one cubic foot. These data will be of great value in preparing the annual plans of operations and working schemes in future years.

34. *Trichinopoly.*—The Cauvery and Coleroon Plantations were surveyed departmentally, and survey is also in progress of all padugai lands that lie between Katalai and Elamanúr, together with a re-survey of the plantations, in order to afford reliable data as to yield per acre planted and the area available for extension and constitution of reserves.

35. *Madura.*—The demarcation and survey of Lower Palnis commenced on 1st November, but there was not much progress during the year. Up to the end of March, about 1,600 acres had been demarcated and about 700 actually surveyed.

Work commenced in Palatúr was continued in Komerakádu and Punnakadu.

36. *Malabar District—Wynaad and Pálghat Division.*—The demarcation and survey of one half the Kánot block had been completed. In Pálghat the survey and demarcation of the Wálayár Reserves were checked by a Surveyor, and a combined map of the reserves showing compartments, &c., is under preparation.

37. *South Canara.*—The Chembugudde and Kuttiyár Reserves were surveyed departmentally during the year and found to contain 78 and 25 acres, respectively.

CHAPTER IV.

Protection and Improvement.

Sections 1 and 2.—*Reserved and other Forests.*

38. Under present circumstances, it is impossible to deal separately with the reserved and other forests, as the establishments are not separately employed on one or other class, and operations have not sufficiently advanced to enable us to make a separation which could lay any claim to accuracy. I, therefore, deal with the two sections together in summarizing the operations of the year.

(*a*) *Establishment, Ranges and Beats.*

39. The accompanying table shows the distribution of the establishment—controlling, executive and protective—during the year 1884-85—over the eleven districts constituting the Southern Circle :—

District.	Controlling.		Executive.		Protective.	
	Deputy Conservators.	Assistant Conservators.	Sub-Assistant Conservators.	Rangers.	Foresters.	Forest Guards.
Chingleput	...	1	...	...	2	8
North Arcot	...	1	...	3	10	45
South Arcot	1	...	...	3	9	50
Salem	1	...	...	5	8	50
Trichinopoly	...	1	...	2	3	18
Tanjore	...	...	1	...	...	1
Coimbatore. North	1	...	...	3	3	15
Coimbatore. South	...	1	1	4	6	31
Madura	1	...	...	3	6	27
Tinnevelly	1	..	1	2	6	24
Malabar. Wynaad and Pálghat ...	1	...	1	2	3	23
Malabar. Nilambúr	...	1	...	1	2	6
South Canara	...	1	...	2	4	24
Forest School	...	...	...	1	1	...
Total ...	6	6	4	*31	63	322

* Includes one Supernumerary, 5th Grade, *vice* one Ranger, 4th Grade, on duty at the Forest School.

40. It is to be understood that the numbers are not permanently fixed. There will be changes as reserved forests are settled and constituted, and we concentrate our special establishment on them, restricting ourselves, with regard to the unreserved forests, to general supervision and inspection.

At present we are merely initiating and organizing regular measures of conservancy, protection, and improvement, and it is not possible to record anything definite regarding the strength and distribution of the establishments.

41. Each forest division constituting a District Forest Officer's charge is divided into ranges and sub-ranges, which in turn are divided into "beats." Rangers or Senior Foresters hold charge of the ranges, Junior Foresters of sub-ranges, and Forest Guards of beats. The "guards" patrol the forests within their beats, prevent damages, and report any breaches of the law to their immediate superiors. They are assisted by watchmen and fire-patrols on the temporary establishments. Tánnádárs are also appointed to check the removal of timber, &c., from the forests and recover the permits. Their numbers vary according to circumstances.

42. The arrangement of ranges and sub-ranges in some districts during the year is shown in the following details as a sample, complete information from all divisions not having been furnished by District Forest Officers. It is hoped that it will be available next year with the approximate areas of the respective charges.

43. *North Arcot District.*—The district is divided into three ranges, *viz* :—

(1) Vellore (comprising Vellore and Pólúr Taluks).
(2) Palmanér (comprising Palmanér and Gudiyátam Taluks).
(3) Chandragiri (comprising Chandragiri and Chittoor Taluks).

Each of the above ranges is in charge of a ranger. The first and second ranges have each thirteen forest guards while the third has nineteen.

The following places constitute sub-ranges with a forester in charge of each :—

Chittoor.	Pólúr.
Gudiyátam.	Wálajápet.
Veppankuppam.	Wandiwash.
Temkumbadi.	

44. *South Arcot District.*—This is divided into six ranges, *viz.* :—

No. 1 or the Northern Range (comprising Tiruvannámalai, a small part of Kallakurchi, and a small part of the Javadi Hills in Tirupatúr Taluk, Salem District).

No. 2 or the Gingee Range (comprising Tindivanam and Gingee Sub-division).

No. 3 or the North-eastern Range (comprising Tindivanam and Villupuram Taluks).

No. 4 or the South-eastern Range (comprising Cuddalore, Chidambaram and Vriddháchalam Taluks).

No. 5 or the Central Range (comprising Tirukoilúr Taluk).

No. 6 or the South-western Range (comprising Kallakurchi Taluk).

No. 1 Range is under the charge of a ranger, No. 2 under a forester, No. 3 under a ranger assisted by two foresters, No. 4 under two rangers assisted by two foresters, No. 5 under a forester, and No. 6 under two foresters. The sanctioned number of forest guards is fifty, but the District Forest Officer has not given their distribution amongst the ranges.

45. *Salem District.*—This is divided into nine ranges conterminous with each taluk, *viz.* :—

(1) Salem Range (with Omalúr as sub-range).
(2) Atúr Range.
(3) Námakal Range.
(4) Tiruchengód Range.
(5) Úttankarai Range.
(6) Tirupatúr Range.
(7) Krishnagiri Range.
(8) Dharmapuri Range (with Pennagaram as sub-range).
(9) Hosúr (with Denkanikóta as sub-range.)

Of the above the most important, *viz.*, (1), (2), (6) and (9), are under the charge of rangers, the rest under the charge of foresters. There are fifty forest guards distributed amongst the nine ranges.

46. *Trichinopoly District.*—This is divided into five ranges, *viz* :—

(1) Trichinopoly.	(4) Perambalúr.
(2) Kulitalai.	(5) Udayárpálaiyam.
(3) Musiri.	

Nos. (2) and (5) are in charge of rangers assisted by five and four forest guards, respectively, and (1), (3) and (4) in charge of foresters with four, three and two guards, respectively.

47. *South Coimbatore Division.*—There are eight ranges, *viz.* :—

No. I—Ánaimalai Teak Forest (with the leased forest as a sub-range).
No. II—Punáchi.
No. III—Pollách Taluk.
No. IV—Udamalpet.
No. V—Palladam.
No. VI—Mettupaláiyam Forests.
No. VII.—Bolampetti and Tadágam Forests.
No. VIII.—Sholakarai Forests.

Nos. I, IV, VI and VII are in charge of rangers and the others in charge of foresters.

The sanctioned number of forest guards was twenty-eight.

48. *Madura District.*—This district is divided into three charges :—

No. I Range (comprising Tirumangalam Taluk, Gundamanáyakanúr Estate and Cumbum Valley).
No. II Range (comprising Palni Taluk with Palni Hills, Periyakulam Taluk *minus* Cumbum Valley).
No. III Range (comprising Madura, Melúr and Dindigul Taluks).

Nos. I and II have each a ranger in charge, while III has a forester. There are twenty-seven forest guards.

(b) General Protection and Breaches of Forest Laws.

49. The general protection of the forests appears to have been fairly well looked after during the year. According to Statement No. 5 appended, the number of prosecutions during the year, including those that were pending, amounted to 588, of which 449 resulted in conviction and 114 in acquittal. There were twenty-five cases under trial at the close of the year. As will be seen from the following summary, the whole of the offences were disposed of under the Indian Penal Code, the Forest Rules under the Act not having been promulgated till the close of the year.

50. *Chingleput.*—Of the three prosecutions for theft of wood under the Indian Penal Code, two resulted in conviction and one in acquittal. The number of persons convicted was two.

51. *North Arcot.*—There were sixteen cases of unauthorized felling, one of injury by fire, and two of cheating. In twelve of these, twenty-three persons were convicted, and in seven, forty-five acquitted.

A case of assault against two persons under Section 352 of the Indian Penal Code was also acquitted.

52. *South Arcot.*—Five cases were pending last year and twenty-seven cases (fourteen for unauthorized felling and thirteen for other offences) were added during the year. Of these twenty resulted in conviction of fifty-nine, and five in the acquittal of twenty-one persons, and seven were pending. Judgments were appealed against in two cases, of which one was confirmed and the other reversed. Besides these, eighteen petty cases were tried by Village Magistrates and 11,258 head of cattle were impounded for trespassing into forest tracts in which grazing is specially prohibited.

53. *Salem.*—Six cases were pending last year to which the year under report added eighty-two, *i.e.*, twenty-nine for injury to forests by fire, three for unauthorized felling, one for grazing without permission, and forty-nine for other offences. Of these, seventy-eight cases were disposed of during the year; fifty-eight resulted in the conviction of 250 presons, and twenty in the acquittal of ninety-four persons; ten cases were pending at the close of the year.

54. *Trichinopoly.*—One case was pending last year and there were fourteen new cases (thirteen for unauthorized felling and one for grazing without permission); thirteen cases were disposed of during the year, of which seven ended in the conviction of thirty-three persons, and six in the acquittal of seventeen persons; two cases were pending.

55. *Tanjore.*—The District Forest Officer reports that there were no prosecutions for breaches of the forest laws.

56. *Coimbatore—Northern Division.*—There were forty cases during the year, of which thirty-five resulted in the conviction of seventy-nine persons and five in the acquittal of thirty-five persons.

57. *Southern Division.*—Of the fifty-three cases tried during the year (including one pending last year) forty-six cases ended in the conviction of 171 persons, and 25 in the acquittal of fifty-three persons.

58. *Madura.*—There were fifty-one cases of unauthorized felling three of grazing without permission, and nine of other offences. Of these, fifty-one cases resulted in the conviction and twelve in the acquittal, of 183, and ninety two persons, respectively.

59. *Tinnevelly.*—There were fifty prosecutions, including two pending from last year; of these, forty-five resulted in the conviction of 187 persons and 22 were acquitted in the remaining five. It is, however, believed that a greater number were disposed of, the result of which the Taluk Magistrates have not duly reported.

60. *Malabar—Wynaad and Pálghat Division.*—There were three cases of unauthorized felling during the year and one was pending. Of these, two cases resulted in the conviction of seven persons and one in the acquittal of three, leaving one pending.

61. *Nilambúr Division.*—In the case of mischief by fire pending in 1882-83, the defendant was acquitted. Of the two cases during the year, one of clandestine felling is now pending and the other of theft of forest produce was dismissed.

62. *South Canara.*—Two cases were pending last year to which 215 were added, *viz.*, 18 for unauthorized felling of wood, 195 injury to forests by fire including 191 kumari cases in the Kásaragód Taluk, and two other offences. One hundred and seventy-one cases ended in the conviction of 190 persons, and 42 in the acquittal of 65 persons.

(c) Forest Fires and Fire Protection.

63. Statement No. 4 gives the details of Forest tracts protected from fire of which the following is an abstract:—

Districts.	Up to 15th June 1883.		During 1883-84.				Total cost up to the end of 1883-84.	Year in which protection commenced.	Remarks.
	Area actually proteced.	Total cost.	Area attempted to be protected.	Failures.	Actually protected.	Amount expended.			
	ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.		
Chingleput	..	..	..	..	..	..	..	..	
North Arcot	173,525	4,701	233,470	500	232,970	1,144	5,845	1879	
South Arcot	17,510	896	63,910	341	63,569	144	1,040	1877	
Salem	12,261·42	4,065	7,000	300	6,700	383	4,448	1866-67	In his statement for 1883-84, the District Forest Officer shows the figures as 2,071 instead of 4,065. The decrease in area attempted is not explained, but there was a mistake in the figures for last year.
Trichinopoly	..	..	..	..	..	..	..	..	
Tanjore	..	..	..	..	..	..	..	..	
Coimbatore—North	..	397	..	..	..	..	..	..	Sholakarai Reserve was transferred from North to South Coimbatore; hence the absence of any entry against North Coimbatore. The expenditure, Rs. 397, shown in last year's return under North Coimbatore has been added to the total under South Coimbatore.
Coimbatore—South	4,821	274	8,327	200	8,127	653	1,324	1880	
Madura	3,000	2,060	17,120	204	16,916	789	2,942	1882-83	The District Forest Officer enters Rs. 2,153 under total cost up to 15th June 1883, instead of Rs. 2,060 exhibited last year; the difference, Rs. 93, is therefore added to the whole cost.
Tinnevelly	..	..	..	..	..	..	..	..	
Malabar—Wynaad	4,480	13	4,480	2,560	1,920	142	155	1882-83	
Malabar—Pálghat	3,017	2,338	3,017	200	2,817	372	2,710	1873-74	
Malabar—Nilambúr	..	..	1,799·38	..	1,799·38	..	45	1883-84	
South Canara	..	..	435	..	435	*89	89	1882-83	* Includes Rs. 38 spent last year.
Total	218,614·42	14,744	339,558·38	4,305	335,253·38	3,716	18,598		

64. There is a marked improvement in the extent and cost of fire-protection. During the year 335,253 acres or 524 square miles of forests were actually protected at a cost of Rs. 3,716, which gives a little over 2 pies per acre, compared with 218,614 acres or 341 square miles at a cost of Rs. 4,763, or 4 pies per acre in 1882-83. The percentage of failure to area attempted in 1883-84 is only 1·26, but there have been some petty fires in the protected areas since the Divisional reports were submitted, which will be exhibited in next year's returns. The result is very satisfactory and great credit is due to the District officers. This is especially the case with regard to North Arcot where Mr. Sheffield appears to have protected 233,000 acres at a cost of Rs. 1,141, which is almost incredible. The percentage of failure is highest in the Wynaad where 2,560 acres were burnt out of a total of 4,480 acres attempted.

65. *Chingleput.*—A fire and boundary line 5½ miles in length and 18 yards in breadth was cleared on the western and southern side of Kámbákam Hill at a cost of Rs. 707, but the area was not actually brought under special fire-protection during the year.

66. *North Arcot.*—The reserves under fire-protection are stated by the District Forest Officer to remain the same as last year, but it will be seen from the detailed statement that their number and extent have been largely increased. Mr. Sheffield will be called upon to explain more clearly what he understands by fire-protection and what expenditure he includes under that head in order that there may be no doubts with regard to this important branch of forest work during the current official year. Five hundred acres are entered under "failures" in the district statement, the causes of which are not explained.

67. *South Arcot.*—About 100 square miles in seven forest blocks of the Tiruvannámalai and Kallakurchi Taluks are under special fire-protection. Of these, about 431 acres were burnt during the fire season of the year by accidents while fire-tracing and by other causes not explained by the District Forest Officer. No incendiaries appear to have been detected or prosecuted, but none of the forests are "reserved" in the strict sense of the word which renders conviction difficult to obtain. In the beginning of the dry season of 1884, 14,500 acres in three forests were specially fire-traced for Rs. 100. The grass and undergrowth was unusually green and the cost of fire-tracing was consequently less than in the previous season. The plan of Kavattimalai block appended to this report illustrates the special protection of forests in this district by fire-lines.

68. *Salem.*—A good deal of fire-tracing is reported to have been done in the old Railway fuel reserves of Vadugampatti, Marur, Mallapuram, Kariyappa Kombai, Ammanéri and Karuvadupárai; lines from 15 to 30 feet broad were cleared for 29 miles at an average cost of Rs. 28 per mile.

The Harúr, Uttankarai and Singárapet Reserves in the Uttankarai Range, Pudur and Yelagiri Teak Reserve in the Tirupatúr Range, Barúr and Tagarapalli Reserves in the Krishtnagiri Range were also fire-traced.

Owing to stringent measures adopted during the year, forest fires generally were less prevalent than usual.

69. *Trichinopoly and Tanjore.*—There were no fire-tracing operations in these districts.

70. *Coimbatore—Northern Division.*—A small fire got into the Jadatalaihalla block; but the other reserves were kept clear from fire by mere watching and warning villagers, &c.

71. *Southern Division.*—The areas under special fire-protection are shown in Return No. 4 and estimated at 8,177 acres.

The large Sholakarai Reserve (1,142 acres) was carefully fire-traced during the year at a cost of Rs. 127 and fire-patrols were employed to watch the fire-lines and keep them clean, but notwithstanding the care bestowed by them, a fire broke out in the north-western corner and passed over 50 acres. It was, however, put down before any great damage was done. On a careful inspection by the District Forest Officer, it was found that the fire had originated from a spot inside the fire-lines and must have doubtless been the work of an incendiary, who was, however, not detected.

The little Sholakarai Reserve (150 acres) was also fire-traced by means of exterior lines at a small cost; but as the lines along the Railway were not well burnt, a spark from a passing engine got into the grass which resulted in the fire passing over the whole area. It is stated that only the grass and other undergrowth were burnt, and that but little damage was done to the trees. The fire-tracing operations in the Palár, Punáchi and selected portions of No. I Reserves were also carefully carried out and proved successful. There were not many fires in the unprotected areas as compared with the previous year. This fact would seem to have been specially noticeable on the Bolampatti hills now under settlement as Reserved Forests.

72. *Madura.*—The principal tracts protected from fire are shown in Return No. 4.

The outer slopes of Alagármalai Reserve having also been brought under protection during the year, the area has increased to 12,000 acres. The average cost per acre during the year did not however exceed 10 pies, which is exceedingly moderate as compared with the cost of the preceding year.

A fire broke out accidently on a grassy slope of this reserve when one of the fire-lines was being burnt and passed over fifty acres, doing no great damage. The protection was otherwise successful.

A large fire from Shembaganúr on the Palni hills crossed a fire-line of the Pámbár Reserve and burnt down about 200 acres of grass and three or four acres of forest land on a rocky precipitous slope in the reserve, but there was fortunately no serious damage. The servants of an adjoining proprietor were charged before the Sub-Magistrate of Kodaikánal with neglecting to take reasonable precaution and kindling fire so as to endanger the forests, notwithstanding due warning under Section 21 (*b*). The case was not concluded when the District Forest Officer submitted his report, but has since resulted in acquittal. Protection may on the whole be considered a success and the arrangements reflect much credit on the District Forest Officer and his subordinates.

73. *Tinnevelly.*—No steps were taken towards the protection of forests from fire in this district, although they were repeatedly urged on the District Forest Officer (Mr. Hayne) by the Collector and myself.

74. *Malabar District—Wynaad and Pálghat Division.*—The Bégúr and Kurchiyat Forests in Wynaad and the Wálayár railway Fuel Reserves in Pálghat were fire-protected.

A large forest fire from the Mysore direction, helped by a strong easterly wind, crossed the fire-trace and entered the Bégúr Reserves, burning 2,560 acres.

There are great difficulties in the way of ensuring fire-protection in the Wynaad as the fire season is very feverish and wild elephants render patrolling dangerous. I am not, however, satisfied with the measures taken, as isolation clearly was not secured, and the Sub-Assistant Conservator in immediate charge does not appear to have realized the importance of the work. The District Forest Officer's report and statement do not agree, as in the former he writes of the Kurchiyat block of 8,000 acres being successfully protected at a cost of three pies per acre. This finds no place in his tabular statement.

The protection of the Wálayár Reserves cost Annas 2-1 per acre, but was not effective, several fires having broken out within the protected areas. Two Mulcers were arrested "*flagrante delicto.*" Both men escaped, but one of them was subsequently taken into custody by the police, put on trial and sentenced to three months' imprisonment under Section 21 of the Forest Act in April last. Mr. Morgan and his establishment cannot be congratulated on the results of these fire-protection during the year, and must be much more careful and attentive to details, if they are to obtain success in the future. I have pointed this out to them.

75. *Nilambúr Division.*—The Nellikutta Forests in which logs of timber had been out lying in several places, were specially fire-traced and fire was entirely kept out.

76. *South Canara.*—About 115 acres of the forest tract of Parapa were successfully protected from fire.

The Pillárkán Reserve was also protected.

(*d*) *Grazing.*

77. With exception of the districts noted below, no information has been furnished concerning the revenue from this source and measures adopted for the protection and improvement of grazing tracts. The matter will receive special attention next year.

78. *North Arcot.*—The question of levying fees on cattle grazed in the Ghât Forests was considered, but nothing had been definitely settled during the year.

79. *South Arcot.*—A small amount was collected on cattle grazing within the Tiruvannámalai Hill Reserves. The District Forest Officer questions the necessity for villagers seeking pasture for their cattle in the Government Forests at all.

80. *Tinnevelly.*—The grazing of cattle in the Ghât Forests and in the Reserved Forests or lands in the plains has been strictly prohibited with a view to secure better protection, but I doubt if the cattle are really excluded, and do not consider it necessary to exclude them entirely from the large areas not under special protection.

Under proper arrangements, we should secure a good revenue from grazing fees which were formerly willingly paid by the people. I shall confer with the Collector on the subject during the course of the year.

(*e*) *Natural Reproduction.*

81. The details in the district reports under this head are very meagre; in fact, the question is barely alluded to, except in North Arcot where a marked improvement in growth, &c., in most of the reserves (Natural Forests), doubtless due to exclusion of cattle and fire, is reported. The Napier Reserve in the Chandragiri Taluk and the Carnatic Ghur Reserve in the Pólúr Taluk are quoted as particular instances. In the former Yellama (*Anogeissus latifolia*) and Red-wood (*Pterocarpus santalinus*) saplings and seedlings are coming on plentifully, besides other good timber tree seedlings, such as Yeppi (*Hardwickia binata*), Pala (*Mimusops Elengi*), Karakái (*Terminalia Chebula*), Jitaji (*Dalbergia latifolia*), Billu (*Chloroxylon Swietenia*), &c. In the latter, the growth of the seedlings on old kumari clearings is very promising except in the rocky parts.

The District Forest Officers will be requested to pay more attention to this important branch of forestry in future.

(*f*) *Artificial Reproduction.*

82. The details of operation under this section will be found in Appendix No. 2, of which the following is an abstract:—

District.	On the 1st April 1883. Area. Regular Plantations.	On the 1st April 1883. Area. Cultural Operations.	On the 1st April 1883. Cost. Regular Plantations.	On the 1st April 1883. Cost. Cultural Operations.	On the 1st April 1883. Cost. Total.	Added or excluded during 1883-84. Area. Regular Plantations.	Added or excluded during 1883-84. Area. Cultural Operations.	Added or excluded during 1883-84. Area. Total.
	1	2	3	4	5	6	7	8	9	10
	Acs.	Acs.	Rs.	Rs.	Rs.	Acs.	Acs.	Acs.
Chingleput	801·44	..	40,075	..	40,075	— 264·92	..	— 264·92
North Arcot	1,558·00	725·00	77,900	7,250	85,150	— 5·	..	— 5·
South Arcot	6,600·	410·	330,000	4,100	334,100	— 4,864·	..	— 4,864·
Salem	5·00	2,500·00	250	25,000	25,250	— 5·	..	— 5·
Trichinopoly	2,183·25	A. 29·75 M. 100·50	109,162	A. 297 M. 1,005	110,464	+ 144·75	..	+ 144·75
Tanjore	11,254·50	..	562,725	..	562,725	— 10,550·50	..	— 10,550·50
Coimbatore .. { North	177·00	71·26	8,850	713	9,563	..	..	..
Coimbatore .. { South	19·50	105·56	975	1,056	2,031	..	..	..
Madura	224·14	219·87	11,207	2,199	13,406	— 128·75	8·75	— 120·00
Tinnevelly	10,081·70	3,645·88	504,085	36,459	540,544	+ 9,469·	..	+ 9,469·
Malabar—								
Wynaad	..	2·60	..	26	26	..	..	..
Pálghat	..	..	..	..	..	..	..	..
Nilambúr	3,435·98	..	171,799	..	171,799	..	..	..
South Canara	687·00	..	34,350	..	34,350	— 687·	..	— 687·
Total ..	36,027·51	{ 7,709·82 M. 100·50	1,351,378	{ 77,098 M. 1,005	1,429,476	— 6,848·67	8·75	— 6,839·92

Note.—The area and cost brought forward by District Forest Officers differed considerably. Their figures on the 31st March 1884 were, therefore, retained and the rest altered. Columns 10 and 13 do not, therefore, give the actual areas added and excluded or the amount expended during the year under report.

ON THE 31ST MARCH 1884.

ADDED OR EXCLUDED DURING 1883-84—(*Contd.*).

District.	Area.			Cost.		
	Regular Plantations.	Cultural Operations.	Total.	Regular Plantations.	Cultural Operations.	Total.
	11	12	13	14	15	16
	Acs.	Acs.	Acs.	Rs.	Rs.	Rs.
Chingleput	14,614	..	546·52	25,460	..	25,460
North Arcot	4,001	..	1,553·	90,888	..	90,888
South Arcot	4,579	..	736·	73,523	..	73,523
Salem	..	..	..	..	..	..
Trichinopoly	3,245	1,284	A. 2,357·75 M. 100·50	60,779	27,559	88,338
Tanjore	7,886	..	1,528·	..	..	..
Coimbatore .. { North	824	..	177·	47,242	..	47,242
Coimbatore .. { South	..	..	19·50	4,402	..	4,402
Madura	8,910	..	357·75	4,042	11,508	15,550
Tinnevelly	1,049	1,413	23,153·49	2,300	3,670	5,970
Malabar—						
Wynaad	2,429	..	41·50	2,429	..	2,429
Pálghat	..	..				
Nilambúr	6,45,230	..	3,435·98	10,77,122	..	10,77,122
South Canara	..	..	..	..	..	..
Total ..	6,59,175	2,697	33,906·49 M. 100·50	13,88,187	42,737	14,30,924

NOTE.—The area and cost brought forward by District Forest Officers differed considerably. Their figures on the 31st March 1884 were, therefore, retained and the rest altered. Columns 10 and 13 do not, therefore, give the actual areas added and excluded or the amount expended during the year under report.

83. The area under regular plantation at the close of last year was shown as 36,027·51 acres. The year under report shows a difference of 6,848·67 acres, due chiefly to an error in the area exhibited under Tanjore last year, which should be a good deal less than what was entered, and to the District Forest Officer, South Arcot, having now excluded the unplanted area, 4,864 acres, from the list of the current year, in which he is correct. The divisions noted below show also some fluctuations for reasons noted opposite to them :—

Chingleput — 254·92.—Two plantations, about 37 acres, near Kattivákam, were sold and some topes transferred to South Indian Railway, the areas of which are not stated.

North Arcot — 5·—Not accounted for.

South Arcot — 4,864·—Last year the area included all land, whether planted or not; the current year's figures represent the planted area only.

Salem — 5·—There are no plantations; the sandalwood plantation of five acres at Kanavinagasamudram has been abandoned or included in an adjoining forest reserve selection.

Trichinopoly + 144·75.—Due to actual survey.

Tanjore — 10,550·50.—The District Forest Officer states that during last year the district is credited with no less than 11,254·50 acres of regular plantation. From the returns he finds that, taking plantations, topes and other jungles into account, the total area amounts to 10,788 acres, of which there are about 704 acres of regular plantation, 824 cultural operations and 9,260 natural jungles.

Madura — 137·50.—Of this, 104 acres are stated to have been included in the Vannattipárai No. I Reserve; the remainder of the discrepancy is not accounted for.

Tinnevelly + 9,469.—The increase appears in Kudiraimalai Téri in Tenkarai Taluk; last year the area appeared under "Reserve" and now transferred to "Plantation" as being the correct head.

Malabar, Wynaad and Pálghat + 41·50.—This was not shown in last year's statement.

South Canara — 687.—In paragraph 28 of the report it is stated that, owing to some mistake, the old jungle conservancy reserves were entered last year twice, *i.e.*, under the head of "Reserves" and under "Plantations"; they are now excluded from the latter.

84. There has been no extension of the areas actually planted, but estimates for considerable extensions during the current and future years have been sanctioned and funds allotted. A separate statement of topes is submitted in accordance with the orders of Government, of which the following is an abstract :—

District.	Extent.	Cost during the Year.	Cost to end of the Year.	Remarks.
	Acs.	Rs.	Rs.	
Chingleput	149·30	871	13,577	
North Arcot	1,106·57	...	...	
South Arcot	393·51	...	8,712	
Salem	2,555·5	9,430	1,78,997	
Trichinopoly	...	...	....	
Tanjore	153·	572	...	
Coimbatore { North	11,309·60	...	26,949	
Coimbatore { South	100·79	...	5,197	
Madura	228·43	385	12,483	
Tinnevelly	...	...	...	Area and cost are included in the plantation statement and, therefore, omitted here.
Malabar { Wynaad and Pálghat ...	3·	...	...	
Malabar { Nilambúr	...	...	...	
South Canara	172·	995	16,986	
Total ...	16,171·70	12,253	2,62,901	

85. It has been extremely difficult to compile, and I have even now doubts as to its accuracy. Until the amalgamation of the jungle conservancy fund with forests

the topes were under the charge of the Revenue Department, and no regular lists were kept. The only information available on paper was the jungle conservancy budget note, but in that only those topes, &c., were entered on which establishments were employed or in which operations were proposed. Our officers have now to find out what are Government topes and what are not, which is no easy task even with the assistance of the taluk and village Revenue authorities. The area under topes will gradually be merged in that of regular plantations to which it rightly belongs; but we must first ascertain more accurately the extent actually planted and condition of the trees. Instructions to this effect will be issued to all District Forest Officers. It should be explained that the distinction hitherto obtaining between regular plantations and topes is that the former were formed for the growth and supply of timber, firewood, &c., whilst the latter were more generally composed of fruit trees, such as tamarind, ilupai, jack, &c., which it was never intended to fell but to retain for the value of their fruit, and as shade for travellers, camping grounds, &c.

86. It is observed that the District Forest Officer, Salem, enters 2,555·5 acres under topes, whilst the same area,—73, is shown under plantation. The area has been retained under topes and excluded from plantations for the present.

87. The area under cultural operations, as given last year, amounts to 7,709·82 acres and 100·50 running miles of channel banks, but the returns of the year under report show only 4,727·65 acres and 100·50 miles, being a decrease of 2,982·17 acres. The cause of this is not clearly accounted for by District Forest Officers, but it is presumed that, owing to some misapprehension, the majority of them have shown under topes the area exhibited by them last year as appertaining to cultural operations. We must hope for fuller and clearer information next year. A circular letter explaining what we required was issued to all District Forest Officers, but the result is not encouraging.

88. The net result, so far as can be gathered from the district reports, is as follows:—Areas classed as regular plantations, 29,178·84 acres; topes, 16,171·70; cultural operations, 4,727·65; and 100·50 running miles of channel banks. If the areas under topes are added to that under regular plantations, we have a total of Acres 45,350 planted, and 4,727 acres under cultural operations, which may be accepted subject to correction year by year as the classification is better understood.

89. *Chingleput.*—Of the two casuarina plantations near Kattivákam formed by the late jungle conservancy department, the larger, Kilinjal Kuppam, 14·43 acres, containing 2,343 trees, 8 years old, was sold for Rs. 1,805, while the other, Talam Kuppam, 25 acres, with 856 trees, similarly aged, realised only Rs. 302, the growth being rather poor. Meyúr plantation supplied 120 telegraph posts, at Rs. 1-9-0 each, including carriage. Nine thousand casuarina and 2,000 mango plants were put out during the year. The topes at the Railway stations were handed over to the Railway authorities, and others, numbering six, to the care of village officers. The principal operations in respect to the remainder were confined to maintaining the present stock and fencing.

90. *North Arcot.*—All the plantations have been notified under the Act for settlement as reserved forests and included in the list of reserves. Their area, *viz.*, 1,553 acres, is the same as in 1882-83 and cost Rs. 4,076 in the shape of maintenance against a revenue from sales of Rs. 2,616. The whole of the plantations are not expected to pay, some of them partaking more of the nature of topes than regular plantations for the supply of timber or firewood.

About $2\frac{1}{2}$ lakhs of casuarina were planted out during the year, of which half-a-lakh died. Other kinds, such as Kát vágai (*Albizzia Lebbek*), Korakapilli (*Inga dulcis*), and Babúl (*Acacia arabica*), were also planted and one lakh and-a-half of palmyra seeds sown.

The number of topes in the district is given as 83, but their areas and cost are not given. There were considerable cultural operations, in which the Collector takes special interest, but the district report is silent on the subject.

91. *South Arcot.*—The area set apart for plantations is 5,600 acres, of which 736 acres, in 12 blocks, have been planted up at the close of the year. It is stated that the yield from plantations is annually increasing. The total receipts under this head

is given as Rs. 8,112-15-11 against an expenditure of Rs. 4,579-5-10. The principal operations were forming and stocking the nurseries preparatory to extending the planted area during the current year.

92. *Salem.*—There are no regular plantations in the district, those that exist being classed as topes and the experimental sandalwood plantation having been transferred to reserves. The area covered by topes in all the taluks is 2,555 acres. One hundred and ten watchers were employed to supervise 102 topes and the rest are left in charge of village officers. The number of watchers has recently been greatly reduced. There were no cultural operations of importance.

93. *Trichinopoly.*—There were 16 plantations, occupying an area of 2,328 acres, of which $144\frac{3}{4}$ were added during the year by re-survey. The cost of formation and upkeep is given as Rs. 60,779 up to the close of the year. Cultural operations were carried on in 16 places over an area of $29\frac{3}{4}$ acres and $100\frac{1}{2}$ miles of channel banks. The operations under this head appear to be extensive. The chief seeds sown and transplanted were *Inga dulcis*, Divi-divi, Casuarina, Vágai, Babúl and Nim. The District Forest Officer's report is very confused and there are numerous palpable inaccuracies.

94. *Tanjore.*—There are about 704 acres of plantation, 153 acres of topes and 824 acres of cultural operations in this division. During the year under review very little, in the way of planting, was done. About 6,000 casuarina seedlings were put out in three villages at a cost of Rs. 32, of which about 25 per cent. perished. Felling operations were confined to the plantations in which the trees were too close together. There were such thinnings in five plantations to the extent of 1,004 tons, all of which, except 52 tons, were sold. The maintenance of all the plantations cost Rs. 3,480. Considerable reductions in the establishment were effected.

The topes in Patukóta and Mannárgudi Taluks appear to have been leased out at an annual rental of about Rs. 8 per tope.

95. *North Coimbatore.*—The sandalwood plantation at Bailúr is more or less a failure and I consider that better results can be secured by natural reproduction, aided by cultural operation.

The number of topes in the division is entered as 155 with an area of 11,309 acres.

96. *South Coimbatore.*—The three small teak plantations on the Ánaimalais are in a promising condition and they have been cleared and fire-protected.

97. *Madura.*—The area under regular plantation and cultural operation is respectively 86·64 and 271·11 acres, costing Rs. 4,042 and 11,508 up to the close of the year. The teak plantation of Vannattipárai is stationary in its growth. The *Eucalyptus* plantation at Kodaikánal is looking well and the coppicing has been very successful. A small nursery of *Eucalyptus globulus* was formed for future operations. Some *Eucalyptus eugenioides* plants were transplanted in the nursery and cut back and are doing very well. The Velankombai Teak Plantation, consisting of 4,347 trees, is in good condition. In the Parappar Plantation on the Palni hills a nursery was formed for *Eucalyptus globulus*, *Acacia pycnantha*, *Callitris Rhomboidea* and *Cryptomeria japonica*.

98. *Tinnevelly.*—The area of regular plantations is entered as 19,550·70 acres and that of cultural operations 3,602·79, but the classification is, I fear, inaccurate and misleading. It will be checked and revised next year. An area of 43·59 acres in the Tinnevelly Taluk, shown under cultural operations last year, was transferred to the Local Fund Department as it consisted of avenues. There was also a small relinquishment at Kulasekharapatnam. Cocoanuts were imported from Colombo and put down in the nursery garden, Tinnevelly Taluk. Nurseries of other species were also formed and the seedlings sold at different rates. All the Foresters have been instructed to collect the seeds of valuable and fruit-bearing trees which germinate readily and thrive without artificial watering.

99. *Malabar.*—The Kánot Teak Plantation is not favorably reported on. It was formerly in charge of the Sub-Collector, though the funds were supplied from forests. It is proposed to plant the whole up with *Ficus elastica* or mahogany.

The Botanical Garden at Manantoddy is in a flourishing condition. Some of the *Eucalypti* and *Aleurites* have suffered much from borer. Two hundred plants of Divi-divi were raised at Pálghat and will be put out during the monsoon.

100. *Nilambúr.*—There are 3,436 acres of plantation, of which that at Amarampulam (408·77 acres) was notified as reserved forest under Section 25 of the Act. The other blocks will be notified as soon as the existing rights of the proprietors are acquired. All the plantations have been fire-traced and protected and are reported to be in good condition.

101. *South Canara.*—The Parapa Teak Plantation is in a very poor condition. The receipts were Rs. 13-4 0, whilst the expenditure amounted to Rs. 48-15-6. The plantations will be merged in the adjoining forests to be reserved under Section 4 when orders are passed on the Collector's special report on the lands at the disposal of Government.

The condition of the casuarina plantation at Ullál is remarkably good. One acre, containing 170 trees, was sold for Rs. 249-10-0.

The Honne (*Calophyllum inophyllum*) Plantation is doing well.

Tannir Bhávi —This is a new plantation, 11 acres in extent, situated on the northern side of the backwaters upon which the town of Mangalore stands. It was planted with casuarinas. The plantations at Kuguiangai and Mukkada with 2,810 teak saplings are now in the way to improvement.

(*g*) *Works of Improvement.*

102. It is difficult to give information under this very wide sub-head of the code form in the absence of special reference to it in the district reports. Almost every operation in the forest should be a work of improvement, but the sub-head is, I believe, intended to apply specially to those works which are undertaken to promote and protect the forest growth and place the timber and other produce in the market at the lowest price, and in the best condition. We are scarcely yet in a position to carry on operations of this nature and record them in a systematic manner. We must first constitute our reserved forests, house our establishments in them and develop roads and other communications, and in these matters it will be observed that good progress has been made during the year.

Amongst works of direct improvement, the following may be mentioned :—

103. *North Arcot.*—Some of the fuel and fodder reserves were fenced with a good ditch bank and aloe hedge. In Sholinghur, Ammanúr and Uriyúr, stone walls were erected in places where the line of fence is crossed by streams.

Lines 24 feet wide were cleared round most of the reserves in the Vellore, Chandragiri, Palmanér and Arni ranges.

Block division lines in the Carnatic Ghur, Napier, and three reserves of the Wálajápet Taluk were also cleared.

104. *South Arcot.*—Four hundred and fifty-two yards of rough stone wall (2 feet wide 3 feet high) were repaired; 1,960 yards of ditch, 3 feet wide by $1\frac{1}{2}$ feet deep, were dug chiefly to protect supplemental plantings, and 1,352 yards were planted with aloes one foot apart. Prickly-pear was laid alongside of roads intersecting forests to a distance of 597 yards. Two thousand nine hundred and five yards of prickly-pear fencing was done by watchers. One and-a-half miles of new inspection lines were cut and 66 miles of old lines maintained clear of re-growth.

The total length of inspection and patrol lines existing in the forests amounts to 150 miles.

105. *Madura.*—The depôt site at Kodaikánal was much improved by extension, fencing, clearing of long grass, &c. Several inspection pathways were cut in the Alagármalai Reserve.

(*h*) *Experiments and Exotic Trees.*

106. It is satisfactory to note that the District Forest Officers have evinced much interest in this branch of their work. Exhaustive accounts are given of each experiment, of which the following is an epitome. I find that many of our officers are only too much inclined to devote time and attention to experiments with exotics, which are more interesting and less laborious than pure forest work, which latter must, however, be the first consideration.

107. *North Arcot.*—The District Forest Officer offers no remarks as to the condition of *Eucalyptus* and *Acacias* (from South America) experimentally planted in the district.

The several species of *Pithecolobium Samán* (rain tree) are said to grow rapidly. The District Forest Officer states that the wood is not much valued as fuel, but the pods seem to be good fodder for cattle.

108. *South Arcot.*—Mr. Norfor's two plots of Ceara rubber plantation covering two acres of loamy red soil 50 feet above sea level, were flourishing when the District Forest Officer visited them in April 1883. The trees are said to be watered daily. The older ones are 16 months old and the largest are 13 feet high and 7 inches girth at 6 inches above ground. The seedlings in the second plot planted in September last before the monsoon do not show so strong a growth. Planting after the rains appears, therefore, to suit the plant in this climate and soil.

Of Mahogany (*Swietenia Mahagoni*), Belgaum walnut (*Aleurites triloba*), Divi-divi (*Cæsalpinia coriaria*), *Albizzia Lebbek*, Cashew (*Anacardium occidentale*), Margosa (*Melia indica*), Jack (*Artocarpus integrifolia*), and country almond (*Terminalia Catappa*) planted by Mr. Norfor, the almond does not succeed, but all the others thrive, especially the cashewnut.

Cuttings from 16 months' old Ceara saplings were shooting well, but the result of seeds sown from them were not visible at the time of the District Forest Officer's visit.

The growth of this plantation has induced the District Forest Officer to try Ceara rubber plants in the adjoining forest land. Those planted in January by Mr. Weld, the Sub-Collector, near Tindivanam, on red, gravelly soil are reported to be so far successful.

Divi-divi (*Cæsalpinia coriaria*).—A plantation of six acres (loamy clay soil) in Siruvanur village, Tirukoilúr Taluk, belonging to one Dévanáyaga Mudaliyár, is thriving well. The trees are seven years old and are considered to have been originally planted too far apart. A cart load of pods was obtained this season.

The plants tried by Mr. Weld in the topes and reserves near Tindivanam and those at Villupuram and Gingee in forest lands and in the sandy tracts near Cuddalore, though healthy, do not show much growth. Their appearance, however, encourages extended planting.

Dalbergia sissoo.—Several four years old saplings on exceptionally rich soil on the Coleroon bank near Chidambaram are 35 feet high, with $2\frac{1}{2}$ feet girth at surface. The growth in other places, though not so large, is good.

Rain trees (*Pithecolobium Saman*).—Those planted in sandy loam have succeeded better than those in clay. Some planted with casuarinas have grown well, while others in sandy loam, with *Poinciana regia* and *Odina Wodier* have done even better. The value of the wood as timber is doubtful. The structure of the wood, as judged from saplings, appears similar to that of *Albizzia Lebbek*.

A single specimen of *Pterocarpus santalinus* planted with teak, *Albizzias* and *Cassias*, though not watered or particularly tended, is 18 feet high with a straight pole.

109. *South Coimbatore.*—The seeds of Divi-divi (*Cæsalpinia coriaria*) sown in a nursery bed in the Coimbatore depôt germinated within a week, and sixty of the seedlings transplanted when six months old are stated to have grown to a height of from 1 to 3 feet in the tenth month.

110. *Madura.*—5 oz. of Divi-divi (*Cæsalpinia coriaria*) seed were sown in the Navinipatti garden at Melúr in May 1883, and of the seedlings transplanted in August, $2\frac{1}{2}$ feet apart, 190 plants are now alive. They are watered daily and are all healthy and thriving. The soil of the garden (gravel and red earth) appears well suited for the species. Many of the seedlings were destroyed in the bed by white-ants and birds, hence the small number of plants secured.

Fourcroya.—Five hundred of these plants were put down in Navinipatti garden, of which 400 now alive are healthy. Two thousand and forty planted on both sides of Tirtha Aravi path in the Alagármalai Reserve for 600 yards have not been very successful. Of the 200 plants put out on the northern margin of the Vírapannaimédu, 191 are alive and healthy.

Reana luxurians.—Of the one lb. of this seed obtained from the Government Farm, Saidápet, half was sown broadcast in Máttupannai in the Alagármalai Reserve in August 1883, in a piece of ground 6 yards by 4 yards, at an elevation of about 2,000 feet. The bed was well watered, but no shade put up. The plants grew rapidly, attaining a height of 6 feet in December and have yielded $1\frac{1}{2}$ lb. of seed. The other half sown in November in a plot 30 yards by 6 yards in Kannaimaráttukádu, at an elevation of about 5,000 feet, did not germinate so quickly as in the Máttupannai. The plants withered a little for want of rain, but revived on a subsequent shower and were five inches high at the end of March.

111. *Malabar—Wynaad and Pálghat Division.*—The Botanical Garden at Manantoddy has continued to flourish, but many valuable plants are reported to have been damaged by cattle. The following statement, furnished by the District Forest Officer, shows the number of plants alive, their age, height, girth of stem, and present condition :—

Name of Tree.	Number Planted and now Alive.	Age.	Height.	Girth.	Present Condition.
Belgaum walnut (*Aleurites triloba*) ...	260	...	36″	$2\frac{1}{4}$″	
Ceara rubber (*Manihot Glaziovii*)	303	...	72″	3″	Poor looking.
Eucalyptus	73	...	54″	1″	
Rain tree (*Pithecolobium Saman*)	84	...	50″	$2\frac{1}{2}$″	
Sappan (*Cæsalpinia Sappan*)	500	...	15″	1″	
Cocoa (*Theobroma Cacao*)	50	...	...	...	All have died out.
Mahogany (*Swietenia Mahagoni*)	2	...	48″	$1\frac{1}{2}$″	
Ficus elastica	3	..	18″	$1\frac{1}{4}$″	
Garcinia sp.	17	...	...	...	
Jámun (Rose apple) (*Eugenia Jambos*) ...	15	...	...	...	
Oranges (*Citrus Aurantium*)	10	...	...	...	
Carob (*Ceratonia siligna*)	4	...	...	...	
Bilimbi (*Averrhoa Bilimbi*)	5	...	...	...	
Casuarina (*Casuarina equisetifolia*) ...	32	...	...	...	
Adenanthera pavonina	22	...	...	...	
Cocoa palm (*Theobroma Cacao*)	2	..	...	...	
Arnotto (*Bixa Orellana*)	475	...	...	...	
Cinnamon (*Cinnamomum Zeylanicum*) ...	47	...	...	...	

Some of the *Eucalypti* and walnut (*Aleurites*) suffered from borer.

Divi-divi (*Cæsalpinia coriaria*).—Two hundred fine Divi-divi plants were raised at Pálghat during the year. The largest of these is stated to be three feet high.

Mahogany (*Swietenia Mahagoni*). Six mahogany plants planted near the Wálayár river in the Warlapadi block have grown two feet high, presenting a healthy appearance. Of the twelve plants put out in the Kanoth teak plantation, eleven are reported to be growing well. A few plants of Cocoa (*Theobroma Cacao*) and Ceara (*Manihot Glaziovii*) planted during the year are thriving.

Castilloa and Hevea Experiments.—These were entrusted to Mr. T. J. Ferguson of Messrs. Hinde and Co., Calicut. The District Forest Officer does not state the progress made up to March 1884. According to a report furnished by Mr. Ferguson, under date 3rd October 1883, six young plants of *Castilloa*, each about 4 to 6 inches high, and twenty-seven rooted stumps of *Hevea braziliensis* were received from the Government of Ceylon in the beginning of April 1883, and in October five of the former are stated to have exhibited a remarkably good growth, measuring as follows :—

(1) 3′ 3″ high, 6 branches, foliage luxuriant.
(2) 3′ 3″ do. 2 do. do.
(3) 2′ 6″ do. 2 do. do.
(4) } 2′ 0″ do. no do. do.
(5) }
(6) 0′ 10″ do. sickly and stunted.

Mr. Ferguson proposed to commence propagating from these very shortly and he has doubtless since done so. The leaves of the best trees measured 12″ × 5″.

Hevea braziliensis sent out shoots shortly after arrival, but two plants subsequently died. Each of the remaining twenty-five sent out from 2 to 4 shoots $2\frac{1}{2}$ to 6 feet high and propagation was about to be commenced. The cost of these experiments up to October last amounted to Rs. 39. A further supply of *Hevea* and *Castilloa* plants were received from Ceylon about the end of March 1884.

The cinchona experiments were ordered to be discontinued.

112. *Nilambúr Division.*—The growth of the mahogany (*Swietenia Mahagoni*) plants, about 4,000 in number, is not promising. The following statement, furnished by the District Forest Officer, shows the measurement, &c., of a few of the largest plants :—

When Planted.	Number.	Height when Planted.	Measurement in May 1883. Height.	Circumference. At base.	Circumference. 5 Feet up.	Present Measurement. Height.	Circumference. At base.	Circumference. 5 Feet up.
		INCH.	FEET.	INCH.	INCH.	FEET.	INCH.	INCH.
September 1873	1	Situ.	65	42	30	67	47	$34\frac{1}{2}$
June 1878	2	6	25	$16\frac{1}{2}$	$12\frac{3}{4}$	27	19	15
Do.	3	6	$17\frac{3}{4}$	$12\frac{1}{4}$	9	18	13	10
October 1879	4	6	17	9	..	18	11	8
	5	6	13	$8\frac{1}{2}$	..	18	10	8
	6	6	18	10	..	19	14	$8\frac{3}{4}$
	7	6	$15\frac{3}{4}$	9	..	19	$11\frac{1}{2}$	$8\frac{1}{4}$
	8	6	17	$8\frac{1}{2}$	..	18	$14\frac{1}{2}$	$11\frac{1}{4}$
	9	6	15	$9\frac{1}{2}$	..	17	$10\frac{1}{2}$	$7\frac{1}{2}$

With the exception of No. 1, the plants are shrubby, having been several times injured by the borer. The moths are plentiful during the rains and disappear in the dry season (December to March). Specimens of caterpillar and moth were sent to Lord Walsingham and to Dr. Bidie, Superintendent, Government Central Museum, for examination.

South American India Rubbers.—Measurement of a few of the best plants are shown in the following table supplied by the District Forest Officer :—

Date Planted.	Number planted Alive.	Number Measured.	Height, when Planted.	Measurement in May 1883. Height.	Girth at base.	Girth, 5 feet up.	Present Measurement. Height.	Girth at base.	Girth, 5 feet up.	Remarks.
			IN.	FT.	IN.	IN.	FT.	IN.	IN.	
Ceara or Manihot Glaziovii.		1	30	35	32	$17\frac{3}{4}$	36	36	21	Double top tree.
October 1878	4 alive					$18\frac{1}{2}$			$21\frac{1}{2}$	
		2	20	33	24	18	33	32	28	
		3	20	33	$22\frac{1}{2}$	17	34	$24\frac{1}{2}$	$20\frac{1}{2}$	
		4	20	34	$30\frac{1}{2}$	23	35	23	$18\frac{1}{2}$	
		5	15	28	$21\frac{1}{2}$	$14\frac{3}{4}$	..	..	..	
June 1880	42 alive	6	40	30	19	15	32	$23\frac{1}{2}$	$19\frac{1}{4}$	Broken by the gale, 26th August 1883 ; has three shoots from the start.
		7	40	32	$22\frac{1}{4}$	18	34	$25\frac{1}{2}$	$18\frac{1}{2}$	
		8	40	$32\frac{1}{2}$	21	$17\frac{3}{4}$	33	28	23	
September 1880	..	9	Situ	$26\frac{1}{2}$	$26\frac{1}{2}$	20	28	32	24	
		10	28	38	$19\frac{3}{4}$	$14\frac{1}{2}$	35	25	21	Broken and died, 26th August 1883.
July 1881	57 alive	11	28	$31\frac{1}{2}$	$16\frac{1}{4}$	13	..	..	..	
		12	28	$29\frac{1}{2}$	$16\frac{1}{4}$	12	37	22	19	
Hevea Braziliensis.		1	30	$32\frac{1}{2}$	$14\frac{1}{2}$	9	38	19	$11\frac{1}{4}$	
		2	30	33	$14\frac{1}{2}$	9	37	20	12	
June 1879	28 alive	3	30	31	14	$8\frac{1}{2}$	$33\frac{1}{2}$	$19\frac{1}{2}$	$12\frac{1}{4}$	
		4	30	31	$12\frac{1}{2}$	$8\frac{3}{4}$	34	$19\frac{1}{2}$	12	
		5	30	29	$10\frac{1}{2}$	$5\frac{1}{4}$	34	19	$9\frac{1}{2}$	
Castilloa Elastica.		1	36	8	$7\frac{1}{4}$	$4\frac{1}{2}$	$10\frac{1}{2}$	9	6	
June 1880	3 alive	2	30	16	15	$12\frac{1}{2}$	19	$16\frac{3}{4}$	13	
		3	18	$16\frac{1}{2}$	$14\frac{1}{2}$	11	$19\frac{1}{2}$	$19\frac{1}{2}$	16	
		4	9	$3\frac{1}{2}$	..	..	5	..	..	
August 1882	3 alive	5	9	3	..	..	$3\frac{1}{2}$	..	..	
		6	23	$3\frac{1}{2}$	..	..	6	7	..	Rooted cutting.

Ceara (*Manihot Glaziovii*).—Of the 6,900 seedlings of Ceara put out during the year, 6,000 are alive, besides the 1,700 planted in June 1882. The growth is good as usual, but it is feared that they will not stand any gale after the burst of the monsoon, the wood being soft and brittle. In August last, eight plants of three years' growth were blown down. There are some six years old trees to experiment with as to their yield. All the trees of 1878, 1880 and 1881 seeded and yielded 80,000 seeds, of which 40,000 were sent to the District Forest Officer, Wynaad and Pálghat Division.

The *Hevea braziliensis* are increasing in girth, the growth in height being less rapid than in previous years.

The *Castilloas* are in a flourishing state.

The *Landolphias* from the Royal Botanical Gardens, Ceylon, planted out in August 1882 (when 18 inches high), are growing well, being now 3 feet 9 inches high. They remained dormant for some months after planting and commenced growth only in November last.

Ten plants of *Cephaëlis Ipecacuanha* from the Government Gardens, Ootacamund, were planted three feet apart on a raised bed of grass under cover of teak trees. The grass being periodically cut protects the plants. Of these, one died, and of the other nine, which are growing with copious foliage, two have flowered. There are besides six plants put down by Mr. Ferguson in a low shed, but they have not thrown out fresh shoots or leaves, and have a poor appearance.

The clump of yellow bamboo (*Bambusa vulgaris*) is handsome in appearance, but the hulms do not attain the average size of the ordinary bamboo, though shoots are thrown annually.

The clump of Giant bamboo (*Bambusa Brandisii*) is growing luxuriantly, throwing out several shoots annually. The hulms already exceeding the length and girth of the ordinary bamboo are likely to attain huge dimensions. This species, if well propagated, will be of much use, specially for floating. The several nodes of the hulms of both varieties planted out in August last under the instructions of Mr. Morgan, Deputy Conservator of Forests, failed, only five cuttings having established themselves. It is believed that success can be ensured if the cuttings are struck in the beginning of July.

113. *Tanjore.*—Of the 71 mahagony (*Swietenia Mahagoni*) plants 12 to 24 inches high, put out at Vettangudi in 1881, 48 from 6 to 13 feet high, with a girth of from 4 to 13 inches at 4 feet from the ground, are now alive and healthy, with some exceptions.

Persian dates.—Of the 170 plants put out at the back of the Vedarniyam Deputy Tahsildar's office in the Tiruturaipúndi Taluk during 1879 or 1880, 103 have died and those remaining are not in a thriving condition.

Of the 443 plants put out at Vattangudi in the Shiyáli Taluk, 245, with an average height of about four feet, survive, presenting a sickly appearance.

114. *South Canara.*—There are four clumps of *Bambusa Brandisii* doing fairly well.

Divi-divi (*Cæsalpinia Coriaria*).—About half-an-acre of the new plantation at Tannir Bhávi was planted with this tree. The seedlings were much too young when put out and they cannot, therefore, be said to have established themselves well as yet.

(i) Communications and Buildings.

115. Considerable progress has been effected under this section, the work having been executed departmentally and, on the whole, very cheaply and well.

The communications are chiefly in the districts of North Arcot and Tinnevelly, where the District Forest Officers deserve much credit for their exertions in this respect.

Rest-houses were erected in North Arcot, South Coimbatore and Tinnevelly, and a Ranger's office in the Madura District.

Much remains to be done in housing our officers of all ranks in the forests and improving forest communications, without which real progress and protection of the forests is impossible.

116. *North Arcot.*—The roads and buildings constructed during the year are shown below:—

Name of Range.	Description of Road.	Distance in Miles.	Cost.	Description of Building.	Cost.
			Rs.		Rs.
Vellore ..	From Ambúr to Assanampet cart road	10⅛	901	A rest-house at Náiknéri ..	350
	From Puttúr to Arasampet, riding	9	426	Do. at Patrakád ..	350
	From Puttúr to Patrakád, riding	3½	227	Do. at Carnatic Ghur.	350
	Leading from Ammerdi to Padri (riding)	9	559		
	From Ambúr road to Náiknéri (cart)	1½	84		
Palmanér ..	From Ambúr to Peddúr (cart) ..	9¾	570	A rest-house at Palmanér ..	480
	From Kadapanattam to Butanapalli (cart)	9	516	Do. at Peddúr ..	250
Chandragiri ..	Karakambadi to Venkatagiri Raja's chatram (cart) ..	7	140		
	Mámandúr to Venkatagiri Raja's chatram (cart)	7	140		
	Road through Mámandúr Reserve	4	80		
	Total ..	69¾	3,643	Total ..	1,780

The Collector remarks that if all the roads were as well done as that from Kadapanattam to Butanapalli, the work may be considered very satisfactory. The District Forest Officer explains that last year's was the first attempt at real road-making, and that with the experience gained better work would be done in future.

I was well satisfied with what I saw of the work when I inspected the district in February. The roads are being used by the public as well as by our employés, and the rest-houses, which are very good for the money, enable the District Forest Officer and Range Officers to travel lighter and with less danger from fever and other ailments, the sites having been carefully chosen.

117. *South Arcot.*—No new roads were made, but some petty repairs were executed.

A tanna station, with tiled roof, was erected near Tiruvannámalai town. A culvert, with parapet walls, was built at Chengam depôt gate.

The forest house at Tiruvannámalai is in good order, but that at Chengam requires repair. The Forester's house at Shanikolam (Gingee) is in a good condition. The inspection bungalow there was repaired.

118. *Trichinopoly.*—The building occupied by the District Forest office was handed back to the Military authorities at their request, and a portion of the house occupied by the District Forest Officer has been rented for the office as a temporary measure. Accommodation will, it is hoped, be erected this year for the District Forest office by the Department of Public Works adjoining the Collector's cutcherry. The Pudupálaiyam and Kalpatti Travellers' bungalows were transferred to this department by the Local Fund Board. The former was partly repaired during the year for the residence of the Forest Ranger.

119. *Coimbatore Northern Division.*—Much inconvenience is stated to have been felt for want of sufficient accommodation for the office, and proposals for a new building (for both North and South Coimbatore offices) have been lately approved of by the Board and submitted for the orders of Government.

120. *Southern Division.*—A forest rest-house was built at Irutapallam in the Bolampatti valley at a cost of Rs. 2,000, exclusive of the value of timber supplied by the department.

This was strongly urged by Mr. Brandis as necessary for the Forest Settlement and District Forest Officer. It will form a nucleus for a forest station in the valley.

121. *Madura.*—The shed in the depôt at Kodaikánal was rebuilt and the depôt site improved and fenced at a cost of Rs. 51. A new Ranger's office building was

erected in the Taluk Cutcherry compound at Periyakulam at a cost of Rs. 1,084, the work reflecting much credit on the Ranger.

A new road leading from the pagoda to the Tirthamantapam, in the Alagármalai reserve, was traced to replace the old one which followed the bed of the stream.

Several inspection pathways were also cut in the above reserve.

122. *Tinnevelly.*—The 18½ miles of Pápanásam road from Anantham Odai to the water-shed boundary near Chembungi peak was completed at a cost of Rs. 5,225 in the year (inclusive of Rs. 300 sanctioned for tools). The Collector states that the first ten miles should be widened, so as to admit of cart traffic.

I inspected the whole length of road open in December and was much pleased with the work, which cannot fail to be of great service in exploring and working the forests hitherto little known, besides being most useful to the planters on the Travancore side of the mountains. I have no doubt that the track will eventually develop into a cart road, though the country is broken and difficult.

The Murukantundu road was repaired during the year at a cost of Rs. 150, the moiety being borne by the Local Fund Board as usual.

A ferry and wire rope over the Sarveyar and an iron wire rope and cradle over the Kareyar were put up for Rs. 550 and Rs. 48, respectively.

The total expenditure under roads amounted to Rs. 5,973, which has been well laid out.

The following buildings were erected during the year:—

	Cost. Rs.	A.	P.
A rest-house (for the Forest Officer, Sub-Assistant Conservator) at Kannikuti Odai in the ghât forests	1,113	8	0
Two rest-houses (for the Northern and Southern Rangers) in the ghât forests at Rs. 275 each	550	0	0
Eleven Forest Guards' houses (at Rs. 36 each) in the ghât forests ...	396	0	0
Total ...	2,059	8	0

This is all good work, the necessity for which has long been recognized and was urged by Mr. Brandis when here.

The Rangers' office buildings at Vásudevanallúr and Ambásamudram were repaired at a cost of Rs. 50 and Rs. 70, respectively. Three temporary huts were erected at Adirmalai, Kannikuti Odai and Koranjan junction for Rs. 31. Thus the total expenditure under buildings amounted to Rs. 2,210-8-0 during the year.

123. *Malabar—Wynaad and Palghát Division.*—The forest house at Manantoddy was approaching completion at the end of the year.

CHAPTER V.

Yield and Working.

Section 1.—*Departmental Operations.*

124. The system of departmental operations chiefly obtains in forests, into which free access is prohibited for various reasons. This method of working is also carried on in open forests to afford supply of timber to consumers when they are unable to remove the timber under the license system. The returns received from the District Forest Officers are not very clear or complete, so that it is difficult to compare the rates or exhibit the net results district by district.

125. The important classes of timber which are generally worked by departmental agency are those noted in the margin, and the subjoined abstract shows the quantity and distribution of the aforesaid descriptions which were felled and removed by Government agency during the past official year compared with the quantities extracted in 1882-83:—

Teakwood.
Blackwood or rosewood.
Redwood.
Sandalwood.

District.	Teakwood.	Blackwood.	Redwood.	Sandalwood.
	C. FT.		TONS.	MAUNDS.
North Arcot	...	...	775	679
South Arcot	176	...	...	150
Salem	...	...	...	172
North Coimbatore	700	...	...	5,287
Wynaad and Pálghat	21,770	12,946	...	...
Nilambúr	15,545			
Saplings	63,712	...	...	...
South Canara	...	1,355	...	...
Total ...	38,191	14,301	775	6,288
Saplings ... ... No.	63,712	...	...	...
Total of 1882-83 ...	22,561	12,803	200	7,361
Saplings ... ... No.	83,297	...	...	...

126. The total quantity of teak felled and removed during the year compared with the results of the previous year shows an increase of 15,630 cubic feet, which is due to large contracts having been secured for purchase of wood from the Wynaad forests. The slight increase in the quantity of blackwood felled is also due to the same reason.

127. The removals of redwood have been satisfactory during the year under review, and they are apparently due to revival of demand for redwood roots.

128. The collection of sandalwood during the past year shows a decrease when compared with that of 1882-83, which is due to two causes—slack demand and denudation of sandalwood tracts during former years. In Salem the quantity collected amounts to 172 maunds and the District Forest Officer did not attempt a larger collection, as he had already on hand a large stock of wood valued at Rs. 13,591 on the 31st March 1883.

Referring to paragraph 13 of the Board's Proceedings, No. 3357, of 10th November 1883, reviewing last year's report, it may be explained that whilst sales of sandalwood in North Coimbatore were considerable, the total sales fell short of those of the previous year, the Salem stock having remained unsold. Again, whilst sale rates fell, owing to a slack demand and large supply from Mysore, the cost of collection in North Coimbatore and elsewhere was increased owing to the greater distances which the billets and roots had to be transported.

129. In addition to the foregoing classes, the quantities of timber marginally entered have been removed by departmental agency, and when compared with the results of the preceding year, the following variations appear. Under junglewood there is a decrease of 6,243 cubic feet, which occurs in Pálghat, where felling was restricted, pending reservation of the forests and estimates of ripe trees available. The variation under firewood and bamboos being small, no remark is called for.

—	1882-83.	1883-84.	Difference.
Other junglewood .. .. { C. FT.	56,146	49,903	— 6,243
{ No.	..	4,277	+ 4,277
Firewood .. .. .. Tons.	3,953	3,926	— 27
Bamboos .. .. .. No.	43,173	47,941	+ 4,768
Minor Forest produce .. Mds.	9,118	58,410	+ 49,292

130. The increase under minor produce is distributed amongst the districts of South Arcot, Salem, and South Canara, in which there were large collections of gall-nuts, Shiyakai (*Acacia concinna*), Avaram bark (*Cassia auriculata*), besides a large quantity of catechu manufactured in South Canara.

The details of operations in the several districts concerned will be briefly noted as follow.

131. *North Arcot.*—In North Arcot 775 tons of redwood have been collected and removed into the sale depôt at a cost of Rs. 6,447-2-0. The rate of collection per ton is nearly the same as that of the two preceding years.

Six hundred and seventy-nine maunds of sandalwood have been prepared and stored in depôt at an outlay of Rs. 347-1-8. The cost per maund amounts to As. 8-2, the rates of the preceding years having been between Rs. 1 and Rs. 1-4-0 per maund. The District Forest Officer has not explained the cause of such a reduction in the cost of collection during the past year. He will be requested to do so.

132. *South Arcot.*—In South Arcot 3,217 cubic feet of timber were dragged to forest depôt and 2,003 cubic feet of timber removed to the market depôt. The expenditure on these operations has been moderate, the average working rates for felling and dragging having been 2 annas and 8 pies per cubic foot, while carting to market depôt was 3 annas and 4 pies per cubic foot.

The cost of felling and removing 150 maunds of sandalwood to the depôt has likewise been very moderate, as the rate per maund is As. 5-10.

The total revenue from departmental operations in this district amounts to Rs. 14,762, exclusive of Rs. 3,952, the sale-proceeds of sandalwood realized after the close of the year.

133. *Salem.*—The results of operations in Salem compared with 1882-83 show an increased removal of miscellaneous timber, such as vengai, vagai, bilvaram, &c., the reasons for which are not given by the District Forest Officer. Sales have been favorable on the whole. Under minor produce a sum of Rs. 2,061 was realized from the sale of tamarind, which had been collected by the department owing to the default of the Kollamalai contractor.

134. *North Coimbatore.*—There has been no timber-felling (except sandalwood) in the taluks of Bhaváni and Satyamangalam. 4,424 maunds of sandalwood billets and roots were prepared at a cost of Rs. 3,620-15-10 in the forests belonging to these taluks as well as Kollegál. This quantity of wood was sold for Rs. 16,636-8-6. In Kollegál 700 cubic feet of teak were felled and sold for Rs. 700-5-4, the profit per cubic foot being 8 annas.

135. *South Coimbatore.*—There was no felling in this division during the past year. 523 logs of timber felled in previous years were carted to the Coimbatore depôt and 71 logs to the Mangara depôt. 95 teak and 7 blackwood logs, containing in all 2,699 cubic feet, were floated from Mangara to Ponáni depôt and supplied from thence to the Bombay Marine.

136. *Madura.*—In this district only firewood was cut and stored in the depôt at Kodaikánal for supplying the demands of visitors to the Pálni hills. 240 tons of wood were collected, of which about 172 tons were sold.

137. *Tinnevelly.*—The departmental operations in felling and removal of timber have been restricted as compared with the figures of 1882-83, whilst a larger collection of minor forest produce, such as cardamom, gallnuts, &c., was made during the year.

The sale results of timber have likewise been poor owing to the substitution of license system for departmental working, as well as to the clearance sale of all old stock at the close of 1882-83.

138. *Malabar—Wynaad and Pálghat.*—During the working season of 1883 the following quantities of timber were squared up and dragged into the depôts:—

	Teak. C. FT.	Blackwood. C. FT.	Junglewood.
Wynaad	21,743	12,945	2,157
Pálghat	27	...	1,657
Total ...	21,770	12,945	3,814

The District Forest Officer reports that the stock of dead teak in the Begur forests has been exhausted, and there is very little dead blackwood or vengai left.

In Pálghat a block of 70 acres, known as the Tamburati Pottai forests (lately handed over by the Revenue Department), has been felled for railway fuel, and the trees will be allowed to grow from coppice after the clearing is completed.

In Walayar a block of 400 acres has been felled over, and well grown saplings of teak, blackwood, &c., left as standards.

Minor forest products have been leased out, with the exception of cardamoms, which were collected and sold departmentally.

139. *Nilambúr.*—In this division 15,545 cubic feet of teak and 34,435 cubic feet of other kinds of timber were felled during the year. A large quantity of saplings, valued at Rs. 25,000, was collected during the year. The sale results have been satisfactory; 17,321 cubic feet of teak, 27,815 cubic feet of other timber, and 39,719 saplings having yielded a revenue of Rs. 62,516.

140. *South Canara.*—During the year 200 logs of blackwood and junglewood, containing 2,438 cubic feet, have been felled near Uppinangadi and Jedkal, but the removal of the wood to the market depôt was delayed owing to the failure of the carting contractor in the one case and difficulty of procuring an elephant on hire in the other.

Certain tracts containing catechu trees were selected and the right of manufacture was given to the neighbouring landholders who undertook to sell the whole of the catechu manufactured by them to Government. 103 candies of the produce were manufactured, of which 50 were purchased by the department. The cost of purchase and the expenses of watching establishments amounted to Rs. 4,422-11-0, while the sale produced a revenue of Rs. 6,374-8-0, which is a satisfactory beginning.

Small quantities of minor forest produce, viz., cardamoms and myrabolams, were collected departmentally and sold at a small profit. But the greater part of the revenue realized from minor produce was obtained under a new system, under which depôts were established in three of the taluks of the district, and the keepers in charge sold on commission on behalf of the department what had been purchased from the collectors of minor produce. The financial result of this system, which was introduced during my visit to the district in November 1883, is very encouraging, a revenue of Rs. 3,049-15-4 having been realized against an outlay of 1,115-8-1. The supply is considerable and demand steady at remunerative rates. I expect a steadily increasing revenue from this source during the current and following years.

141. The subjoined abstract shows the quantity of timber and other produce felled and sold during the past year in comparison with the results of 1882-83:—

Description of Timber, &c.			Quantity Felled.		Quantity Sold.	
			1882-83.	1883-84.	1882-83.	1883-84.
Teakwood	No.	..	..	17	..	51
	C. feet	..	22,561	38,191	68,408	51,995
Teak saplings	Cart-loads	..	..	..	..	..
	No.	..	83,297	63,712	35,821	39,919½
Blackwood	C. feet	..	12,803	14,301	16,284	14,724
Rosewood	Do.	..	..	..	290	..
Other junglewood	Do.	..	56,146	49,903	63,654	44,931
	No.	..	..	4,277	..	1,518
Redwood	Tons	..	200	775	400	628
Sandalwood	Maunds	..	7,361	6,288	6,878	5,307
Firewood	Tons	..	3,953	3,926 Cart-loads 3	5,305	3,421½
Charcoal	Cwt.	..	..	..	..	2
Bamboos	Cart-loads	..	.	2	9	2
	No.	..	43,173	47,941	39,328	55,634
Minor forest produce.	Maunds	..	9,118	58,410	14,224	30,592
	No.	..	900	Cotas 1,444	900	502
	Measures	..	..	14	..	1,660¾
	Cart-loads	..	..	..	..	695
	Bottles	..	..	..	..	28

142. By reference to the foregoing abstract, it will be observed that 102,395 cubic feet of teak and other timber have been felled during the year, while the sales have amounted to 111,650 cubic feet, besides teak saplings which are returned in numbers

The surplus sales over fellings represent disposal of the stock of previous years which remained on hand on the 31st March 1883. Timber felled in one year is frequently not sold in the same year. It takes time to remove logs from the forests to market depôts, and logs are left to season in the forests, which decreases their weight and increases their value. As our organization improves and operations are more systematically conducted, the fellings will be based more or less on the annual increment and become more reliable and continuous, but the sales must depend on the demand, and the rates realized will vary according to the quality of the timber and the conditions on which it is placed upon the market.

143. The subjoined abstract furnishes the valuation of timber and other produce on hand in the sale depôts at the close of the past official year as compared with the opening balance :—

District.	Valuation of Stock.		Difference.	
	At the commencement of the year.	At the close of the year.	In favor of the year.	Against the year.
	Rs.	Rs.		
Chingleput	..	..	..	..
North Arcot	3,183	5,617	2,434	..
South Arcot	2,463	2,679	216	..
Salem	14,302	14,758	456	..
Trichinopoly	..	..	..	..
Tanjore	..	..	..	..
Coimbatore .. {North Coimbatore	..	..	..	..
Coimbatore .. {South Coimbatore	..	..	..	..
Madura	21,015	13,891	..	7,124
Tinnevelly	41	218	177	..
Malabar .. {Wynaad and Pálghat	1,381	9	..	1,372
Malabar .. {Nilambúr	2,210	2,273	63	..
South Canara	57,458	76,771	19,313	..
	..	..	..	..
Total ..	1,02,053	1,16,216	+ 22,659	8,496
	..	..	— 8,496	..
Net result ..	..	..	+ 14,163	..

The stock valuation at the close of the past official year shows a balance of Rs. 14,163 in favor of the department, which is satisfactory.

Section 2.—*Removal of Produce by Purchasers.*

144. The working under the license and voucher or permit system has yielded a total revenue of Rs. 3,32,799 during the year, which shows a considerable improvement over the actuals of 1882-83. The subjoined abstract exhibits the comparative results of the past two years in the removals of timber and other kinds of produce :—

Description of Timber and other Produce.	Number or Quantity.	Quantity.		Amount realized.	
		1882-83.	1883-84.	1882-83.	1883-84.
				Rs.	Rs.
Teak	Cubic feet	12,465	7,800	4,131	4,011
Junglewood	Do.	294,086	408,209	34,685	52,451
Firewood and railway fuel	Post and Sleepers, No.	610	393		
Charcoal	Tons	45,864	73,105	94,826	1,05,535
	Do.	1,811	4,556	12,642	14,497
Bamboos	No.	10,700	24,337	48,182	59,326
	Cart-loads	35,248	54,514		
Forest produce	Maunds	152,904	125,063 (Cart-loads. 11,315)	95,252	85,221
Grazing and fodder grass	.....	..	....	5,976	11,758
	Total ..	..	..	2,95,694	3,32,799

It will be observed that the seigniorage realized on 7,800 cubic feet of teakwood in 1883-84 amounted to nearly the same amount as on 12,400 cubic feet in 1882-83, the reasons for which are not apparent as the seigniorage rates were not raised.

145. The important variations in the value of timber and other produce removed during the year compared with its predecessor occur under the heads noted in the margin.

Junglewood	+ 17,766
Firewood	+ 10,709
Bamboos	+ 11,144
Forest produce	— 10,031

The increase under junglewood is distributed amongst the districts of South Arcot, Salem, Madura and Tinnevelly, and is principally due to greater check on illicit felling and removal which were minimized by the introduction of the Forest Act and the entertainment of more numerous and better organized establishments. In Tinnevelly the discontinuance of departmental working accounts for the increased revenue under this head.

Large removals of firewood in the districts of Salem and South Coimbatore account for the increase under firewood, whilst in North Arcot the improvements introduced of giving up forest blocks on contract has added to the development of revenue from bamboos. In South Coimbatore the transfer of the Coimbatore Taluk, where the demand for firewood and bamboos is great, has tended to the increase of revenue from these sources.

The decrease in the removal of minor produce is nominal, owing to the department having undertaken the collection of the produce on the Kollimalai hills, in the Salem District, for the reasons explained in paragraph 132 *supra*, and other causes. A larger revenue, therefore, appears under departmental working.

146. The important features and facts connected with this system of working will be detailed below.

147. *Chingleput.*—No permit system under the rules framed under Section 26 of the Madras Forest Act has yet been introduced in the district. Revenue was only collected from the sale of trees on poramboke land and plantations or topes, the old Jungle Conservancy rules and rates of seigniorage having become a dead letter.

148. *North Arcot.*—The system of working forest blocks on contract requires notice. The trees contained in these blocks are generally marked by the department before they are cut. The contractor who removes them brings them to the edge of the forest where they are inspected and stamped, the seigniorage collected and timber removed on way-permit. The contractor is bound to cut and remove all the trees marked by the department, and this condition induces him to find distant markets for Government timber, as the local demand is generally insufficient.

149. *South Arcot.*—There has been an improvement of revenue under this head, due to greater vigilance in checking removals. Ten tannahs were maintained at a cost of Rs. 549-8-1 for the year.

150. *Salem.*—The District Forest Officer dwells at length on certain defects in the permit system introduced into the district in a tentative manner two years ago by the former Forest Officer (Mr. Stanbrough) at the Collector's suggestion. He objects to the village officials being entrusted with the issue of permits, as opportunities are thereby afforded to them for malpractices, which generally escape punishment. He complains of other difficulties in recovering permits and rendering correct account of removals. These matters do not find a proper place in an annual report and are receiving attention in connection with the new rules under Sections 26 and 35 of the Act.

In spite of these defects, the financial results of the system during the year appear to have been fairly satisfactory.

151. *North Coimbatore.*—The revenue derived under the license system is only about Rs. 800 less than that of 1882-83, notwithstanding the transfer of the Coimbatore Taluk to the South Coimbatore Division.

152. *South Coimbatore.*—The financial results of the system were highly successful, the revenue exceeding that of last year by Rs. 15,000, which is ascribed to the conversion and removal of spokes, rafters, and felloes under the contract system from the Anaimalai Forest and the transfer of the Coimbatore Taluk from the Northern to this division.

153. In the districts of Madura and Tinnevelly also there has been a satisfactory increase of revenue, which is attributed to greater check on removals and prevention of clandestine felling.

The other districts where this system is in vogue being of less importance, no remark is called for.

SECTION 3.—*Free Grants of Forest Produce.*

154. The subjoined statement shows the removals of timber and other produce during the past official year on free pass :—

District.	Timber.		Firewood.		Bamboos.	
	Building purposes.	Agricultural purposes.	Agricultural and Domestic and for Manufacture of Jaggery.	Burning Corpse and erecting Corn-sheds, &c.	Building purposes.	Agricultural purposes.
	Quantity.	Quantity.	Quantity.	Quantity.	Quantity.	Quantity.
	C. FT.	C. FT.	TONS.	TONS.	CART-LOADS.	CART-LOADS.
Chingleput			*Nil.*			
North Arcot	7,300	..	..	..	48	..
South Arcot	..	1,020	84	..	..	24
Salem	3,198	8,832	..	..	178	22
Trichinopoly			Not given.			
Tanjore			*Nil.*			
Coimbatore .. North Coimbatore	..	4,703	423	..	..	298
Coimbatore .. South Coimbatore			*Nil.*			
Madura	5,435	..	..	..	17	..
Tinnevelly	627	..	876	..	..	..
Malabar .. Wynaad and Pálghat			*Nil.*			
Malabar .. Nilambúr			*Nil.*			
South Canara			*Nil.*			
Total ..	16,560	14,555	1,383	..	243	344

155. It is observed that there is a considerable reduction in the quantity of timber removed on free passes and that the reduction is progressive. In 1881-82 such passes were issued for 51,683 cubic feet, which in 1882-83 dwindled down to 39,959, and the grant for the current year both for building and agricultural purposes amounted to only 30,115 cubic feet. No reasons for this are given in the district reports, but my experience is that it is due to absence of *bonâ fide* demand and to the ryots preferring to purchase their requirements in the local markets or obtain them clandestinely from the forests.

Under recent orders, *i.e.*, the rules under Section 26 of the Act, tracts may be set apart by the Collector *bonâ fide* for own use, but not for sale or barter by the villagers. Free grants of timber, &c., will be the exception, not the rule, and may well be left to the District Forest Officer as representing the Collector.

CHAPTER VI.

FINANCIAL RESULTS.

156. The total revenue of the circle realized during the past year amounts to Rs. 5,45,058, and exhibits a steady improvement when compared with the actuals of the preceding years as shown in the margin. The revenue rose from Rs. 4,52,651 in 1880-81 to Rs. 5,45,658 in 1883-84, and between these years there has been a steady rise of Rs. 30,000 on an average for each year. The causes for these results are to be found in increased supervision and more systematic management and control. The introduction of the Forest Act and the organization of establishments on a better footing with more definite duties and powers will result in a still larger annual increase within the next few years.

Years.	Rs.
1880-81	4,52,651
1881-82	4,81,958
1882-83	5,14,802
1883-84	5,45,658

The total expenditure under A. "Conservancy and Works" and B. "Establishments" amounts to Rs. 4,78,464, and the subjoined abstract shows the actuals under receipts and expenditure classified under budget sub-heads :—

Head.	Receipts.	Amount.	Head.	Expenditure.	Amount.
		Rs. A. P.			Rs. A. P.
I.	Timber and other produce removed by Government Agency—		I.	Timber and other produce removed by Government Agency—	
	(*a*) Timber	1,10,400 13 4		(*a*) Timber	27,434 3 9
	(*b*) Firewood and charcoal ..	12,861 15 2		(*b*) Firewood and charcoal ..	3,580 6 9
	(*c*) Bamboos	2,198 11 6		(*c*) Bamboos	467 2 8
	(*d*) Sandalwood	16,742 12 6		(*d*) Sandalwood	4,786 9 0
	(*e*) Grass and other minor produce	54,512 9 2		(*e*) Grass and other minor produce	4,228 15 8
II.	Timber and other produce removed by purchasers, &c.—		II.	Timber and other produce removed by consumers	18,110 4 8
	(*a*) Timber	56,461 13 0	III.	Confiscated drift and waif wood ..	215 7 5
	(*b*) Firewood and charcoal ..	1,20,031 13 0	V.	Rent of leased forests	1,462 3 3
	(*c*) Bamboos	59,327 0 9	VI.	Live and dead stock—	
	(*d*) Grazing and fodder grass.	11,758 1 3		(*a*) Purchase of cattle ..	40 0 0
	(*e*) Other minor produce ..	85,219 5 3		(*b*) Feed and keep of cattle ..	3,218 8 11
III.	Confiscated drift and waif wood ..	2,363 10 10		(*c*) Plant, tools, and instruments	2,143 13 6
IV.	Revenue from forests not managed by Government—		VII.	Communications and buildings—	
	(*a*) Duty on foreign timber.	0 6 0		(*a*) Roads and bridges ..	10,808 2 11
V.	Miscellaneous—			(*b*) Buildings	12,097 3 6
	(*a*) Fines and forfeitures ..	45 0 4		(*c*) Other works	188 15 6
	(*b*) Refunds	5,741 3 3	VIII.	Demarcation, improvement, and extension of forests—	
	(*c*) Other sources	8,082 7 11		(*a*) Demarcation	14,428 2 11
				(*b*) Compensation for land, &c.	8,308 13 9
				(*c*) Surveys and working plans	1,070 0 6
				(*d*) Plantations	32,301 3 1
				(*e*) Protection from fire ..	5,585 15 4
				(*f*) Other works	33,431 2 10
			IX.	Miscellaneous—	
				(*a*) Refunds	4,091 6 2
				(*b*) Law charges	93 4 0
				(*c*) Other do.	616 10 9
				Total expenditure actually adjusted ..	1,88,708 12 10
				Total outstanding and unadjusted balance ..	35,413 14 2
				Grand Total of A, "Conservancy and Works" ..	2,24,122 11 0
				Add total of B. "Establishments".	2,54,341 1 0
				Total Expenditure ..	4,78,463 12 0
				Add Surplus revenue of Southern Circle ..	67,193 15 3
	Total'..	5,45,657 11 3		Total ..	5,45,657 11 3

157. From the foregoing abstract it will be seen that the total cost surplus in favor of the department has amounted to Rs. 67,193-15-3, and if Rs. 35,413-14-2 shown as outstanding balance of the year be excluded from the actual expenditure as has hitherto been done, the total surplus will amount to Rs. 1,02,607-13-5, exclusive of an increase in the value of timber in stock amounting to Rs. 14,163.

158. It may be here explained that, under instructions from the Accountant-General, it has been decided to charge all funds drawn in one year as expenditure of the same year, as the practice hitherto observed of carrying forward the unadjusted balance of one year to the following year defeats the object of budget provision and sanction; in fact, money actually drawn and expended out of an allotment for certain work is exhibited as expenditure of another year, when perhaps such work is not sanctioned. District Forest Officers have, therefore, been called upon to report the classification of their unadjusted balances of the past year, and, on receipt of complete information, these balances will be charged off to the appropriate heads, so that nothing will remain as unadjusted balance.

This will, however, be very difficult to effect, as there must always be advances outstanding on account of timber felled and not lodged in the sale depôts, roads and buildings under construction, &c.

I confess that, in my opinion, the Account Department is striving at too much exactitude, and to make the accounts perfect, all the timber, &c., felled and removed and paid for in one year should be sold and the amount credited in the same year, which, as I have explained, is impossible.

159. *A.* "*Conservancy and Works.*"—Exclusive of the above balance, the actual expenditure of the circle during the past year under A. "Conservancy and Works" indicates an increase when compared with the figures of the preceding years which is noted in the margin. This increase is attributable to the employment of considerable protective establishments, such as fire-patrols, watchers, tannahdars, &c., as well as to the opening out of forest roads, construction of buildings and huts, compensation for land, and extensive demarcation operations under the forest settlement. Large outlay on capital works is necessary in the interest of forest conservancy, and it may be stated with confidence that too much has not been spent upon such operations.

Years.	Rs.
1880-81	1,30,507
1881-82	1,78,703
1882-83	1,76,520
1883-84	1,88,709

160. *B.* "*Establishments.*"—The cost of establishments during the past year, when compared with the actuals of the preceding three years, shows a gradual increase, which is the result of gradual development of establishments since the reorganization of the department and improved rates of pay and travelling allowances.

Years.	Rs.
1880-81	1,56,450
1881-82	1,88,984
1882-83	2,08,715
1883-84	2,54,341

CHAPTER VII.

General Remarks.

161. *Appointments, Promotions and Transfers of Charge amongst the Controlling Staff.*—Mr. Peake, appointed by the Secretary of State, joined in December 1883, and was posted to South Canara as an Assistant Conservator, 3rd grade.

Messrs. Hadfield and Stanbrough were promoted from the 2nd to 1st grade of Assistant Conservators in August 1883, and Mr. Sheffield was brought on the graded list as an Assistant Conservator of the 1st grade in January 1884.

Mr. Porter having qualified by the lower standard was promoted to the 2nd grade of Assistant Conservators from the 25th March 1881.

There have been numerous transfers of charge.

Mr. Cherry, Deputy Conservator, 2nd grade, assumed charge of the Salem Division from special duty in April, relieving Mr. Stanbrough as District Forest Officer.

Mr. Gass, Deputy Conservator, 4th grade, reverted from doing duty in the Northern Circle (Nilgiri Division) in June, and held charge of the Trichinopoly Division until the end of August, when he was relieved by Mr. Stanbrough, and proceeded to Madura, where he received charge from the Assistant Collector, Mr. Robinson, who had been in charge.

Mr. Ferguson, Deputy Conservator of Forests, in charge of Nilambúr Plantations, retired on a pension on the 28th of July, being relieved by Mr. Hadfield, Assistant Conservator.

In Mr. Ferguson we lost the services of an excellent officer, to whom the fine condition of the magnificent teak plantations at Nilambúr is mainly due.

The state of Mr. Carroll's (Sub-Assistant Conservator) health rendering a change from South Canara imperative, he was transferred to Tanjore as District Forest Officer in September, and Mr. Bradley, C.S., took charge of the South Canara forests as District Forest Officer, and has done excellent service.

Mr. Brasier, Assistant Conservator, 3rd grade, assumed charge of Chingleput as District Forest Officer in October.

The other District Forest Officers remained in charge of the same divisions as last year.

162. *Upper Subordinate Establishment.*—Mr. Eber-Hardie was appointed a Sub-Assistant Conservator, 2nd grade, on the 1st April 1883, and has held charge of the Tinnevelly ghât forests throughout the year. He promises well.

Great pains have been taken to weed out the staff of Rangers and Foresters and secure the services of competent and willing men, which is very difficult.

163. *Tests and Rules for the examination of Forest Subordinates.*—A complete set of tests and rules for the examination of subordinates was submitted to and approved of by the Board and Government. The rules came into force from the 1st of December 1883, and apply to all Rangers, Foresters, and Clerks who are now on probation, as well as to those who may be entertained in future.

The great difficulty is to secure the services of fairly educated men who have passed the tests and are willing to accept a forest life.

164. *Forest School at Dehra Dún.*—A Ranger and Forester from this circle proceeded to Dehra Dún as students in June 1883.

The Ranger, Gurunatha Pillai, has done very well and stood third on the list of students at close of the first year's course. The Forester's educational attainments are found not up to the mark, especially in arithmetic and mensuration, but the Director reports that he does his best and will make a good Forester. Both men like the school and climate and have enjoyed excellent health.

165. *Uniform and Warm Clothing for Forest Guards.*—A neat and inexpensive uniform of shikár cloth was decided upon during the year, and is being supplied to the guards at their own expense. New waist belts, with departmental badge and a number, were supplied, and Government sanctioned the annual supply of a suit of warm clothing and blanket being supplied to all guards and office peons whose duties take them into the hill forests. A good pattern of dark green cloth from the Elgin mills has been selected and is in course of issue. A pattern of badge for watchmen to be worn on the left arm was also selected.

The men are found to like the adoption of a uniform dress, which is also being adopted by the Foresters and Rangers.

166. *Maps.*—In accordance with the Proceedings of the Board, No. 2117, of 24th July, communicating a resolution of the Government of India on the subject of maps to elucidate annual reports, instructions were issued to District Forest Officers after consultation with the Superintendent, Revenue Survey.

All the District Forest Officers (except Salem and Tanjore) have done their best to comply with the demand, and all the maps are submitted; but I would only recommend that those marginally noted be printed with the report, together with Mr. Wooldridge's plan, showing the arrangement of fire-lines in the Kávatti Malai block reserve.

North Arcot.	Tinnevelly.
South Arcot	Malabar.
South Coimbatore.	Wynaad.
Trichinopoly.	Nilambúr.

Of the other maps, some are not of the proper dimensions and others give no information. This is especially to be regretted in the case of Madura, where good progress has been made in demarcating the reserved forests and fire-protection.

It has been found impossible to prepare a forest map of the circle, which would be of any value on the scale prescribed.

There is no greater want experienced than that of good forest maps, and measures must be taken to secure them at least of our reserved forests as soon as possible.

Instructions have been issued to District Forest Officers to report as soon as boundaries are settled, cleared, and ready for survey.

167. *International Exhibition at Calcutta.*—During the year specimens of forest products were contributed to the International Exhibition by the districts marginally noted. Madura unfortunately was just a little too late, and Tinnevelly was unable to send anything. The districts of Tanjore, Chingleput, and Trichinopoly being at the time without District Forest Officers, were likewise not in a position to supply specimens. The notice given by the

North Arcot.	
South Arcot.	
Salem.	
Coimbatore ..	North Coimbatore Division.
	South Coimbatore Division.
Malabar.	
South Canara.	

Government of India was somewhat short, especially as it involved the collection of easily spoilt articles; nevertheless everything was done to make the best representative collection possible, such as that sent to Amsterdam in 1882-83.

The list of awards had not been received at close of the year under review, but it includes the Conservator and District Forest Officer, Salem.

168. *Specimens from Mangrove Swamps and Tidal Rivers for Botanical identification —South Arcot.*—Twenty-four specimens of trees and vegetations found in the salt marshes and on islands in the tidal creeks near the mouth of the Coleroon were sent to Professor Lawson at Ootacamund for identification.

169. *Acquisitions of Forest Land—South Coimbatore.*—One thousand two hundred and seventy-three acres of land were acquired from the Shrotriemdar of Vellimalaitpatnam under the Land Acquisition Act for Rs. 4,224, and 306 acres of land situated on the road leading up to the Porati saddle were purchased for Rs. 3,550. A piece of land 349·87 acres, situated in the village of Akkarai Bolampatti, were sold for arrears of revenue, purchased by Government and transferred to this department.

An appeal from the decision of the Forest Settlement Officer, disallowing a claim advanced to certain land in the Bolampatti Valley, was pending before the District Court at close of the year.

170. *Boundary Dispute—Tinnevelly.*—Mr. Baber's decision in the Singampatti forest case under Act XXVIII of 1860 was upset by the District Court, whose judgment was, however, on the whole in favor of Government, subject to certain rights of easement.

Cross appeals are now pending preferred by the Zemindar and Government, and it is hoped that a final settlement of this long-standing dispute may be arrived at during the course of the current year.

Government gained the case in the Sivagiri hill dispute in the Madura District Court.

171. *Reclamation of Sandy Wastes.*—A special report on the reclamation of sandy wastes has been submitted in accordance with the orders of Government. Extensive operations in this direction are in progress and contemplated in South Arcot and on the "*teris*" or sand dunes of Tinnevelly.

172. *Departmental Code.*—The draft of the Departmental Code was completed during the year by the two Conservators and Deputy Conservator of Forests, in charge of Central Office of Accounts, in committee, and submitted for approval in May. Its introduction will secure uniformity in the accounts and departmental procedure generally and supply an undoubted want.

173. *Health of Establishments.*—The health of the officers of the controlling and executive grades has, on the whole, been good, but Mr. Douglas, in charge of the Central Offices at Madras, was seriously ill in March.

Two forest guards died of fever in North Coimbatore, and there was much small-pox in South Coimbatore, which carried off many of the hillmen.

Fever, cholera, and small-pox were very prevalent in Malabar, almost the whole of the establishments in Wynaad and Nilambúr having been prostrated during the hot months.

174. *Administration of the Department generally.*—The administration of the department has on the whole worked well and smoothly, and there is no doubt that great progress has been made in all important respects.

The Central Offices at Madras remained under the charge of Mr. Douglas, who reports well of my Head Clerk, Parthasarathy Mudaliyár, and the Clerks generally. My Circuit Clerk, Mr. Saldanha, has given me satisfaction.

The pressure of work on all ranks, both in and out of office, has been very great, and more liberal provision for granting leave and supplying the place of absentees is necessary.

175. The want of better office accommodation in a more central situation is much felt.

APPENDIX I.

Forest Department, Southern Circle.

Area of Reserved Forests, 1883-84.

FORM No. 59.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
Chingleput District.	Saidápet Taluk.	Tandray					827·24			
	Chingleput do.	Tirukalikundram					696·84			
		Oragadam					540·			
		Madayathúr					697·			
		Kambákam					11,363·56			
		Thamanellore					809·89			
		Ugumudi					1,449·91			
		Santhanelur					923·11			
		Gudalvarpolliem					647·48			
		Nallathúr					725·20			
		Kadur ..					1,420·5			
		Aruthur					1,208·34			
		Racherla					532·28			
		Cherivi ..					636·			
		Mupur Pallai					957·22			
		Chinnattipakam					1,861·46			
		Kotamarikuppam					2,100·4			
		Sattivedu					2,922·19			
		Namalúr					937·64			
		Kallandúr					481·53			
	Tiruvallur do.	Chenjeegram					327·17			
		Palvakam					436·30			
		Seerri ..					331·33			
		Sunkarai					630·20			
		Mookarambakam					590·			
		Ambakam					2,457·42			
		Paridam					886·93			
		Pudukuppam					1,109·83			
		Chenneri					677·2			
		Dasikuppam					436·93			
		Nagalapuram					4,556·59			
		Rangherry					1,683·96			
		Krishnapuram					271·64			
		Reppalpattu					2,221·75			
		Mudiyur					655·35			
		Hodsonpuram					981·83			
		Plasepolliem					1,130·95			
		Gangoolu Kadigai					427·87			

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
Chingleput District—(*Cont.*)	Tiruvallúr Taluk—(*Cont.*)	Allikuli	..	..	..	..	835·61	..	....	
		Ibrampuram	..	..	..	..	1,342·2	..	....	
		Hodsonnagaram	..	..	..	..	464·78	..	....	
		Pondúr	..	..	..	..	1,433·33	..	....	
		Kolathúr	..	..	..	..	248·	..	....	
		Palavakam	..	..	..	..	436·30	..	....	
		Irakolu	..	..	..	..	156·57	..	....	
		Total ..	53,808·21	84·06	2,558·65	..	*56,366·86	88		* Proposed to be constituted as reserves.
North Arcot District.	Vellore Taluk.	Sandalwood reserve	..	..	..	..	12,800	20	G.O., No. 1456, 5th Nov. 1880.	Partly demarcated.
		Javady timber reserve ..	..	..	..	..	19,200	30	Do. ..	Do.
		Naikaneri do.	..	..	..	..	6,400	10	Procs. No. 41, 7th Feb. 1884.	Demarcated.
		Thellay do.	..	..	..	..	12,800	20	G.O., No. 1456, 5th Nov. 1880.	Do.
		Ambúr fuel do.	..	..	..	..	3,840	6	G.O., No. 520, 9th April 1879.	Demarcated and surveyed.
	Pólúr do. ..	Carnaticghur do.	..	..	..	..	12,800	20	G.O., No. 1456, 5th Nov. 1880.	Demarcated.
	Chandragiri do.	Napier do.	..	..	..	..	8,772	13·70	G.O., No. 798, 30th Aug. 1879.	Demarcated, surveyed and fenced.
		Marmandur do.	..	..	..	..	1,776	2·77	G.O., No. 971, 1st June 1871.	Do.
		Chamala do.	..	..	..	..	9,600	15	Bd.'s Procs., No. 419, 7th Feb. 1884.	Partly demarcated.
		Panapak do.	..	..	..	..	6,400	10	Do. ..	Do.
		Puduputla byle	..	..	..	..	2,560	4	Do. ..	Do.
	Palmaner do.	Musalimadugu	..	..	..	..	9,600	15	Do, ..	Demarcated.
		Morthana	..	..	..	..	16,000	25	Do. ..	Partly demarcated.
		Peddoor	..	..	..	..	9,600	15	Do. ..	Demarcated.
		Baireddipalle	..	..	..	..	10,240	16	Do. ..	Do.
	Chittoor do...	Paradarami	..	..	..	..	6,400	10	Do. ..	Partly demarcated.
	Arcot do.	Palwadi	..	..	..	..	6,400	10	G.O., No. 1456, 5th Nov. 1880.	Demarcated.
		Punganúr	..	..	..	..	6,400	10	Bd.'s Pros., No. 419, 7th Feb. 1884.	Do.
	Gudiyátam do.	Ambúr drug	..	..	..	..	5,760	9	Do. ..	Not demarcated.
		Total ..	..	..	..	..	167,348	261·47		

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District.	No. I Range—Tiruvannamálai Taluk.	Tenmalai	23,040	..	..	..	23,040	..	....	
		Muthenai (partly in Salem) ..	4,000	..	..	..	4,000	..	....	Demarcated.
		Chinnasamudram	6,400	..	..	..	6,400	..	....	Surveyed.
		Peringolathur	4,800	..	..	..	4,800	..	....	
		Tiruvanámalai Kasba ..	7,510	..	..	..	7,510	..	....	Do.
		Tandramput	11,500	..	..	..	11,500	..	....	Demarcated.
		Kadambai	1,000	..	..	..	1,000	..	....	Do.
		Tippakadu	6,000	..	..	..	6,000	..	....	Do.
		Portion of Attipakam in Parikal and Panniyar Villages.	1,000	..	..	..	1,000	..	....	
		Total ..	65,250	101·95	..	..	65,250	101·95		
	No. II Range—Gingee Range.	Muttakadu	3,087	..	..	..	3,087	..	....	Surveyed.
		Kattumangalam	1,661	..	7	..	1,668	..	....	Do.
		Siruvadi	1,665	..	..	..	1,665	..	....	Do.
		Annamungalam	250	..	..	..	250	..	....	Demarcated.
		Vellam (Sevúr)	1,115	..	..	..	1,115	..	....	Do.
		Padipallam	3,735	..	..	..	3,735	..	....	Surveyed.
		Periamur, including Pakammalai.	9,026	..	..	..	9,026	..	....	Do.
		Karai	1,344	..	..	..	1,344	..	....	Do.
		Tandavasamudram	3,000	..	..	..	3,000	..	....	Demarcated.
		Mathur	540	..	..	..	540	..	....	
		Gangavaram, including Thurinjikadu.	9,844	..	..	..	9,844	..	....	Surveyed.
		Odianatham	1,000	..	..	..	1,000	..	....	Demarcated.
		Total ..	36,267	56·67	7	..	36,274	56·68		
	No. III Range—Tindivanam Taluk.	Nanjilekondam	50	..	..	..	50	..	....	Demarcated.
		Nathammangalam	30	..	..	..	30	..	....	Do.
		Villakkam	100	..	..	..	100	..	....	Do.
		Peradikuppam	1,400	..	..	..	1,400	..	....	Surveyed.
		Agar	1,500	..	..	..	1,500	..	....	Demarcated.
		Nadivanthur	2,500	..	..	..	2,500	..	....	Do.
		Bommathur	300	..	..	..	300	..	....	Do.

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
North Arcot District—(*Continued*).	Chittoor Taluk.	Iyarála	..	..	..	..	6,400	10	....	Demarcated.
		Penamore	..	..	..	..	6,400	10	....	Do.
		Chittoor	..	..	..	..	2,560	4	....	Do.
		Santhapet	..	..	..	..	2,560	4	....	Do.
		Bommasamudram	..	..	..	..	3,000	4·68	....	Do.
		Cheelapallai	..	..	..	..	1,063	1·66	....	Partly demarcated.
		Keenatipallai	..	..	..	..	2,856	4·46	....	Do.
	Gudiyátam Taluk.	Vikramasi	..	..	..	..	161	·25	....	Demarcated and fenced.
	Wálajápet do.	Gúdalúr	..	..	..	..	559	·87	....	Demarcated, surveyed and fenced.
		Kanjempet	..	..	..	..	154	·24	....	Do.
		Ammanur	..	..	..	..	210	·32	....	Do.
		Uriyúr	..	..	..	..	672	1·05	....	Do.
		Banavaram	..	..	..	..	1,071	1·67	....	Do.
		Anapauk	..	..	..	..	61	·09	....	Do.
		Thengal	..	..	..	..	120	·18	....	Do.
		Ammúr	..	..	..	..	6,018	9·4	....	Partly demarcated.
		Kolathúr	..	..	..	..	1,781	2·7	....	Partly demarcated, fenced and surveyed.
		Minnel	..	..	..	..	1,395	2·1	....	Not demarcated.
	Wandiwash do.	Ponnúr	..	..	..	..	1,676	2·61	....	Demarcated, surveyed and fenced.
		Venkundram	..	..	..	..	822	1·28	....	Do.
		Bádúr	..	..	..	..	829	1·29	....	Do.
		Nambedu	..	..	..	..	929	1·45	....	Demarcated.
		Kodiyálam	..	..	..	..	255	·39	....	Demarcated, fenced and surveyed.
	Pólúr do.	Nadugal	..	..	..	..	3,632	5·67	....	Demarcated.
		Vishamangalam	..	..	..	..	1,148	1·79	....	Do.
		Nedunconam	..	..	..	..	1,798	2·80	....	Do.
		Brama Catary	..	..	..	..	1,589	2·48	....	Do.
		Kapalúr	..	..	..	..	1,280	2	....	Not demarcated.
		Kalúr	..	..	..	..	3,068	4·79	....	Do.
		Allialamangalam	..	..	..	..	10,502	16·4	....	Do.
		Total	..	..	..	..	64,569	100·62		
		Grand Total	..	173,480	271·05	58·437	..	231,917	362·09	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District—(*Contd.*)	Tindivanam Taluk—(*Contd.*)	Pánchalam	1,200	..	..	..	1,200	..	....	Surveyed.
		Saram	150	..	..	..	150	..	....	Demarcated.
		Olakur	300	..	..	..	300	..	....	Do.
		Rashanai	50	..	..	..	50	..	....	Do.
		Salavadi	70	..	..	..	70	..	....	Surveyed.
		Jaggampettai	340	..	..	..	340	..	....	Do.
		Yediyalam	400	..	..	..	400	..	....	Do.
		Yerianur	50	..	45	..	95	..	....	Demarcated.
		Janakampettai	108	..	..	..	108	..	....	Do.
		Sevur	1,200	..	..	..	1,200	..	....	Do.
		Senalur	150	..	..	..	150	..	....	Do.
		Mannur	50	..	..	..	50	..	....	Do.
		Nemalai	300	..	..	..	300	..	....	Do.
		Yendur	50	..	..	..	50	..	....	Do.
		Bramhadesem	50	..	..	..	50	..	....	Do.
		Vannipper	50	..	..	..	50	..	....	Do.
		Kumilampet	1,200	..	..	..	1,200	..	....	Do.
		Madukuppam	400	..	..	..	400	..	....	Do.
		Alathur	300	..	..	..	300	..	....	Do.
		Kandadu	370	..	..	..	370	..	....	Do.
		Omeyur	20	..	..	..	20	..	....	Do.
		Attikuppam	185	..	..	..	185	..	....	Do.
		Merkanam	500	..	..	..	500	..	....	Do.
		Mylam	..	..	265	..	265	..	....	Do.
		Total	13,373	20·89	310	..	13,683	21·37		
	Villupuram Taluk.	Vainer (in two bits)	365	..	..	..	365	..	....	
		Kalikovil	200	..	..	..	200	..	....	
		Chengadu	100	..	..	..	100	..	....	
		Vakkur	200	..	..	..	200	..	....	
		Kappiamur	545¼	..	..	..	545¼	..	....	
		Muthampolliem	50	..	..	..	50	..	....	Surveyed.
		Naramalnaruthur	80	..	..	..	80	..	....	
		Alliyur	70	..	..	..	70	..	....	
		Nelianur	70	..	..	..	70	..	....	
		Agaram Gangarandipolliem	344	..	..	..	344	..	....	
		Pakkam	350	..	..	..	350	..	....	
		Sorappur	50	..	..	..	50	..	....	
		Maruthur	70	..	..	..	70	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District—(*Contd.*)	Villupuram Taluk—(*Contd.*)	Villupuram Kasba tank ..	100	..	..	..	100	..	....	
		Valuthareddi	130	..	..	..	130	..	....	
		Kandampakam	60	..	..	..	60	..	....	
		Olukkai	50	..	..	..	50	..	....	
		Kappur	50	..	..	..	50	..	....	
		Kondangi	100	..	..	..	100	..	....	
		Nannadu	100	..	..	..	100	..	....	
		Perambakam	100	..	..	..	100	..	....	
		Devenampet	100	..	..	..	100	..	....	
		Teruvamathur	28¼	..	..	..	28¼	..	....	Surveyed.
		Tennamadai	51¼	..	..	..	51¼	..	....	
		Athanur	1,449	..	..	..	1,449	..	....	
		Orathur	228¼	..	..	..	228¼	..	....	
		Thangal	57	..	..	..	57	..	....	
		Karanai	200	..	..	..	200	..	....	
		Gundalapaliyur	844	..	..	..	844	..	....	
		Siruvalai (Arumbuli)	1,014¼	..	..	..	1,014¼	..	....	Do.
		Vembi (in two bits)	256½	..	..	..	256½	..	....	
		Narasinganur	377¼	..	..	..	377¼	..	....	
		Vikravandi (in two places) ..	470	..	..	..	470	..	....	
		Melakondam	495	..	..	..	495	..	....	
		Sathanur	261	..	..	..	261	..	....	Do.
		Panampattu	250	..	..	..	250	..	....	
		Saliempolliem (two places) ..	200	..	..	..	200	..	....	
		Nemali	100	..	..	..	100	..	....	
		Dadavaram	200	..	..	..	200	..	....	
		Tiruvakkarai	1,000	..	..	..	1,000	..	....	
		Thaluvai	150	..	..	..	150	..	....	
		Total ..	10,916	17·06	..	..	10,916	17·06		
		Total of No. III Range ..	24,289	37·95	310	..	24,599	39·43		
	No. IV Range—Cuddalore Taluk.	Valicheripolliem	525	..	..	..	525	..	....	Do.
		Ramapuram	566	..	..	..	566	..	....	Do.
		Vellakarai	1,600	..	..	..	1,600	..	....	Do.
		Chellambanadampettai ..	651	..	..	..	651	..	....	Do.
		Badrakata	344	..	..	..	344	..	....	Do.
		Samatikuppam	343	..	..	..	343	..	....	Do.
		Sinnathanakuppam	313	..	..	..	313	..	....	Do.

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District—(*Contd.*)	Cuddalore Taluk—(*Contd.*)	Kattijagai	388	..	..	..	388	..	....	Surveyed and demarcated.
		Velanguppam	1,000	..	..	..	1,000	..	....	Demarcated.
		Kanjinippu	2,250	..	..	..	2,250	..	....	Do.
		Vadakuthu	3,400	..	..	..	3,400	..	....	Do.
		Velrampat	1,800	..	..	..	1,800	..	....	Do.
		Vellayanguppam	1,700	..	..	..	1,700	..	....	Do.
		Kaliyanguppam	150	..	..	..	150	..	....	
		Kathiampakam	100	..	..	..	100	..	....	
		Siruvathanur (two bits) ..	300	..	..	..	300	..	....	
		Total ..	15,430	24·11	..	..	15,430	24·11		
	Chidambaram Taluk.	Pichavaram	2,000	..	..	..	2,000	..	....	
		Ramapuram, hamlet of Pulienkata.	800	..	..	..	800	..	....	Do.
		Koudapuram	1,200	..	..	..	1,200	..	....	Do.
		Pananjinellore	200	..	..	..	200	..	....	
		Kallatharkurchi	350	..	..	..	350	..	....	Do.
		Misangan	800	..	..	..	800	..	....	Do.
		Adivaraganellore	1,200	..	..	..	1,200	..	....	Do.
		Kallakudi	600	..	..	..	600	..	....	Do.
		Pinnalur	400	..	..	..	400	..	....	Do.
		Manamadevi	150	..	..	..	150	..	....	
		Viranam Tank	1,500	..	..	..	1,500	..	....	
		Total ..	9,200	14·37	..	..	9,200	14·37		
	Vriddhachallam Taluk.	Velangulam and Vennakuli ..	500	..	..	..	500	..	....	Do.
		Samakstai and Palleapatnam ..	4,500	..	..	..	4,500	..	....	Do.
		Palleput	1,500	..	..	..	1,500	..	....	
		Erulakurchi (Nadeput) ..	300	..	..	..	300	..	....	Do.
		Melakapankalam	600	..	..	..	600	..	....	Do.
		Parur	1,200	..	1,800	..	3,000	..	....	Surveyed and demarcated.
		Niriyamadam	600	..	..	..	600	..	....	Demarcated.
		Ammeri	500	..	..	..	500	..	....	Do.
		Kupanatham	750	..	..	..	750	..	....	Do.
		Satnamangalam	200	..	..	..	200	..	....	Do.
		Arasuguli	100	..	..	..	100	..	....	Do.
		Kalapakam	600	..	..	..	600	..	....	Do.
		Kannapuram	600	..	..	..	600	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District—(*Contd.*)	Vriddhâchalam Taluk—(*Contd.*)	Karamangudi	2,000	..	..	..	2,000	..	....	Demarcated.
		Narasingamangalam	200	..	..	..	200	..	....	Do.
		Kottanur	2,700	..	..	..	2,700	..	....	Do.
		Mematur	500	..	..	..	500	..	....	Do.
		Pillur	800	..	..	..	800	..	....	
		Pulambadi	2,000	..	..	..	2,000	..	....	Do.
		Allambalam	2,000	..	..	..	2,000	..	....	
		Addiri	1,000	..	..	..	1,000	..	....	
		Kattumylur	800	..	..	..	800	..	....	
		Narriyur	3,000	..	..	..	3,000	..	....	
		Nangur	1,800	..	..	..	1,800	..	....	
		Mangalam	300	..	..	..	300	..	....	
		Aliyur	150	..	..	..	150	..	....	
		Pinjanur (Karivelam tract)	200	..	..	..	200	..	....	
		Kasba Tank	200	..	..	..	200	..	....	
		Total	30,600	47·81	1,800	..	32,400	50·81		
		Total of No. IV Range	55,230	86·29	1,800	..	57,030	89·10		
	No. V Range—Tirukoilûr Taluk.	Nattamur	9,500	..	..	..	9,500	..	....	Surveyed.
		Chettamur	3,000	..	..	..	3,000	..	....	Demarcated.
		Annavaram	2,650	..	..	..	2,650	..	....	Do.
		Odiathur	2,500	..	..	..	2,500	..	....	
		Ayandur	1,000	..	..	..	1,000	..	....	
		Virinjipuram	1,500	..	..	..	1,500	..	....	Do.
		Adukkam	1,500	..	..	..	1,500	..	....	Surveyed.
		Athipakam	2,000	..	..	..	2,000	..	....	Demarcated.
		Sadakattai	500	..	..	..	500	..	....	
		Samimalai	4,000	..	..	..	4,000	..	....	Do.
		Marathur (Kunathur Malai)	2,220	..	..	..	2,220	..	....	
		Ulundurpet (Pandur)	2,500	..	..	..	2,500	..	....	
		Yedakal	4,500	..	..	..	4,500	..	....	Do.
		Alwarmalai	6,500	..	..	..	6,500	..	....	Do.
		Siruvakam	1,200	..	..	..	1,200	..	....	
		Kutadi	2,250	..	..	..	2,250	..	....	Do.
		Sitheri	3,000	..	..	..	3,000	..	....	Do.
		Kunjaram	1,500	..	..	..	1,500	..	....	
		Kallamadu	500	..	..	..	500	..	....	Do.
		Ponnavalam	200	..	..	..	200	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District—(*Contd.*)	Tirukoilûr Taluk—(*Contd.*)	Tiruvanellore	40	..	..	..	40	..	....	
		Yemappur	70	..	..	..	70	..	....	
		Siruvanur	50	..	..	..	50	..	....	
		Eruveliput	50	..	..	..	50	..	....	
		Melamangalam	40	..	..	..	40	..	....	
		Mamandur	50	..	..	..	50	..	....	
		Gramam	40	..	..	..	40	..	....	
		Ellandorai	40	..	..	..	40	..	....	
		Panapakam	50	..	..	..	50	..	....	
		Sethilingamadam	70	..	..	..	70	..	....	
		Maruthur tank bed	60	..	..	..	60	..	....	
		Puthupoliem	40	..	..	..	40	..	....	
		Palaya Agraram tank reserve	65	..	..	..	65	..	....	
		Total	53,185	83·10	..	..	53,185	83·10		
	No. VI Range—Kallakurchi Taluk.	Kanakadu	1,200	..	..	..	1,200	..	....	Demarcated.
		Kadambur	100	..	..	..	100	..	....	Do.
		Kaduvamur	1,500	..	..	..	1,500	..	....	Do.
		Kuttuvananjur	800	..	..	..	800	..	....	Do.
		Chittal (Ponmodu)	1,500	..	..	..	1,500	..	....	
		Vengalam	3,000	..	..	..	3,000	..	....	
		Rishmendiem	3,000	..	..	..	3,000	..	....	
		Nelamungalam	150	..	..	..	150	..	....	Do.
		Yemaputhur	1,000	..	..	..	1,000	..	....	Do.
		Kadathur	300	..	..	..	300	..	....	Do.
		Indali	1,000	..	..	..	1,000	..	....	
		Katalam	2,500	..	..	..	2,500	..	....	Do.
		Nagalur	900	..	..	..	900	..	....	
		Purasakurchi	750	..	..	..	750	..	....	
		Varamsaram	450	..	..	..	450	..	....	
		Kutakudi	1,000	..	..	..	1,000	..	....	
		Killneriyappanur	1,500	..	..	..	1,500	..	....	
		Vardiyappanur	500	..	..	..	500	..	....	
		Chinna Salem	200	..	..	..	200	..	....	
		Sattapadi	250	..	..	..	250	..	....	
		Total	21,600	33·75	..	..	21,600	33·75		
		Grand Total	255,821	399·69	2,117	..	257 938	403·03		

Area of Reserved Forests 1883-84.—(*Continued.*)

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Coimbatore Division.	Polláchi Taluk	Anaimalai No. I	..	..	..	..	103,680	82		Rights inquired into and declared under Section 25 of Act V of 1882.
		Do. No. II	..	..	..	..		6		
		Do. No. III	..	..	..	..		74		
	Udamalpet do.	Fuel Reserve at Elyanatham	..	..	..	..	62·84			
		Do. at Uthanthoni	..	..	..	..	60·0			
		Do. at Dhulli	..	..	..	..	484·73			
	Palladam do.	Arasur	..	..	..	..	57·97			
		Nachipolliem	..	..	..	..	63·30			
		Ammapolliem	..	..	..	..	61·34			
		Kuduvettapolliem	..	..	..	..	82·15			
		Perumanellur	..	..	..	..	81·29			
		Pudupolliem	..	..	..	..	66·49			
	Udamalpet do.	Kattaimangalam	..	..	..	..	3·0			
		Chinnimalaipolliem	..	..	..	..	9·38			
		Gudimangalam	..	..	..	..	4·78			
		Pulamkinar	..	..	..	..	3·82			
		Pukkulam	..	..	..	..	13·50			
		Pulavadi	..	..	..	..	7·64			
		Madathukalam	..	..	..	..	3·0			
	Polláchi do.	Kinnathakadam	..	..	..	..	8·0			
		Shankararayapuram	..	..	..	..	106		G. O., No. 1259, 16th Nov. 1882.	
		Muthiampolliem	..	..	..	..	4·0			
		Periakulandai	..	..	..	..	3·0	23·		Locally recognized by established custom.
		Kottampatti	..	..	..	..	6·0			
	Palladam do.	Anupatty	..	..	..	..	3·0			
		Sithambalam	..	..	..	..	3·0			
		Kathanur	..	..	..	..	3·0			
		Manikapuram	..	..	..	..	5·0			
		Tirupur	..	..	..	..	5·0			
		Vadugapolliem	..	..	..	..	8·0			
		Ganapattipolliem	..	..	..	..	5·0			
		Appenaikenpatti	..	..	..	..	9·55			
		Nilambúr	..	..	..	..	9·55			
		Silachuruchel	..	..	..	..	4·75			
		Agraraputur	..	..	..	..	5·0			
	Coimbatore	At the toll-gate on the road to Thadagam.	..	..	..	..	9·75		Board's Procs., 10th Feb. 1884, No. 571.	
		At the toll-gate east of Puliacolum road.	..	..	..	..	55·55			
		Sholakarai Reserve	..	..	..	..	1,292·0			
		H.K.M. Reserve at Mettupálaiyam.	..	..	..	..	12,160			
		Total ..	104,878·72	163·87	13,565·66	..	118,444·38	185		

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
Madura District.	Madura District.	Vannathiparai'	..	..	..	..	27,481·6	42·99	....	G.O., No. 1681, 17th October 1878. G.O., No. 1284, 29th August 1881. G.O., No. 1275, 11th October 1883. Notification in *Fort St. George Gazette*, dated 13th November 1883.
		IV. Suranganar	..	..	..	..	3,616·	5·65	....	
		IX. Sengalvarayar	..	..	..	..	5,209·6	8·14	....	
		X. Pambar	..	..	..	..	4,755·2	7·43	....	
		XI. Poombarai and Velpatti valley.	..	..	..	..	13,587·2	21·23	....	
		XII. Kudniar	..	..	..	..	10,060·8	15·72	....	
		XIII. Kookkal	..	..	..	..	9,644·8	15·07	....	
		XIV. Maruthanadhar	..	..	..	..	6,528	10·20	....	
		XV. Pambukal Ár	..	..	..	..	800	1·25	....	
		XVI. Senivathukadu	..	..	..	..	2,279·2	3·56	....	
		XVII. Kannienkadu	..	..	..	..	3,001·6	4·69	....	
		XVIII. Veimellai	..	..	..	..	4,800	7·50	....	
		XIX. Serumalai	..	..	..	..	25,529·6	39·89	....	
		XX. Mudimalai	..	..	..	..	6,086·4	9·51	....	
		XXI. Alagarmalai	..	..	..	..	13,036	20·37	....	
		XXIII. Sholas on the Lower Planis—								
		(*a*) Perumalmalai Shola.	..	..	..	..	..	..	....	
		(*b*) Thogavadai Shola.	..	..	..	..	..	..	....	
		(*c*) Serathankánal.	..	..	..	..	..	..	..	
		(*d*) Arankanal	..	..	..	..	..	..	....	
		(*e*) Kadavu Shola	..	..	..	..	..	..	....	
		XXIV. Sholas on the Upper Palnis.	..	..	..	..	2,316	3·62	....	
		(*a*) Tiger Shola	..	..	..	..	..	..	....	
		(*b*) Parapar Shola.	..	..	..	..	..	..	....	
		(*c*) Kodaikánal	..	..	..	..	..	..	....	
		(*d*) Pannitutankánal.	..	..	..	..	..	..	....	
		(*e*) Gundan and Mannavan Shola.	..	..	..	..	..	..	....	
		(*f*) Gundar Shola	..	..	..	..	..	..	....	
		(*g*) Sandanam Shola.	..	300	..	..	..	..	....	
		(*h*) Fort, Hamilton.	..	..	..	..	..	..	....	
		(*i*) Marian Shola	..	..	..	..	..	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and Date of Notification of Addition or Transfer.	Remarks.
Salem District ..	Salem District	A or Vadagampatti	..	..	..	..	1,976·28	..	....	Demarcated, surveyed fenced and authorised—G. O., No. 1172, 21st March 1877.
		B or Morúr	..	..	..	..	799·43	..	....	Do. do
		C or Mallápuram	..	..	..	..	587·10	..	....	Do. do.
		D or Bargur	..	..	..	..	220·94	..	....	Do. do.
		E or Puthur	..	..	..	..	1,069·81	..	....	Do. do.
		Ammaneri	..	..	..	..	252·91	..	....	Do. do.
		Pellapolli	..	..	..	..	981·8	..	....	Do. do.
		Kariappakombai	..	..	..	..	531·80	..	....	Do. do.
		Kanjeri	..	..	..	..	600·	..	....	Demarcated, surveyed, fenced and authorised—G.O., No. 27, 2nd March 1880.
		Paimaicaradu	..	..	..	..	2,645·72	..	....	Conservator's letter, No. 517, 26th July 1880.
		Karuvattuparai	..	..	..	..	837·83			
		Thogarapalli	..	..	..	..	100·	..	....	Collector's order, 11th October 1879.
		Uttankarai	..	..	..	..	469·11	..	....	Demarcated, surveyed, fenced and authorised—*vide* G.O., No. 1172, 21st March 1877.
		Singarapet	..	..	..	..	2,624·62			
		Harur	..	..	..	..	1,176·94			
		Mailgherry	..	..	..	..	5,459·	..	....	Demarcated, surveyed, and authorised—G.O., No. 1689, 8th Nov. 1881.
		Kanavaikuttapalle	..	..	..	..	743·	..	....	
		Goolhatti	..	..	..	..	3,252·	..	....	
		Munchi	..	..	..	..	3,309·	..	....	
		Konadainagasamudram S.R. ..	..	..	..	..	421	..	....	Five acres formerly a sandal plantation now closed and included as reserve—G.O., No. 190, 12th January 1880.
		Monkey Shola	..	..	..	..	40·87	..	....	
		Pattipandy	..	..	..	..	94 63	..	....	Collector's letter, No. 9, 23rd January 1880.
		Salem Nád Reserve	..	..	..	..	1,719·62 — 380·52	..	....	Collector's letter, No. 475, 11th June 1879, applied for cultivation on the Shevaroys, but was refused and reserved.
		Total ..	28,188·79	44·03	1,344·10	..	29,532·89	46·14		

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and Date of Notification of Addition or Transfer.	Remarks.
Trichinopoly District.	Trichinopoly District.	Lálápet (*a*)	106	$\frac{1}{8}$	* 107	..	213	$\frac{1}{3}$	....	* Handed over by the Public Works Department.
		Tuvagudi (*a*)	944	$1\frac{1}{2}$	..	..	944	$1\frac{1}{2}$	....	(*a*) G.O., No. 502, 21st March 1871.
		Tainimalai (*b*)	640	1	..	..	640	1	....	(*b*) G.O., No. 1457-117, 23rd November 1883.
		Minnakaradu (*b*)	1,000	$1\frac{9}{16}$	..	..	1,000	$1\frac{9}{16}$	....	These reserves are neither surveyed nor demarcated
		Punjantangi (*b*)	1,000	$1\frac{9}{16}$	..	..	1,000	$1\frac{9}{16}$	....	
		Sripurandan (*a*)	486	$\frac{3}{4}$	..	..	486	$\frac{3}{4}$	....	
		Nagamangalam	..	..	400	..	400	$\frac{5}{8}$	....	
		Pachamalais	..	..	..	..	..	..	....	
		Total ..	4,176	6·52	507	..	4,683	7·31		
Tanjore District	Tanjore Taluk	Naddur	..	..	..	..	421	·66	....	
		Eachenkattai	..	..	..	..	77	·12	....	
		Kallangarai	..	..	..	..	109	·17	....	
		Marungulam	..	..	..	..	152	·24	....	
		Karungulam Melapatti ..	..	..	..	..	389	·61	....	
		Thatchankurchi	..	..	..	..	161	·25	....	
		Pudukudivadapatti	..	..	..	..	212	·33	....	
		Kangeampatti	..	..	..	..	67	·10	....	
		Kammanthangadi, Keelayur ..	..	..	..	..	232	·36	....	
		Purathur	..	..	..	..	205	·32	....	
		Thirumangalakatti, Keelayur.	..	..	..	..	437	·68	....	
		Do. Melayur.	..	..	..	..	514	·80	....	
		Ponnappar	..	..	..	..	181	·28	....	
	Shiyáli ..	Vettangudi	..	..	..	..	1,380	2·15	....	
		Kodiakadu (Point Calmere) ..	..	..	..	..	5,710	8·92	....	
	Tiruturaipúndi	Andirkadu	..	..	..	..	64	·10	....	
		Settipalem	..	..	..	..	84	·13	....	
		Naluvedapatti	..	..	..	..	42	·06	....	
		Samudraveli	..	..	..	..	230	·36	....	
	Mannárgudi ..	Apparasampettai	..	..	..	..	76	·12	....	
	Patukóta ..	Thandalai	..	..	..	..	283	·44	....	
		Pathukudapatam	..	..	..	..	66	·10	....	
		Total ..	..	..	11,092	..	11,092	17·30		
North Coimbatore Division ..	North Coimbatore Division.	I or Jadathalahallah ..	..	..	..	..	361·01	..	....	Notified under Section 25 of Forest Act V of 1882—*vide*, G.O., No. 1462, 26th November 1883.
		II or Odiarpolliem	..	..	..	..	296·63	..	....	
		III or Bylore	..	..	..	..	1,186·39	..	....	
		IV or Guninalla	..	..	..	..	519·78	3·70	....	
		Total ..	16,118·61	25·18	..	—13,754·80	2,363·81	3·70		

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and date of Notification of Addition or Transfer.	Remarks.
Madura District—(*Contd.*)	Madura District—(*Cond.*)	Railway Fuel Reserve—								
		Goovanooth	..	..	..	..	1,920	..	....	G.O., No. 1284, 29th August 1881.
		Akkamakaradu	..	..	..	..	1,600	..	....	
		Kapparamakutu	..	..	..	..	2,560	..	....	
		Sundamalai	..	..	..	..	2,240	..	....	
		Thannukaradu	..	..	..	..	1,920	..	....	
		Thenikal	..	..	..	..	3,200	..	....	
		Jungle Conservancy—								
		Thenapudupatti	..	..	..	..	126·78	..	....	G.O., No. 1259, 16th November 1882.
		Sakimangalam	..	..	..	..	467·94	..	....	
		Nagamalai	..	..	..	..	2,356·	..	....	
		Muthugamalai	..	..	..	..				G.O., No. 1275, 11th October 1883.
		Vellamalai	..	..	..	..				
		Perumalmalai	..	..	..	..	2,700	..	....	Notification in *Fort St. George Gazette*, 13th November 1883.
		Pillayarnatham Hills	..							
		Kadavakurichi	..	..	..	..	5,120	..	....	
		Sengathampatti	..	..	..	..	4,480	..	....	
		Vikramangalam	..	..	..	..	10,240	..	....	
		(Fuel and Fodder Reserve—								
		Veguthamalai	..	..	..	..	4,200	..	....	Constituted a fuel and fodder reserve under Rule 8 of the rules under Section 26 of the Forest Act.
		Total	196,182·32	306·54	..	−14,319·15	181,862·22	216·82		
Tinnevelly District.	Nángunéri Taluk.	Ghât Forests—								
		Reserve No. I	..	..	..	..	31,532·80	49·27	Notification under Section 25 of Forest Act V of 1883 in the *Fort St. George Gazette*, dated 22nd Jan. 1884, and Board's Proceedings, No. 258, dated 25th Jan. 1884.	*A tract of 8·87 square miles of Saptur Zemin Forest is included within the reserved limits in the Vartirayiruppu block, but it will not be considered as included in the reserve until arrangements have been made with the Collector of Madura and the Zemindar for its reservation under Chapter IV, Board's Procs., 25th, Jan. 1884, No. 258.
	Ambásamúdram Taluk.	Do. ,, II	..	..	..	..	91,008	142 20		
	Tenkasi	Do. ,, III	..	..	..	..	18,009·60	28·14		
	Sankaranainárkoil.	Do. ,, IV	..	..	..	..	19,737·60	30·84		
	Srívilliputur *	Do. ,, V	..	..	..	..	23,270·40	36·36		
		Total of Ghât Forests	..	..	..	..	183,558 40	286·81		
		Plain Forest—								
		Kottam Kulam Hills	..	..	..	..	500	·781	1878.	
	Ambása mudram.	Kalandamamalai	..	..	..	..	1,120	1·75	1878.	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and Date of Notification of Addition or Transfer.	Remarks.
Tinnevelly District—(*Contd.*)	Tinnevelly Taluk.	Plain Forest—(*Continued*).								
		Manur Kulam	..	..	..	..	1,133	1·770	1873.	
		Rusta Kulam	..	..	..	..	20	·031	,,	
		Ramasawmipuram Kulam	..	..	..	..	18	·028	,,	
		Siru Kulam	..	..	..	..	5	·008	,,	
		Kalakudi Kulam	..	..	..	..	127	·198	,,	
		Puthu Kulam	..	..	..	..	100	·156	,,	
		Seethakurchi Kulam	..	..	..	..	53	·082	,,	
		Sendamangalam Kulam	..	..	..	..	32	·05	1874.	
		Aruvan Kulam	..	..	..	..	56	·087	,,	
		Naranamalpuram Kulam	..	..	..	..	213	·332	,,	
		Rajavallipuram Kulam	..	..	..	..	255	·398	,,	
		Piran Kulam	..	..	..	..	31	·048	,,	
		Alaganeri Kulam	..	..	..	..	39	·060	,,	
		Aruvan Kulam tope	..	..	..	..	2	·003	,,	
		Ananthakristnapuram Tope.	..	..	..	..	10	·015	,,	
		Thalayuthu or Pullikottai Hills.	..	..	..	..	500	·781	1880.	
		Total	..	..	..	..	2,594	4·047		
	Tenkarai Taluk.	Kaliavoor Kulam	..	..	..	..	322	·500	1872.	
		Kalankarai block	..	..	..	..	187	·292	,,	
		Rajan Kulam	..	..	..	..	150	·234	,,	
		Muthur Kulam	..	..	..	..	241	·376	,,	
		Kuthukal Kulam	..	..	..	..	133	·207	,,	
		Narajiniam Kulam	..	..	..	..	106	·165	1873.	
		Kongariakurchi block	..	..	..	..	92	·143	1874.	
		Kayalpatam Undankadu	..	..	..	..	411	·642		
		Total	..	..	..	..	1,642	2·559		
	Otapidáram.	Agilandapuram Kulam	..	..	..	..	124	·193	1872.	
		Kuty Kulam	..	..	..	..	18	·028	,,	
		Parchy Kulam	..	..	..	..	105	·164	,,	
		Sengalamadayúr Kulam	..	..	..	..	45	·070	,,	
		Karisal Kulam	..	..	..	..	148	·231	,,	
		Tuticorin blocks	..	..	..	..	605	·945	1874.	
		Vyparkadu reserve	..	..	..	..	813	1·270	,,	
		Total	..	..	..	..	1,858	2·901		

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
Tinnevelly District—(*Contd.*)	Sátúr ..	Plain Forest—(*Continued*).								
		Nemaneri	..	..	..	..	486	·759	1873.	
		Mudithalai Kulam	..	..	..	..	200	·312	,,	
		Periapiraly	..	..	..	..	109	·170	,,	
		Chinnapiraly	..	..	..	..	40	·062	,,	
		Ondipulenaikanur	..	..	..	..	103	·169	,,	
		Puttukulam	..	..	..	..	244	·381	,,	
		Total ..	..	..	..	..	1,182	1·853		
		Total of Plain Forest ..	..	..	..	..	8,896	13·889		Area not ascertained by survey.
		Grand Total ..	201,923·40	315·50	..	— 9,469	192,454·40	300·69		
Wynaad and Pálghat Divisions, Malabar District.	Wynaad ..	Kudracote	41,500	64·84	..	..	41,500	64·84	....	
		Padrey	22,400	35·	..	..	22,400	35·	....	
		Chedleth	52,501·24	82·03	..	..	52,501·24	82·03	....	
		Benni	30,720	48	..	..	30,720	48	....	
		Cardamom Forest	13,440	21	..	..	13,440	21	....	
		Kanoth	25,600	40	..	..	25,600	40	....	
		Total ..	186,161·24	290·87	..	..	186,161·24	290·87		
	Pálghat ..	Chenat Nair Forest	16,369	25·50	..	..	16,369	25·57	....	Surveyed but area not accurately ascertained.
		Walayár Reserve	3,017	4·79	..	..	3,017	4·71	....	
		Thampurattipottai	..	..	100	..	100			Area entered approximately.
		Tiruvazham Koonoor	..	..	1,000	..	1,000	1·95	Added in December 1883.	
		Forest land near Doni ..	..	..	150	..	150			
		Total ..	19,386	30·29	1,250	..	20,636	32·23		
Nilambúr Division, Malabar District.	Nilambúr ..	Nellicutta	..	..	..	..	1,799·38	..	....	
		Karampoya *	..	..	..	..	3,955·28	..	....	* Reserved—*vide* notification published in *Fort St. George Gazette*, dated 26th February 1884, under Section 25 of Act V of 1882.
		Packodi	..	..	..	..	761·25	..	....	
		Pannangode	..	..	..	..	462·09	..	....	
		Welluvasheny	..	..	..	..	329·74	..	....	
		Edacode	..	..	..	..	3,666·07	..	....	
		Amarapollam *	..	..	..	..	57·14	..	....	
		Arimbrakuta	..	..	..	..	299·75	..	....	
		Chathambarai	..	..	..	..	60·89	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
Nilambúr Division, Malabar District—(*Contd.*)	Nilambúr—(*Contd.*)	Kanakutha	..	..	..	..	668·61	..	....	
		Edampadam	..	..	..	..	581·26	..	....	
		Karien	..	..	..	..	950·61	..	....	
		Muriat	..	..	..	..	1,765·13	..	....	
		Total ..	20,000	31·25	..	— 4,642·80	15,357·20	24·		
South Canara District.	South Canara District.	Pillar Khan	..	..	..	..	320	·5	....	These forests have not been notified under the Act, the first is an old reserve of the Forest Departments dating since 1875, the others are jungle conservancy reserves.
		Chembuguddi	..	..	..	..	75	About 12	....	
		Kutiar	..	..	..	..	25	·04	....	
		Poitaji	..	..	..	..	87	·14	....	
		Ajjar kad	..	..	..	..	195	·30	....	
		Sabbadi	..	..	..	..	120	·19	....	
		Total ..	879	1·43	..	— 57·	822	1·29		
		Grand Total ..	1,261,003·29	1,970·28	90,871·41	—42,242·75	1,309,631·95	2,045·82		

The totals brought forward by District Forest Officers differed considerably; their figures for 31st March 1884 retained and the rest altered.

(FORM No. 60.)

APPENDIX II.

Forest Department, Southern Circle, Madras.

Area of Plantations, 1883-84.

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Chingleput District.	Meyur, Pelappúr and Mamandur	..	..	..	..	400	19,178	
	Názarethpéttah	..	..	..	..	71·54	1,359	
	Wálajábád	..	..	..	..	14·55	1,203	
	Vembákam	..	..	..	..	8·	3,336	
	Hanoomanthaputhéri	..	..	..	..	12·		
	Mélamenjur	..	..	..	..	24·		
	Kathivák	..	..	..	..	14·43	234	
	Covelong	..	..	..	..	2·	150	
	Total ..	801·44	40,075	— 254·92	14,614	546·52	25,460	
North Arcot ..	Tiruvallam	..	..	..	..	435	26,040	About 3,000 acres planted, 1,000 to an acre.
	Virinjipuram	..	..	..	..	260	18,390	About 200 acres planted, 1,000 to an acre.
	Kilminnel	..	..	..	..	150	7,577	All planted, 1,000 to an acre.
	Chayanúr	..	..	..	..	129	5,621	80 acres planted, 1,000 to an acre.
	Gazulamandam	..	..	..	..	250	3,028	44 acres planted; just felled.
	Vanávédu	..	..	..	..	30	1,956	All planted, 1,000 to an acre.
	Ammundi	..	..	..	..	160	3,664	About 50 acres planted, 1,000 to an acre.
	Arkónam Sub-Magistrate's compound ..	..	..	..	..	5	130	All planted, about 300 to an acre.
	Do. plantation	..	..	..	..	37	4,971	Do. do.
	Do. Head Assistant Collector's office.	..	..	..	..	4	151	Do. do.
	Ambúr	..	..	..	..	5	248	Do. do.
	Thándráyagunta	..	..	..	..	2	639	All planted, 1,000 to an acre—Casuarina.
	Palmanér	..	..	..	..	2	1,287	All planted, 300 to an acre—Sandalwood, &c.
	Nágamangalam	..	..	..	..	31	2,469	All planted, very poor Casuarina.
	Piduguvaripalle	..	..	..	..	20	2,933	All planted; 500 to an acre.
	Venkatagirikota	..	..	..	..	4	2,182	Do. do.
	Byreddipalle	..	..	..	..	4	5,495	Eucalyptus; very poor.
	Ammerdi	..	..	..	..	25	4,107	All planted, Cassia floridæ, Sandal, Redwood, &c.
	Total ..	1,558	86,887	— 5	4,001	1,553	90,888	

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
South Arcot ..	Chengam	..	1,226	..	32	8	1,257	
	Agaram	..	6,638	..	167	86	6,805	Markanam absorbed in this plantation.
	Atchikádu	..	1,764	..	48	24	1,812	
	Tolangada	..	6,428	..	482	110	6,910	
	Fort St. David	..	2,512	..	519	30	3,031	
	Shonangkuppam	..	7,455	..	457	120	7,912	
	Donidorai and other salt topes around ..	..	507	..	469	35	976	
	Nochikádu	..	6,715	..	513	200	7,229	
	Periyákupam	..	1,097	..	853	56	1,950	
	Add amount of land-rate paid for the above plantation.	..	..	..	313	..	313	
	Killai Plantations	..	381	..	484	25	865	
	Kolarun mouth Plantation	..	902	..	109	15	1,011	
	Malattar Bed	..	29,841	..	133	27	29,973	Ponniár anicut plantation absorbed in this plantation.
	Vélúr	..	2,563	..	..	..	2,563	Transferred to Reserve List according to Conservator's view in Inspection note of February 1882, as noted last year.
	Add pay of the Manager and his Gumastah in charge of Tirukoilúr plantations.	..	916	..	..	..	916	
	Total ..	5,600	68,945	— 4,864	4,579	736	73,523	
Salem	Salem	5	2,644	— 5	..	..	..	The area and cost for the current year are shown in the Tope Statement.
	Átúr							
	Námakal							
	Tiruchengód							
	Uttankarai							
	Tirupatúr							
	Krishnagiri							
	Dharmapuri							
	Hosúr							
Trichinopoly ..	Elamanúr	84	11,176	33	495	117	11,671	
	Kulitalai	58	9,247	3	380	61	9,627	
	Manattattai	33¼	3,647	8¾	201	42	3,848	
	Sittalavoi	107	6,940	45	209	152	7,149	
	Sekkonam	122	2,815	..	110	122	2,925	
	Kattalai	55	6,796	14	145	69	6,941	
	Púdúr	100	569	41	72	141	641	

Area of Plantations, 1883-84—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Trichinopoly—(*Contd*).	Punganúr	480	373	..	53	480	426	
	Kilamánikkam	242	5,069	..	344	242	5,413	
	Arámanaikurichi	91	2,300	..	113	91	2,413	
	Karaipákkam	107	2,143	..	263	107	2,406	
	Tiruvenganúr	185	1,694	..	285	185	1,979	
	Varappakurichi	192	1,444	..	105	192	1,549	
	Sattambádi	105	2,158	..	120	105	2,278	
	Valakurichi	130	257	..	54	130	311	
	Annagarempet	92	906	..	296	92	1,202	
	Total	2,183¼	57,534	+ *144¾	3,245	2,328	60,779	* Found by actual survey.
Tanjore	Tranquebar, No. I	..	..	..	..	52	..	† The amount spent on these plantations up to 1st April 1883 cannot be given as there is nothing on record to show the same. The amount laid out during the year under report towards pay of maistries, gardeners and temporary coolies is Rs. 2,297.
	Do. No. II	..	..	..	..	62	..	
	Véttangudi	..	..	..	..	453	..	
	Neidavassal	..	..	..	..	51	..	
	Kodiempálaiyam	..	..	..	..	60	..	
	Kadambai	..	..	..	..	26	..	
	Total	11,254·50	7,887	— 10,550·50	— 7,886	704	† ..	
Coimbatore. North Coimbatore.	Satyamangalam and Talamalai	..	..	..	..	..	..	
	Sandalwood	80	18,515	..	48	80	18,563	
	Kollégal	97	27,903	..	776	97	28,679	
	Beilúr							
	Total	177	46,418	..	824	177	47,242	
Coimbatore. South Coimbatore	Three plantations in Polláchi Taluk	19·50	4,402	..	..	19·50	4,402	These are the teak plantations in No. 1 Reserve on the Anamalai.
Madura	No. 1, Vannáthipárai	..	..	— 104	..	..	..	Included in the Vannáthiparai Forest Reserve.
	No. 2, Kodaikánal—							
	(*a*) Eucalyptus	..	..	..	..	14·50	3,066	G.O., No. 1275, dated 11th October 1883. Notification in *Fort St. George Gazette*, dated 13th November 1883.
	(*b*) Acacia					18·		
	No. 3, Velamkombai	..	..	..	..	54·14	976	
	Total	224·14	12,952	— 137·50	— 8,910	86·64	4,042	

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Tinnevelly	Tinnevelly	73·50	232	..	158	73·50	390	
	Tenkarai	9,873·9	390	+ 9,469	353	19,342·9	743	
	Otapidáram	88·88	18	..	16	88·88	34	* The particulars of plantations comprised in each of the taluks is shown in the tope statement.
	Sankaranainárkoil	1·0	..	..	95	1·0	95	
	Tenkási	32·10	402	..	237	32·10	639	
	Nángunéri	13·13	209	..	190	13·13	399	
	Srívilliputúr	..	..	..	..	..	..	
	Sátúr	..	..	..	..	..	..	
	Ambásamudram	..	..	..	..	..	..	
	Total	10,081·70	1,251	+ 9,469	1,049	* 19,550·70	2,300	
	Wynaad (Kanoth) Pálghat Division	..	..	+ 41·50	2,429	41·50	2,429	
Malabar District	Nilambúr Division—							
	Iravellukavu	131·56	..	..	..	131·56		
	Aruvacode	113·63	..	..	..	113·63		
	Yedacode	693·59	..	..	..	693·59		
	Ellengerry	337·81	..	..	..	337·81		
	Ramalur	21·33	..	..	..	21·33		
	Mulathimana	70·76	..	..	..	70·76		
	Pannengode	393·78	..	..	..	393·78		
	Walluwasherry	584·00	..	..	..	584·00		
	Chathamborai	498·10	..	..	..	498·10	10,77,122	
	Nellikutta	120·23	..	..	..	120·23		
	Amarapálam	† 408·77	..	..	..	408·77		
	Mangalasherry	10·74	..	..	..	10·74		† Reserved—*Vide* notification published in *Fort St. George Gazette*, dated 26th February 1884, under Section 25 of Act V of 1882.
	Ambalacandy	1·04	..	..	..	1·04		
	Chittarikal	9·55	..	..	..	9·55		
	Putalath	8·35	..	..	..	8·35		
	Mangalasherry	10·74	..	..	..	10·74		
	Arimbracutta	22·00	..	..	..	22·00		
	Total	3,435·98	4,31,892	..	6,45,230	3,435·98	‡ 10,77,122	‡ The total entered by the District Forest Officer is Rs. 11,19,039-11-5.
South Canara	Parapa, * Ullál, Honne, Thaniar Bhavi, Kugniangai and Mukkade.	687	13,687	— 687	..	..	..	Extent and other particulars are not given. In paragraph 28 of the report it is stated that owing to some mistake the old Jungle Conservancy Reserves were entered in the last Administration Report twice under the head of Reserves and under the head of Plantations. They are in no way plantations.
	Grand Total	36,027·51	7,74,574	— 6,848·67	6,59,175	29,178·84	13,88,187	

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
	Cultural Operations.	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Chingleput	..	..	..					
Arcot, North ..	..	725	1,450					
Arcot, South ..	..	410	8,712		*Nil.*			
Salem	..	2,500	15,137					
Trichinopoly ..	Yedamalaipatti	A. 4	263	..	30	4	293	
	Melúr	M. 6	34	..	20	6	54	
	Peruvali bank	,, 2½	109	..	24	2½	133	
	Kariyamanikkam	A. 10½	551	..	77	10½	628	
	Sodeiyur	,, 4⅛	188	..	24	4½	212	
	Coleroon Left Bank Trunk Road to Alambadi.	M. 22	1,889	..	767	22	2,656	
	Mahadanapuram	..	171	..	50	..	221	
	Ambásamudram	..	311	..	30	..	341	
	Kunnudianpatti	A. 2⅜	168	..	..	2⅜	168	
	Yesani	,, 9⅛	282	..	10	9⅛	292	
	Nandiyar Project	M. 4	2,243	..	18	4	2,261	
	Coleroon Left Bank, Sembiakudi to Vaippor.	M. 21	7,439	..	108	21	7,547	
	Ponnari Main Channel	,, 19	6,995	..	99	19	7,094	
	Do. Branch Channels	.. 16	2,199	..	..	16	2,199	
	Lower Anicut line	,, 10	3,433	..	24	10	3,457	
	Vadavar Padúgais	..	..	..	3	..	3	
	Total ..	A. 29¾ M. 100⅓	26,275	..	1,284	A. 29¾ M. 100⅓	27,559	
Tanjore	Nadur	..	..	..	..	18	..	The areas noted are only approximate, none of them having been surveyed as yet.
	Pachenkottai	..	..	..	..	9	..	
	Kolangarai	..	..	..	..	20	..	
	Karangulam Melpatti	..	..	..	..	5	..	
	Marangulam	..	..	..	..	20	..	
	Natarajapuram	..	..	..	..	9	..	
	Kathicheri	..	..	..	..	15	..	
	Kalliappanellur	..	..	..	..	18	..	
	Mudicondanellur	..	..	..	..	25	..	
	Vettangudi	..	..	..	..	520	..	
	Nannilam	..	..	..	..	2	..	
	Othianthivu	..	..	..	..	20	..	
	Vedarniem (Date garden)	..	..	..	..	1	..	
	Edingankottai	..	..	..	..	7	..	
	13 Topes in Patukóta	..	..	..	..	135	..	
	Total ..	..	..	..	..	824	..	

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Coimbatore, North ..	..	71·26	24,864					
Do. South ..	..	105·56	8,362		*Nil.*			
	Jungle Conservancy Plantations—							
Madura	Veeramadayan plantations	..	..	..	..	..	..	
	Thenaur plantations	..	..	..	..	..	..	
	Thovariman do.	..	..	..	..	..	..	
	Dindigul at the junction of Trichinopoly and Caroor roads.	..	..	..	..	..	..	
	Do. around the Race-course ..	..	..	..	..	..	..	
	Do. in front of the Dindigul Munsif's Court.	..	..	..	..	..	..	
	Kodaikánal Settlement	..	..	..	..	..	..	
	Poombarai	..	..	..	..	..	..	
	Navempatti Garden	..	..	..	..	..	..	
	Koiloor Traveller's Bungalow	..	..	..	..	..	..	
	Gúdalúr	..	..	..	..	..	..	
	Goovakapatti	..	..	..	..	..	..	
	Thamaraikulam	..	..	..	..	..	..	
	Melmangolam	..	..	..	..	..	..	
	Vadipatti	..	..	..	..	..	..	
	Gangoovarpatti	..	..	..	..	..	..	
	Allinagarum	..	..	..	..	..	..	
	Virapandi	..	..	..	..	..	..	
	Muthanuthu Village	..	..	..	..	..	..	
	Verapakki Plantations	..	..	..	..	..	..	
	Sivagiripatti Plantations	..	..	..	..	..	..	
	Palkanuth Dak Bungalow	..	..	..	..	..	..	
	Tengarai Tope	..	..	..	..	..	..	
	Kottampatti Traveller's Bungalow ..	..	..	..	..	..	..	
	Meloor do.	..	..	..	..	..	..	
	Kalmalai Tope in Kodakampatti Madura Taluk.	..	..	..	..	..	..	
Tinnevelly—	Total ..	219·87	..	8·75	..	271·11	11,508	
Tinnevelly Taluk.	Nainarkulam Tank	5 25	59	..	..	..	59	
	Mallikulam do.	10·7	60	..	..	..	60	
	Thamaraikulum	5	60	..	..	..	60	
	Kandiaperikulam	5	60	..	..	..	60	
	Thirumalakolandapuram Pattakulam ..	5	60	..	..	..	60	
	Palnmadai Tank Bank	5	60	..	..	..	60	

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Tinnevelly Taluk —(*Continued*) ..	Madavakurichi Urani	1	12	..	..	..	12	
	Semboothoo	·22	13	..	..	..	13	
	Kattarrankulam	5	13	..	..	..	13	
	Tenkulam Sanikanúthú Uruni	·66	13	..	..	..	13	
	Sivandipatti Hanumanadi	·15	25	..	..	..	25	
	Omanallur	·15	13	..	..	..	13	
	Periyaujeri River Banks	·30	19	..	..	..	19	
	Nariyúthu	·30	19	..	..	..	19	
	Kaliyuthu Uruni	·49	13	..	..	..	13	
	Total	* 43·59	499	..	..	..	499	* These were shown as excluded during the year.
Tenkarai Taluk	Nazereth	915·45	48	..	38	915·45	86	
	Kulasegarapatnam Sea Custom Office	† ·50	60	..	10	..	70	† Excluded during the year.
	Srivaikuntham district Munsif's Court compound	·90	59	..	49	·90	108	
	Total	916·85	167	..	97	916·35	264	
Otapidárum Taluk.	Otapidáram Casba	6·37	59	..	51	6·37	110	
	Tuticorin and Sivandakolam	5·07	92	..	125	5·07	217	
	Total	11·44	151	..	176	11·44	327	
Sátúr	Sátúr River side	..	60	..	43	..	103	
	Veppalepatti	1·45	60	..	49	1·45	109	
	Sátur River	1·54	59	..	40	1·54	99	
	Total	2·99	179	..	132	2·99	311	
Srívilliputur ..	Sammandapuram	1·22	59	..	29	1·22	88	
Sankaranainárkovil.	Sankaranainárkoil Casba	1·28	60	..	42	1·28	102	
	Vásudevanallúr	1·02	..	..	63	1·02	63	
	Puliangudi Ilandaikulam	2,615·01	105	..	170	2,615·01	275	
	Do. Channel							
	Pattakulam							
	Naranaperi							
	Vásudevannallúr							
	Naranapuram							
	Rappikulam							
	Do. Elankulam							

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Sankaranainárkoil —(*Continued*) ..	Vásudevanallúr River Bank	..	270	..	121	..	391	
	Melapuliangudi Do.							
	Mela Chintamani							
	Total	2,617·31	435	..	396	2,617·31	831	
Tenkási Taluk ..	Courtalam River Bank	2·	..	..	..	2·	23	
	Tenkási Do.	2·	..	..	20	2·	50	
	Puliyur Do.	2·	..	..	15	2·	15	
	Do. Channel	1·20	..	..	15	1·20	49	
	Pattakurichi River Bank	·50	..	..	20	·50	20	
	Mayamankurichi	1·50	..	..	20	1·50	50	
	Netur	4·	..	..	10	4·	61	
	Milapavoor	1·25	..	..	14	1·25	66	
	Total	14·45	220	..	114	14·45	334	
Ambasámudram Taluk	Kangeyan Channel Bank	5	24	..	27	5	51	
	Rangasamudram	2	..	..	..	2	..	
	Pappagudi Kurungulam	2	..	..	..	2	..	
	Ambásamudram Cusba	1	59	..	41	1	100	
	Do. Cutcherry compound	3	119	..	82	3	201	
	Total	13	202	..	150	13	352	
Nángunéri Taluk.	Valliyur market tope	5·75	47	..	52	7·75	99	
	Pannagudi	1·	22	..	..	1·	22	
	Singikulam	5·36	36	..	37	5·36	73	
	Kalacad Channel Bank	5·80	..	..	49	5·80	49	
	Nángunéri Cutcherry Compound	·47	..	..	49	·47	49	
	Do. Traveller's bungalow	1·05	60	..	..	1·5	60	
	Radhápuram market	1·30	48	..	34	1·30	82	
	Mulaikaraipatti tope	·50	36	..	27	·50	63	
	Nángunéri market	2·04	48	..	35	2·4	83	
	Thisayanvilai	2·76	45	..	35	2·76	80	
	Total	26·03	342	..	318	26·03	660	
	Total of all Taluks	3,645·88	2,245	..	1,413	3,602·79	3,670	
Malabar District, Wynaad Division ..		2·50	274	..	..	..	..	
South Canara District.	*Nil.*	..	..	..	..	..	..	
	Grand Total of Cultural operations..	A 7,709·82 / M 100·50	87,319	8·75	2,697	A 4,727·65 / M 100·50	42,737	
	Grant total of Regular Plantations and Cultural operations..	A 43,737·33 / M 100·50	8,61,893	— 6,839·92	6,61,872	A 33,906·49 / M 100·50	14,30,924	

Vide remark at foot of the abstract in the report.

(Form No 61.)

STATEMENT No. III.

Forest Department, Southern Circle, Madras.

Annual List of Topes.

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Chingleput ..	Madurántakam.	1	Madurántakam	Not entered	·78	21	77	
		2	Acharapákam		2·	21	106	
	Chingleput	3	Gúduváncheri		22·	60	612	
		4	Chingleput		8·	35	142	
	Saidápet ..	5	Saidápet		1·	30	423	
		6	St. Thomas' Mount		2·58	30	402	
		7	Pallávaram		1·33	30	393	
		8	Nelvoy		9·74	29	1,224	
		9	Karunguli		4·	31	926	
		10	Sothupákam		6·39	28	1,121	
		11	Sittamúr		5·26	29	779	
		12	Mámandúr		10·95	26	1,070	
		13	Pralayambákam		5·73	72	1,352	
		14	Tiruvallúr		4·70	75	2,701	
			Periyakuppum		2·81			
		15	Attúr		23·	215	1,465	
		16	Homes' Garden		20·3	80	203	
		17	Sríperumbudur		18·73	59	581	
				Total ..	149·30	871	13,577	
North Arcot.	Chittoor ..	1	Bolámpet nursery garden	Mango, jack, casuarina, &c.	2·72	..	..	
		2	Reddigunta do.	Do. do.	15·00	..	..	
		3	Garden at Poiney Anicut	Do. do.	9·25	..	..	
		4	Garden at Huzur Cutcherry, Grimespet.	Trincomalai and margosa	..	..	..	
		5	Palmyra topes in the limits of Reddigunta.	Palmyra	37·32	..	..	
		6	Topes on the Chases Hill	Mango, blue-apple, &c.	60·00	..	..	
		7	Garden at Bangalore road and tope at Kothagundlaganipallai.	Trees of various kinds	23·2	..	..	
	Palmanér ..	8	Garden east of Palmanér river ..	Do. do.	2·2	..	..	
		9	Garden east of Byappagaripallai and Musalimadugu.	Do. do.	2·2	..	..	
		10	Garden near the well in the limits of Berupallai on the Gudiyátam road.	Do. do.	2·0	..	..	
	Gudiyátam.	11	Samoor	Do. do.	7·24	..	..	
			Kottitharamittor	Do. do.	13·32	..	..	
		12	Pichanúr	Do. do.	4·32	..	..	
		13	Banyan tope at Cautpadi	Do. do.	11·32	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
North Arcot —(*Contd*).	Gudiyatam—(*Continued*).	14	Palmyra tope at Pichanúr	Palmyra	5·80	..	..	
		15	Deputy Tahsildar's compound at Kuppam.	Trees of various kinds	1·28	..	..	
		16	Ammerdy	Do. do.	8·00	..	..	
		17	Attúr	Do. do.	171·	..	..	
		18	Pullipat	Do. do.	4·5	..	..	
		19	Allapuram	Palmyra	7·12	..	..	
		20	Ajaramcheri	Do.	88·45	..	..	
		21	Village reserve in the limits of Nelvoy, Santhapolliem, Thepathangal, and Penatur.	Trees of various kinds	117·32	..	..	
	Pólúr ..	22	Thellay	Do. do.	101·93	..	..	
		23	Elatúr	Do. do.	7·28	..	..	
		24	Murugapadi, Papambadi, Kunutur.	Do. do.	90·	..	..	
		25	Korapet	Do. do.	10·	..	..	
		26	Thachampatti	Do. do.	4·36	..	..	
	Wandiwash.	27	Echur	Do. do.	13·9	..	..	
		28	Erumathuti and Thandalam ..	Do. do.	22·80	..	..	
		29	Thitharai	Do. do.	2·25	..	..	
		30	Themmughur	Do. do.	10·11	..	..	
		31	Kodialam	Do. do.	7·	..	..	
		32	Kolipulúr	Do. do.	16·3	..	..	
		33	Vellam	Do. do.	12·31	..	..	
		34	Sudathangal	Do. do.	6·2	..	..	
		35	Nemali	Do. do.	3·85	..	..	
		36	Parasoor	Do. do.	24·19	..	..	
		37	Nedangunam	Do. do.	6·60	..	..	
	Arcot ..	38	Randam	Do. do.	11·5	..	..	
		39	Meranum	Do. do.	14·22	..	..	
		40	Seerangattoor	Do. do.	15·34	..	..	
		41	Velapakam	Do. do.	3·00	..	..	
		42	Damarapauk	Do. do.	3·5	..	..	
		43	Palmyra tope at Randam	Palmyra	5·0	..	..	
		44	Anandali	Trees of various kinds	26·27	..	..	
		45	Paniyúr	Do. do.	10·	..	..	
		46	Senai	Do. do.	8·	..	..	
		47	Venkatapuram	Do. do.	8·	..	..	
	Wálajápet ..	48	Manthangal	Do. do.	25·	..	..	
		49	Topes on the hill at Ammur ..	Do. do.	18·	..	..	
		50	Maniyabut	Do. do.	16·	..	..	
		51	Banavaram	Do. do.	3·	..	..	
		52	Minnel	Do. do.	2·10	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
North Arcot.—(*cont.*)	Wálaj á p e t—(*Continued*).	53	Topes on the bank of Tirucolum at Tirutani.	Trees of various kinds	1·	..	..	
		54	Vanien choultry	Do. do.	2·	..	..	
		55	Topes near Mr. Whiteside's fresh-water pond at Arkonam.	Do. do.	3.	..	..	
			Topes on the bank of Mr. Robinson's gunta at Arkonam					
		56	Kondramangalam	Date	..	..	..	
		57	Kothur	Date and tamarind	..	..	..	
		58	Kondavada	Mangoes, tamarind and cocoanut	..	..	..	
		59	Gazulamandiem	Do. do. do.	..	..	..	
		60	Natcheoor	Date	..	..	..	
		61	Kannikapuram	Tamarind	..	..	..	
		62	Kondrapaukam	Mango	..	..	..	
		63	Thimmanayanampolliem	Woodapple	..	..	..	
		64	Ramakrishnapuram	Tamarind	..	..	..	
		65	Moomalvaripallai	Do.	..	..	..	
		66	Peroor	Date	..	..	..	
		67	Pudupatla	Tamarind	..	..	..	
		68	Mallavaram	Date	..	..	..	
		69	Adavapallai	Do.	..	..	..	
		70	Thatimakulapallai	Date and palmyra	..	..	..	
		71	Edugapallai	Tamarind	..	..	..	
	Chandragiri.	72	Singareddipallai	Mango, tamarind, margosa, ippu, date, &c.	..	..	..	
		73	Mogarala	Date and palmyra	..	..	..	
		74	Thoorparpallai	Date	..	..	..	
		75	Chittoovaripallai	Do.	..	..	..	
		76	Ramapuram	Do.	..	..	..	
		77	Veerase Hipalayam	Do.	..	..	..	
		78	Arthalavaripolliem	Do.	..	..	..	
		79	Runjiatvaripallai	Mango	..	..	..	
		80	Mungapuram	Tamarind	..	..	..	
		81	Gopalpuram	Do.	..	..	..	
		82	Chengareddi Bundagoo	Do.	..	..	..	
		83	Inkapakam	Tamarind, black plum, ippi, mango, date, &c. ..	..	..	..	
				Total ..	1,106·57	..	..	
South Arcot.	Tiruvannámalai.	1	Kunathur tope	Tamarind, eluppai and other sorts	5·49	..	..	
		2	Tamarakolum tope	Eluppai, katavalai, nagai, and other sorts	2·64	..	..	
		3	Tirukoilur road tope	Tamarind, eluppai, vembu, and other sorts	3·84	..	..	
		4	Vanathroyapolliem tope	Eluppai, katavalai, and other sorts	1·32	..	..	
		5	Melathikam tope	Tamarind, eluppai, vembu, mango, and other sorts, ..	1·84	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
South Arcot —(*Contd.*)	Tiruvannámalai—(*Continued*).	6	Saralpoondy tope	Eluppai, vembu, mango, and other sorts	3·96	..	..	
		7	Somasamudram tope	Tamarind, eluppai, vembu, nagai, and other sorts ..	1·32	..	..	
		8	Samudram Elam tope	Bilva trees, mango, and other sorts	1·32	..	..	
		9	Vengikal tope	Nagai, tamarind, eluppai, vembu, and other sorts ..	1·15	..	..	
		10	Samudram tope	Tamarind, eluppai, nagai, vembu, and other sorts ..	4·75	..	..	
		11	Kolappadi tope	Tamarind, eluppai, nagai, and other sorts	5·28	..	..	
		12	Athianthal tope	Eluppai, nagai, and other sorts	3·5	..	..	
		13	Nadugampoondy tope	Kattuvalai, tamarind, eluppai, and other sorts ..	3·96	..	..	
		14	Pennathur tope	Eluppai, nagai, and tamarind	4·62	..	..	
		15	Kolakudi tope	Eluppai, tamarind, nagai, karivélam, vembu, and other sorts.	3·30	..	..	
		16	Mathur tope	Tamarind, eluppai, nagai, and other sorts	5·94	..	..	
		17	Konalur tope	Casuarina, nagai, tamarind, eluppai, and other sorts ..	1·98	..	..	
		18	Mallavadi tope	Tamarind, eluppai, and other sorts	1·95	..	..	
		19	Soranthai tope	Tamarind, nagai, palmyra, eluppai, and other sorts ..	4·12	..	..	
		20	Norkambadi tope	Tamarind, eluppai, nagai, and other sorts	8·58	..	..	
		21	Mangalam tope	Eluppai, nagai, vembu, and other sorts	4·29	..	..	
		22	Nadalákanandal tope	Eluppai, vembu, tamarind, and other sorts	3·46	..	..	
		23	Nochimalai tope	Eluppai, tamarind, karivélam, and other sorts ..	3·54	..	..	
		24	Mudianur tope	Tamarind, eluppai, nagai, and other sorts	3·56	..	..	
		25	Nallur tope	Tamarind, eluppai, and other sorts	1·90	..	..	
		26	Keelsirupakam tope	Tamarind, eluppai, casuarina, and other sorts ..	3·28	..	..	
		27	Sellameri tope	Tamarind, eluppai, and other sorts	1·58	..	..	
		28	Tandrumpet tope	Tamarind, eluppai, and other sorts	1·98	..	..	
		29	Mekkalore tope	Casuarina, nagai, konnai, eluppai, tamarind, and other sorts.	9·24	..	..	
		30	Thachampet tope	Eluppai and mango	3·67	..	..	
		31	Eryúr tope	Mango, eluppai, and tamarind	2·64	..	..	
		32	Muthanur tope	Tamarind, eluppai, and mango	3·96	..	..	
		33	Trinomalai kusba nursery tope ..	Eluppai, kattuvalai, portia, and other sorts	1·32	..	..	
		34	Somasipadi tope	Eluppai, and other sorts	3·42	..	..	
				No. II Range—Gingee.				
				Nil.				
	Tindivanam.			No. III Range.				
		1	Nathangal tope	Eluppai, katuvagai, &c., trees and sandal, &c., plants, &c.	7·26	..	..	
		2	Marichetty tope	Casuarina, ferugenia, marudai, &c.	2·64	..	..	

Annual List of Topes

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
	Tindivanam —(*Cont.*)	3	Kollumedu tope	Tamarind, eluppai, and other trees	1·32	..	..	
		4	Chendur tope	Tamarind, eluppai, and other trees	1·34	..	..	
		5	Devanur	Eluppai, other trees	5·28	..	..	
		6	Relief Camp tope	Vembu, red sanders, rain tree, thurinji, casuarina, velvelam, and other trees.	1·98	..	..	
	Villupuram.	7	Sathambodi	Mango, eluppai, and casuarina	14·91	..	..	
		1	Panamalai tope	Tamarind, eluppai, and other sorts	1·	..	..	
		2	Yedapolliem tope	Tamarind, eluppai, and other sorts	2·	..	..	
		3	Soshampoondy tope	Tamarind, vembu, and katuvagai	3·	..	..	
		4	Puvarasanguppam tope	Silk cotton, tamarind, palmyra, and other sorts ..	3·	..	..	
		5	Kalliput tope	Eluppai, tamarind, nagai, &c.	1·	..	..	
		6	Sethathur tope	Mango tree, kattuvagai, and other sorts	3·	..	..	
		7	Tiruppachanur tope	Palmyra trees, tamarind, kattuvagai, and other sorts.	5·	..	..	
		8	Maharajapuram tope	Tamarind, kattuvagai, and other sorts	2·	..	..	
		9	Sathanur	Tamarind, palmyras, karuvelam, and other sorts ..	5·	..	..	
		10	Mundipakam	Palmyras, tamarind, mango, eluppai, cashew, and other sorts.	2·	..	..	
		11	Palaput	Tamarind, and other sorts	2·	..	..	
		12	Hriyúr No. 1 / Do. ,, 2	Tamarind, eluppai, and other sorts	3·	..	..	
South Arcot —(*Cont.*)		13	Kappiamur	Tamarind, kattuvagai, and other sorts	1·	..	..	
		14	Nawáb's tope	Eluppai, young palmyras, mangoes, silk cotton, cocoanut trees, jack trees, guava, cashew, tamarind, lime, and other sorts.	44·	..	..	
			No. IV Range.					
	Cuddalore..	1	Panruti nursery tope	Tamarind, eluppai, mango, guava, casuarina, kattuvagai, nagal, and other sorts.	5·	..	..	
		2	Poongoonam tope	Mango, tamarind, nagal, portia, karuvélam, and other sorts.	7·	..	..	
	Chidambaram.	3	Kothangudi tope	Karivélam, peevélam and portia	3·	..	..	
		4	Gnanaprakasam tope	Portia, karivélam, tamarind, and other sorts	1·62	..	..	
		5	Melakondalavadi tope on the north bank of Coleroon.	Eluppai, mango, tamarind, karivélam, palmyra, and other sorts.	11·89	..	..	
		6	Melakondalavadi tope in the middle of Coleroon.	Cashew, tamarind, eluppai, silk cotton, palmyras, portia, and other sorts				
	Vridháchallum.	7	Vayalúr tope No. 1	Tamarind, palmyras, vembu, and other sorts ..	11·75	..	..	
		8	Do. ,, 2	Tamarind, vembu, and other sorts				
		9	Do. ,, 3	Tamarind, vembu, and other sorts				
		10	Peria Vadavadi	Tamarind, palmyra, and other sorts	10·3	..	..	
		11	Vallivalanthan	Tamarind, palmyras, karungali, and other sorts ..	6·47	..	..	
		12	Veppur	Velvél and karivél	7·49	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
	Vridháchalam —(*Cont.*)	13	Head Assistant Collector Bungalow tope.	Kodukkapulli, othiam, konnai, mango, banyan, and other sorts	·50	..	..	
			No. V Range.					
	Tirukoilúr..	1	Aviyur tope	Tamarind, and vembu	9·24	..	..	
		2	Manalurpet road tope	Tamarind, eluppai, mango, and other sorts	2·16	..	..	
		3	Sandapet tope	Tamarind, mango, nagai, and other sorts	·80	..	..	
		4	Pedagam	Tamarind, nagai, vembu, and other sorts	1·65	..	..	
		5	Chettikolam tope	Tamarind, eluppai, nagai, vembu, and other sorts ..	1·48	..	..	
		6	Vannánkuttai	Tamarind, eluppai, nagai, and other sorts	1·32	..	..	
		7	Mangalam road tope	Tamarind, eluppai vembu, and other sorts	·78	..	..	
		8	North side tope	Tamarind, eluppai, and other sorts	1·32	..	..	
		9	Thetha tope	Eluppai, and other sorts	·50	..	..	
		10	Old nursery tope near the above ..	Tamarind, eluppai, nagai, and other sorts	1·24	..	..	
		11	Nandavanam tope	Eluppai, tamarind, and other sorts	·41	..	..	
		12	Vellur tope	Tamarind, nagai, and other sorts	5·95	..	..	
		13	Sirumal tope	Tamarind, eluppai, and other sorts	2·	..	..	
		14	Meyúr	Tamarind, eluppai, and other kinds	1·	..	..	
South Arcot —(*Cont.*)		15	Bungalow tope	Tamarind, eluppai, nagai, vembu, and other sorts ..	1·65	..	..	
		16	Jail tope	Tamarind, eluppai, nagai, vembu, casuarina, and other sorts.	·50	..	..	
		17	Kulapolliem tope	Tamarind, eluppai, nagai, vembu, and other sorts ..	·41	..	..	
			No. VI Range.					
	Kallakurchi.	1	Inthali tope	Tamarind, mango, eluppai, nagai, velvélam, karivélam, and other sorts.	11·55	..	..	
		2	Melveli tope	Mango, tamarind, vembu, velvél, cashwenut, eluppai, elanthai, and other sorts.	14·52	..	..	
		3	Payithandorai tope	Tamarind, mango, karivél, eluppai, nagal, vembu, velvél, and other sorts.	9·90	..	..	
		4	Kallakurchi tope	Mango, tamarind, velvélam, and other sorts	2·60	..	..	
		5	Kusba nursery tope	Mango, eluppai, velvélam, silk cotton, nagal, and other sorts.	1·40	..	..	
		6	Vangaram tope	Palmyras, tamarind, velvél, and eluppai	6·60	..	..	
		7	Thottiam tope	Tamarind, eluppai, and velvél	6·60	..	..	
		8	Namasivayapuram tope	Tamarind, eluppai, vembu, palmyras, velvélam, and other sorts.	6·60	..	..	
		9	Kuttakudi tope	Tamarind, and eluppai	6·60	..	..	
				Total ..	393·51	..	8,712	
Salem ..	Salem ..	1	Athanur tope..	Mango, tamarind, cocoanut, margosa, eluppai, atti, sandalwood, guava, kolingi, and other trees.	50·	42	3,994	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Salem—(*Cont.*)	Salem—(*Cont.*)	2	Kamalapuram	Mango, tamarind, margosa, naga, eluppai, manja konnai, and others.	8·	36	1,425	
		3	Bodinayakampatti	Mango, manja konnai, tamarind, margosa, athi, guava, and others.	4·	38	1,898	
		4	Sooramangalam	Mango, and nagai	6·43	82	838	
		5	Bodinayakampatti	Mango, tamarind, and margosa	8·			
		6	Longley tope	Mango, tamarind, margosa, athi, and guava	8·66	60	5,026	
		7	Attyampatti tope	Mango, tamarind, margosa, palmyra, and jack	1·	38	82	
		8	Line tope	Mango, tamarind, and margosa	1·45	38	662	
		9	Arab line tope	Mango, vagai, and other trees	2·	..	243	
		10	Karipatti	Mango, tamarind, margosa, and palmyra	4·	28	339	
		11	Pallipatti or Mettupatti	Mango, tamarind, margosa, naga, eluppai, and others.	25·	..	923	
		12	Civil Court compound	Mango, margosa, and tamarind	6·	44	1,784	
		13	Mettupatti or Kathi Veppalapatti	Mango, tamarind, athi, and margosa	25·	32	1,143	
			Valasayur	Mango, and tamarind	25·	..	1,329	
		14	Mallúr bungalow	Mango, tamarind, margosa, sandalwood, and vagai	2·	28	28	
		15	Post Office compound (at Sooramangalam)	Mango, and margosa	1·	..	448	
		16	Engine-drivers' bungalow at Sooramangalam	Margosa and others	·84	..	96	
		17	Rasipur	Tamarind, eluppai, mango, cocoanut, margosa and naga	2·84	48	1,134	
		18	Seerapalli tope	Tamarind, athi, mango, and eluppai	2·5	21	567	
		19	Muthukalipatti	Tamarind, cocoanut, eluppai, mango, athi and margosa	3·15	84	1,030	
		20	Vellalapatti	Tamarind, cocoanut, eluppai, mango, athi and margosa	2·	21	768	
		21	Anaithattipolliem	Tamarind, cocoanut, mango, nagai, eluppai, margosa, athi, and guava.	34·69	96	2,381	
		22	Andagalur and Munchavady topes.	Tamarind, mango, naga, margosa, eluppai, vagai, and athi.	58·32	196	4,201	
		23	Vennandur	Tamarind, cocoanut, margosa, naga, mango and eluppai	10·	90	1,304	
		24	Koneripatti tope	Tamarind, mango, naga, eluppai, margosa, and athi.	30·	42	2,604	
		25	Omalúr bungalow	Mango, eluppai, tamarind, margosa, and other trees	7·72	71	1,819	
		26	Omalúr Western tope	Eluppai, naga, tamarind, margosa, and athi	7·33	50	1,001	
		27	Tharamangalam	Eluppai, tamarind, and margosa	3·	48	487	
		28	Tharamangalam Chendikesavaram tope.	Mango, eluppai, tamarind, and naga	10·	42	884	
		29	Tharamangalam Mangavally	Tamarind, and margosa	6·	42	511	
		30	Nangavally Shady	Tamarind, eluppai, and margosa	3·	..	423	
		31	Nangavally Pullikuttai Eri tope	Eluppai, naga, tamarind, and margosa	10·	..	1,517	
		32	Chinnappambatti	Tamarind, margosa, vilanathi, ichi, and ála	2·	..	387	
		33	Chikkamampatti	Mango, and tamarind	15·34	..	694	
			Thasa Samudram	Mango, and tamarind	13·73	42	1,283	
		34	Atúr Railway Station tope	Tamarind, eluppai, and margosa	3·	46	236	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Salem—(*Continued*).	Salem—(*Continued*).	35	Toppúr road way-side tope	Tamarind, mango, and eluppai	20·	..	856	
		36	Ayothiapatnam	Mango, cocoanut, and others	8·13	44	1,805	
		37	Sheveroy Hills (chuttram tope)	Different trees	15·87	73	1,643	
		38	Cutcherry compound tope	Different trees	3·92	44	135	
		39	Muthunayagampatti	Tamarind	3·	42	122	
		40	Pudur nursery tope	Mango, margosa, naga, eluppai, athi, palmyra, guava, jack, and other trees.	2·	44	1,311	
		41	Kadayampet	Mango, tamarind, and eluppai	10·	48	1,311	
		42	Huzur Cutcherry compound tope	Different trees	3·	111	111	
		43	Omalúr	Mango	5·73	..	156	
		44	Eastern tope	Tamarind and others	2·92	..	146	
		45	Eastern Shandy tope	Different trees	20·9	..	1,607	
		46	Eastern Fort tope	Tamarind, eluppai, vélam, and others	18·	2	1,471	
		47	Pannapatti tope	Mango, tamarind, vélam	6·	..	652	
		48	Pachanampatti	Karivélam, margosa, and others	16·	4	349	
		49	Nanganally and Míchéry	Tamarind and others	10·	..	510	
		50	Míchéry	Eluppai, tamarind, and other trees	9·	4	680	
		51	Amarakanthi	Tamarind, mango, eluppai	32·35	110	1,058	
		52	Putteragoundenpolliem	Cocoanut, tamarind, eluppai, guava, woodapple, naga, athi, ála, vagai, margosa, and others.	8·50	45	694	
		53	Kattukottai tope	Cocoanut, tamarind, eluppai, naga, athi, ála, vagai, and others.	8·50	50	609	
		54	Abinaram	Cocoanut, tamarind, eluppai, athi, ála, vagai, and others.	6·41	51	542	
		55	Periakishnapuram tope	Cocoanut, tamarind, eluppai, jack, guava, naga, margosa, and others.	7·74	44	589	
		56	Ammapolliem	Cocoanut, tamarind, eluppai, jack, naga, margosa, and others.	6·	51	506	
	Atúr	57	Thedanúr	Cocoanut, tamarind, eluppai, guava, naga, athi, and other trees.	2·28	50	378	
		58	Echampatti	Cocoanut, tamarind, eluppai, and naga	2·68	51	471	
		59	Mangalapuram	Cocoanut, tamarind, eluppai, athi, and others	·96	42	386	
		60	Narasingapuram	Cocoanut, tamarind, eluppai, jack, guava, and others.	4·	44	415	
		61	Bálur	Cocoanut, tamarind, eluppai, jack, and other trees	2·	44	513	
		62	Manjeri tope	Cocoanut, eluppai, tamarind, naga, and other trees	3·39	52	749	
		63	Atúr tope	Cocoanut, tamarind, eluppai, jack, guava, woodapple, athi, and other trees.	6·51	44	698	
		64	Atúr Cutcherry tope	Cocoanut, jack, and other trees	12·3	33	406	
		65	Atúr Shandy	Cocoanut, tamarind, eluppai, woodapple, margosa, and other trees.				
	Námakal	66	Námakal Deputy Collector's office	Tamarind, and margosa	5·53	86	1,269	
		67	Námakal School tope	Mango, and vagai				

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Salem—(*Cont.*)	Námakal—(*Cont.*)	68	Námakal Hospital	Tamarind and vagai	2·24	50	791	
			Námakal Travellers' Bungalow ..	Mango, ichi, and margosa				
		69	Námakal Cutcherry tope ..	Mango, cocoanut, jack, and other trees	8·85	92	1,446	
			Kamalalayam					
		70	Neechampatti tope	Tamarind, eluppai, and margosa	1·2	38	38	
		71	Anjalan	Tamarind, eluppai, margosa, and mango	2·61	72	987	
			Poolanjeri					
		72	Thattiangarpet	Tamarind and eluppai	4·23	42	527	
		73	Valayapatti old and new topes ..	Tamarind and mango	·50	42	285	
		74	Paramatti old tope	Tamarind, margosa, vagai, cocoanut, palmyra, and others.	2·12	5	5	
		75	Nulloor	Vagai, tamarind, and margosa	8·19	73	73	
		76	Paramathy Cutcherry tope	Cocoanut	·17	43	43	
		77	Padamadipolliem	Tamarind and margosa	6·16	31	31	
			Vélur tope	Cocoanut, tamarind, mango, eluppai, and others ..	4·77	93	93	
		78	Maniyanúr	Tamarind, mango, and margosa	·60	73	73	
		79	Mogavaram old tope	Tamarind, margosa, and eluppai	2·12	26	26	
		80	Mogavaram new tope	Tamarind, eluppai, naga, and margosa	8·19	42	42	
		81	Thanapalli	Tamarind, eluppai, and margosa	1·50	..	..	
		82	Arumugathankottai	Mango, eluppai, tamarind, margosa, and others ..	15·93	69	364	
		83	Panady	Mango, eluppai, margosa, tamarind, and other trees .	5·20	27	251	
		84	Periatheppakolam	Margosa, vagai, naga, tamarind, eluppai, mango, cocoanut, and other trees.	1·79	46	242	
		85	Karuveppampatti	Mango, eluppai, tamarind, naga, and other trees ..	2·21	..	44	
		86	Vyguntham	Mango, tamarind, eluppai, margosa, and other trees ..	2·23	39	201	
		87	Chinnatheppakolam	Cocoanut and other trees	·45	..	50	
		88	Kolikalnatham	Margosa and other trees	6·63	..	..	
	Tiruchengód.	89	Palbóni tope	Mango, cocoanut, tamarind, eluppai, sandalwood, jack, pomegranate, margosa, and other trees.	6·17	44	302	
		90	Lutchumanatheertham	Mango, tamarind, eluppai, naga, margosa, pomegranate, and others.	1·	33	254	
		91	Mathésappan	Mango, tamarind, naga, eluppai, and margosa ..	..	44	292	
		92	Sankuchakram tope	Mango, eluppai, tamarind, margosa, sandalwood, naga, and other trees.	6·10	36	295	
		93	Sankeri bungalow tope	Tamarind, margosa, and other trees	3·92	..		
		94	Vellandivalarai	Margosa, woodapple, tamarind, eluppai, and other trees.	2·	28	184	
		95	Chinna Mavali	Margosa, woodapple, vagai, tamarind, eluppai, mango, &c.	9·23	37	234	
		96	Poolampatti	Mango, woodapple, eluppai, pomegranate, and others.	2·	28	166	
		97	Railway Station tope	Mango, margosa, tamarind, naga, and eluppai ..	6·	38	285	
	Hosúr ..	98	Hosúr Government tope	Eluppai, casuarina, margosa, bamboo, and other trees.	11·	48	440	
		99	Hosúr bandy-stand	Mango, eluppai, athi, tamarind, jack, margosa, woodapple, and other trees.	4·	48	221	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Salem—(*Cont.*)	Hosúr—(*Cont.*)	100	Andivady, A	Mango, eluppai, and other trees	2·52	42	508	
		101	Do. B	Mango, eluppai, athi, and others	7·91	42	367	
		102	Do. C	Mango, eluppai, athi, tamarind, Semai ávaram, and other trees.	10·12	48	367	
		103	Do. D	Mango, Semai ávaram, eluppai, and others	18·61	90	533	
		104	Do. E	Mango, eluppai, and others	2·	42	358	
		105	Kothur, A	Mango, Semai ávaram, eluppai, tamarind, athi, and other trees.	11·69	42	556	
		106	Do. B	Mango, Semai ávaram, eluppai, casuarina, sandalwood, and others.	53·67	90	882	
		107	Do. C	Mango, eluppai, and other trees	15·32	42	482	
		108	Kothagondapalli	Mango, Semai ávaram, eluppai, casuarina, and other trees.	16·97	41	574	
		109	Bommandapalli, A	Mango, eluppai, and others	11·69	48	499	
		110	Do. B	Mango, eluppai, athi, and others	12·37	42	558	
		111	Do. C	Mango and other trees	12·	42	938	
		112	Jeegúr tope	Mango, eluppai, athi, tamarind, sandalwood, and others.	7·44	42	883	
		113	Mothígiri	Mango, eluppai, and other trees	2·46	42	206	
		114	Naribalagunta	Mango, eluppai, and others	1·74	48	766	
		115	Miliginpalli	Mango, eluppai, and casuarina	15·87	..	649	
		116	Huzur bungalow	Mango and other trees	3·	..	116	
		117	Saramands	Mango, athi, and other trees	2·13	11	234	
		118	Aggondapalli	Mango, eluppai, and other trees	15·51	11	1,057	
		119	Achettipalli	Mango, eluppai, tamarind, athi, and other trees ..	5·98	42	331	
		120	Do. B	Mango, eluppai, and other trees	4·76	42	316	
		121	Thotagiri, A	Mango, eluppai, athi, tamarind, &c.	17·62	42	933	
		122	Do. B	Tamarind, mango, Semai ávaram, and athi	32·17	90	1,782	
		123	Araconapatti	Mango, eluppai, and other trees	3·18	11	284	
		124	Samanapalli	Mango, eluppai, tamarind, and other trees	11·85	11	924	
		125	Begipalli	Mango, eluppai, athi, and other trees	6·8	11	197	
		126	Belagondapalli	Mango, Semai ávaram, and other trees	37·89	42	1,765	
		127	Jeebee	Mango, Semai ávaram, eluppai, and other trees ..	2·	48	284	
		128	Denkanikóta	Mango, eluppai, athi, tamarind, jack, &c.	6·82	48	844	
		129	Panchakalupuram, A	Mango, eluppai, athi, and other trees	33·28	42	1,162	
		130	Do. B	Mango, Semai ávaram, eluppai, athi, and other trees.	20·66	40	921	
		131	Kelamangalam	Mango and other trees	2·	..	198	
		132	Mallasamudram tope	Mango, eluppai, athi, and other trees	2·	48	482	
		133	Anegollu	Mango, eluppai, athi, and other trees	40·35	90	1,455	
		134	Thandrai	Mango, Semai ávaram, eluppai, athi, casuarina, and others.	37·89	90	1,197	
		135	Korapalli	Avarai and other trees	18·26	..	1,027	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Salem—(*Cont.*)	Dharmapuri	136	Pennagaram A	Tamarind, eluppai, mango, margosa, naga, karuvélam, casuarina, and other trees.	2·58	47	278	
		137	Do. B	Tamarind, eluppai, mango, naga, karuvélam, and other trees.	5·57			
		138	Do. C	Tamarind, eluppai, mango, and other trees	1·42	..	1,061	
		139	Do. D.	Tamarind, eluppai, mango, and other trees	2·43			
		140	Do. E.	Tamarind, mango, and other trees	8·23			
		141	Athigappudy	Tamarind, eluppai, mango, margosa, naga, karuvélam, and other trees.	10·76	85	664	
		142	Seekadi tope	Tamarind, eluppai, mango, margosa, naga, karuvélam, &c.	20·	85	871	
		143	Nallamballi A.	Tamarind, mango, and other trees	1·20	..	..	
			Do. B.	Tamarind, eluppai, mango, margosa, naga, and other trees.	3·	45	647	
		144	Thorandoddi	Tamarind, eluppai, mango, margosa, naga, karuvélam and other trees.	25·	65	959	
		145	Esagarapalli	Tamarind, eluppai, mango, margosa, naga, karuvélam, and others.	60·	85	841	
		146	Kallipuram	Tamarind, mango, naga	1·90	40	388	
		147	Sógathúr	Tamarind, eluppai, mango, margosa, naga, karuvélam, jack, and other trees.	214·37	150	1,995	
		148	Periampatti	Tamarind, mango, eluppai, margosa, naga, karuvélam, and other trees.	15·47	45	490	
		149	Krishnapuram	Tamarind, eluppai, mango, margosa, karuvélam, and others.	6·64	44	413	
		150	Nagarasampatti	Tamarind, eluppai, mango, margosa, naga, and other trees.	9·98	47	593	
		151	Muthúr	Tamarind, eluppai, mango, margosa, and karuvélam, &c.	31·31	75	923	
		152	Narasier pond	Tamarind, eluppai, mango, &c.	1·	121	399	
		153	Dharmapuri	Tamarind, eluppai, mango, margosa, and others ..	1·	..	438	
		154	Kamalapuram	Tamarind, eluppai mango, naga, karuvélam, &c. ..	25·	85	855	
		155	Karimangalam	Tamarind, eluppai, mango, &c.	6·2	47	462	
		156	Mahindramangalum	Tamarind, eluppai, mango, naga, &c.	6·	..	389	
		157	Settikardi	Tamarind, mango, margosa, karuvélam and others ..	3·	43	533	
		158	Thethiopanahalli	Tamarind, eluppai, mango, margosa, and others ..	1·	35	396	
		159	Appakathiranahalli	Tamarind, eluppai, mango, margosa, naga, and others.	20·	44	416	
		160	Local Fund Dispensary, Forest office and School compound.	Tamarind, eluppai, mango, margosa, casuarina, jack, sandalwood, &c.	6·	85	234	
	Krishnagiri.	161	Kanakamatlu A.	Tamarind, guava, mango, eluppai, margosa, wood-apple, casuarina, ácha, &c.	30·31	132	847	
		162	Do. B.	Mango, eluppai, tamarind, margosa guava, sandalwood, jack, palmyra, &c.	12·29	..	772	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Salem—(*Cont.*)	Krishnagiri —(*Cont.*)	163	Doultabad	Tamarind, jack, palmyra, pungam, &c.	2·85	88	418	
		164	Karánji	Tamarind, eluppai, pungam, and margosa	2·57		522	
		165	Thogarapalli	Tamarind, mango, eluppai, margosa, casuarina, palmyra, &c.	7·81	48	1,174	
		166	Gengaveram	Mango, eluppai, tamarind, woodapple, margosa, palmyra, &c.	11·61	90	1,155	
		167	Boganapalli	Mango, eluppai, tamarind, palmyra, kattuvagai, &c.	33·89	164	2,443	
		168	Travellers' bungalow	Mango, eluppai, tamarind, and others	10·11	..	..	
		169	Kothipalli	Tamarind, mango, eluppai, naga, margosa, and others.	30·87	180	1,716	
		170	Chendapuram	Tamarind, mango, eluppai, naga, margosa, &c. ..	3·12	42	532	
		171	Moravahalli	Mango, eluppai, naga, tamarind, margosa, athi, &c. .	12·16	90	1,164	
		172	Mathúr	Tamarind, eluppai, margosa, naga, &c.	2·92	90	649	
		173	Manthipalli	Tamarind, eluppai, mango, athi, palmyra, and other trees.	11·62	48	934	
		174	Amballi	Eluppai, tamarind, mango, and palmyra	2·41	46	516	
		175	Gadagarampatti	Tamarind, eluppai, naga, mango, margosa, karivélam, athi, palmyra, &c.	42·38	180	2,707	
		176	Manja Médu	Tamarind, eluppai, margosa, mango, karivélam, palmyra, &c.	49·24	16	2,601	
		177	Poomalanthampatti	Mango, tamarind, eluppai, naga, palmyra, &c. ..	25·3	180	1,876	
		178	Theerthagiripalli	Eluppai, mango, tamarind, palmyra, and others ..	11·12	90	1,325	
		179	Jambukuttapatti	Tamarind, eluppai, naga, mango, athi, palmyra, woodapple, &c.	48·5	180	3,096	
		180	Kannandahalli	Tamarind, eluppai, naga, mango, athi, guava, and palmyra.	2·18	48	528	
		181	Krishnagiri School	Tamarind, woodapple, and others	4·78	90	898	
		182	Tirupatúr Camping	Tamarind, mango, eluppai, naga, &c.	11·5	83	1,404	
		183	Tirupatúr School	Tamarind, mango, eluppai, naga, margosa, and others.	5·59			
		184	Head Assistant Collector's Office compound.	Tamarind, mango, margosa, &c.	12·57	38	764	
		185	Atkinson's tope	Tamarind, mango, eluppai, casuarina, vagai, guava, and palmyra.	2·64	..	884	
		186	Jalárpet	Tamarind, mango, eluppai, margosa, and others ..	1·50	38	348	
	Tirupatúr ..	187	Koratti	Tamarind, mango, eluppai, naga, margosa, and palmyra	18·15	38	38	
		188	Jalárpet Rest-house	Tamarind, mango, eluppai, and others	4·	38	82	
		189	Tirupatúr palmyra tope	Tamarind, mango, eluppai, and margosa	15·43	38	38	
		190	Elavampatti	Tamarind, mango, eluppai, guava, athi, álai, margosa, &c.	15·43	34	162	
		191	Iruvampatti	Tamarind, mango, eluppai, and margosa	3·99	35	379	
		192	Amboorpet Cutcherry tope ..	Tamarind, mango, casuarina, cocoanut, and others ..	9·40	24	2,573	
		193	Orr's Choultry	Tamarind, mango, eluppai, and others	·71	3	328	
		194	Railway Camping tope	Tamarind, eluppai, naga, margosa, and karivélam ..	6·66	4	283	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Salem—(*Cont.*)	Tirupatúr—(*Cont.*)	195	Komárampatti	Tamarind, mango, and others	14·72	32	32	
		196	Thamaléri Muthúr	Tamarind, mango, and others	42·21	38	38	
		197	Sámalpati	Mango, eluppai, tamarind, naga, and margosa	5·	..	2,170	
		198	Arbuthnott tope	Mango, eluppai, guava, pomegranite, tamarind, naga, cocoanut, palmyra, and others.	42·	88	5,101	
		199	Orr's Choultry	Tamarind, margosa, and athi	1·60	28	218	
		200	LeFanu's camping ground	Mango, eluppai, tamarind, naga, and ála	3·60	20	365	
		201	Podur	Mango, eluppai, tamarind, and ála	7·24	..	738	
		202	Hanumatheertham	Mango, eluppai, guava, tamarind, and palmyra	11·12	..	1,222	
		203	Hanumatheertham bungalow	Margosa	1·	..	57	
		204	Singárapet	Eluppai, tamarind, and naga	3·	..	1,231	
		205	Majamurpatti	Eluppai, mango, guava, tamarind, ½ cocoanut, and margosa.	5·	20	1,713	
		206	Kondampatti	Tamarind	5·86	20	426	
		207	Kathavany bungalow tope	Margosa	1·	..	163	
		208	Harur Varunatheertham	Mango, eluppai, guava, tamarind, naga, &c.	5·13	8	1,699	
		209	Mórappúr tope	Mango, guava, tamarind, and naga	3·	..	648	
		210	Mórappúr bandy-stand	Mango, eluppai, guava, tamarind, naga, and margosa.	8·	20	1,339	
		211	Poyipatti	Mango, eluppai, tamarind, naga, and margosa	4·	..	740	
	Utankarai	212	Echampady	Mango, eluppai, guava, tamarind, naga, and margosa.	6·17	20	1,372	
		213	Pallipatti	Mango, eluppai, tamarind, and margosa	6·98	20	1,290	
		214	Theerthamalai	Mango, eluppai, pomegranite, tamarind, and naga	7·61	25	1,599	
		215	Byranikampatti	Mango, eluppai, and tamarind	7·33	20	1,168	
		216	Kottapatti	Mango, eluppai, and tamarind	4·33	20	901	
		217	Chinthalapady	Mango, eluppai, guava, tamarind, and naga	3·28	20	872	
		218	Pulidiyur	Mango, eluppai, guava, tamarind, naga, &c.	11·7	20	668	
		219	Kowboor	Mango, eluppai, tamarind, and margosa	4·55	..	704	
		220	Kowboor bungalow	Mango, naga, and margosa	1·	30	325	
		221	Longley's camping at Mullapuram.	Eluppai, tamarind, and margosa	2·	20	567	
		222	LeFanu's camping tope at Harúr	Eluppai, tamarind, and margosa	3·18	20	390	
		223	Venkata Subba Row's tope	Mango, eluppai, guava, pomegranite, tamarind, and margosa.	3·58	40	726	
		224	Utankarai Cutcherry tope	Tamarind and margosa	·82	15	365	
		225	Harúr Cutcherry tope	Pomegranite, tamarind, cocoanut, and margosa	1·	..	261	
		226	Pearse's tope	....	12·72	20	652	
		227	Atkinson's tope	....	5·26	20	927	
		228	Gollanúr	....	47·54	20	20	
				Total ..	2,555·5	9,430	1,78,997	
Trichinopoly				*Nil.*				

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Tanjore	Kumbakónam.	1	Nadukávéri Natarajapuram	Cocoanut	9	..	..	Leased out, consequently no expenditure incurred.
		2	Nannilam Village tope	Do.	2	..	..	
	Mannárgudi	3	Edangankota Melayúr	Mangoes, &c	7	55	2,152	
	Putukóta	4	Veppangulam	Do.	10	44	..	
		5	Perumagalore Vadapati	Do.	13	52	..	
		6	Kolakudi	Do.	13	52	..	
		7	Vedayathi	Do.	10	44	..	Accounts having been destroyed, expenditure up to the year cannot be shown.
		8	Anaikadu	Do.	10	44	..	
		9	Thandalai	Do.	10	48	..	
		10	Nidavassal Melpathi	Do.	9	44	..	
		11	Muthakurichi	Do.	10	44	..	
		12	Alathúr	Do.	10	..	..	
		13	Vattagudi	Do.	10	44	..	
		14	Kondikulam	Do.	10	44	..	
		15	Kannugudi Melpathi	Do.	10	43	..	
		16	Seravaruthi Thenpathi	Do.	10	14	..	
				Total ..	153	572	..	
North Coimbatore.	Erode	1	Moolaccadu tope (Uttu kuli)	Kattumamaram, mango trees, velvélam, poovarasam, veppam, vagai, Semai vagai, cocoanut trees, lime trees, northai, bomlimasai, orange trees, tamarind trees, woothiam, vathinarayanam, asogai trees, nagai, munthiri, nelli, pomegranite, wolagai, peamaram, Semai bilvai, woodapple trees, elanthai, woonjal, palmyra, murungai, and palamaram.	4·1	..	1,024	
		2	Pásur Poramboke punjai	Tamarind trees, elavan, nagai, woothiam, mango, nellimaram, palamaram veppam, eluppai, kadukoy, puli, cocoanut trees, and palmyras.	4·82	..	..	
		3	Unjalúr tope	Tamarind trees, mango, palamaram, columichai, eluppai, cocoanut trees, athi, nagai, punnai, and karuvélam.	10·79	..	..	
		4	Anainasavampolliem	Tamarind trees, palmyras, cocoanut trees, mango, palamaram, guava trees, seethapalai, pomegranite, veppam, and sandal.	3·38	..	1,384	
		5	Cutcherry tope	Cocoanut trees, mango trees, malaivembu, nellimaram, elavan, pomegranite, guava trees, jamnagai, columichai, codinarthai, lime trees, tamarind trees, vagai, coducapuli, nut trees, and murungai.	10·27	..	5,502	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Coimbatore —(*Cont.*)	Erode—(*Cont.*)	6	Sub-Collector's Bungalow tope ..	Cocoanut trees, vagai, mango trees, bombilimasai, álam, aranji, cork trees, murungai, vathinarayanam, and grapes.	9·85	..	1,617	
		7	Nadupathy Savady kádu	Tamarind trees, velvélam, sidusi, veppam, and karivélam.	1·76	..	138	
		8	Perumalcovil kádu	Velvélam, vanni, karivélam, sirungi, veppam, oonjal, peamaram, palmyras, pungai, and vagai..	11·50	..	..	
		9	Nadupathy Matha kádu punjai ..	Velvélam and tamarind	4·15	..	..	
		10	Do. do.	Velvélam, veppam, palmyras, karuvélam, kunni, pungai, and vagai.	6·15	..	..	
		11	Puliamadoo	Velvélam, veppam, and oonjal	3·62	..	..	
		12	Culathoovoolvoy tope	Velvélam, karivélam, kunni, veppam, vanni, oonjal, pungai, vagai, and palmyras	4·67	..	..	
		13	Vayakkadupolliem	Velvélam, pungai, veppam, palmyras, vagai, vanni, aya trees, tamarind, purasu, and oonjal.	10·2	..	..	
		14	Neerodi Poramboke	Velvélam, veppam, pungai, oonjal, palmyras, and tamarind.	3·85	..	..	
		15	Culathoovoolvoy Poramboke ..	Palmyras, veppam, karivélam, velvélam, pungai, perumaram, and vagai.	28·87	..	..	
		16	Thannugam vellodu	Palmyras	15·44	..	31	
		17	Gengapuram tope	Karivélam and palmyras	12·61	..	93	
		18	Modakurchi	Palmyras, velvélam, karivélam, elanthai, and woothiam.	4·65	..	..	
		19	Oothukkuli tope	Palmyras, velvélam, karivélam, and veppam ..	18·83	..	20	
		20	Parundurai tope	Palmyras, velvélam, karuvélam, veppam, ichi, pungai, peamaram, and oonjal.	24·93	..	61	
		21	Soorimapolliem tope	Veppam, palmyras, vagai, oonjal, karivélam, woodapple trees, and tamarind.	11·1	..	111	
		22	Nattipolliem tope	Vallimaram, velvélam, veppam, palmyras, oonjal, karivélam, peamaram, veppam, vannimaram, velvélam, karivélam, oonjal, vagai, elanthai, purasu, pungai, ayamaram, tamarind trees, widathalam, valliyamaram, palmyras, and palai.	20·98	..	138	
		23	Valladoo tope	Palmyras, velvélam, veppam, karivelam, pungai, vélam, vagai, eluppai, and oonjal.	66·76	..	1,399	
		24	Conjikkoil tope	Palmyras, karivélam, velvélam, veppam, and oonjal.	19·16	..	122	
		25	Nariankulam valvoy tope	Karivélam, velvélam, veppam, vagai, tamarind, ayamaram, oonjal, and palmyras.	11·18	..	..	
		26	Arasaloor tope	Palmyras, veppam, karivélam, vagai, and velvélam ..	28·55	..	47	
		27	Morattupolliem tope	Palmyras, karivélam, and veppam	213·49	..	..	
	Karúr ..	28	Karúr	Palmyras, tamarind trees, and other trees	9·	..	1,764	
		29	Pulinjoor	Palmyras, cocoanut trees, tamarind, and other trees.	8·	..	1,061	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
North Coimbatore—(*Cont.*)	Karúr—(*Cont.*)	30	Púgalur tope	Cocoanut trees, tamarind, mangos, and other trees ..	·48	..	289	
		31	Aravakurchi tope	Palmyras and tamarind	2·87	..	415	
		32	Do.	Palmyras tamarind, and other trees	7·64	..	..	
		33	Do.	Palmyras and tamarind	3·88	..	..	
		34	Do.	Palmyras, cocoanut trees, tamarind, and other trees.	3·82	..	223	
		35	Gúdalúr tope	Palmyras, tamarind, and other trees	1·91	..	238	
		36	Do.	Palmyras, cocoanut trees, tamarind, and other trees.	7·64	..	551	
		37	Do.	Palmyras, tamarind, and other trees	5·73	..	498	
		38	Do.	Palmyras, cocoanut trees, tamarind, mango, and other trees.	9·55	..	348	
		39	Do.	Palmyras, tamarind, and other trees	1·43	..	204	
		40	Nagampally tope	Palmyras, tamarind, and other trees	5·73	..	239	
		41	Venjaman, Gúdalúr tope	Palmyras, tamarind, and other trees	..	..	..	
		42	Do.	Palmyras, tamarind, cocoanut, mango, and other trees.	1·91	..	344	
		43	Sanapparathy channel tope ..	Palmyras	..	..	197	
		44	Caradiempolliem tope	Palmyras	152·85	..	719	
		45	Oppadamangalam tope	Palmyras, cocoanut trees, tamarind, and other trees.	1·83	..	472	
		46	Do.	Palmyras, cocoanut trees, tamarind, and other trees.	1·86	..	179	
		47	Do.	Palmyras	3·86	..	591	
		48	Do.	Cocoanut trees, tamarind, and other trees	2·86	..	909	
		49	Combupolliem tope	Palmyras, cocoanut trees, and other trees	2·86	..	549	
		50	Tamarind tope, Karivélam ..	Tamarind trees, karivélam, velvélam, veppam, vagai, and palmyras.	210·22	..	..	
		51	Ganapathipolliem tamarind tope ..	Tamarind trees	18·8	..	..	
		52	Sivamali palmyra tope	Palmyras, tamarind trees, and eluppai trees	..	..	..	
		53	Thombarattipolliem tamarind tope.	Tamarind trees, velvélam, karivélam, veppam, and vagai.	31 77	..	..	
		54	Maravapolliem palmyra tope ..	Palmyras, karivélam, velvélam	99·44	..	..	
		55	Do. do. ..	Tamarind trees, palmyras, and eluppai trees ..	131·23	..	..	
		56	Do. do. ..	Palmyras, tamarind trees, karivélam, velvélam, and veppam.	..	..	..	
	Dhárápuram.	57	Mamthorai palmyra tope	Palmyras and tamarind	25·69	..	..	
		58	Palmyra tope	Palmyras and tamarind trees	131·3	..	..	
		59	Do.	Palmyras and tamarind trees	219·46	..	..	
		60	Do.	Palmyras and tamarind trees	203·39	..	..	
		61	Do.	Tamarind trees, palmyras, and cocoanut trees ..	149·46	..	..	
		62	Tamarind tope	Tamarind trees, palmyras, and cocoanut trees ..	50·98	..	..	
		63	Mettupálaiyam palmyra tope ..	Palmyras and tamarind trees	..	..	..	
		64	Sanapattipolliem tamarind tope ..	Tamarind trees, palmyras, karivélam, veppam, velvélam, ichi, and cocoanut trees.	407·55	..	..	
		65	Tamarind tope	Tamarind trees and palmyras	138·48	..	..	
		66	Palmyra tope	Palmyras and tamarind trees	256·91	..	..	
		67	Do.	Palmyras, tamarind trees, karivélam, and velvélam.	210·29	..	..	
		68	Do.	Palmyras and tamarind trees	212·10	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost During Year.	Cost To end of Year.	Remarks.
						Rs.	Rs.	
North Coimbatore—(*Cont.*)	Dhárápuram—(*Cont.*)	69	Palmyra tope	Palmyras and tamarind trees	83·62	..	..	
		70	Do.	Palmyras and tamarind trees	319·44	..	..	
		71	Do.	Palmyras tamarind trees, karivélam, and veppam ..	6 27	..	..	
		72	Do.	Tamarind, palmyras, veppam, and karivélam ..	154·85	..	..	
		73	Do.	Tamarind trees and palmyras	48·26	..	..	
		74	Do.	Palmyras and tamarind trees	7·32	..	..	
		75	Do.	Tamarind trees, palmyras, and cocoanut trees ..	94 87	..	..	
		76	Do.	Palmyras and tamarind trees	146·27	..	..	
		77	Tamarind tope	Tamarind trees	..	..	..	
		78	Palmyra tope	Palmyra and tamarind trees	251·62	..	..	
		79	Do.	Palmyra and tamarind trees	36 68	..	..	
		80	Do.	Tamarind trees	1·16	..	..	
		81	Do.	Palmyras and tamarind trees	57·9	..	..	
		82	Do.	Palmyras	9·57	..	..	
		83	Columangali fuel reserve	Veppam, palmyras, velvélam, woodapple, banyan trees, tamarind trees, vanni trees, athi, karivélam, and perumaram.	80·48	..	..	
		84	Súriyanellore palmyra tope ..	Palmyras	11·59	..	..	
		85	Candalam, malamagam fuel reserve	Vélam, karivélam, tamarind trees, panamaram, and veppam.	85·84	..	..	
		86	Tamarind tope	Tamarind trees	4·28	..	..	
		87	Do.	Tamarind trees, karivélam, vélam, vagai, velvélam, veppam, and palmyras.	134·	..	..	
		88	Nanthavanampolliem palmyra tope.	Cocoanut trees, palmyras, veppam, woodapple, murungai, vanni tree, vagai, and karivélam.	2·47	..	..	
		89	Sadayampolliem palmyra tope ..	Tamarind trees and palmyras	108·73	..	..	
		90	Moothampatti palmyra tope ..	Palmyras and tamarind trees	637·30	..	..	
		91	Tamarind tope	Tamarind trees	20·32	..	..	
		92	Pallampatti tamarind tope ..	Tamarind trees	1·	..	..	
		93	Bommanallore tamarind tope ..	Tamarind trees	2·	..	..	
		94	Valayuthampolliem palmyra tope..	Palmyras	·83	..	..	
		95	Kathabavoor palmyra tope ..	Palmyras, tamarind, elanthai and kunni	99·48	..	..	
		96	Thoppampatty palmyra tope ..	Palmyras, vélam, veppam, and karivélam	9·71	..	..	
		97	Sangarandompolliem palmyra tope.	Palmyras and tamarind trees	117·43	..	..	
		98	Mambady palmyra tope	Palmyras and tamarind trees	..	..	..	
		99	Paramiam tope	Palmyras	4·73	..	..	
		100	Tamarind tope	Tamarind trees	16·87	..	..	
		101	Mulayamboody palmyra tope ..	Palmyras, velvélam, oonjal, veppam, karivélam, parumaram, malangiluvai, tamarind trees, ichi, kodaichithi, viriamaram, vagai, athi, karukkottamaram, thasathooval, pungai, and woodapple trees.	534·78	..	..	
		102	Fruit Garden	Fruit trees, several other trees, vélam, sithaman, palmyras, tamarind, and veppam.	..	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost. During Year.	Cost. To end of Year.	Remarks.
						Rs.	Rs.	
North Coimbatore—(*Cont.*)	Dhárápuram—(*Cont.*)	103	Kannivadi tope	Palmyras and tamarind trees	472·62	..	..	
		104	Do.	Palmyras and tamarind trees	227·7	..	..	
		105	Do.	Tamarind trees, palmyras, and mango trees	24·56	..	..	
		106	Do.	Tamarind trees, cocoanut trees, and eluppai	..	..	..	
		107	Palmyra tope	Palmyras and tamarind trees	10·45	..	..	
		108	Do.	Palmyras, tamarind trees and kannikaradu	429·3	..	..	
		109	Do.	Palmyras, tamarind trees, velam, oonjal, and velleyam.	..	..	..	
		110	Komarapolliem palmyra tope ..	Tamarind trees, eluppai, and palmyras	258·51	..	..	
			Do. do.	Tamarind trees	47·86	..	..	
		111	Mango tope	Mango trees and palmyras	1·79	..	..	
		112	Do.	Palmyras, tamarind trees, veppam, vagai, poovarasam, vathanarayanam, úthian, ichi, karivélam, sethamaram, thasathooval, vélam, pungai, palamaram, and kunni.	..	..	..	
		113	Ponnivady palmyra tope	Palmyras, tamarind trees, vélam, velvélam, oonjal, and karivelam.	414·82	..	320	
		114	Nallampolliem tamarind trees ..	Tamarind trees, velvélam, oonjal, and karivélam ..	18·69	..	..	
		115	Kolathupollem tamarind tope ..	Tamarind trees, palmyras, veppam, vélam, peamaram, ichi, karivélam, athi, elanthai, oonjal, purasoo, othiamaram, pungai, banyan trees, kunni trees, vagai, variam, poovarasam, arasam, and pammaram.	339·23	..	..	
		116	Do. do.	Palmyras, karivélam, tamarind, banyan, poovarasam, vagai, and athi.	626·86	..	..	
		117	Sitharavathampolliem palmyra tope	Palmyras	31·41	..	..	
		118	Do. do. ..	Palmyras, tamarind trees, nagai, cocoanut trees, veppam, vélam, arasamaram, pungai, ichi, velvélam, karuvélam, and variam.	89·41	..	60	
		119	Tamarind tope	Tamarind trees, karivélam, veppam, and palmyras..	143·94	..	..	
		120	Do.	Tamarind trees, vélam, karivélam, veppam, purasu, vagai, and palmyras.	..	..	..	
		121	Do.	Tamarind trees, palmyras, karivélam, and velvélam..	387·94	..	..	
		122	Fruit tope	Mango trees, palmyras, eluppai, nagamaram, arasam, karivélam, cacoanut trees, and tamarind trees.	103·86	..	..	
		123	Palmyra tope	Palmyra and mango trees	33·74	..	..	
		124	Do.	Tamarind trees, velvélam, karivélam, veppam, and palmyras.	90·1	..	..	
		125	Do.	Palmyras, véiam, and veppam	161·84	..	60	
		126	Do.	Palmyras, vélam, tamarind trees, nagai, veppam, and other trees.	..	..	..	
		127	Government tope	Palmyras	396·15	..	..	
	Satyamangalam.	128	Akkara, Kodiveri tope	Palmyras and tamarind	20·79	..	874	
		129	Thadapalli channel tope	Palmyras	..	..	457	
		130	Arakankota	Palmyras	..	..	998	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
North Coimbatore—(*Cont.*)	Bhavâni ..	131	Narinjipett Government tope ..	Mango trees	3·82	..	1,402	
		132	Mathoor palmyra tope	Palmyras	16·31	..	7	
		133	Yemamangalum tope	Do.	3·27	..	..	
		134	Olacodam Ittari tope	Do.	1·9	..	32	
		135	Gathisamudram tope	Do.	7·97	..	27	
		136	Periapaliyûr tope	Do.	9·68	..	74	
		137	Kasaramungalam tope	Palmyras, veppam, tamarind, and vagai	11·18	..	21	
		138	Varathanellore tope	Palmyras	7·31	..	6	
		139	Orachali tope	Do.	10·93	..	6	
		140	Appakkodal tope	Do.	6·73	..	..	
		141	Bhavâni tope	Do.	35·24	..	135	
		142	Jamba tope	Do.	16·85	..	83	
		143	Mylambadi tope	Do.	1·24	..	7	
		144	Fuel reserve	Palmyras, vêlam, and veppam	10·57	..	..	
		145	Kasaramangalam fuel reserve ..	Karivélam	2·80	..	..	
		146	Periapulinjur fuel reserve ..	Vengai, karivélam, and tamarind	45·1	..	..	
		147	Appakkodal fuel reserve	Karivélam and veppam	2·50	..	..	
		148	Appakkodal fuel reserve	Tamarind trees, veppam, peamaram, vélam, and vagai.	17·5	..	..	
		149	Bhavâni palmyra tope	Palmyras	29·20	..	..	
		150	Jambai fuel reserve	Tamarind trees, karivélam, velvélam, vagai, and veppam.	142·23	..	..	
	Kollegâl ..	151	Kollegâl kusba tope	Karivélam	100·	..	230	
		152	Kunthur reserve	Karivélam	96·6	..	146	
		153	Lutchmipuram fuel reserve ..	Kungily, hoorugal, karivélam, ando ther trees ..	100·60	..	..	
		154	Kunthur tamarind tope	Tamarind trees and other trees	5·87	..	..	
				Total ..	11,405·10	..	27,322	
South Coimbatore.	Palladam ..	1	Tope at Anenashapolliem	Palmyra trees and karivélam trees	1·91	..	2,061	
		2	Tope at Soloor	Tamarind, veppam and teak, &c., trees	1·97	..	188	
		3	Tope at Udayárpálaiyam	Karivélam and palmyra sprouts	9·82	..	238	
		4	Tope at Irugur	Palmyra sprouts, &c., trees	9·84	..	254	
		5	Tope at Avanâshi	Palmyra, tamarind, karivélam, velvélam, sandal-wood, and woodapple, &c , trees.	57·89	..	2,133	
		6	Tope at Avanasilingumpolliem ..	Palmyra, karivélam, velvélam, tamarind, and veppam trees, &c.	19·36	..	323	
				Total ..	100·79	..	5,197	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Madura ..		1	Koilur Travellers' bungalow ..	Tamarind, margosa, eluppai, karivélam, and vagai ..	1·19	..	399	The figures in this column include the total expenditure incurred in the Jungle Conservancy Department from the commencement up to 1st April 1883 in each tope.
		2	Koilur Northern tope	Tamarind, margosa, eluppai, and palmyra	·15	..	..	
		3	Gódalûr tope	Tamarind, margosa, eluppai, karivelam, and vagai ..	1·18	..	404	
		4	Palkanooth Travellers' bungalow tope.	Tamarind, margosa, eluppai, velvélam, oosal, and konnai.	4·	..	1,212	
		5	Trichinopoly and Karûr road junction tope.	Tamarind, margosa, eluppai, karivélam, and vagai ..	1·	..	238	
		6	Tope opposite to Munsif Court, Dindigul.	Tamarind, margosa, eluppai, karivélam, and oosal ..	·59	..	515	
		7	Tope round the Race Course ground.	Tamarind, margosa, naval, eluppai, karivélam, and vagai.	4·	..	970	
		8	Navimpatti	Jack tree, tamarind, mango, eluppai, and guava tree.	12·	205	205	
		9	Tamarakulam tope	Tamarind, vembu, and eluppai	1·	..	550	
		10	Melmungalam tope	Eluppai, margosa, vagai, peenary, vembu, and moongalpannai.	1·5	..	342	
		11	Vadipatti	Tamarind, vagai, and vembu	1·	3	598	
		12	Gangoovarpatti	Tamarind, vagai, eluppai, vembu, and naval ..	4·	3	751	
		13	Allinagaram	Eluppai, naval, vembu, and vagai	2·	40	684	
		14	Mottanooth tope	Vagai, tamarind, vembu, vélam, and kodukapuli ..	2·	..	878	
		15	Virupakshi tope	Tamarind and eluppai	7·15	49	620	
		16	Sivagiripatti tope	Tamarind, eluppai, vembu, vagai, véla, puvarasoo, marotham, and oosal.	1·15	50	408	
		17	Tengarai tope	Véla, vemsoo, sandal, kallathu, tamarind, naval, vembu, eluppai, vagai, arasoo, and moongal.	6	9	885	
		18	Kothampatti Travellers' bungalow.	Vagai, tamarind, margosa, and cocoanut	6	..	..	
		19	Melûr Travellers' bungalow ..	Margosa, tamarind, and vagai	5·5	..	..	
		20	Kalmalai tope Goovakapatti ..	Peramboo, vélam, palmyra, velvélam, tamarind, eluppai, and naval.	130·52	..	198	
		21	Veerapandi	Vémbu, vagai, karivelam, and aroonellikoi	2	26	626	
				Total ..	193·03	385	10,483	
				Regular Operations.				
Tinnevelly ..	Tinnevelly.	1	Singravaram in Sindupundarai ..	Mango, teak, and margosa	·72	42	112	The total of the entries under regular plantations and cultural operations are shown in the plantation statement.
		2	Sivalapuri	Babul	50·	25	55	
		3	Nursery garden near Stochanam's bridge.	Mango, tamarind, gooseberry, and palmyra ..	2·78	54	126	
		4	Huzur Cutcherry compound at Kokarakulam.	Mango, tamarind, gooseberry, and palmyra	20·	37	96	
	Tenkarai ..	5	Katchanavilai	Odai and banyan	932·50	38	82	
		6	Nalumavadi	Vagai and margosa	522·19	38	86	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Tinnevelly—(*Cont.*)	Tenkarai—(*Cont.*)	7	Kanam	Gallnut, naval, tamarind and vagai	474·30	38	133	
		8	Kayamoli	Banyan	240·70	..	..	
		9	Kudiramoli	Odai, banyan, gallnut, vagai, and margosa	9,469·	..	46	
		10	Semmarkolum	Odai, banyan, gallnut, vagai, and margosa	801·79	41	85	
		11	Pandrapuram	Odai and banyan	1,268·78	38	85	
		12	Nadurakurchi	Vagai and margosa	2,806·38	38	54	
		13	Arasur, Patchakadu	Banyan and casuarina	2,789·45	38	86	
		14	Sadaynerikulam	Gallnut, vagai, and odai	7·	38	86	
	Otapidáram	15	Madathur Pudukolum	Babul	88·88	16	35	
	Sankaranainárkoil.	16	Marathoni	Mango, eluppai, and jack	1·	95	95	
		17	Jadakal Periyakulam	Vagai, tamarind, and maruda	5·	..	23	
		18	Matalainparaikulam	Vagai and punga	1·	22	21	
		19	Maraverikulam	Vagai, tamarind, eluppai, and babul	1·25	..	30	
		20	Melapavoor Periyakulam	Vagai and tamarind	2·	22	52	
		21	Kelapavoor Periyakulam	Vagai, maradu, naval, and mango	2·	22	42	
		22	Vadagarai Melpidagai Karisalkulam	Naval, tamarind, and eluppai	1·	22	51	
		23	Vadagarai Keelpidagai Harikesavaperiakulam.	.....	2·70	22	52	
		24	Sengulam	Marudu, tamarind, and eluppai	·80	21	51	
	Tenkási	25	Sivalperiyakulam	Marudu, tamarind, and eluppai	1·	21	23	
		26	Kodikurchi Rajakulam	Marudu, tamarind, and eluppai	2·5	..	52	
		27	Pattapathi Thovarankulam	Marudu, tamarind, and eluppai	·30	..	24	
		28	Kanakupillai Valasu Kalkuttikulam.	Vagai, pungai, tamarind, and margosa	2·	..	24	
		29	Kunavamanallur Vettaikarankulam	Marudu, pungai, vagai, and babul	1·50	..	..	
		30	Madapulikulam	.....	1·	..	23	
		31	Netur Periyakulam	Vagai, tamarind, and babul	2·50	22	44	
		32	Papuli Periyakulam	Vagai, tamarind, babul, and eluppai	3·48	22	4	
		33	Pattakurchi Kilkulam	.....	1·	21	21	
		34	Tiruchitambalam River Bank	.....	1·	..	..	
		35	Tiruchitambalam Kulam	Marudur	1·	22	58	
	Nángunéri.	36	Vallayúr garden	Mango, eluppai, bamboo, and banyan	12·8	150	307	
		37	Radhápuram tope	Margosa, vagai, and vadamadaki	1·5	40	92	
				Total ..	19,551·18	1,004	2,256	
			Cultural Operations.					
	Tinnevelly.	1	Nainarkulam Tank	Babul	..	..	60	
		2	Mallikulam Tank		..	..	60	
		3	Thamaraikulam		..	..	60	
		4	Kandiaperikulam		..	..	60	
		5	Tirumalaikulandapuram Pattakulam.		..	..	60	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Tinnevelly—(*Cont.*)	Tinnevelly.	6	Palumadai Tank bank	Babul	..	..	60	
		7	Madavakurichi Urini		..	..	12	
		8	Semboothoo		..	..	13	
		9	Kattarankulam		..	..	13	
		10	Tenkulam, Sanikanoothoo Urini		..	..	13	
		11	Sivandepatti Hammanedi		..	..	25	
		12	Omanallur		..	..	13	
		13	Piranjeri river bank		..	..	19	
		14	Nariyoothoo		..	..	19	
		15	Kaliyuthu Urini		..	..	13	
	Tenkarai	16	Nazareth	Banyan and palmyra	915·45	38	86	
		17	Kulasekharapatnam Sea Customs Office.	Tulip	..	10	70	
		18	Srívaikuntham District Munsif's Court compound.	Cocoanut, mango, jack, and orange	·90	49	109	
	Otapidáram.	19	Otapidáram kusba	Mango, bamboos, eluppai, and vagai	6·37	51	111	
		20	Tuticorin and Savandakulam	Jack, margosa, eluppai, and tamarind	5·7	125	216	
		21	Sátúr river side	Bamboos	1·45	43	103	
	Sátúr	22	Veppalapattai	Bamboos		49	109	
		23	Sátúr river	Naval, vagai, and tamarind	1·54	40	99	
	Srívilliputur	24	Sammandapuram	Mango and banyan	1·22	29	88	
		25	Sankaranainárkoil Kusba	Jack, orange, neem, and eluppai	1·28	42	102	
		26	Vásudevanellúr	Bamboos	1·2	63	63	
		27	Puliangudi Ilandaikulam Puliangudi channel	Naval and bamboos				
		28	Pattakulam	.....				
		29	Naranaperi	.....				
	Sankaranainárkoil.	30	Vásudevanellúr	.....				
		31	Naranapuram	.....	2,615·1	170	275	
		32	Rappaikulam	.....				
		33	Rappaikulam Elankulam	.....				
		34	Vásudevanellúr river bank	Mango, banyan, and bamboos				
		35	Melapuliangudi river bank	.....	..	121	391	
		36	Melachiritamani	Bamboos				
		37	Courtalam river bank	Margosa, vagai, and marudu	2·	..	22	
		38	Tenkási river bank	Marudu, casuarina, and vagai	2·	20	50	
		39	Pulyur river bank	Marudu	2·	15	15	
	Tenkási	40	Pulyur channel	Vagai, margosa, casuarina, and tamarind	1·20	15	49	
		41	Pattakurchi river bank	Marudu and punnai	·50	20	20	
		42	Mayamankurchi river bank	Marudu	1·50	20	50	
		43	Nétúr river bank	Marudu	4·	10	60	
		44	Melapavoor	Marudu	1·25	14	66	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Tinnevelly—(*Cont.*)	Ambás a mudram.	45	Kangayan channel bank	Vagai, margosa, and maradu	5·	27	51	
		46	Rangasamudram	....	2·	..	..	
		47	Pappagudi Karungalam	....	2·	..	..	
		48	Ambásamudram kasba	Eluppai and tamarind	1·	..	..	
		49	Ambásamudram Cutcherry compound.	Gooseberry	3·	41	100	
	Nángunéri	50	Valliyur market tope	Vadamaduki, vagai, and banyan	5·75	82	201	
		51	Pannagudi	Margosa and vagai	1·	52	99	
		52	Singikulam	Maradu, tamarind, and margosa	5·36	..	22	
		53	Kalakkad Channel bank	Navel, mango, tamarind, maradu, and margosa ..	5·80	37	73	
		54	Nánguneri Cutcherry compound ..	Tulip and margosa	·47	49	49	
		55	Nánguneri Travellers' bungalow ..	Tamarind, margosa, and navel	1·5	49	49	
		56	Radhapuram market	Mango, eluppai, vagai, and tamarind	1·30	..	60	
		57	Mulaikkaraipatti tope	Vagai and margosa	·50	34	82	
		58	Nángunéri market	Banyan	2·4	27	63	
		59	Thisayavilai market	Banyan and tamarind	2·76	35	83	
				Total ..	3,602·79	35	80	
						1,412	3,669	
Malabar ..	Wynaad ..	..		*Nil.*				
	Pálghat ..	1	Puliyampally	Mango trees	3·	..	..	
		2	Mango tope	Mango trees and jack trees				
	Nilambúr ..	..		*Nil.*				
				Total ..	3·	..	..	
South Canara	Mangalore ..	1	Ullal	Casuarina	13·	107	not known.	
		2	Thannir Bhavi	Casuarina	11·	565	564	
		3	Ullal (old)	Honne	14·	19	not known.	
		4	Ullal (new)	Honne	25·	221	do.	
	Kasaragód ..	5	Parappa	Teak	109·	83	16,422	
				Total ..	172·	995	16,986	
				Grand Total ..	39,385·77	14,671	2,67,202	
				Deduct total for Tinnevelly included in the Plantation Statement	23,153·97	2,416	5,925	
				Total ..	16,231·80	12,255	2,61,277	

(Form No. 62.)

APPENDIX IV.

Forest Department, Southern Circle, Madras.

Area of Forest Tracts protected from Fire during the Dry Season of 1884, to accompany Report for 1883-84.

Division.	Forest Tracts.	Up to 15th June.		During 1883-84.				Total Cost up to the End of 1883-84.	Year when Protection commenced.	Remarks.
		Area actually protected.	Total Cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
		Acres.	Rs.	Acres.	Acres.	Acres.	Rs.	Rs.		
Chingleput District.	Kámbákam Hill	..	..	..	..	..	..	..	..	Five and-a-half miles in length and 18 yards broad of boundary and fire lines were cleared on the western and southern side of the hill for Rs. 707-2-6.
North Arcot District.	Pólúr Taluk—									
	Carnatic ghur reserve	..	609	12,800	..	12,800	85	694	1881	
	Kapalúr reserve	..	..	1,280	..	1,280	..	..	1884	
	Kalúr do.	..	..	3,068	..	3,068	..	..	..	
	Alinjálamangalam reserve ..	..	..	10,502	..	10,502	..	..	..	
	Ammerdy plantation	..	..	25	..	25	..	..	..	
	Vellore Taluk—									
	Sandalwood reserve	..	375	12,800	..	12,800	..	375	1879	
	Jávadi timber do.	..	751	19,200	..	19,200	..	751	1881	
	Naikanéri do.	..	..	6,400	..	6,400	..	..	1880	
	Thellai do.	..	1,078	12,800	..	12,800	..	1,078	1881	
	Ambúr fuel do.	..	311	3,840	..	3,840	198	509	1879	
	Ambúr plantations	..	..	5	..	5	..	..	1884	
	Chandragiri Taluk—									
	Napier reserve	..	534	8,772	..	8,772	13	665	1880	
	Mamanadúr reserve	..	719	1,776	..	1,776	156	875	1874	
	Chamala do.	..	..	9,600	300	9,300	49	49	1880	
	Panapák do.	..	..	6,400	..	6,400	28	28	1880	
	Pudibatta byle	..	..	2,560	..	2,560	25	25	1880	
	Gazalamandayam plantation ..	..	..	250	..	250	..	..	1884	
	Palmanér Taluk—									
	Musali Madugu reserve	..	..	9,600	..	9,600	..	..	..	
	Morthana reserve	..	..	16,000	..	16,000	216	216	..	
	Peddur do.	..	..	9,600	..	9,600	..	..	1880	
	Baireddipalle do.	..	..	10,240	..	10,240	..	..	1884	
	Palmanér plantation	..	..	2	..	2	..	..	..	
	Nágamangalam do.	..	..	31	..	31	..	..	..	
	Piduguváripalle do.	..	..	20	..	20	..	..	..	
	Venkatagirikóta	..	..	4	..	4	..	..	..	
	Baireddipalli do.	..	..	4	..	4	..	..	..	
	Arcot Taluk—									
	Palamadi reserve	..	307	6,400	..	6,400	..	307	1881	
	Punganúr do.	..	..	6,400	..	6,400	68	68	1880	
	Kilminnel plantation	..	..	150	..	150	..	..	1884	
	Chittoor Taluk—									
	Paradarami reserve	..	..	6,400	..	6,400	73	73	1880	

Area of Forest Tracts protected from Fire during the Dry Season of 1884, to accompany Report for 1883-84—(*Continued*).

Division.	Forest Tracts.	Up to 15th June.		During 1883-84.				Total Cost up to the End of 1883-84.	Year when Protection commenced.	Remarks.
		Area actually protected.	Total Cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
North Arcot District—(*Continued*).	Chittoor Taluk—(*Continued*).	ACRES.	RS.	ACRES.	ACRES.	ACRES.	RS.	RS.		
	Iyrala reserve	..	..	6,400	..	6,400	..	..	..	
	Penamúr do	..	..	6,400	..	6,400	..	..	..	
	Chittoor do.	..	..	2,560	..	2,560	68	68	1882	
	Santhapet do.	..	..	2,560	..	2,560	..	..	..	
	Bommasamudram reserve	..	..	3,000	..	3,000	..	..	1884	
	Chílapalle	..	..	1,063	..	1,063	..	..	..	
	Keevatipalle	..	..	2,856	..	2,856	..	..	..	
	Gudiyátam Taluk—									
	Ambúrdrug reserve	..	..	5,760	..	5,760	..	..	1880	
	Vikramasi do.	..	17	161	..	161	..	17	1882	
	Tiruvallam plantation	..	..	435	..	435	..	..	1884	
	Virinjipuram do.	..	..	260	..	260	..	..	..	
	Cheyanúr do.	..	..	129	..	129	..	..	..	
	Ammundry do.	..	..	160	..	160	..	..	..	
	Thandrayaguntа plantation	..	..	2	..	2	..	..	..	
	Wálajápet Taluk—									
	Gúdalúr reserve	..	..	559	..	559	..	..	1880	
	Kanjampet do.	..	..	154	..	154	..	..	1880	
	Ammanur do.	..	..	210	..	210	..	..	1880	
	Uriyur do.	..	..	672	..	672	..	..	1880	
	Banávaram do.	..	..	1,071	..	1,071	47	47	..	
	Anapák do.	..	..	61	..	61	..	..	..	
	Thengal do.	..	..	120	..	120	..	..	..	
	Ammúr do.	..	..	6,018	200	5,818	..	..	1884	
	Kolathúr do.	..	..	1,781	..	1,781	..	..	..	
	Minnel do.	..	..	1,395	..	1,395	..	..	..	
	Vanavedu do.	..	..	30	..	30	..	..	..	
	Arkónam Sub-Magistrate's compound.	..	..	5	..	5	..	..	..	
	Head Assistant Collector's compound.	..	..	4	..	4	..	..	..	
	Arkónam plantation	..	..	37	..	37	..	..	..	
	Wandiwash Taluk—									
	Ponnur reserve	..	..	1,676	..	1,676	..	..	1880	
	Venkundram reserve	..	..	822	..	822	..	..	..	
	Badúr do.	..	..	829	..	829	..	..	..	
	Nambedu do.	..	..	929	..	929	..	..	..	
	Kodiyalam do.	..	..	255	..	255	..	..	..	
	Nedungal do.	..	..	3,632	..	3,632	..	..	1883	
	Vishamangalam do.	..	..	1,148	..	1,148	..	..	..	
	Nedungundram do.	..	..	1,798	..	1,798	..	..	..	
	Brammacatteri do.	..	..	1,589	..	1,589	..	..	..	
	Total ..	173,525	4,701	233,470	500	232,970	1,144	5,845	..	

Area of Forest Tracts protected from Fire during the Dry Season of 1884, to accompany Report for 1883-84—(*Continued*).

Division.	Forest Tracts.	Up to 15th June.		During 1883-84.				Total Cost up to the End of 1883-84.	Year when Protection commenced.	Remarks.
		Area actually protected.	Total Cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
South Arcot District.	Tiruvannámalai Kasba—	ACRES.	RS.	ACRES.	ACRES.	ACRES.	RS.	RS.		
	Anámalai section, 3,000 acres. Kavathimalai section, 7,500 acres. Chengam Sub-division, same taluk— 2. Thenmalai inclusive of Muthunai and Damaracadu 24,000. 3. Chinnasamudram 6,500 .. 4. Chockadivalasai Malai 4,000 .. 5. Perungolathúr Sami Malai 8,000. Kallakurchi Taluk— 6. Thagarai and slopes of Chinnatripatti Malai 11,000.	17,510	896	63,910	* 341	63,569	144	1,040	From dry season 1878 inclusive. 1877 and 1883-84. 1878	The 90 acres of difference shown in this statement between area of reserves and that attempted to be protected is the land occupied by fire traces, &c., approximately.
Salem District.	Vadugampatti	..	..	1,000	30	970	60	..	1866-67	
	Morur	..	..	400	30	370	21	..	..	
	Mallapuram	..	..	300	30	270	15	..	..	
	Burgur	..	..	125	..	125	7	..	..	
	Pudur	..	..	500	..	500	28	..	..	
	Ammaneri	..	..	125	30	95	10	..	1871-72	
	Pellapalli	..	..	450	30	420	24	..	..	
	Karippa Kombi	..	..	300	30	270	15	..	..	
	Kanjeri	..	..	300	30	270	15	..	1880-81	
	Pannikaradu	..	..	1,075	60	1,015	58	..	1881-82	
	Karuvathuparai	..	..	400	30	370	21	..	..	
	Thogarapalli	..	..	75	..	75	4	..	1880-81	
	Uttankarai	..	..	250	..	250	14	..	1874-75	
	Singarapet	..	..	1,200	..	1,200	63	..	..	
	Harúr	..	..	500	..	500	28	..	..	
	Total ..	12,261·42	4,065	7,000	300	6,700	383	4,448	..	
Trichinopoly and Tanjore Districts.	....	*Nil.*								
Coimbatore District.	North Coimbatore	..	† 397	*Nil.*						
	South Coimbatore—									
	No. I reserve	..	..	..	..	..	..	..	..	
	No. II reserve	..	..	..	..	..	..	..	..	
	Palar reserve	..	..	..	..	..	..	..	..	
	Sholakarai reserve	..	..	8,327	200	8,127	653	‡ 1,324	..	
	Total ..	4,821	274	8,327	200	8,127	653	1,324	..	

* Occurred in five reserves.
† Sholakarai reserve was transferred to South Coimbatore and with it the cost, Rs. 397, which is added to the total cost of South Coimbatore.
‡ Does not include the pay of watcher for March, April, and May 1883, and February 1884.

Area of Forest Tracts protected from Fire during the Dry Season of 1884, to accompany Report for 1883-84—(*Continued*).

Division.	Forest Tracts.	Up to 15th June.		During 1883-84.				Total Cost up to the End of 1883-84.	Year when Protection commenced.	Remarks.
		Area actually protected.	Total Cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
		Acs.	Rs.	Acs.	Acs.	Acs.	Rs.	Rs.		
Madura District.	XXI—Alagarmalai	3,000	2,060	12,000	..	12,000	610	2,763	1882-83	
	X—Pambar	..		5,120	204	4,916	179	179	1883-84	
	Total ..	3,000	2,060	17,120	204	16,916	789	2,942		
Tinnevelly District.	....					*Nil.*				
Malabar District.	Wynaad Division—									
	Coodracote	4,480	13	4,480	2,560	1,920	142	155	1882-83	Resides, these 114 timber depôts, each 30′ square, have been fire-traced in the first four forest divisions.
	Padry, Chedleth, Beni and Cardamom forests.					*Nil.*				
	Total ..	4,480	13	4,480	2,560	1,920	142	155		
	Pálghat Division—									
	Walayar reserves	3,017	2,338	3,017	200	2,817	372	2,710	1873-74	
	Chenat Nair Forests not protected.	..	..	..	..	..	..	..		
	Nilambur Division—									
	Nellicutta	..	..	1,799·38	..	1,799·38	..	45	1883-84	
South Canara District.	Parappa	..	..	115	..	115	..	68	1882-83	
	Pillarkan	..	..	320	..	320	89	21	1883-84	
	Total ..	..	..	435	..	435	* 89	89		
	Grand Total ..	218,614·42	14,744	339,558·38	4,305	335,253·38	3,716	18,598		

* Includes Rs. 38 spent last year; Rs. 4-12-0 were spent in protecting 162 logs lying in the forests.

(Form No. 63.)

APPENDIX V.

Statement of Prosecutions for Breaches of Forest Rules during 1883-84.

Forest Division and Civil District.	Cases pending from 1882-83.	New Cases of the Year.					Total Cases.	Disposed of during the Year.						Cases pending at close of year.	Remarks.
		Injury to Forests by Fire.	Unauthorised 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. Chingleput ..	..	..	I.P.C., 379 3 cases.	..	..	3	3	2	2	1	2	3	4	..	
2. North Arcot ..	..	1	16	..	3	20	20	12	23	8	47	20	70	..	
3. South Arcot ..	(*a*) 5	..	14	2	11	27	32	20	59	5	21	25	80	7	(*a*) Six shown last year.
4. Salem	6	29	3	1	49	82	88	58	250	20	94	78	344	10	
5. Trichinopoly ..	(*b*) 1	..	13	1	..	14	15	7	33	6	17	13	50	2	(*b*) Nothing shown last year.
6. Tanjore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
7. Coimbatore—															
North ..	..	..	..	..	40	40	40	35	79	5	35	40	114	..	
South ..	1	..	..	..	52	52	53	46	171	7	25	53	196	..	
8. Madura	..	..	51	3	9	63	63	51	183	12	92	63	275	..	
9. Tinnevelly ..	2	..	46	..	2	48	50	45	189	5	22	50	211	..	
10. Malabar—															
Wynaad and Pálghat ..	1	..	3	..	..	3	4	2	7	1	3	3	10	1	
Nilambúr ..	1	..	1	..	1	2	3	..	..	2	2	2	2	1	
11. South Canara ..	(*c*) 2	195	18	..	2	215	217	171	190	42	65	213	255	4	(*c*) One last year.
Total ..	19	225	168	7	169	569	588	449	1,186	114	425	563	1,611	25	

FORM No. 64.)

APPENDIX F.

DETAILED STATEMENT showing the Revenue of the Southern Circle for the Official Year 1883-84.

Budget Heads.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.
1	2	3	4	5	6	7	8
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Timber and other Produce removed from the Forests by Government Agency—							
(a) Timber	187 0 0	10,949 13 0	3,188 11 10	2,034 10 5	83 5 0	..	700 5 4
(b) Firewood and charcoal	..	2,631 12 6	7,938 9 8	..	413 4 11	..	..
(c) Bamboos	..	..	1 0 0	22 8 0	..	..	..
(d) Sandalwood	..	..	69 0 0	35 0 0	..	..	16,636 8 6
(e) Grass and other minor produce	..	108 4 0	3,564 11 8	36,027 8 11	..	..	2,049 0 1
II. Timber and other Produce removed from the Forests by Consumers or Purchasers—							
(a) Timber	..	8,554 11 10	9,234 0 7	7,429 7 1	1,315 8 2	174 0 0	6,664 12 0
(b) Firewood and charcoal	7,216 9 1	24,736 5 4	5,253 9 9	18,838 11 9	5,211 0 9	3,063 9 1	3,537 8 2
(c) Bamboos	..	15,072 5 4	1,427 4 6	16,827 4 6	2,535 11 3	..	10,664 11 0
(d) Grazing and fodder grass	..	458 8 2	0 12 7	..	2,011 2 6	47 8 0	..
(e) Other minor produce	2,370 11 2	13,890 10 3	3,707 2 8	14,579 8 2	2,607 15 0	1,083 15 9	20,869 8 8
III. Confiscated drift and waifwood	37 2 6	96 9 9	63 12 6	290 6 5	8 5 3	..	128 0 6
IV. Revenue from Forests not managed by Government—							
(a) Duty on foreign timber and other forest produce	..	..	0 6 0	..	..	..	..
(b) Revenue from shared and private forests	..	..	..	..	..	..	..
V. Miscellaneous—							
(a) Fines and forfeitures	..	2 0 0	..	1 5 0	3 11 4	..	..
(b) Refunds	44 12 6	313 3 8	66 8 0	1,710 9 4	..	38 1 7	266 12 7
(c) Other sources	..	115 1 5	..	966 0 7	16 2 6	50 15 4	573 9 6
Total Receipts	9,856 3 3	76,929 5 3	34,515 9 9	98,763 0 2	14,206 2 8	4,458 1 9	62,090 12 4
Add Book Adjustment	..	..	..	..	..	..	..

Budget Heads.	South Coimbatore.	Madura.	Tinnevelly.	Wynaad and Pálghat.	Nilambúr.	South Canara.	Total.
	9	10	11	12	13	14	15
I. Timber and other Produce removed from the Forests by Government Agency—	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
(a) Timber	17,215 1 1	..	1,522 2 0	19,403 9 4	54,940 7 4	175 12 0	1,10,400 13 4
(b) Firewood and charcoal	..	828 1 6	..	3 0 0	153 11 4	893 7 3	12,861 15 2
(c) Bamboos	..	..	..	513 7 4	1,567 3 8	4 8 6	2,108 11 6
(d) Sandalwood	2 4 0	..	..	..	..	..	16,742 12 6
(e) Grass and other minor produce	70 0 0	..	1,774 8 8	956 12 11	..	9,961 10 11	54,512 9 2
II. Timber and other Produce removed from the Forests by Consumers or Purchasers—							
(a) Timber	7,009 10 6	5,885 13 8	8,961 9 9	..	..	1,232 3 5	56,461 13 0
(b) Firewood and charcoal	11,441 8 1	11,021 14 5	14,485 15 2	..	..	15,225 1 5	1,20,031 13 0
(c) Bamboos	9,589 3 0	2,352 7 6	474 12 8	..	..	383 5 0	59,327 0 9
(d) Grazing and fodder grass	1,565 12 0	7,621 2 0	53 4 0	..	..	..	11,758 1 3
(e) Other minor produce	10,155 9 3	8,207 9 11	7,732 6 5	..	..	14 4 0	85,219 5 3
III. Confiscated drift and waifwood	376 9 5	133 5 5	431 8 1	37 8 0	..	760 7 0	2,363 10 10
IV. Revenue from Forests not managed by Government—							
(a) Duty on foreign timber and other forest produce	..	..	..	..	..	..	0 6 0
(b) Revenue from shared and private forests	..	..	..	..	..	..	..
V. Miscellaneous—							
(a) Fines and forfeitures	11 0 0	2 0 0	25 0 0	..	..	..	45 0 4
(b) Refunds	275 4 7	185 12 3	874 3 9	941 8 6	556 1 6	468 5 6	5,741 3 3
(c) Other sources	2,121 13 6	3,439 7 10	576 12 9	17 0 0	184 8 0	21 0 6	8,082 7 11
Total Receipts	59,833 11 5	39,677 10 6	36,912 3 3	21,872 14 1	57,401 15 10	29,140 1 0	5,45,657 11 3
Add Book Adjustment	..	..	..	..	..	..	..

DETAILED STATEMENT of Expenditure under A. "Conservancy and Works" in the Southern Circle for the Official Year 1883-84.

Budget Heads.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.
1	2	3	4	5	6	7	8
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Timber and other produce removed from the Forests by Government Agency—							
(a) Timber	26 4 0	6,528 4 8	1,985 1 2	1,722 12 0	11 12 0	..	350 0 0
(b) Firewood and charcoal	..	2,333 9 8	309 15 0	..	418 2 1	..	..
(c) Bamboos	..	0 8 0	..	..	..	..	3,620 15 10
(d) Sandalwood	..	494 8 2	57 12 0	613 5 0	..	..	1,300 0 0
(e) Grass and other minor produce	..	305 10 5	185 9 3	1,249 8 0	51 1 4	..	..
II. Timber and other produce removed from the forests by consumers or purchasers	..	2,697 7 3	549 8 1	2,962 0 10	1,298 1 8	..	2,435 11 7
III. Confiscated drift and waifwood	..	0 10 0	34 0 0	19 8 5	..	..	22 3 8
IV. Revenue from Forests not managed by Government—							
(a) Duty on foreign timber and other forest produce	..	..	..	..	..	..	..
(b) Revenue from shared and private forests	..	..	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government	..	..	..	..	..	..	..
VI. Live and dead stock—							
(a) Purchase of cattle	..	..	..	..	..	..	..
(b) Feed and keep of cattle	..	..	..	..	..	..	..
(c) Plant, tools, and instruments	..	..	..	..	..	..	..
VII. Communications and Buildings—	15 2 0	1,168 8 0	154 4 8	..	44 0 0	23 9 3	86 15 0
(a) Roads and bridges	..	5,568 2 1	..	848 13 2	..	16 0 0	52 14 0
(b) Buildings	..	905 14 9	68 4 0	281 5 7	..	..	..
(c) Other works	..	..	148 3 6	..	..	..	105 0 0
VIII. Demarcation, Improvement, and extension of Forests—	..	..	..	..	..	..	..
(a) Demarcation	707 2 6	6,070 9 1	150 0 0	115 9 0	158 5 7	..	83 9 0
(b) Compensation for land and rights	..	10 0 0	..	..	..	..	..
(c) Surveys and working plans	..	..	56 13 6	489 0 0	..	..	..
(d) Plantations	2,858 5 3	5,056 4 9	4,578 15 10	223 10 6	3,885 2 3	5,954 14 7	746 4 0
(e) Protection from fire	..	1,143 13 0	143 12 6	1,442 14 4	..	..	..
(f) Other works	266 0 0	6,763 15 1	6,220 7 7	12,847 10 11	1,363 0 3	..	136 15 0
IX. Miscellaneous—							
(a) Refunds	34 2 9	..	60 0 0	1,866 0 7	..	3 1 1	26 15 10
(b) Law charges	..	7 0 0	..	..	..	..	..
(c) Other charges	..	65 8 0	10 6 6	105 3 4	20 0 0	..	47 14 6
Total Expenditure adjusted	3,907 0 6	39,120 4 11	14,713 1 7	24,787 5 8	7,249 9 2	5,997 8 11	9,015 6 5
Total disallowed	345 5 4	2,195 6 2	111 6 9	2,912 0 6	902 2 7	..	564 7 9
Total Outstanding Advance	416 8 8	1,808 1 11	..	2,135 0 10	219 14 10	9 4 3	3,840 11 7
Total of A. "Conservancy and Works"	4,668 14 6	43,123 13 0	14,824 8 4	29,834 7 0	8,371 10 7	6,006 13 2	13,420 9 9

Detailed statement of Expenditure under A. "Conservancy and Works" in the Southern Circle for the Official Year 1883-84—(*Continued*).

Budget Heads.	South Coimbatore.	Madura.	Tinnevelly.	Wynaad and Pálghat.	Nilambúr.	South Canara.	Total.
	9	10	11	12	13	14	15
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Timber and other produce removed from the Forests by Government Agency—							
(a) Timber	4,908 6 2	..	407 13 1	3,464 3 0	7,979 0 0	50 11 8	27,434 3 9
(b) Firewood and charcoal	..	498 8 11	..	..	..	20 3 1	3,580 6 9
(c) Bamboos	..	..	..	243 4 0	223 6 8	..	467 2 8
(d) Sandalwood	..	..	..	..	..	..	4,786 9 0
(e) Grass and other minor produce	24 1 0	..	752 5 10	211 9 10	..	149 2 0	4,228 15 8
II. Timber and other produce removed from the forests by consumers or purchasers	2,706 8 8	3,443 12 5	1,442 1 7	..	..	575 0 7	18,110 4 8
III. Confiscated drift and waifwood	23 8 6	8 7 4	107 1 6	..	..	..	215 7 5
IV. Revenue from Forests not managed by Government—							
(a) Duty on foreign timber	..	..	..	..	..	..	..
(b) Revenue from shared and private forests	..	..	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government	..	..	..	..	1,462 3 3	..	1,462 3 3
VI. Live and dead stock—							
(a) Purchase of cattle	..	..	..	40 0 0	..	..	40 0 0
(b) Feed and keep of cattle	58 1 6	..	..	2,155 1 8	894 13 6	..	3,218 8 11
(c) Plant, tools, and instruments	73 1 3	141 0 8	89 7 4	144 3 0	245 4 7	..	2,143 13 6
VII. Communications and Buildings—							
(a) Roads and bridges	296 1 8	..	3,923 10 0	140 8 0	31 0 0	..	10,808 2 11
(b) Buildings	370 4 3	1,084 0 0	101 0 0	8,966 0 5	194 2 0	21 4 6	12,097 3 6
(c) Other works	15 0 0	..	..	25 12 0	..	..	188 15 6
VIII. Demarcation, Improvement, and extension of Forests—							
(a) Demarcation	870 8 0	2,424 4 2	1,726 4 0	420 2 0	..	1,701 13 7	14,428 2 11
(b) Compensation for land and rights	7,927 13 9	..	371 0 0	..	..	..	8,308 13 9
(c) Surveys and working plans	83 10 0	..	220 6 0	218 12 0	..	1 7 0	1,070 0 6
(d) Plantations	..	1,131 12 5	287 5 8	817 13 3	5,672 2 7	1,088 8 0	32,301 3 1
(e) Protection from fire	541 0 0	943 8 6	..	620 11 0	729 2 0	21 2 0	5,585 15 4
(f) Other works	731 11 8	..	4,156 13 7	347 4 10	480 13 5	116 6 6	33,431 2 10
IX. Miscellaneous—							
(a) Refunds	98 4 7	188 12 3	825 4 3	831 6 2	..	157 6 8	4,091 6 2
(b) Law charges	..	..	86 4 0	..	..	..	93 4 0
(c) Other charges	82 6 8	..	73 3 8	91 8 1	120 8 0	..	616 10 9
Total Expenditure adjusted	18,810 7 8	9,864 2 8	14,570 0 6	18,738 3 3	18,032 8 0	3,903 1 7	1,88,708 12 10
Total disallowed	100 2 11	18 4 8	1,011 15 2	1,795 9 10	21 6 0	227 11 10	10,265 15 6
Total Outstanding Advance	622 1 1	456 2 3	6,900 7 8	1,019 3 3	862 13 11	6,917 8 5	25,207 14 8
Total of A. "Conservancy and Works"	19,532 11 8	10,338 9 7	22,482 7 4	21,553 0 4	18,916 11 11	11,048 5 10	2,24,122 11 0

Detailed Statement of Expenditure under A. "Conservancy and Works" and B. "Establishment" in the Southern Circle for the Official Year 1883-84.

Budget Heads.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.	South Coimbatore.
1	2	3	4	5	6	7	8	9
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Salaries—								
(a) Conservator	..	..	..	..	..	..	..	..
(b) Superior officers	1,250 0 0	4,888 11 4	9,550 0 0	8,700 0 0	5,254 13 5	..	10,049 3 2	3,490 5 2
(c) Subordinate, Forest, and Depôt establishments	939 7 4	9,136 1 11	9,034 10 3	8,387 11 6	3,182 13 10	917 13 5	4,704 8 11	8,664 5 3
(d) Office establishments	352 2 8	1,870 0 0	1,873 3 0	1,821 4 1	1,129 5 9	213 10 8	1,786 0 3	1,784 3 2
(e) Deputation and special allowances	..	5 13 11	..	400 0 0	304 12 11	..	..	436 3 4
II. Travelling Allowances—								
(a) Conservator	..	..	..	..	..	..	..	..
(b) Superior officers	611 4 0	1,746 12 4	2,640 0 0	1,833 10 3	1,174 1 3	..	1,829 7 10	1,734 3 1
(c) Subordinate, Forest, and Depôt establishments	95 5 4	2,683 5 2	1,785 13 9	1,648 6 11	1,188 0 8	279 7 7	1,336 1 4	2,473 2 0
(d) Office establishments	35 10 8	244 8 0	268 3 2	221 6 4	77 4 0	61 2 4	84 11 10	124 2 8
III. Contingencies—								
(a) Stationery	..	4 13 2	6 13 8	25 2 6	5 2 6	1 7 9	101 10 0	6 8 3
(b) Carriage of tents and records	26 11 0	200 0 0	86 15 5	218 9 4	7 13 0	59 15 1	36 0 0	130 11 0
(c) Rents, rates, and taxes	..	24 0 0	106 10 8	..	..	2 14 0	..	..
(d) Pay of Police guards	..	..	..	..	..	..	..	..
(e) Official postage	10 2 0	334 6 0	371 12 8	399 15 6	130 9 6	19 9 0	214 1 6	210 8 0
(f) Sundries	16 0 0	740 10 0	60 9 6	775 5 10	110 0 9	234 9 1	445 3 6	361 13 3
Total of B. "Establishments"	3,336 11 0	21,879 1 10	25,784 12 1	24,431 8 3	12,564 13 7	1,790 8 11	20,587 0 4	19,416 1 2
Total of A. "Conservancy and Works"	4,668 14 6	43,123 13 0	14,824 8 4	29,834 7 0	8,371 10 7	6,006 13 2	13,420 9 9	19,532 11 8
Grand Total of all Expenditure	8,005 9 6	65,002 14 10	40,609 4 5	54,265 15 3	20,936 8 2	7,797 6 1	34,007 10 1	38,948 12 10

Budget Heads.	Madura.	Tinnevelly.	Wynaad and Pálghat.	Nilambúr.	South Canara.	Central Office.	Total.
	10	11	12	13	14	15	16
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Salaries—							
(a) Conservator	..	..	..	..	..	15,122 9 3	15,122 9 3
(b) Superior officers	3,850 0 0	7,800 0 0	6,599 15 5	5,954 13 5	838 11 4	13,600 0 0	81,826 9 3
(c) Subordinate, Forest, and Depôt establishments	5,905 2 1	5,720 14 0	5,867 7 0	1,755 7 4	4,762 13 6	60 0 0	69,039 4 4
(d) Office establishments	1,248 7 8	1,718 5 6	2,095 1 7	1,265 0 11	1,284 9 5	11,137 4 6	29,578 11 2
(e) Deputation and special allowances	50 0 0	..	365 3 7	..	..	..	1,562 1 9
II. Travelling Allowances—							
(a) Conservator	..	..	..	..	..	2,663 7 6	2,663 7 6
(b) Superior officers	1,938 6 10	1,368 9 0	1,649 8 3	1,648 13 0	274 6 0	2,270 0 0	20,719 1 10
(c) Subordinate, Forest, and Depôt establishments	1,562 1 9	1,298 10 3	1,412 12 0	431 3 5	1,277 0 6	107 14 0	17,579 4 8
(d) Office establishments	264 8 2	170 5 7	134 5 8	28 6 0	191 5 8	831 7 7	2,737 7 8
III. Contingencies—							
(a) Stationery	..	4 13 0	15 14 6	14 6 6	..	30 3 3	216 15 1
(b) Carriage of tents and records	86 8 0	61 11 6	109 1 9	..	172 6 4	448 15 1	1,645 5 6
(c) Rents, rates, and taxes	..	..	179 13 5	..	..	900 0 0	1,213 6 1
(d) Pay of Police guards	..	..	..	..	..	..	..
(e) Official postage	271 9 6	430 5 0	145 12 6	50 5 0	288 1 0	605 11 11	3,482 13 1
(f) Sundries	103 4 6	511 4 3	545 0 4	29 10 3	263 10 8	2,756 13 11	6,953 15 10
Total of B. "Establishments"	15,280 0 6	19,084 14 1	19,120 0 0	11,178 1 10	9,353 0 5	50,534 7 0	2,54,341 1 0
Total of A. "Conservancy and Works"	10,338 9 7	22,482 7 4	21,553 0 4	18,916 11 11	11,048 5 10	..	2,24,122 11 0
Grand Total of all Expenditure	25,618 10 1	41,567 5 5	40,673 0 4	30,094 13 9	20,401 6 3	50,534 7 0	4,78,463 12 0

(From No. 69.)

Forest Department, Southern Circle, Madras.

Statement of Timber and other Produce cut and collected by Government Agency during 1883-84.

District.	Range Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of Year.		Collected during the Year.		Total.		Disposed of during Year.			Balance at end of Year.		Remarks.
			Number.	Cubic feet.	Number.	Cubic feet.	Number.	Cubic feet.	How disposed of	Number.	Cubic feet.	Number.	Cubic feet.	
Chingleput ..	..	Casuarina poles ..	..	..	120	..	120	..	Taken to Sale Depôt ..	120	..	..	..	
North Arcot ..	Forest. ..	Redwood	..	..	..	Tons 775	..	Tons 775	Removed to the Sale Depôt.	..	Tons 775	..	..	
		Sandalwood ..	..	..	..	Mds. 679	..	Mds. 679	Do.	..	Mds. 679	..	..	
		Casuarina posts ..	..	..	1,047	..	1,047	..	Do.	1,047	..	..	..	
		Fuel	..	..	..	Tons 339	..	Tons 339	Do.	..	Tons 339	..	..	
		Forest produce ..	..	..	..	Mds. 700	..	Mds. 700	Do.	..	Mds. 700	..	..	
	Forset Depôt.	Teak	..	..	..	176	..	176	..	..	..	..	176	
South Arcot ..	Forest ..	Miscellaneous logs.	552	1,321	2,866	7,014	3,418	8,335	Sold	712	1,717	1,210	2,555	
		Sandalwood	..	..	Mds. 150	..	Mds. 150	..	Removed to Sale Depôt.	1496	4,063			
									Do.	Mds. 150	..	..	..	
		Total Timber	552	1,321	2866 / Mds. 150	7,190	3,418 / Mds. 150	C. ft. 8,511	..	C. ft. 2208 / Mds. 150	5,780	1,210	2,731	
	Forest ..	Firewood and Charcoal	..	..	Tons 2,470	..	Tons 2,470	..	Removed to Sale Depôt.	Tons 2,470	..	..	..	
		Bamboos	..	..	Cart-lds 2	..	Cart-lds 2	..	Do.	Cart-lds 2	..	..	..	
	Grass and other Produce.	..	..	..	Mds. 40,514	..	Mds. 40,514	..	Do.	Mds. 40,514	..	..	..	
Salem	Forest ..	Junglewood post ..	..	..	75	..	75	..	Removed to Sale Depôt.	75	..	..	..	
		Miscellaneous logs.	..	..	..	1,779	..	1,779	Do.	..	1,779	..	..	
		Sandalwood ..	..	..	Mds. 172	..	Mds. 172	..	Do.	Mds. 172	..	..	..	
		Bamboos	..	..	No. 200	..	No. 200	..	Do.	No. 200	..	..	..	
		Forest produce ..	..	..	Mds. 5,691	..	Mds 5,691	..	Do.	Mds. 5,691	..	..	..	
Trichinopoly ..	Forest ..	Junglewood ..	..	..	169	Not given.	169		Sold	169	..	..	..	
		Firewood	Tons 202	..	Tons 669	..	Tons. 871	..	Sold	Tons 193	..	Tons. 678	..	
Tanjore ..			..	..	..	..	..	*Nil.*	..	..	..	..	..	
Coimbatore — North Coimbatore Division.	Forests ..	Teak	..	..	115	700	..	..	Removed to Sale Depôt.	115	700	..	..	
		Sandalwood ..	..	..	Mds. 5,287	..	..	..	Do.	5,287	..	..	..	
		Forest produce ..	..	..	2,728	..	..	..	Do.	2,728	..	..	..	

Statement of Timber and other Produce cut and collected by Government Agency during 1883-84—(*Continued*).

District.	Range Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of Year.		Collected during the Year.		Total.		Disposed of during Year.			Balance at end of Year.		Remarks.
			Number.	Cubic feet.	Number.	Cubic feet.	Number.	Cubic feet.	How disposed of.	Number.	Cubic feet	Number.	Cubic feet.	
Coimbatore—(*Contd.*) South Coimbatore Division.	Forest	Teak	1,850	28,749	..	..	1,850	28,749	Taken to Sale Depôt ..	743	10,943	1,107	17,806	
		Blackwood ..	147	2,592	..	..	149	2,660	Do.	13	229	136	2,431	
	Bólumputty & Méttupál a i-yam.	..	2/149	67/2666	..	..	..	..	..	..	..	..	..	
		Junglewood ..	56	1,312	..	..	58	1,426	Taken to Sale Depôt ..	..	..	58	1,426	
	Bólumputty & Méttupál a i-yam.	..	2/58	114/1426	..	..	..	..	..	..	..	..	..	
Madura ..	Kodaikánal ..	Firewood ..	..	..	Tons 241	..	Tons 241	..	Removed to Sale Depôt.	Tons 241	..	..	..	
Tinnevelly ..	Forest ..	Junglewood ..	..	..	196	302	196	302	Removed to Sale Depôt.	196	302	..	..	
		Forest Produce	..	..	..	Mds. 191	..	Mds. 191	Do.	..	Mds. 191	..	..	
			..	..	..	Meas. 14	..	Meas. 14	..	..	Meas. 14	..	..	
			..	..	..	1,444 Cottalis	..	1,444 Cottalis	..	..	1,444 Cottalis	..	..	
Malabar. Wynaad ..	Forest ..	Teak	..	24,620	Pieces 17	21,743	17	46,363	Sold	No. 17	21,226	..	25,137	
		Blackwood ..	..	1,788	..	12,946	..	14,734	,, ...	..	6,596	..	8,138	
		Other Junglewood	..	2,171	..	2,325	..	4,496	,, ...	..	1,841	..	2,655	
		Bamboos	..	..	27,207	..	27,207	..	,, ...	27,207	..	..	..	
Pálghát ..	Forest ..	Blackwood ..	..	43	..	..	..	43	..	..	..	..	43	
		Junglewood ..	..	3,070	..	1,657	..	4,727	Sold	..	1,313	..	1,540	
		Teak	..	..	..	27	..	27	Removed to Sale Depôt.	..	1,874	..	27	
		Bamboos	..	..	400	..	400	..	Do.	150	..	..	..	
		Firewood	..	..	Cartld 3	..	Cartld 3	..	Sold	250	..	..	..	
		Forest produce ..	..	..	No. 500 Rattan.	..	No. 500	..	,, ...	Cartload 3	..	..	..	
									,, ...	No. 500	..	..	..	
Nilambúr.	Nellakóta ..	Teak	..	..	378	15,545	378	15,545	Removed to Sale Depôt.	378	15,545	..	..	
		Junglewood ..	..	..	738	34,435	738	34,435	Do.	738	34,435	..	..	
		Saplings	..	..	63,712	..	63,712	..	Do.	63,712	..	..	..	
		Bamboos	..	..	20,134	..	20,134	..	Do.	20,134	..	..	..	
South Canara ..	Forest ..	Blackwood ..	..	..	60	1,355	60	1,355	..	..	..	60	1,355	
		Junglewood ..	..	..	102	2,391	102	2,391	..	..	..	102	2,391	
		Firewood	..	..	Tons 207	..	Tons 207	..	Removed to Sale Depôt.	Tons 207	..	..	..	
		Forest produce ..	..	..	Mds. 8,086	..	Mds. 8,086	..	Do.	Mds. 8,086	..	..	..	

(FORM No. 70.)

Forest Department, Southern Circle, Madras.

Receipts and Issues of Timber and other Produce in Sale Depôts during the Year 1883-84.

District.	Name of Depôt.	Description of Timber and other Produce.	On hand, 1st April 1883.		Received during the Year.			Total.		Disposed of during the Year.			Balance on 31st March 1884.		Remarks.
			Number or Quantity.	Cubic Feet.	Whence received.	Number or Quantity.	Cubic Feet.	Number or Quantity.	Cubic Feet.	How disposed of.	Number or Quantity.	Cubic Feet.	Number or Quantity.	Cubic Feet.	
Chingleput ..	..	Casuarina poles ..	..	..	Sale depôt.	No. 120	..	120	..	Supplied to Telegraph Department.	120	..	..	..	
North Arcot ..	Sale depôt	Redwood	Tons. 225	..	Sale depôt.	Tons. 775	..	Tons. 1,000	..	Sold ..	Tons. 628	..	Tons. 372	..	
		Sandalwood ..	Mds. 408	..	..	Mds. 679	..	Mds. 1,087	..	..	..	..	Mds. 1,087	..	
		Casuarina posts ..	..	..	..	No. 1,047	..	No. 1,047	..	Supplied to Telegraph Department.	No. 1,047	..	..	..	
		Fuel	Tons. 33	..	..	Tons. 339	..	Tons. 372	..	Supplied to Central Jail and sold.	Tons. 343	..	Tons. 29	..	
		Forest produce ..	..	..	..	Mds. 700	..	Mds. 700	..	Sold ..	Mds. 700	..	..	..	
South Arcot ..	Sale depôt	Miscellaneous logs.	140	359	Forest depôt.	1,496	4,063	1,636	4,422	Sold ..	1,572	4,239	64	183	
		Sandalwood ..	Mds. 800	..	..	Mds. 150	..	Mds. 950	..	..	Mds. 12	..	Mds. 938	..	
		Firewood	..	..	..	Tons. 2,470	..	Tons. 2,470	..	..	Tons. 2,470	..	Tons. ..	..	
		Charcoal	..	..	..	Tons. $\frac{1}{10}$	..	Tons. $\frac{1}{10}$	..	..	Tons. $\frac{1}{10}$	..	Tons. ..	..	
		Bamboos	..	..	..	Cart-loads. 2	Cart-loads. 2	Cart-loads. 2	Cart-loads. 2	..	Cart-loads. 2	Cart-loads. 2	..	..	
		Forest produce ..	Mds. 398	..	..	Mds. 40,514	..	Mds. 40,912	..	..	Mds. 40,897	..	Mds. 15	..	
Salem	Sale depôt	Miscellaneous logs.	..	767	Sale depôt.	..	1,779	..	2,546	Sold ..	..	1,275	..	475	
		Junglewood posts.	..	..	..	No. 75	..	..	..	Supplied to other departments.	No. 75	796			
		Sandalwood ..	Mds. 2,794 + 337 (a)	..	..	Mds. 172	..	Mds. 3,303	..	Sold ..	Mds. 8	..	3,295	..	(a) Omitted in the last account.

Receipts and Issues of Timber and other Produce in Sale Depôts during the Year 1883-84—(*Continued*).

District.	Name of Depôt.	Description of Timber and other Produce.	On hand, 1st April 1883.		Received during the Year.			Total.		Disposed of during the Year.			Balance on 31st March 1884.		Remarks.
			Number or Quantity.	Cubic Feet.	Whence received.	Number or Quantity.	Cubic Feet.	Number or Quantity.	Cubic Feet.	How disposed of.	Number or Quantity.	Cubic Feet.	Number or Quantity.	Cubic Feet.	
Salem—(*Contd*).	Sale depôt	Bamboos	..	..	..	No. 200	..	No. 200	..	Supplied to other departments.	200	..	..	..	
		Forest produce ..	Mds. (a) 86	..	..	Mds. 5,778	..	5,864	..	Sold ..	5,825	..	39	..	(a) Omitted in the last account.
Trichinopoly ..								*Nil.*							
Tanjore ..								*Nil.*							
Coimbatore. North Coimbatore Division.	Sale depôt	Teak	..	..	Forest ..	115	700	115	700	Sold ..	115	700	..	..	
		Sandalwood ..	..	..	..	..	Mds. 5,287	..	Mds. 5,287	Sold ..	..	Mds. 5,287	..	..	
		Forest produce ..	..	..	..	..	Mds. 2,728	..	Mds. 2,728	Sold ..	..	Mds. 2,728	..	..	
Coimbatore. South Coimbatore Division.	Sale depôt	Teak	{ 937 + 91	13,674 2,098	..	..	..	..	..	Sold ..	903	11,929	..	..	
										Supplied to Central Jail, Coimbatore.	3	*100	..	..	
										Used by the department.	8	218	..	..	† Stock, Bólumputty and Méttupálaiyam transferred to South Coimbatore.
										Transferred to jungle wood.	1	19	..	..	
		Blackwood ..	1,028 575	15,772 9,545	Forest ..	743 ..	10,943 ..	1,771 ..	26,715 ..	..	915 ..	12,266 ..	856 ..	14,449 ..	
		..	..	‡ 3	..	..	..	..	..	..	..	..	..	..	‡ Increase found on remeasurement.
		..	107	2,812	..	..	..	..	..	..	..	..	..	..	
		Junglewood ..	682 22	12,360 232	.. ..	13 ..	229 ..	695 ..	12,589 ..	Sold ..	377	7,443	318	5,146	
		..	55	1,317	..	..	..	..	..	Sold ..	40	623	..	..	
										Used by the Department.	36	906	..	..	
			77	1,549	Teak used as junglewood.	1	19	78	1,568	..	76	1,529	2	39	
		Sandalwood ..	..	..	..	lbs. 9	..	lbs. 9	..	..	lbs. 9	..	..	..	

Receipts and Issues of Timber and other Produce in Sale Depôts during the Year 1883-84—(*Continued*).

District.	Name of Depôt.	Description of Timber and other Produce.	On hand, 1st April 1883. Number or Quantity.	On hand, 1st April 1883. Cubic Feet.	Received during the Year. Whence received.	Received during the Year. Number or Quantity.	Received during the Year. Cubic Feet.	Total. Number or Quantity.	Total. Cubic Feet.	Disposed of during the Year. How disposed of.	Disposed of during the Year. Number or Quantity.	Disposed of during the Year. Cubic Feet.	Balance on 31st March 1884. Number or Quantity.	Balance on 31st March 1884. Cubic Feet.	Remarks.
Madura ..	Sale depôt..	Firewood.. ..	Tons. 9	..	Sale depôt.	Tons. 241	..	Tons. 250	..	Sold ..	173	..	77	..	
Tinnevelly ..	Sale depôt	Teak	91	350	..	..	..	91	350	Sold ..	91	350	..	..	
		Teak materials ..	..	132	..	..	..	..	132	..	..	132	..	..	
		Other junglewood.	239 Cart-loads.	1,456	Sale depôt.	196	302	435	1,758 Cart-loads.	..	435	1,758	..	..	
		Bamboos ..	2	..	..	..	..	..	2	Wastage ..	..	..	..	..	* The District Forest Officer shows only 11 maunds and 13 measures.
		Forest produce ..	Mds. *35	..	..	Mds. 191 / M. 14 / C. 1,444	..	Mds. 226 / M. 14 / C. 1,444	Mds. 226 / M. 14 / C. 1,444	Sold ..	Mds. 188 / M. 14 / C. 1,444	..	38	..	
Malabar. Wynaad ..	Sale depôt	Teakwood ..	..	1,312	..	..	..	..	1,312	..	..	..	..	1,312	
		Blackwood ..	..	7	..	..	..	..	7	..	..	..	..	7	
		Other junglewood	..	1,505	..	..	..	..	1,505	..	..	..	..	1,505	
		Forest produce ..	Mds. 3	..	Forest ..	Mds. 6	..	Mds. 9	..	Sold ..	Mds. 9	..	..	..	
Pálghat ..	Sale depôt	Other junglewood	..	255	..	..	1,874	..	2,129	..	..	1,633	..	496	
		Bamboos	..	..	..	No. 150	..	..	150	Sold ..	No. 150	..	..	..	
Nilambúr ..	Sale depôt	Teak	545	17,321	Sale depôt.	378	15,545	923	32,866	Sold ..	545	17,321	378	15,545	
		Saplings	44,165	..	..	63,712	..	1,07,877	..	..	39,719	..	68,158	..	
		Blackwood ..	..	805	..	..	..	..	805	..	..	685	..	120	
		Junglewood ..	..	28,906	..	..	34,435	..	63,341	..	..	27,130	..	36,211	
		Firewood ..	..	..	..	Tons. 34	..	34	..	Sold ..	..	34	..	..	
		Bamboos ..	..	..	..	20,134	..	20,134	..	..	27,827	..	..	..	
		..	..	..	..	† 7,693	..	7,693	..	..	..	..	..	..	† Omitted by District Forest Officer.
South Canara ..	Sale depôt	Firewood ..	..	..	..	Tons. 207	..	Tons. 207	..	Sold ..	..	Tons. 207	..	..	Do.
		Forest produce ..	..	..	..	Mds. 8,086	..	Mds. 8,086	..	..	..	Mds. 8,086	..	..	Do.

FORM No. 71.

Forest Department, Southern Circle, Madras.

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84.

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
Chingleput ..	Locally ..	I (*a*)	Casuarina ..	No. 120	..		RS. A. P. 187 8 0	RS. A. P. 187 8 0	..	..	
North Arcot ..	Mámandúr Depôt	I (*a*)	Redwood ..	Tons 628	..	Not given ..	9,150 0 0	9,150 0 0	..	..	
	Vellore and Karkambady.	..	Posts	No. 1,047	..		1,799 13 0	1,799 13 0	..	..	
							10,949 13 0	10,949 13 0	..	..	
	Vellore Depôt	I (*b*)	Fuel	Tons 343	..		2,631 12 6	2,631 12 6	..	..	
		I (*c*) ..	Soapnut ..	Mds. 400	..		70 12 0	70 12 0	..	..	
			Tamarind ..	,, 300	..		37 8 0	37 8 0	..	..	
							108 4 0	108 4 0			
						Grand Total ..	13,689 13 6	13,689 13 6			
South Arcot ..	Forest Depôt ..	I (*a*)	Junglewood ..	..	1,717		688 7 7	688 7 7	..	..	
		I (*a*)	Junglewood ..	..	4,239		2,500 4 3	2,500 4 3	..	..	
							3,188 11 10	3,188 11 10			
		I (*b*)	Firewood ..	Tons 2,200	..		7,630 5 8	7,630 5 8	..	..	
			Ávaram sticks.	,, 270	..		307 14 0	307 14 0	..	..	
			Charcoal ..	Cwt. 2	..		0 6 0	0 6 0	..	..	
							7,938 9 8	7,938 9 8			
		I (*c*)	Bamboos ..	Cart-lds. 2	..		1 0 0	1 0 0	..	..	
	Sale Depôt ..	I (*d*)	Sandalwood ..	Mds. 12	..	Not given ..	69 0 0	69 0 0	..	..	
		I (*e*)	Gallnuts ..	,, 1,440	..		120 0 0	120 0 0	..	..	
			Tamarind ..	,, 1,418	..		393 3 2	393 3 2	..	..	
			Fruits, &c. ..	..	..		310 9 6	310 9 6	..	..	
			Manure leaves.	Cart-lds. 676	..		342 11 3	342 11 3	..	..	
			Palmyra leaves.	,, 9	..		6 7 6	6 7 6	..	..	
			Seeds	Mds. 335	..		175 14 0	175 14 0	..	..	
			Seedlings ..	,, 2	..		3 12 0	3 12 0	..	..	
			Ávaram bark ..	,, 8,946	..		2,060 7 9	2,060 7 9	..	..	
			Velvélam bark..	,, 400	..		44 0 0	44 0 0	..	..	
			Silk cotton ..	,, 280	..		10 12 0	10 12 0	..	..	
			Thorns	Cart-lds. 10	..		5 4 9	5 4 9	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
							Rs. A. P.	Rs. A. P.			
South Arcot—(*Continued*).	Sale Depôt—(*Contd.*)		Date and palmyra juice.	..	..		22 14 9	22 14 9	..	..	
			Honey	Mds. 5 1/4	..	Not given.	41 3 0	41 3 0	..	..	
			Wax	,, 3/20	..		12 0 0	12 0 0	..	..	
			Grass	,, 268	..		15 8 0	15 8 0	..	..	
							3,564 11 8	3,564 11 8			
						Grand Total ..	14,762 1 2	14,762 1 2			
Salem	Sale Depôt ..	I (*a*)	Áchá	..	386		459 6 3	459 6 3	..	..	
			Véngai	..	13		15 12 6	15 12 6	..	..	Supplied to Revenue Department.
			Junglewood ..	..	241		326 5 9	326 5 9	..	..	
	Salem Depôt ..	..	..	Posts 75	..		582 10 10	582 10 10	..	..	
	Denkanikóta ..	..	..	..	625		14 0 0	14 0 0	..	..	Supplied to Central Jail.
	Salem	..	..	..	158		537 11 5	537 11 5	..	..	Supplied to Remount Depôt.
	..						98 11 8	98 11 8	..	..	Supplied to Salem Taluk.
							2,034 10 5	2,034 10 5			
		I (*c*)	Bamboos ..	No. 200	..	Not given.	22 8 0	22 8 0	..	..	
		I (*d*)	Sandalwood ..	Mds. 8	..		35 0 0	35 0 0	..	..	
	Denkanikóta ..								..	..	
		I (*e*)	Gallnuts ..	,, 1,121	..		780 0 0	780 0 0	..	..	
			Wax ..	,, 3/5	..		4 0 0	4 0 0	..	..	
			Soapnut ..	,, 87	..		22 0 0	22 0 0	..	..	
			Tamarind ..	,, 4,617	..		2,061 0 0	2,061 0 0	..	..	
			Tree rents ..	..	..		33,160 8 11	33,160 8 11	..	..	
							36,027 8 11	36,027 8 11			
						Grand Total ..	38,119 11 4	38,119 11 4			
Trichinopoly ..	Locally ..	I (*a*)	Timber	No. 169	..	Not given ..	83 5 0	83 5 0	..	..	
		I (*b*)	Firewood ..	Tons 193	..		413 4 11	413 4 11	..	..	
						Grand Total ..	496 9 11	496 9 11			
Tanjore				*Nil.*							

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
							Rs. A. P.	Rs. A. P.			
Coimbatore.	North Coimbatore Division. Sale epôt ..	I (*a*)	Teak ..	115	700		700 5 4	700 5 4	..	..	
		I (*d*)	Sandalwood ..	Mds. 5,287	..		16,636 8 6	16,636 8 6	..	..	
		I (*e*)	Deer-horns ..	,, 14	..	Not given.	61 1 1	61 1 1	..	..	
			Bees-wax ..	,, 8	..		101 7 10	101 7 10	..	..	
			Honey	,, 5 1/2	..		14 7 0	14 7 0	..	..	
			Gallnuts ..	,, 2,700 1/2	..		1,872 0 2	1,872 0 2	..	..	
							2,049 0 1	2,049 0 1			
						Total ..	19,385 13 11	19,385 13 11			
	South Coimbatore Division. Sale Depôt ..	I (*a*)	,,	903	11,929		12,377 11 7	12,377 11 7	..	..	Supplied to Central Jail, Coimbatore.
			Teak ..	..	100		180 12 2	180 12 2	..	..	
			,,	8	* 218		..	..	..	..	* Used for the construction of the Irulapolliem Bungalow and office furniture.
			,,	1	† 19		..	..	..	..	† Transferred to jungle woods.
					12,266		12,558 7 9	12,558 7 9			
			Blackwood ..	,, 377	7,443	Not given.	4,446 9 11	4,446 9 11			
			Junglewood ..	,, 40	623		209 15 5	209 15 5	..	..	
				,, 36	* 906		..	..	..		
		I (*d*)	Sandalwood billets.	..	..		2 4 0	2 4 0	..	..	
		I (*e*)	Forest produce.	..	..		70 0 0	70 0 0	..	..	
						Total ..	17,287 5 1	17,287 5 1			
Madura ..	Kodaikánal ..	I (*b*)	Firewood ..	Tons 173	..		828 1 6	828 1 6			
Tinnevelly ..	Sale Depôt ..	I (*a*)	Teakwood ..	..	350		217 0 3	217 0 3	..	..	
			Teak materials	..	132		109 4 1	109 4 1	..	..	
			Kongu ..	..	302		321 7 8	321 7 8	..	..	
			Véngai ..	..	823		504 2 2	504 2 2	..	..	
			Junglewood ..	..	633		370 3 10	370 3 10	..	..	
							1,522 2 0	1,522 2 0			

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
							RS. A. P.	RS. A. P.			
Tinnevelly—(*Continued*).	Sale Depôt—(*Continued*).	I (*e*)	Cardamom ..	Mds. 46	..	Not given.	1,626 2 11	1,626 2 11	..	..	
		I (*e*)	Gallnuts ..	,, 99	..		60 1 7	60 1 7	..	..	
		I (*e*)	Dammer ..	,, 6	..		13 13 11	13 13 11	..	..	
			Wax	,, $1\frac{16}{25}$	..		22 14 6	22 14 6	..	..	
			Honey	Meas. $20\frac{3}{4}$	..		20 12 0	20 12 0	..	..	
			Tamarind ..	1,444	..		19 5 9	19 5 9	..	..	
			Mango seeds ..	196	..		11 6 0	11 6 0	..	..	
							1,774 8 8	1,774 8 8			
						Grand Total ..	3,296 10 8	3,296 10 8			
		I (*a*)	Teak	..	21,226 Pieces 17	Not given.	4,690 6 11	4,690 6 11	..	..	
			Blackwood ..	..	6,596		5,362 8 0	5,362 8 0	..	..	
			Mutty	..	$28\frac{1}{2}$		7 1 8	7 1 8	..	..	
			Benteak ..	..	99		24 12 2	24 12 2	..	..	
			Homay ..	..	1,487		590 10 10	590 10 10	..	..	
			Junglewood ..	..	$51\frac{1}{2}$		12 14 0	12 14 0	..	..	
				..	175		19 6 6	19 6 6	..	..	
			Mutty stump tee.	..	..		128 2 0	128 2 0	..	..	
	Locally ..					Add amount of advance paid for Teak, &c.	5,063 9 5	5,063 9 5	..	..	
							15,899 7 6	15,899 7 6			
Malabar. Wynaad ..		I (*c*)	Bamboos ..	No. 27,207	..		416 15 4	416 15 4	..	..	
	Sale Depôt ..	I (*e*) ..	Honey	Botls. 28	..	Not given.	841 12 11	841 12 11	..	..	
			Cardamom ..	Mds. $7\frac{1}{8}$							
						Total ..	17,158 3 9	17,158 3 9			
	Pálghat .. Locally ..	I (*a*)	Teak Saplings..	Cart-ld. $\frac{1}{2}$	..	Not given.	4 0 0	4 0 0	..	..	
			Junglewood ..	..	1,313		360 13 8	360 13 8	..	..	
	Sale Depôt ..	..	..	..	3,333		1,139 4 2	1,139 4 2	..	..	
							1,504 1 10	1,504 1 10			
						Security for purchase of Teak, &c.	2,000 0 0	2,000 0 0			
						Total ..	3,504 1 10	3,504 1 10			

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
							RS. A. P.	RS. A. P.			
Malabar—(*Continued*).	Pálghat—(*Cont*). Locally ..	I (*b*)	Firewood ..	Ton $1\frac{1}{2}$	..	Not given.	3 0 0	3 0 0	..	..	
	Sale Depôt ..	I (*c*)	Bamboos ..	No. 250	..		81 8 0	81 8 0	..	..	
		..	..	,, 150	..		15 0 0	15 0 0	..	..	
							96 8 0	96 8 0			
	Locally ..	I (*e*)	Forest products, rattan.	No. 500	..		115 0 0	115 0 0	..	..	
						Total ..	3,718 9 10	3,718 9 10			
	Nilambúr	I (*a*)	Teak	.. ..	17,321	Not given.	13,856 14 8	54,940 7 4	Not given.	Not given.	* Supplied to Bombay Marine Department.
			Teak crooks ..	No. 34	..		* 1,111 6 11				
			Teak saplings..	,, 39,719	..		41,901 9 3				
			Blackwood ..	.. ..	685		500 10 6				
			Benteak ..	.. ..	18,445		4,354 10 4				
			Karumarid ..	.. ..	4,334		975 1 2				
			Poomarid ..	.. ..	1,644		284 9 1				
			Erul	.. ..	2,707		562 4 7				
							63,547 2 6	..			
		I (*b*)	Firewood ..	Tons 34	..		153 11 4	153 11 4	..	..	
		I (*c*)	Bamboos ..	No. 27,827	..		1,567 3 8	1,567 3 8	..	..	
						Grand Total ..	65,268 1 6	56,661 6 4			
	South Canara.	I (*a*)	Teak saplings.	Not known ..	..	Not given.	7 13 0	7 13 0	..	..	
				No. 200	..		5 0 0	5 0 0	..	..	
			Junglewood ..	,, 107	..		85 4 0	85 4 0	..	..	
			Timber ..	Not known ..	..		77 11 0	77 11 0	..	..	
							175 12 0	175 12 0			
	Sale Depôt ..	I (*b*)	Firewood ..	Tons 207	..		828 15 0	828 15 0	..	..	
			Sale of Casuarina loppings.	..	..		63 13 3	63 13 3	..	..	
			Charcoal ..	..	..		0 11 0	0 11 0	..	..	
							893 7 3	893 7 3			

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
South Canara—(*Continued*).	Sale Depôt (*Continued*.)	I. (*e*)	Bamboos ..	..	..		Rs. A. P. 4 8 6	Rs. A. P. 4 8 6	..	..	
	....	1. (*e*) ..	Sikay	Mds. 5,455	..	Not given.	2,566 1 2	2,566 1 2	..	..	
			Bark	,, 2,416	..		122 8 0	122 8 0	..	..	
			Cardamom ..	,, 2	..		111 4 1	111 4 1	..	..	
			Honey	Meas. 4	..		5 5 0	5 5 0	..	..	
			Wax	Mds. 10	..		118 11 0	118 11 0	..	..	
			Myrabolan ..	,, 75	..		32 5 6	32 5 6	..	..	
			Cinnamon flowers.	,, 99	..		140 6 5	140 6 5	..	..	
			Nux vomica ..	25	..		12 12 0	12 12 0	..	..	
						Sale-proceeds of Catechu, &c ..	6,852 5 9	6,852 5 9			
							9,961 10 11	9,961 10 11			
						Grand Total ..	11,035 6 8	11,035 6 8			

(Form No. 72.)

Forest Department, Southern Circle, Madras.

Timber and other Produce cut, collected and removed from the Forests by Consumers or Purchasers including Pasture during the Year 1883-84.

Districts.	Produce removed. Description.		Number or Quantity.	Amount of Revenue.	Amount actually realized during the year.	Remarks.
Chingleput ..	Firewood	Tons.	10,308½	Rs. 7,217	Rs. 7,217	II (*b*).
	Áváram bark, &c.	Mds.	18,960	2,371	2,371	II (*e*).
	Total of the District ..		..	9,588	9,588	
North Arcot ..	Timber	Cubic feet.	1,00,315	8,555	8,555	II (*a*).
	Firewood	Tons.	11,065	24,736	24,736	II (*b*).
	Charcoal	,,	1,573	15,072	15,072	II (*c*).
	Bamboos	Cart loads.	9,930	459	459	II (*d*).
	Grazing and fodder grass		..	..		
	Other minor produce		..	12,510	12,510	II (*e*).
	Amount erroneously credited to Land Revenue, but since transferred to Forest as per Accountant-General's orders.		..	1,381	1,381	
	Total of II (*e*) ..		..	13,891	13,891	
	Grand Total of the District ..		..	62,713	62,713	
South Arcot ..	Sáfin and Karungáli	Cubic feet.	121	23	23	II (*a*).
	Junglewood, rough	,,	22,111	1,149	1,149	II (*a*).
	Do. squared up	,,	1,924	128	128	
	Do. worked up	,,	20	4	4	
	Valvélam trees	,,	11,800	529	* 529	II (*a*).
	Particulars not given	,,	..	2,442	2,442	II (*a*).
	Timber	,, No.	96,020	4,804	4,804	II (*a*).
	Palmirahs	,, No.	207	155	155	II (*a*).
	Total of II (*a*) ..	No.	1,31,296	9,234	9,234	
			207	..	..	
	Firewood	Tons.	5,347	5,147	5,147	II (*b*).
	Charcoal	,,	11	30	30	II (*b*).
	Áváram bark sticks	,,	71	64	64	II (*b*).
	Melár (loppings)	Head load.	398	12	12	II (*b*).
	Total of II (*b*) ..		5,429	5,253	5,253	
	Head load.		398	..	..	
	Bamboos	Cart load.	1,794	1,427	1,427	II (*c*).
	Grazing 157 cattle	..	..	1	1	II (*d*).
	Áváram bark	Mds.	33,000	1,739	1,739	II (*c*).
	Velvélam	,,	40	3	3	II (*c*).
	Thorns	Cart loads.	447	58	58	II (*c*).
	Leaves	,,	1,972	283	283	II (*c*).
	Green grass	,,	8	3	3	II (*c*).
	Seeds, &c.	,, Mds.	6	1	1	
	Gallnuts	,,	886	74	74	
	Tagarai seeds	,,	..	27	27	II (*c*).
	Tamarind, Eluppai, &c., crop ..	..	..	134	134	
	Tree rents	..	..	1,380	1,380	
	Lease of Wood-apple	..	..	6	6	
	Total of II (*c*) ..		..	3,708	3,708	
	Total of the District ..		..	19,623	19,623	
Salem ..	First, Second and Third class Timber.	Cubic feet.	99,884	7,429	7,429	II (*a*).
	Firewood	Tons.	5,982	13,401	13,401	II (*b*).
	Charcoal	,,	1,709	5,438	5,438	
	Total of II (*b*) ..		..	18,839	18,839	
	Bamboos	Bandy load.	21,984	16,827	16,827	II (*c*).
	Áváram bark	Mds.	70,605	3,154	3,154	II (*c*).
	Tree rents	,,	..	11,298	11,298	
	Sámal bark	,,	448	44	44	

* Cut and removed by the Department Public Works.

ABSTRACT.

Districts.	I (*a*).	I (*b*).	I (*c*).	I (*d*).	I (*e*).	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Chingleput	187	..	..	..	..	187
North Arcot	10,950	2,632	..	..	108	13,690
South Arcot	3,189	7,939	1	69	3,565	14,763
Salem	2,035	..	22	35	36,028	38,120
Trichinopoly	84	413	..	..	..	497
Tanjore			*Nil.*			
North Coimbatore	700	..	..	16,637	2,049	19,386
South Coimbatore	17,215	..	..	2	70	17,287
Madura	..	828	..	..	..	828
Tinnevelly	1,522	..	..	..	1,775	3,297
Wynaad and Pálghat	19,404	3	513	..	957	20,877
Nilambúr	54,940	154	1,567	..	..	56,661
South Canara	176	893	5	..	9,962	11,036
Total ..	1,10,402	12,862	2,108	10,743	54,514	1,96,629

Timber and other Produce cut, collected and removed from the Forests, &c.—(*Continued*).

Districts.	Produce removed. Description.	Number or Quantity.	Amount of Revenue.	Amount actually realized during the year.	Remarks.
			Rs.	Rs.	
Salem—(*Contd.*)	Sómboo bark .. .. .. Mds.	807	76	76	II (*e*).
	Pisagoo ,, ... ,,	90	8	8	
	Total of II (*e*) ..	71,950	14,580	14,580	
	Total of the District ..	..	57,675	57,675	
Trichinopoly ..	Timber .. .. No.	12	20	20	II (*a*).
	Timber for which particulars not given .. .. ,,	..	1,296	1,296	
	Total of II (*a*) ..	..	1,316	1,316	
	Fuel .. .. Tons.	386	576	576	II (*b*).
	Particulars not given	..	4,635	4,635	
	Total of II (*b*) ..	..	5,211	5,211	
	Bamboos .. .. No.	487	72	72	II (*c*).
	Particulars not given	..	2,464	2,464	
	Total of II (*c*) ..	..	2,536	2,536	
	Grazing and fodder grass	..	2,011	2,011	II (*d*).
	Minor produce .. .. .. Mds.	181½	2,608	2,608	II (*e*).
	Total of the District ..	..	13,682	13,682	
Tanjore ..	Casuarina poles .. .. .. No.	174	174	174	II (*a*).
	Do. stumps, loppings, &c. .. Tons.	954	2,024	2,024	II (*b*).
	Firewood .. .. ,,	1,099	1,026	1,026	
	Charcoal .. .. Cart load.	8	14	14	
		..	3,064	3,064	
	Grazing and fodder grass	..	47	47	II (*d*).
	Other minor produce	..	1,084	1,084	II (*e*).
	Total of the District ..	..	4,369	4,369	
North Coimbatore Division.	Reserved .. First-class timber .. Cubic feet.	7,520	2,932	2,932	II (*a*).
	Reserved .. Second-class do. .. ,,	14,640	2,553	2,553	
	Reserved .. Third-class do. .. ,,	940	130	130	
	Unreserved timber .. .. ,,	16,616	1,049	1,049	
	Total of II (*a*) ..	39,716	6,664	6,664	
	Firewood .. .. Tons.	3,512	3,457	*3,457	II (*b*).
	Charcoal .. .. ,,	27	81	81	
	Total of II (*b*) ..	..	3,538	3,538	
	Bamboos .. .. Cart load.	9,667	10,665	10,665	II (*c*).
	Gallnuts, &c. .. .. .. ,,	Not given.	4,308	4,308	II (*e*).
	Barks, &c. .. .. ,,	Do.	1,813	1,813	
	Rent of topes, &c. .. .. .. ,,	..	14,748	14,748	
	Total of II (*e*) ..	..	20,869	20,869	
	Total of the District ..	..	41,736	41,736	
South Coimbatore Division.	Teak heads and butts .. .. Cubic feet.	7,800	4,011	4,011	II (*a*).
	First-class timber .. .. ,,	1,420	503	503	
	Second-class do. .. .. ,,	980	220	220	
	Third-class do. .. .. ,,	2,040	301	301	
	Unreserved timber .. .. ,,	23,206	1,730	1,730	
	Sale of trees in Government Topes ,,	Not given.	245	245	
	Total of II (*a*) ..	35,446	7,010	7,010	
	Firewood .. .. Tons.	10,162	10,154	10,154	II (*b*).
	Sale of poramboke trees .. .. ,,	..	521	521	
	Charcoal .. .. ,,	247½	766	766	
	Total of II (*b*) ..	..	11,441	11,441	

* Includes sale-proceeds of poramboke trees.

Timber and other Produce cut, collected and removed from the Forests, &c.—(*Continued*).

Districts.	Produce removed. Description.	Number or Quantity.	Amount of Revenue.	Amount actually realized during the year.	Remarks.
			Rs.	Rs.	
Coimbatore—(*Contd.*) South Coimbatore Division—(*Continued*).	Bamboos .. .. .. Cart load.	8,742	9,589	9,589	II (*c*).
	Grazing and fodder grass ..	..	1,566	1,566	II (*d*).
	Other minor produce ..	..	7,259	7,259	II (*e*).
	Rent of Forest trees ..	..	2,897	2,897	
	Total of II (*e*) ..	..	10,156	10,156	
	Total of the District ..	..	39,762	39,762	
Madura ..	First-class timber .. .. Cubic feet.	7,140	2,141	2,141	II (*a*).
	Second do. do. .. .. ,,	674	135	135	
	Third do. do. .. .. ,,	436	85	85	
	Fourth do. do. .. .. ,,	1,210	172	172	
	Junglewood .. .. .. ,,	41,531	3,353	3,353	
	Total of II (*a*) ..	50,991	5,886	5,886	
	Firewood .. .. Tons.	11,817	10,186	10,186	II (*b*).
	Charcoal .. .. ,,	231	836	836	
	Total of II (*b*) ..	12,048	11,022	11,022	
	Bamboos .. .. .. Cart load.	2,248	2,352	2,352	II (*c*).
	Grazing and fodder grass	..	7,621	7,621	II (*d*).
	Rattan .. .. .. Mds.	40	2	2	II (*e*).
	Áváram bark .. .. Cart load.	19	38	38	
	Vembadam bark	7/16	7	7	
	Nellikay .. .. .. ,,	4 7/16	2	2	
	Kayam leaves .. .. .. ,,	6 9/16	10	10	
	Fibre .. .. ,,	5 3/16	6	6	
	Mangoe .. .. ,,	7/16	1	1	
	Tree rents	..	8,142	8,142	
	Total of II (*e*) ..	..	8,208	8,208	
	Total of the District ..	..	35,089	35,089	
Tinnevelly ..	Reserved timber .. .. Cubic feet.	10,488	3,475	3,475	II (*a*).
	Unreserved { Teak materials ,,	10,506	1,922	1,922	
	Unreserved { Other Junglewood ,,	34,198	3,565	3,565	
	Total of II (*a*) ..	55,192	8,962	8,962	
	Firewood .. .. Tons.	5,936	11,940	11,940	II (*b*).
	Charcoal .. .. ,,	758	2,546	2,546	
	Total of II (*b*) ..	6,694	14,486	14,486	
	Bamboos .. .. .. Cart load.	149	321	321	II (*c*).
	Eracully .. .. .. ,,	160	154	154	
	Total of II (*c*) ..	309	475	475	
	Grazing and fodder grass	..	53	53	II (*d*).
	Rattan .. .. .. Cart load.	50	44	44	II (*e*).
	Other produce	..	7,688	7,688	
	Total of II (*e*) ..	..	7,732	7,732	
	Total of the District ..	..	31,708	31,708	
Malabar. Wynaad and Pálghat ..		*Nil.*		*Nil.*	
Nilambúr ..		*Nil.*		*Nil.*	
South Canara	Reserved timber .. .. Cubic feet.	968	520	520	II (*a*).
	Junglewood .. .. .. ,,	1,986	712	712	
	Total of II (*a*) ..	2,954	1,232	1,232	
	Firewood .. .. Tons.	5,566	4,175	4,175	II (*b*).
	Do. for Sandal stills as per contract	..	11,000	11,000	
	Charcoal .. .. Mooras.	2,021	50	50	
	Total of II (*b*) ..	..	15,225	15,225	

Timber and other Produce cut, collected and removed from the Forests, &c.—(*Continued*).

Districts.	Produce removed. Description.	Number or Quantity.	Amount of Revenue.	Amount actually realized during the year.	Remarks.
South Canara—(*Continued*).	Bamboos .. .. No.	23,850	Rs. 383	Rs. 383	II (*c*).
	Reeds .. .. .. Cart Loads.	8,802	14	14	II (*e*).
	Total of the District ..	..	16,854	16,854	

Districts.	II (*a*).	II (*b*).	II (*c*).	II (*d*).	II (*e*).	Total of the Amount under II.
						Rs.
Malabar. Coimbatore. Chingleput	..	7,217	..	..	2,371	9,588
North Arcot	8,555	24,736	15,072	459	13,891	62,713
South Arcot	9,234	5,253	1,427	1	3,708	19,623
Salem	7,429	18,839	16,827	..	14,580	57,675
Trichinopoly	1,316	5,211	2,536	2,011	2,608	13,682
Tanjore	174	3,064	..	47	1,084	4,369
North Coimbatore Division ..	6,664	3,538	10,665	..	20,869	41,736
South Coimbatore do. ..	7,010	11,441	9,589	1,566	10,156	39,762
Madura	5,886	11,022	2,352	7,621	8,208	35,089
Tinnevelly	8,962	14,486	475	53	7,732	31,708
Wynaad and Pálghat	..	..	..	..	..	..
Nilambúr	..	..	..	..	..	..
South Canara	1,232	15,225	383	..	14	16,854
Total ..	56,462	1,20,032	59,326	11,758	85,221	3,32,799

(Form No 73.)

Forest Department, Southern Circle, Madras.

Abstract showing the Value of Timber and other Produce at Sale Depôt for the Year 1883-84.

Description of Timber and other Produce.	On hand at the commencement of the Year. Number.	C. Feet.	Value.	On hand at the close of the Year. Number.	C. Feet.	Value.	Difference in Value. In favor of the Year.	Against the Year.	Remarks.
Timber.			Rs.			Rs.			
Chingleput	..	..	..	Nil.	..	..	..	..	
North Arcot—									
Redwood .. Tons.	225	..	2,700	372	..	4,464			
Sandalwood .. Mds.	408	..	408	1,087	..	1,087			
Total ..	..	..	3,108	..	..	5,551	2,443	..	
South Arcot—									
Junglewood	140	359	208	64	183	100			
Sandalwood .. Mds.	800	..	2,120	938	..	2,439			
Total .. {	140	359	2,328	64	183	2,539	211	..	
{	Mds. 800			Mds. 938					
Salem—									
Junglewood	..	767	672	..	475	419			
Sandalwood .. Mds.	3,130	..	13,592	3,232	..	14,327			
Total ..	3,130	767	14,264	3,232	475	14,746	482	..	
Trichinopoly	..	..	..	Nil.	..	..			
Tanjore	..	..	..	Nil.	..	..			
Coimbatore. North Coimbatore Division.	..	..	..	Nil.	..	..			
South Coimbatore Division—									
Teak .. {	937	13,674	11,852	856	14,449	10,765			
{	+ 91	2,098	1,054						
Blackwood .. {	575	9,545	6,229	318	5,146	3,099			
{	+ 107	2,815	1,461						
Junglewood {	22	232	87	2	39	27			
{	+ 55	1,317	332						
Total ..	1,787	29,681	21,015	1,176	19,634	13,891	..	7,124	

Abstract showing the Value of Timber and other Produce at Sale Depôt for the Year 1883-84—(*Continued*).

Description of Timber and other Produce.	On hand at the commencement of the Year. Number.	C. Feet.	Value.	On hand at the close of the Year. Number.	C. Feet.	Value.	Difference in Value. In favor of the Year.	Against the Year.	Remarks.
			Rs.	Nil.		Rs.			
Madura	..	..	..	..	..	..			
Tinnevelly—									
Teak	91	482	325	..	..	..			
Véngai	192	823	567	..	..	..			
Shenbagapálai ..	17	60	42	..	..	..			
Milai	30	159	109	..	..	..			
Junglewood	..	414	209	..	..	..			
Total ..	330	1,938	1,252	..	..	..	..	1,252	
Malabar. Wynád Forest Division—									
Teak	..	1,312	1,167	..	1,312	1,167			
Blackwood ..	..	7	4	..	7	4			
Mutty ..	..	125	63	..	125	63			
Benteak ..	..	23	9	..	23	9			
Hommay ..	..	1,357	844	..	1,357	844			
Total ..	..	2,824	2,087	..	2,824	2,087	..	..	
Pálghát Division—									
Junglewood ..	..	255	71	..	496	186	115	..	
Nilambúr—									
Teak	545	17,321	12,991	378	15,545	11,659			
Blackwood ..	..	805	604	..	120	90			
Benteak ..	487	18,681	4,670	573	24,985	6,187			
Korrinarid ..	119	4,492	967	165	9,844	1,816			
Poonarid ..	63	2,324	363	..	680	106			
Erul	136	3,409	533	..	702	110			
Saplings ..	44,165	..	37,330	{ 68,158	..	25,000			* Added for saplings omitted by District Forest Officer. † Rejected saplings to be sold as firewood.
				{ 70†	..	+ 31,798*			
						5†			
Total ..	45,542	47,032	57,458	69,344	51,876	44,973	..	12,485	
South Canara	..	..	..	Nil.	..	..	..	..	
Firewood.									
North Arcot .. Tons.	33	..	75	29	..	66	..	9	
Madura .. ,,	9	..	41	77	..	218	177	..	
Bamboos.									
Tinnevelly Cart-load.	2	..	8	..	..	..	..	8	
Minor Produce.									
South Arcot .. Mds.	398	..	135	Mds. 15	..	150			
Salem .. .. ,,	86	..	38	,, 39	..	12			
Tinnevelly .. { ,,	12	..	121	,, 38	..	9			
{ Meas.	13								
Wynád .. { Bottles	28	..	52	..	..	..			
{ Mds	1								
Total ..	..	..	346	..	..	171	..	165	

PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE NORTHERN CIRCLE, MADRAS,

FOR THE YEAR 1883-84.

READ—the following letter from J. S. GAMBLE, Esq., Conservator of Forests, Northern Circle, to the Secretary to the Board of Revenue, dated Camp Horsleykonda, 18th July 1884, No. 36-C :—

I have the honor to submit the Annual Report on Forest Operations for the Northern Circle for 1883-84, and to request the favor of your permitting the proofs to be sent to me for correction as usual. I regret that the report should be late: the lateness is due to my absence in camp since 30th June.

2. Two maps are under preparation by the Survey Department and will be ready by the 1st September. I also hope to be able to add an Appendix II giving the list of trees of the Northern Circars compiled by me on my recent tour, and this will follow.

CHAPTER I.

INTRODUCTORY REMARKS.

The work of the year has been the steady progress of re-organization and the selection of reserves. The principal works of forest inspection have been—

1. *Ganjam District.*—Detailed inspection by the Conservator in Goomsur and Suradá, with visits to the Mohiri hills and Chicacole.
2. *Vizagapatam District.*—Inspection of the Pálkonda Forests by the Conservator.
3. *Kistna District.*—Full inspection of the proposed reserves and the plantations by the District Forest Officer, Mr. Boileau.
4. *Nellore District.*—Inspection of the coast forests and plantations by the Conservator and District Forest Officer Mr. Vincent, and of the Veligonda forests by the Acting District Forest Officer Somasundram Mudali.
5. *Cuddapah District.*—Inspection by the District Forest Officer Mr. Higgens, C.S., of the forests of the sub-division taluks and of those of the Nallamalai and Lankamalai hills.
6. *Kurnool District.*—Inspection by the District Forest Officer Mr. Sim, C.S., of the northern and eastern portions of the Nallamalai hills and the Kurnool Veligondas.
7. *Bellary District.*—Inspection by the District Forest Officer Mr. Hooper in the Hospet, Kudligi, Adóni and Alúr Taluks.
8. *Anantapur District.*—Inspection by the District Forest Officer Mr. Brougham of the forests of the Penukonda and Hindupur Taluks.
9. *Nilgiris.*—Examination of the sholas of the Coonoor and Ootacamund settlements by the Conservator as well as selection of reserves in the Barliyár valley.

2. In all cases almost, these works of inspection have led to the submission of notifications proposing forest reserves under Section 4 of the Act; the most important additions to the proposed reserves being those (1) for the Goomsur Taluk of Ganjam, (2) for the Kistna forests, (3) for the Srîharikót forests of Nellore, (4) for the rest of the proposed reserves in Cuddapah excluding those of the Jammalamadugu Taluk, and (5) for the Eastern Nallamalais and Veligonda hills of Kurnool.

3. The following extract from the Conservator's report to the Collector describes the reserved forests which it is proposed to constitute in Ganjam, for the locality of which the sketch map accompanying this report may be consulted:—

Forests Nos. 1 and 2 consists of the *Kaliamba* and *Teleki forests* and the hills between these villages and the cultivated country near the Russellkonda-Aska road. A belt of forest will be left on the side towards the villages for management under Section 26 of the Act This part of the forests has already been much cut about and carelessly cut; while, in spite of the prohibition of cutting Sál, of which no notice whatever seems to have been taken, trees quite newly felled may be seen all about usually cut at 3-4 feet from the ground and producing only crooked pole and short instead of straight poles likely to grow up into trees. Indeed, in all the forests, and with all sizes of tree, this practice of cutting at a height above the ground has done very great damage, to which the only remedy is to cut again and then flush into the ground. The hills in these blocks are fairly well clothed with mixed forest, and in the valleys there is good Sál, usually about three parts grown. On the south-west these forests adjoin those of Suradá, to be referred to later on. As the timber grows larger and communications are open, their position close to the main road will render them very valuable. There are several small villages inside, all of them already demarcated and mapped by the Survey Department and thus easily defined. The boundaries will have to be marked more conspicuously, but this will not take long.

Forest No. 3, the *Baibali forest*, is one of the important areas, as in the level lands between Birkót and Khalogam there is a large area of what was a short while ago a very fine Sál forest. Its present condition is best described by the result of two small valuation surveys which gave per acre, respectively, five and ten trees over 4 feet 6 inches in girth, or an average of about seven trees fit to cut in the next twenty years. The results of the first and chief survey may usefully be thus recorded:—

—	Under 1 Cubit.	1-2 Cubits.	2-3 Cubits.	3-4 Cubits.	Total.
Sál	122	37	17	5	181
Saj	30	2	...	...	32
Ebony	22	2	...	...	24
Other trees of all sizes ...	...	...	...	...	142
Total ...	174	41	17	5	379

The southern half of this forest adjoins the land claimed by the Korada Zemindar (see my note 3-C, of 7th January 1884). His contractors are fast getting rid of every tree fit to give one broad gauge sleeper, and, if not stopped at once, will leave the forests bare of all trees fit to cut within the next forty years. It seems best to settle this boundary question during the forest settlement, and I believe you agree with me in this. Towards the west the forests run up to the top of the ghâts, where is the boundary of the Maliah country. These hills are full of fine timber of large sizes, but large Sál is found only on the flats in the valleys and for a short distance up some of the slopes, especially those with eastern aspect. The villages inside the forest are not surveyed or demarcated, but I do not think their demarcation will present any difficulty, though some of the isolated pieces of dry cultivation about Khalogam, Tilki and Baibali might usefully be taken and, if necessary, other land given instead.

No. 4, the *Darpangia forest*, is one of the most valuable of the blocks in Goomsur. The lower part is nearly all Sál forest of good quality, and though it has been much cut and wastefully treated, there is still a fair amount of mature timber. A rough valuation gave 167 Sál trees above 18 inches in girth to the acre, and about sixteen of these were over 4½ feet. But this was not in the best locality. The following measurements of a tree just felled will give an idea of the timber of the Goomsur forests. It was 75 years old and had a girth of 6 feet 6 inches at the base. Omitting bark it therefore gave a mean growth of seven rings per inch of radius. It gave besides branches and top four logs of 10 feet long each, their contents being 24, 20, 17 and 15 cubic feet, respectively; total 76 cubic feet, equivalent to 95 cubic feet cylindrical measurement. The hill part of the forest occupies the west side of the Kalingia ghât and has some large timber of good kinds notably Urjono (*Terminalia Arjuna*) and Dhaw (*Anogeissus latifolia*), while a few good

Toon (*Cedrela Toona*) and Tangani (*Xylia dolabriformis*) can be obtained. These forests will present no difficulty in demarcation, though the boundaries of several villages will have to be demarcated round.

No. 5, the *Ramba forest*, lies east of the Kalingia ghât and between it and the valley of the Gullery river as far down as the road from Gullery to Kharriguda. It is chiefly hilly country with good Sál in the valleys, and especially about Valiki, where a sample area of half acre was carefully marked off and the trees measured. The result was—

	Under 1 Cubit.	1-2 Cubits.	2-3 Cubits.	3-4 Cubits.	4-5 Cubits.	5-6 Cubits.
Sál	86	59	20	4	1	1
Other trees	27	8	1	2	.	...
Total ...	113	67	21	6	1	1=209

or 418 trees per acre, of which four immediately marketable and twelve fit to cut within the next twenty years. They were all well grown, strait and good, but the forest being somewhat difficult to reach with carts, cuttings had not been made.

South of No. 5, and stretching down to near Russellkonda between the Loharkhandi and Gullery rivers is the *Gullery forest*. This forest, as may be imagined, has been much cut, but there is still a considerable amount of good timber and a very large quantity of dry wood fit for conversion into sleepers or other pieces. There are also good stretches of mixed forest, while towards Russellkonda the pole forest of Sál show every chance of growing up well. A valuation line was taken across one portion of this block at random, and happened to cross a part where the soil and the forest growth were both poor. The results were:—

	Under 1 Cubit.	1-2 Cubits.	2-3 Cubits.	3-4 Cubits.	4-5 Cubits.	Total.
Shorea robusta (Sál)	172	76	23	8	1	280
Terminalia tomentosa (Sajo)	22	7	..	1	...	30
Diospyros Melanoxylon (Ebony)	59	3	1	...	...	63
Pterocarpus Marsupium (Piasal)	1	1	...	...	...	2
Dalbergia latifolia (Blackwood)	3	...	...	...	...	3
Soymida febrifuga (Sohaw)	2	3	1	...	...	6
Ougeinia dalbergioides (Bandhono)	...	...	1	...	...	1
Bassia latifolia (Mahna)	3	...	...	...	...	3
Others of various sizes	...	...	...	...	...	264
Total ...	262	90	26	9	1	652

on an area of three acres. This is a valuation which may almost be adopted *as an average* for the whole of the low level country of the Goomsur forests. Much of the area traversed was of the description of forest I have called "Sohaw forest," from the fact that the Sohaw (*Soymida febrifuga*) is the chief important tree. Sál and other trees abound, but they are badly grown and the soil is very poor. This kind of forest alternates with Sál in such a way that they are very difficult to separate, and it will be important to carefully preserve these areas or otherwise they will degenerate into bare stretches of ground covered with kunkur nodules and cut about by small ravines into little hills and valleys. In the Gullery forest the area of "Sohaw" is not very great, however, and what there is, is only in patches.

Adjoining the Gullery forest is the isolated range which forms No. 7, the *Koolada forest*. It has little Sál timber, but the hills yield fuel trees and bamboo which will be useful for the supply of Russellkonda, from which it is only about two miles distant.

No. 8, the *Dimrijoli forest*, is a small area between two branches of the Gullery river. It contains some very good forest, especially round Dimrijoli, a village whose recent fellings of large Sál trees should not be allowed to proceed further. The northern boundary of this forest is the Muttah of Chokapad, which, being a scheduled district, was not examined.

No. 9, the *Ambazara block*, consists of the hill range of that name north of a line from near Kukuluba, west to the Gullery valley. The forest is mostly hill country, but with good Sál in the valleys. It is not so important as the *Chondorgiri forest*, No. 11, which adjoins it on the south, and is perhaps the most valuable area in the whole of the forests. The large Sál forest which occupies the country south Chondorgiri contained a few years ago a splendid crop of large

Sál. I regret to say that wasteful and careless fellings, induced by the system of selling Sál by permits for the bandy-load, has resulted in the greater part of the old trees now being found lying on the ground with one 10-foot piece cut out of them and no more. The remainder is now being removed to depôt as fast as it can, but still the waste has been very great. The stock left, however, is very valuable, and the *Chondorgiri block* should prove a very valuable reserve and should be put under working systematically as one of the first after we have disposed of the dry wood. The hills behind the village of Chondorgiri (where, too, the further cutting of large Sál for cultivation should be prevented) contain chiefly bamboo, but with a good deal of big Dhaw (*Anogeissus latifolia*) and other kinds, while in the valley between them are some of the largest Sál I have seen in Goomsur.

West of the Chondorgiri forest lies a small forest, No. 10, *Chodiapali*, in the valley of the Bodangi river. It consists of several isolated hills with good forest between them, and should, I think, be reserved or the forest will soon disappear and the rocky hills become denuded of vegetation.

No. 12, the *Gunduribadi forest*, resembles the Ambazara hills which it adjoins. I have not seen very much of this forest, which, however, should be reserved as it includes the hills up to the Bengal frontier (Daspala State).

No. 13 is the Gogodo forest occupying the north-eastern corner of the district in the angle between the States of Daspala and Nyagarh. It has been usually supposed to contain very valuable forest, and this was probably true some years ago; but the small patches of cultivation made by the villagers of Gogodo and neighbouring places have greatly spoilt the large Sál, and though we have still some good Sál forest and a beautiful piece of large mixed forest on the frontier still left, yet the whole of the southern part consists of the kind I have called "Sohaw forest," with patches of good Sál only along rivers. It should, however, be reserved, and if in this and neighbouring blocks the revenue demarcation of villages could be made at the same time as the forest settlement, I feel sure it will be well.

South of the Gogodo block and adjoining the Nyagarh frontier is No. 14, the Paichalai block, which consists of a hill range with a little Sál only on the level portion to the west, and especially about Tanjore and Nundropodor, where it is pretty good, though in places somewhat damaged by patches of cultivation in the middle of the best parts. Similar in character is the *Brahmanosai forest*, No. 15, which lies to the west towards the Kukuluba river.

No. 16 is the *Jaganathprásad forest*, a large area extending from near Koolada away to the frontier and containing moderately good forest, which, however, to the south has in places suffered considerably from careless felling. This forest will require some alterations, probably on the south, as I am of impression that on a small length of proposed boundary I was unable personally to visit, and the description of which was taken from the Tahsildar's map, some changes may be necessary to include the Jadabuni hill. But this the District Forest Officer can do at any time, or the hill may be afterwards proposed as a separate block.

No. 17, the *Panchbuthi forest*, is an area near the Nyagarh frontier, consisting partly of the hills on that frontier and partly of forest in the plains, partly Sál and partly of mixed trees. The portion of this forest about Korasingh is very good, and contains especially a good supply of Satinwood with other good trees. The Sál has been so much cut that only half-grown and young trees are found. The boundaries of this forest are already demarcated on the village maps and by the usual stones set up as village boundaries.

No. 18, the *Kurcholi forest*, consists of the range of hills west of Kurcholi, and contains principally mixed trees of fair growth, while No. 19, the *Kriyamba forest*, is the large area which comprises the high hills on the Bengal frontier and the valleys within them. This forest has some very good Sál, and though there is little of very large size, yet the quality is very good and the areas compact. It will be a most valuable reserve, as it is so near the plains country and has good carting from it towards Aska and Berhampore. There is also a fine growth of trees of other kinds, such as Sahajo, Ebony and Satinwood, and there is a large supply of bamboo of the best quality. It is one of the best forests in Goomsur, and will be capable of giving a large revenue.

Nos. 20 and 21, the *Sandusalya* and *Bodochendana forests*, are isolated hills on the Atagadá Zemindari boundary, and No. 22, the *Vishnuchakram forest*, contains the great isolated hills east of the road from Bullipadra to Bellugunta. They have been all a good deal cut; but the growth is capable of improvement, and I am of opinion that they should be treated as reserves and care taken to prevent their denudation.

Nos. 23 to 31 are the forests of the Suradá Taluk, and contains some very promising forest-growth, though at present, owing probably to their having the Rushikulya river, the best for floating, passing through them, they have been more cut than those of Goomsur. No. 23, the *Rogada forest*, contains a large area of valuable Sál forest, and in places the growth of other good trees, especially Satinwood, is remarkable. But careless fellings have filled the forests with badly-shaped trees, and they must consequently undergo improvement fellings before the regular working scheme can be made.

No. 24, the *Bondagocha forest*, continues the Rogada block on to the boundary of the Pandakol mittah (scheduled district) with forest of similar quality, while No. 30, the *Vinjagheri forest*, really continues the Rogada forests on to the banks of the Rushikulya, but the growth is

not so good, as the neighbourhood of the river and of the Aska road have caused it to be more frequently cut for fuel.

No. 25, the *Dhougam forest*, is a small piece in the Pipalapanka mittah containing a hill which is surrounded by good Sál forest, with a number of trees of large size. There were many such lately evidently in the forest, but heavy and careless fellings about a year ago much reduced the number of mature trees and left a quantity of wood on the ground. No. 26, the *Pipalapanka forest*, also contains good Sál towards the hills, and near the road good pole forest. It requires, however, an improvement cutting to remove badly-shaped trees.

Nos. 27, 28 and 29, the *Hukuma* (or Baliapada), *Moondapitta* and *Rayigoda forests* lie south of the Suradá-Aska and Suradá-Pipalapanka road. They are chiefly hilly tracts with comparatively little Sál, but good general growth. They have been worked for the Aska fuel rather indiscriminately, and if so worked again, it should be, as you suggested, by compartments.

No. 31, the *Malati forest*, is the hill range between Aska and Gangapur, which has also been very much cut, and its reservation is necessary and important owing to its position near the chief road of the Goomsur country.

The forests of Goomsur are, with few exceptions, as good Sál forests as the Conservator has in his experience in other provinces met with. When permanently demarcated, supplied with an efficient staff and placed under a working scheme drawn up so as to ensure the maximum yield, at the same time as a steady improvement, they will, in the Conservator's opinion, give a large revenue to Government. The reproduction is very good, and the present state of the forests in mature timber is, taking previous treatment into consideration, much better than he expected. Fire-protection will really be easy, for there is little long grass, and, in respect to means of transport, the rivers and roads leading to the sea will, when supplemented by forest export roads, allow of easy carriage.

4. After leaving the Goomsur hills, the Conservator inspected the forests of the Mohiri hills in the Berhampore Taluk. These hills contain some young growth, especially of Tangani (*Xylia dolabriformis*) capable of improvement, but they have naturally been overworked, and the selection of reserves will, in view of the number of hill villages, prove difficult. After leaving the Mohiri hills the Conservator visited the forests of the States of Mandasa (Mahendragiri hills) and Parlákimedi, the proposed fuel and fodder reserves of Chicacole, and then proceeded to the Pálkonda hills of Vizagapatam now managed by Messrs. Arbuthnot and Co., the renters of the estate.

5. In the Pálkonda hills some good areas of Sál were found as well as a large extent of scrub forest containing very numerous seedlings of *Xylia dolabriformis*, *Chloroxylon Swietenia*, and other good trees, and capable of making a fine reserve, which, he hopes, it will ere long become.

6. The account of the hill ranges and forests of the Kurnool District by Mr. Sim, C. S., given below as extracted from his annual report will be found interesting:—

"The district of Kurnool is divided into three parts, the partitions being the three hill ranges known as the Yerramalai on the west, the Veligondas on the east, and the Nallamalai in the centre, and it is on these three ranges, or round their base, that the forests of the district lie.

"The *Yerramalais* are a series of low red cliff-scarped, plateau-topped hills, that straggle across, in a broad belt of hill and date fields and waste lands, from Gooty up to the Tungabhadra, east of Kurnool; they are not of much account so far as timber goes, being now for the most part bare, and, with their caps of hard sand-stone, never likely to be very much else; but there are patches of a fair scrub growth on them in places, and for firewood, for rafters and small poles, for barks, and, seeing how they stand across the path of the monsoons and how dry the surrounding country is, for climatic reasons are not unimportant.

"The *Veligondas* are the narrow peaked range that separates Kurnool from Nellore, radiating out into three arms—North, North-west and South—from a centre near Konapalli; though greener than the Yerramalais, they are not well wooded, nor are the trees on them of much value, being mainly *Nemmi*, *Alli*, *Bira* and others, more useful for fruit than for timber. Still at Konapalli, the centre of the star, the hills open out a little, and here and there is a more promising growth, *Chiriman*, *Yegi*, and much cut-up Red Sanders; like the Yerramalai, therefore, these hills are important only for small timber and for climatic reasons.

"The *Nallamalais* are the chief range of the district; starting from the Cuddapah frontier, they run in a wide belt of thickly-wooded peaks and ravines, plateaux and valleys, broad basins and mountain masses due north to the Kistna; beginning with a width of some ten miles, the lef

broadens out as it runs northwards until at the Mantrala Kanama it has reached to thirty; thence it swings east and west like the two arms of a great T with its western arm flanking the Kistna for fifty miles of its length, and with its eastern bounding the district up to the north-easternmost point of Márkápur—a wild, unhealthy, hardly known tract and yet studded with the ruins of walled cities, tanks and temples. It is this that is usually meant by the Kurnool forests, these 2,000 square miles of continuous forest; it is from them that all our good timber comes, and it is here that we must look for our most important reserves.

"This work of reservation is now in progress, and though no reserves have as yet been finally proclaimed, it is possible to say with a certain amount of certainty what they will be; they will be all the hill country of the Veligondas, with part perhaps of the outcrop of scrub that skirts its base towards the south; they will be the whole range of the Nallamalais, excluding perhaps a portion on the eastern side and including a considerable portion of the rich "terai" on the west; and they will be a few tracts on the Yerramalai and, except such rights as may be given to the Chentsus, the rights of a few temples, and a few rights of way across some of the smaller passes, they will, I think, be absolutely reserved."

7. The only districts or areas now remaining for thorough inspection are (1) the Godávari District, (2) the southern taluks of Vizagapatam, (3) the Agency Tracts of Ganjam, and (4) the slopes and valleys of the Nílgiris, and these the Conservator hopes to complete within the present year.

Forest Rules.

8. Rules under Section 26 of the Forest Act have been drawn up under the supervision of the Board of Revenue and came into force on 1st January 1884. Rules for the transit of timber between the Kurnool District and the Territories of His Highness the Nizam were also passed.

CHAPTER II.

Areas and Boundaries.

9. The return of area of Reserved Forests *under the Act* has still to be submitted blank, for, although the Forest Settlement in some of the forests of the Cuddapah District was completed during the year, final notifications were not published till after its close. The list of forests reserved under previous orders (Return No. 1) remains unchanged, except that the "village forests" of last year in Cuddapah have been transferred to this form, and the area of the Malpangudi forest in Bellary has been rectified, the total for the circle now standing at 527,360 acres, or 824 square miles.

The District Forest Officer in Cuddapah has explained that the so-called village forests are exactly on the same footing as other previously-reserved areas of the Jungle Conservancy Department, and that it was the custom in the two taluks of Jammalamadugu and Proddutur to call them village forests instead of reserved forests. The return of village forests is therefore omitted, the areas so given being now entered as Reserves.

10. In last year's report, paragraph 31, the submission of three draft notifications for Reserved Forests was recorded; during the year under review others have also been submitted and most of them published. They are the following:—

4. Nellore District ...	Udayagiri		Notification No. 185 of 13th October 1883.
	Chimakurthi		
5. Do. do. ...	Sríharikót		Notification No. 186 of 13th October 1883.
	Reddipalem		
	Pernadu		
	Atakanitippa		
	Venad		
	Irakam		
6. Kurnool District ...	Cumbum		Notification No. 198 of 17th November 1883.
	Márkápur		
7. Do. do. ...	North Veligondas ...		Notification No. 199 of 17th November 1883.
	South do. ...		
	West do. ...		
8. Bellary District ...	Bandri		Notification No. 197 of 17th November 1883.
	Gound		
	Hospet		
	Jog		
	Oblagudi		

9. Nellore District ...	Dugarázpatnam		Notification No. 205 of 17th November 1883.
	Kottapatam		
	Tamminapatnam		
	Utukur-Varini		
	Iskapalle		
	Tummalapenta		
	Ramapatam		
	Pakala-Binginipalle ...		
	Kottapatam		
	Kanuparthi		
	Ongole		
	Kanigiri		
10. Anantapur District...	Anantapur, North		Notification No. 214 of 7th December 1883.
	Do. South		
	Gooty		
11. Nílgiri District ...	Benné		Notification No. 219 of 7th December 1883.
12. Do. do. ...	Coonoor Reserves—		Notification No. 13 of 19th December 1883.
	Ghât reserve		
	Sim's Park, No. 1 ...		
	Do. No. 2 ...		
	Spring field		
	Bleak-house		
	Bandy shola		
	Coonoor peak		
	Brooklands		
	Lamb's rock		
	Tiger hill		
	Blackbridge		
	River reserve		
	Town shola		
13. Do. do. ...	Ootacamund Reserves—		Notification No. 14 of 11th January 1884.
	Snowdon		
	Dodabetta Block, No. 1 ...		
	Do. No. 2 ...		
	Kótagiri Trace, Shola No. 1.		
	Kótagiri Trace, Shola No. 2.		
	Craigmore		
	Elk hill		
	Lovedale, East		
	Do. West		
	Munjinikorai		
	Bathri shola		
	Therma tope		
	Marliamund shola ...		
14. Bellary District ...	Bellary		Notification No. 51 of 12th March 1884.
	Mincheri		
15. Cuddapah District ...	Kavalakuntla		Notification No. 54 of 14th March 1884.
	Ganugapenta		
	Gopavaram		
	Ramapuram		
	Malliamkonda		
	Konarazupalle		
	Vontimitta		
	Kanakalakonda		
	Patur		
	Kanamalapalle		
	Lankamalai		
	Kottakota		
	Dassapalle		
	Kanchalamoram		
	Sibyala		
	Tsundupalle		
	Madhavaram		
	Vandadi hill		

15. Cuddapah District—(*Continued*).	Urukonda	Notification No. 54 of 14th March 1884.
	Rekkalakonda	
	Yellutla	
	Gajjbuchikona	
	Yerramorallajedu	
	Ankalammakonda	
	Nurukupalakonda	
	Tavalam	
	Madhanikonda	
	Pentzupád	
	Avalakonda	
	Mudimadugu	
	Horsleykonda	
	Mothugamala	
	Mallaiakonda	
	Nallakonda...	
	Kotammakonda	
	Errakasikonda	
	Tshvaramala	
	Kokanti	
	Kadiri	
	Vellichellamala	
	Thirumaladevarakonda ...	
	Nigadi	
	Gorivikanama	
	Dorigallu	
	Kukarazukonda	
	Tumala	
	Malakavemala	
	Tummalamala	
	Kondagamerla	
	Somarazumala (East) ...	

The progress of forest reserve selection, demarcation and settlement may be best recorded district by district.

11. *Ganjam District.*—As explained in paragraph 3 the selection of Reserved Forests in Goomsur was made by the Conservator during the year. On the 25th March he submitted to the Board draft notification countersigned by the Collector with proposals regarding thirty-one blocks of forest, which the Board have approved. Demarcation was at once commenced and will, the Conservator hopes, be nearly completed before the Forest Settlement Officer is appointed. In this way his work will be greatly facilitated, and it is not anticipated that he will make many alterations of importance.

12. *Vizagapatam District.*—The selection of forest reserves was commenced during the Conservator's visit in March 1884 to the Pálkonda hills and will, he hopes, be permitted to extend to those of the Golgonda hills and the Sarvasiddhi Taluk. In the latter some useful areas may, it is hoped, be secured, which, though now in bad condition, may be gradually improved and placed under the Forest Act. In the other taluks, good forests do exist, but they will probably have to be reserved under some other Act, or at any rate generally under order of Government as the taluks are scheduled districts.

13. *Godávari District.*—Remarks on this district must be postponed till next year; the reserves in Bhadráchalam and Rékapalle Taluks remain as before.

14. *Kistna District.*—The selection of reserves in this district, started by the Conservator when on tour in August 1883, has been nearly completed, and a notification prepared proposing twenty-five blocks for reservation. In that notification were included most of the areas likely to be proposed for reservation, and only the plantations, the coast forests, and some small additional pieces possibly will remain to be added. The demarcation will be commenced at once.

15. *Nellore District.*—Three notifications covering the Srîharikót forests and islands, the casuarina plantations, and the isolated blocks of Chimakurthi, Kanigiri, Udayagiri and Ongole were published during the year, and drafts were also submitted for the forests of the eastern slopes of the Veligonda range. These drafts still await

orders of Government which has called for some information regarding them, which information is being collected. On the subject of the demarcation and settlement, the District Forest Officer writes:—

"Srîharikót, Dugarázpatnam, Kottapatam and Taminapatnam were demarcated before the close of the year, and the settlement of the first-named would probably have been completed by the 25th May if the Forest Settlement Officer had not been suddenly removed on 9th May, the day that the three months allowed for presenting claims expired, and just as orders on them were going to be passed."

No change has taken place in regard to the other areas, but the selection of reserves will, it is hoped, be done during the current year.

16. *Cuddapah District.*—The District Forest Officer thus writes:—

"Two schedules of proposed reserves were prepared and notified by Government under Section 4 of Forest Act:—(*a*) seventeen reserves on 4th June 1883, (*b*) fifty reserves on 31st March 1884. Kódúr plantation and Thunakonda reserve were settled and declared reserved forests from 1st May 1884. Pullampet plantation and Mittamidapalle plantation have been settled and notification under Section 16 sent up. Settigunta reserve has been settled, but the period for appeal has not yet elapsed. The Forest Settlement Officer has also made some progress towards the settlement of the following blocks:—Shesachelam Reserve, Reddipalle Plantation, Camalapuram Plantation."

Demarcation has not progressed in Cuddapah as fast as it might have done, but the Settlement Officer will, it is hoped, speedily push on the forest settlement, so that by next year we may have a good list of permanently-notified reserves to show in Return No. 1. The Sketch Map No. 2 annexed to this report shows the areas selected up to date.

17. *Kurnool District.*—The whole of the selection of Reserved Forests for the Nallamalai hills has been completed, and the settlement is now in progress. The greater part of the western boundary has been demarcated in spite of many difficulties in obtaining labor. The selection of reserves in the Veligonda Hills has also been made, and work will shortly be started in the Yerramalais.

18. *Bellary District.*—Two notifications were submitted and approved and published by Government during the year; the first relating to five blocks adjoining the Sandúr forests in the Hospet and Kudligi Taluks, the latter to two blocks in the Bellary, Hospet and Ráyadrug Taluks. Further notifications are under preparation, but no demarcation has yet been completed.

19. *Anantapur District.*—In this district, notification regarding the Gooty and Anantapur plantations has alone been published as yet, but reserves have been selected in Penukonda and Hindupur, as well as Muchukota, and will shortly appear, it is hoped. In this district as well as in Bellary the condition of the reserves is poor at present.

20. *Nílgiris.*—The first notification alluded to last year's report proposed some of the Ootacamund settlement and Tódanád plantations for reservation. Since then notifications regarding a further series of reserves in Ootacamund settlement, the whole of the proposed reserves in the Coonoor settlement, and the Benné teak forest have issued and more are under preparation. The want of good maps is much felt in the selection of these reserves; the available maps being either small scale maps showing no hills, or village maps on large scale giving but very small idea of the ground. The work of selection, which here has to be made in much greater detail than elsewhere, is progressing slowly, but still satisfactorily. All the Coonoor reserves were permanently demarcated during the year, the rest temporarily, a sum of Rs. 1,734 having been spent. The distance cleared was about $62\frac{1}{2}$ miles, while 1,095 permanent pillars were erected.

21. Considerable progress has thus been made during the year in the selection of reserves. Demarcation work, however, in some districts is not being sufficiently pushed on, while in one or two, and especially in the Nílgiris, the settlement work would seem to be also proceeding unnecessarily slowly. The necessity for, and the immense value in protection afforded by, a properly demarcated boundary cannot be really explained except by actual experience, and the Conservator hopes that Collectors will endeavour to get their District Forest Officers to thoroughly understand the necessity for urging on demarcation work in the future as fast as possible. When it is remembered that the sanctioned estimate for the year provided Rs. 9,890 and the revised estimate Rs. 15,500, while only Rs. 3,547 were actually spent, it may be realized how

common is the mistake of providing funds and then neglecting or making excuses for not carrying out the work. It is not only in *demarcation*, but under many other heads that estimated works are postponed till too late, as an examination of the actual figures of the estimates will show, and while every possible clamour is raised for larger forest staffs, more peons, more office writers or more temporary establishments, our surplus revenue was this year, I regret to say, only just made by important works which had been budgeted for, being omitted or postponed under some more or less valid excuse. In Cuddapah, Kurnool and Nílgiris only was any attempt made to utilize the budget provision for demarcation, while in the two latter only would it appear that any demarcation work of value was completed.

Leased Forests.

22. The lease of the Sandúr forests in Bellary has been finally concluded in a Convention signed on the 18th March 1884 (Appendix A). No timber was cut, but 41,137 bamboos were sold at Re. 1 per 100. The tracts were closed against grazing, and the collection of minor produce begun. The revenue of the leased forests was Rs. 509, the expenditure Rs. 11,315, including rent Rs. 10,000; some minor produce still remaining unsold.

23. In the Mudumalai Forest in Nílgiris, 12,300 cubic feet of teak were brought to depôt and 6,084 cubic feet taken to Ootacamund.

Fuel and Fodder Reserves.

24. In the Berhampore Taluk of Ganjam some good areas have been selected by the Senior Assistant Collector and will probably be notified shortly by the Collector under the rules. The selection of areas in Chicacole Taluk is also under discussion In the Vizagapatam District proposals were submitted by the Acting Principal Assistant Collector Mr. Welsh for the formation of fuel and fodder reserves in Sarvasiddhi Taluk, and his report is shortly expected. In Kurnool the reservation of lands for grazing and fodder reserves is being made in the dry country west of the Yerramalais. No report on the matter was received from other districts, but now that the selection of Reserved Forests is progressing and the Forest Rules are published, action cannot be much longer delayed.

CHAPTER III.

Surveys, Working Plans, and Annual Plans of Operations.

(1).—*Surveys.*

25. It may be useful here to record the maps which are available for use in the forest and the probable requirements in the future.

26. *Ganjam.*—Taluk maps on the scale of 1 inch = 1 mile are available for the Berhampore and Chicacole Taluks as well as for the Zemindari estates of Parlákimedi, Tarlá, Mandasa, Tekkali, Chíkati, Aska. But the Berhampore Taluk map unfortunately omits the Mohiri hills, so that a map of that forest country will now be urgently required. For the whole of the Agency Tracts and the northern half of Goomsur, the sheets of the "Ganjam and Orissa Survey," 1 inch = 1 mile, supply all that is necessary, and the sketch map which accompanies this report shows the proposed forest reserves. For the southern part of Goomsur and the neighbouring Zemindaris only the Atlas sheet 4 miles = 1 inch, is available, but for recent roads and the divisions of the district the "Manual" map, 1 inch = 8 miles, is very useful.

27. *Vizagapatam.*—No taluk maps have yet been published, though, as survey operations are now going on, we may hope before long to have maps of the Pálkonda, Sarvasiddhi and Golgonda Taluks, and it is to be hoped that the former will include the Palkonda hills. For the Agency Tracts the sheets of the Vizagapatam and Central Provinces Survey, 1 inch = 1 mile, are available, but for the rest of the district, the Atlas sheet, 4 miles = 1 inch, is our only resource.

28. *Godávari.*—Taluk maps on 1 inch = 1 mile are available for all the taluks as well as the estates of Cocanada, Coringa and Pithápuram. For the Agency Tracts the sheets of the "Vizagapatam and Central Provinces Survey" again come in, and for the Bhadráchalam and Rékapalle taluks we have the sheets of the "Survey of the Godávari taluk," 1 inch = 1 mile, Nos. 11 to 18. The Atlas sheets are of course available as well as the "Manual Map," 8 miles = 1 inch.

29. *Kistna and Nellore.*—Separate maps are available on 1 inch = 1 mile for all the taluks, and the district map on 1 mile = 2 inches is also very useful. There are small "Manual" maps on 1 inch = 2 miles.

30. *Cuddapah.*—Taluk maps on 1 inch = 1 mile are available for all taluks except Madanapalle, Kadiri and Váyalpád. For these, the taluks of the sub-division, there is only the Atlas sheet. The small 'Manual' map, copy of which, colored to show the forests, accompanies this report, is also useful. Special maps of the old reserves and plantations are available, scale 4 inches = 1 mile; but these will have to be revised after the present forest settlement is completed.

31. *Kurnool.*—The best map is the district map on 2 inches = 1 mile, as this is the only one which properly shows the Nallamalai Hills. There are separate maps for all taluks on 1 inch = 1 mile, but the Nallamalai Hills are excluded from them. Topographical sheets, Nos. 109 to 111, show portions of Rámallakót and Pattikonda taluks on 1 inch = mile.

32. *Bellary and Anantapur.*—In these districts we are very badly off for maps, there being none for the taluks, and besides the Atlas sheets, the Local Fund maps which are only sketches and sheets 109, 110 and 111 of the topographical survey which give parts of the Adóni taluk on 1 inch = 1 mile, there is no good map available, and this is a source of great inconvenience. A special map has however been made for the Sandúr forests, and this must later on be supplemented by the addition of the Government Forest Reserves adjoining that territory.

33. *Nilgiris.*—There are many maps of the Nílgiri district, namely:—

District.—"Manual" map 1 inch = 2 miles.
District map 1 inch = 1 mile.

Amsham.—Tódanád, Merkunád, Munanad, Cherankod, Nambolukod and Ouchterlony Valley, 4 inches = 1 mile, but no hill shading. A map of Paranginád is much wanted.

Settlement.—Ootacamund { 6 inches = 1 mile / 8 ,, = 1 ,, } with contoured hills.
,, 24 inches = 1 mile, with no hill shading.
Coonoor 8 inches = 1 mile, with shaded hills.
,, 24 inches = 1 mile, with no hill shading.
Wellington 24 inches = 1 mile do.
Kotagiri 6 inches = 1 mile, with contoured hills.
,, 24 inches = 1 mile, with no hill shading.

Village.—Maps in sheets on the scale of 16 inches = 1 mile for many villages.

Plantations.—Special maps without shading for most of the old plantations. A new map is, it is understood, in course of publication, in sheets, showing the hills; and this, it is expected, will be by far the most useful for forest purposes. These maps are useful enough for boundary demarcation purposes, but we shall require to have special maps made for the Reserved Forests after they are finally settled, and those not merely skeleton sheets with a boundary line and no other information, outside or in, as hitherto, but useful maps showing the lay of the ground, the roads, streams, forest blocks and compartments and all such information as may make them useful and capable of being added to as work goes on.

34. Thus it will be seen that we have fairly good maps for all districts except Vizagapatam, Bellary and Anantapur, and that besides these the ones most urgently required are those of the taluks of Goomsur in Ganjam; Madanapalle, Váyalpád, Kadiri in Cuddapah; and Paranginád in Nílgiris.

35. In the matter of forest survey nothing has been done departmentally except the maps by Mr. Brougham of the Gooty and Anantapur plantations in the Anantapur district, and by Mr. Lodge of the Dugarázpatnam and Taminapatnam plantations in Nellore.

(2).—*Working Plans.*

36. The only working plans so far made are the preliminary schemes for the Nílgiri plantations, viz. :—

1. "Old forest," Coonoor.
2. "Aramby," Ootacamund.
3. "Governor's" Shola, Ootacamund.
4. Bathri, Ootacamund.

and the preliminary working scheme of the Ballipalle forests in Cuddapah.

37. The "Old forest" is a plantation of 200 acres of blue-gum on the hills between Coonoor and Kodamalai. It has been divided into ten compartments of an average of 20 acres each and these again into two sub-compartments. Two sub-compartments have been set apart for the working of each year of the ten years from 1883-84 to 1892-93. For 1883-84, compartments 3 (*a*) and 8 (*a*) were marked for cutting, but owing to want of demand the former only was cleared. The yield was 1,275 tons, 988 bullock loads and 8,544 head loads of fuel. Assuming bullock loads to be 300 and head loads 70 lb., the amount was about 1,700 tons, or for $8\frac{1}{2}$ acres 200 tons per acre, which is considerably in excess of the estimate of Mr. Hutchins, which, at 12 tons per acre on $8\frac{1}{2}$ acres, 11 years old, would give 1,222 tons only. Three sub-compartments will, it is hoped, be worked this year if purchasers can be obtained. The reproduction in coppice has been excellent, leaving nothing to be desired.

38. The "Aramby" working circle consists of the plantations of "Aramby" and "Koolie," together about 120 acres. They have been divided into ten compartments, two half compartments being annually worked. During the year under review 2 (*a*) (from 1882-83), 4 (*a*) and 1 (*a*) (from 1883-84) were cleared, the results being—

—	Tons.	Head Loads.	Tons.	Add estimate of belt trees.	Total.
				TONS.	TONS.
2 (*a*)	604	721	32	48	684
4 (*a*)	541	1,323	59	120	720
1 (*a*)	460	1,522	68	75	603
Total ..	1,605	3,566	159	243	2,007

The areas are not yet very satisfactorily settled, owing to the roughness of the maps; but the three sub-compartments give probably about 18 acres, the yield therefore being 111·5 tons per year less by about one half than Mr. Hutchins' estimate (12 tons per acre for twenty years on 18 acres = 4,320 tons). Next year better information regarding areas will probably be obtainable and the calculation be revised.

39. The working scheme for the Governor's shola plantations covers the areas known as Baikie, Sheffield, Cally, Chowghat Cally, Governor's shola I and II, Arnikal, Andy and Huppatti; total 195 acres. These have been divided into eighteen compartments and a scheme drawn up after careful examination, under which about 20 acres will be cut yearly in a rotation of ten years. The scheme begins in 1884-85, in which year compartment 1 in Baikie and 1 in Governor's shola will be cleared. A similar scheme has been made for the Bathri plantation.

40. Careful records of all the works will now be kept, and, as soon as better maps and more reliable area statistics are available, we shall see better how the results compare with Mr. Hutchins' forecast. Working schemes will also now be made for the Nílgiri sholas, many of which stand very greatly in need of working to improve their condition and growth as well as to supply material. There is no doubt in the Conservator's mind but that those of the Nílgiri sholas which are at moderate elevations will as well repay working as do the coppice forests of Europe.

41. In the Ballipalle evergreen forests in Cuddapah, covering about 1,500 acres fit for working in coppice, a preliminary scheme was drawn up, under which compartments 2 *b* and 5 *b* were cut during the year, though, as the whole material was not removed to depôt before its close, exact statistics cannot yet be given. The area to be cut over yearly is about 50 acres.

The Conservator hopes soon to be able to frame a preliminary working scheme for the Gumsoor sál forests. The revision of the working proposals for the Nellore plantations is now under consideration, and the results will be reported next year. The revision of that in force in Sriharikót must await the final notification of the reserves.

(3).—*Plans of Operations.*

42. These have not been regularly started yet, matters being so far not in a good condition for them. The all-important work at present is the selection and demarcation of reserves and the improvement of the revenue collections, and, though other works are not being lost sight of, yet much cannot be done till these preliminaries are finished.

CHAPTER IV.

Protection and Improvement.

43 In this chapter it is not yet possible to separate the reserved forests from others as yet, the remarks therefore must be taken as applying to all.

(*a*) *Establishments, Ranges and Beats.*

1.—*Superior Staff.*

44. The superior staff at the close of the year consisted of—
One Conservator, Mr. J. S. Gamble.
Six Deputy Conservators, Messrs. Higgens, C.S., Sim, C.S., Vincent, Hooper, Lieutenant-Colonel Jago, and Mr. Boileau.
Four Assistant Conservators, Messrs. Brougham, Lushington, Homfray and Lodge.
all, except Messrs. Homfray and Lodge, being in charge of forest divisions. Mr. F. A. Lodge joined the department as a trained officer, appointed by Her Majesty's Secretary of State, on 21st December 1883, and was posted to Nellore.

45. During the year, Mr. E. H. Boileau was promoted from Assistant Conservator, First Grade, to Deputy Conservator, Fourth Grade, and Mr. J. H. B. Brougham from Assistant Conservator, Second, to Assistant Conservator, First Grade.

46. Of the four Sub-Assistant Conservators, the Conservator is sorry to report the death during the year of Messrs. E. Dampier and T. A. Newman. Of the other two, Mr. Stafford continued in charge of the Godávari district and Somasundram Mudaliar was posted as District Forest Officer to Vizagapatam.

2.—*Subordinate Staff.*

47. The Subordinate staff continued nearly the same as reported in paragraph 19 of last year's report. But proposals for a greater equalization of the staff of the districts have been submitted and are now under the consideration of Government. The actual staff at the close of the year was as follows :—

District.	Office Establishment.	Forest Establishment.			Total.
		Sub-Assistant Conservators.	Forest Rangers.	Foresters and Forest-guards.	
	RS.	RS.	RS.	RS.	RS.
Conservator's Office	316	..	..	..	316
Ganjam	39	..	..	176	215
Vizagapatam	..	150	..	22	172
Godávari	58	150	150	114	472
Kistna	97	..	..	590	687
Nellore	128	..	..	439	567
Cuddapah	147	..	280	594	1,021
Kurnool	129	..	100	278	507
Bellary	36	..	50	73	159
Anantapur	46	..	..	142	188
Nílgiris	134	..	..	251	385
Total ..	1,130	300	580	2,679	4,689
Balance saved ..	84	400	745	593	1,822
Grand total sanctioned ..	1,214	700	1,325	3,272	6,511

Ranges and Beats.

48. In the *Ganjam District* five ranges have been constituted, viz. :—

1. Suradá.	4. Kurchóly.
2. Mojagodo.	5. Berhampore.
3. Kukuluba.	

and officers posted. Eventually one more must be made in Gumsoor, but for the present the division as proposed will suffice.

49. In *Vizagapatam* two ranges have been formed, viz., Pálkonda and Golgonda, another will probably be required in Sarvasiddhi.

50. In the *Godávari District* except the Bhadráchalam range, none are yet permanently settled. They will be properly started this year.

51. In the *Kistna District*, seven ranges have been constituted consisting of taluks or groups of taluks :—

1. Bandar (Bandar and Gudiváda).
2. Bápatla (Bápatla and Répalle).
3. Bezváda (Bezváda and Nandigáma).
4. Guntúr (Guntúr and Narsaraopet).
5. Vinukonda (Vinukonda).
6. Pálnad (Pálnad, part).
7. Krósúr (parts of Narsaraopet, Pálnad and Sattenapalle).

52. In *Nellore* nine ranges were at work during the year, they were :—

1. Sriharikót.	6. Nellore.
2. Plantations.	7. Kanigiri.
3. Gúdúr.	8. Ongole.
4. Rápúr.	9. Madras depôt.
5. Udayagiri.	

but the re-organization of these has been proposed.

53. In the *Cuddapah District* there are ten ranges, viz. :—

1. Kodúr	} Pullampet Taluk.
2. Rajampet	
3. Cuddapah	Cuddapah do.
4. Siddhavattam	Siddhavattam do.
5. Badvél	Badvél do.
6. Proddutur	Proddutur and Jammalmadugu Taluks.
7. Ráyachóti	Ráyachóti Taluk.
8. Váyalpád	Váyalpád do.
9. Madanapalle	Madanapalle Taluk.
10. Kadiri	Kadiri Taluk.

54. In *Kurnool* eight ranges have been constituted, viz. :—

1. Yerramalais.	5. Nandikótkur.
2. Sirvél.	6. Cumbum.
3. Nandyál.	7. Kristnamchettypalle.
4. Velgode.	8. Márkápur.

It has been found necessary, owing to the distance through the hills, to have the division line in the centre on the taluk boundaries and the range head-quarters on either side.

55. In *Bellary* at the close of the year there were only two ranges, but it is now proposed to make five, viz., Sandúr, Hadgalli, Bellary, Hospet and Adóni.

56. In *Anantapur* three ranges were at work during the year in Muchukota, Penukonda and Hindupúr. Two more may be required at Anantapur and Gooty.

57. In the *Nilgiris* at present there are five ranges, viz., Ootacamund, Coonoor, Kótagiri, Mudumalai and Sígúr, but this number, for forests which require so much more detailed supervision, is quite inadequate; and it is proposed eventually to make more, viz., Kullar, Mailur, Naduvatam and South-East Wynaad. When this is done and the number of forest guards increased, work will go on better and protection be more certain.

58. The *Beats* in the different ranges will, it is hoped, be definitely marked out and settled during the year.

(b) General Protection and Breaches of Forest Laws.

59. Form No. 4 shows the number of cases of the year to have been 567, which, together with 39 pending from last year, makes 606 ; in 425 of which convictions were obtained, 96 representing acquittals and 86 cases pending at the end of the year. Most of these latter were in Nellore. The largest number of cases were in Nellore, Cuddapah and Kurnool, while there were few in Ganjam, Kistna and Nílgiris. Out of 521 cases tried, 425 or 82 per cent. resulted in conviction. It will be noted that in last year's report 30 cases only were given as pending at the close of the year, while it is now reported that there were also 8 in Ganjam and 1 in Bellary. This will account for the number at the beginning of the year under review being given as 39.

60 The small number of cases in Ganjam is reported due to the Forest Guards not having, till the end of the year, been employed on their proper duties. The District Forest Officer of Kistna reports that "in accordance with a recent Government Order on the subject no register is kept, consequently I have only been supplied with a list of those tried previous to January 1, 1884." The Government Order merely prescribed the discontinuance of returns direct to Government but did not in any way countermand the record of cases, and the matter is here alluded to in order that it may be everywhere understood that District Forest Officers are expected to keep a permanent record of forest cases. From Nellore no explanation of the number of cases is given.

61. All the cases in Bellary were from Sandúr, where lately the penal clauses of the Forest Act have been applied to the leased forests.

62. The District Forest Officer of Kurnool has submitted a very interesting account of the work of the year under this head, parts of which are here reproduced :—

"Our police arrangements during the year have also been changed for the better, a regular system of straightforward inquiry, report and prosecution having been laid down in the place of the haphazard delays and roundabout routine of former times ; reports are now sent at once and simultaneously to myself and to the Sub-Magistrate ; the District Magistrate's sanction, if necessary, is aked for direct by the Sub-Magistrate himself ; and where formerly six or seven months did not suffice for the trial of a case, as many days are sufficient now.

A few specimen cases may not be uninteresting, as showing some of the 'tricks of the trade.' I select three from Atmakúr ; the first in point of time was as follows :—On the 5th December 1882, Deputy Tahsildar Cuppuswami Mudali had gone to Venkatapuram to cart some confiscated timber out to Atmakúr for sale, but though waiting for a very long time, he could get no carts ; at length his suspicions were aroused, and he came back to the depôts near Kristnapuram, determined to be on the watch for the running of smuggled timber, which he suspected was the matter in hand ; night came on and watch was kept up but to no purpose, and on the morning, therefore, the Deputy Tahsildar started out into the forests to hunt things out for himself : some distance out, he came on the timber lying by itself and consisting of yagi beams and posts to the value of Rs. 340, dragged away to one side of the path and there dropped and hidden among the trees and bushes ; these he confiscated, and following up the track—for it had been raining—left by the carts, eventually came up with them, standing with the mud still fresh on their wheels, in the village of Venkatapuram ; the cartmen admitted their share in the transaction, pleading that it had been done under the orders of Comati Venkayya, one of the large timber merchants of Kristnapuram ; sanction for his prosecution was obtained, the case was tried in the year now under report, and the merchant was sentenced by Tahsildar Narayanasawmy Naidu to four months' simple imprisonment and a fine of Rs. 100."

The two other cases were similar and were detected by Forester Mr. Payrie and Police Constable Rejayana, respectively. Mr. Sim goes on to say :—

"Three things are noteworthy in these cases, (1) that the main smuggling is done by the big timber merchants ; (2) that with their depôts so close to the forests and regular accounts not enforceable, such smuggling is particularly easy ; and (3) that a reward system to induce informers is the only way to effectively cope with it.

The ryots do not cheat as much, I think ; a few poles and a few cart-loads of firewood being the limit of their requirements, the chief offenders are the merchants mentioned above ; then come the Zemindars and Inamdars of the Cumbum side with their cheap permits satisfied from *our* forests, and in many cases fraudulent passes issued and antedated to tide a detected offender over conviction ; and finally come, or rather came—for our import rules have put a stop to them—the Lambádies and Lugálies, who, under pretence of importing timber from the Hyderabad side and under the cover of Hyderabad permits, cut and sold from our own."

63. The assistance given by the Revenue and Police authorities is again most satisfactory ; but it must be noted that other districts are not so fortunate in this respect

as Kurnool, and if in Ganjam and Kistna, particularly, more assistance were thus given, forest offences would more speedily be put a stop to and the number of cases recorded in the returns diminish in a real and legitimate manner. The Collector of Bellary has specially mentioned M. V. Chellapathi Naidu, Tahsildar of Hadgalli, and A. Akhilandum Mudali, Acting Tahsildar of Adóni, as having given much intelligent assistance in forest protection, demarcation and other works.

(c) Forest Fires and Fire Protection.

64. From Ganjam very little is reported about fires, save that on all the hills fires have occurred. In the sál tracts in the plains, however, little damage has been done. Next year a commencement will be made to make specially protected areas, and the same steps should be taken in the Pálkonda hills of *Vizagapatam*. In the *Godávari* District, most of the reserves appear to have had fire in them, those of Peddanallapalli, Tunikicheruvu and parts of Arlagudiem, Tarival, Bunderas and Pocharum having only escaped.

65. In the *Kistna* District a small attempt at protection of some of the forests was made, and up to the end of the year comparatively few fires had occurred. The Kondapalli reserve was the only one which could be said to have been specially protected, and in this three square miles were burnt, including a small garden planted by the Jungle Conservancy Department. The District Forest Officer should have taken every precaution to save this. In the Bollapalle reserve two fires occurred, but both were extinguished before they had gone very far. Two bad fires occurred in the Palnád taluk, and one in the Arisepalli plantation near Masulipatam, but other plantations escaped.

66. In *Nellore* no special measure were undertaken. Fires are rare in the plantations and plain forests, and it is only in the Veligondas that they occur. The Conservator had recommended a special area to be selected for protection in the Veligonda hills, but nothing was done. It is worth noticing that in their reports the Nellore authorities always complain that the fires in the forests come from Cuddapah and the Cuddapah authorities the reverse. The Conservator is inclined to think that neither is really the case, but that fires are lit by herdsmen on the hills and travel towards Nellore or Cuddapah according to the direction of the wind at the time.

67. In *Cuddapah* a few definite blocks in each range were selected for special protection, and the result is given in Form 3. The specially protected areas were—

		Failures.
Ballipalle, East	6,306	1,400
Do. West	4,480	2,200
Kódúr Hill	4,686	400
Yerraguntlakota	3,487	360
Thanakonda	1,047	15
Nigadi	19,000	...
Malakavemala	5,500	500
Nurukupalakonda, I	900	...
Do. II	3,700	...
Ankalammakonda	3,500	...
Mamillapalli	3,000	...
Horsleykonda	4,989	...
Guvalacheruvu	7,600	...
Gadikota	12,000	...
Srirangarazupolliem	4,800	...
Arepoyakanama	9,000	...
Muddureddipalle	8,400	240
Total ...	102,386	5,115

the failures being only $5\frac{1}{4}$ per cent. of the area attempted. The return, however, only gives results up to the date of submission of the report, for the fire-season was not then over, nor, indeed, is it yet over now (July 15) in some ranges.* It is to be regretted that the chief failures were in Kódúr range, but the result on the whole is satisfactory as is the result in the whole district, for fires have been comparatively few and been quickly extinguished, chiefly, as the District Forest Officer reports, by the timely assistance of village officials. In some of the specially protected areas, it is

* It may perhaps be said to have ended on August 3rd.

believed that small fires have occurred quite recently, and it may here be mentioned that the Conservator intends to submit proposals for altering the date of final report on fire protection, the fire-season lasting for different periods in different districts, and in some being often not over even in the middle or end of July.

In *Kurnool* an area of two square miles was set apart near Velgode for special protection, but half of it was unfortunately burnt. The District Forest Officer has, however, made such arrangements that next year much more serious endeavours will be made. Mr. Sim does not think that the fires this year covered more than one-half of the Nallamalais.

68. In *Bellary*, the protection of the Sandúr forests continues. The following interesting report by Mr. Hooper is here reproduced *in extenso*:—

"During the previous year operations had been conducted for the first time in the Rámandrug Range of the Leased Forests and in the small Malpanagudi block to the south of the Copper Hills.

"We had then to record a fire which burnt 1,200 acres in the Kanavihalli and Gurga blocks of Rámandrug and the saving of 13,800 acres at a cost of Rs. 1,250.* The protection from fire of Malpanagudi was not mentioned in the Circle Report; it cost in that year Rs. 95. In the year under report, which is thus our second fire season, we protected the same areas and a portion of British forest adjoining the Rámandrug leased blocks on their western side, thereby altering the block areas as given in last year's account. In this way we have included in one protected range nearly 19,000 acres, or an increase over last season of about 4,000 acres. Comparing the cost during each season, we find that the whole expenditure under this head during 1883-84 was Rs. 1,150, of which Rs. 330 were debitable to the work of the previous dry season. The cost of the work from November to April has therefore amounted to Rs. 820, expended as follows: Rámandrug range Rs. 752, Malpanagudi block Rs. 70. The accounts for 1884-85 contain charges on the season's account amounting to Rs. 412, work being kept open from want of rain until the 7th day of July.

	Rs.
* Accounts, 1882-83	920
Do. 1883-84	330
	1,250

"This charge was expended as follows:—

	Rs.
Rámandrug Range	399.
Malpanagudi Block	14.

"The total cost of the season has therefore been as follows:—

The protection of 19,000 acres.

"Rámandrug Rs. 1,150 as against the actual protection in the previous season of 13,800 acres at a cost of Rs. 1,250 out of an attempted total area of 15,000 acres. In the margin the detail of the season changes will be found. We had no fires that reached the protected area beyond two slight ones which spread from the line burning, and were put out before they spread. In this way we lost about 200 acres in all. In Malpanagudi an area of under 50 acres was burnt from fire lighted by some one unknown, the total cost being Rs. 83-8-0.

"On the whole the work was a success, yet the season was the driest and the longest I have ever known. The work was carried on slowly in my absence in other parts of the district up to March and the Ranger was new to it all. In future we should not have all these difficulties to contend with in one season and we may fairly consider the work of fire-protection to be successfully established.

"I would mention that about 8,000 acres of the North-eastern Range have also been saved owing to the vigilance of the establishment in detecting fire cases and the prompt extinction of the fires that did occur.

"The details of the cost according to blocks are as follows:—

—	Sandur Acres 2,750.	Hospett Acres 1,050.	Venkatagiri Acres 1,150.	Gound Acres 5,050.	Gurga Acres 2,430.	Kanavihalli Acres 4,160.	Dhurmapur Acres 2,150.	Total Acres 18,750.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Exterior lines	50	31	19	18	70	72	35	295
Interior lines	30	16	...	...	...	...	...	46
Exterior lines	33	20	35	11	24	11	20	154
Interior lines	41	28	...	...	...	...	...	69
Watching	67	93	80	86	93	48	63	530
General charges	8	3	3	17	8	12	6	57
Total ...	229	191	137	132	195	143	124	1,151

or per acre less than one anna."

69. In *Anantapur* special protection works were quite successful; the District Forest Officer reports as follows:—

"It is satisfactory to be able to report that two blocks comprising an area of 7,040 acres in the Muchukota jungles were completely protected from fire during the year at a cost of Rs. 325-8-0 as per annexed table:—

Particulars—Muchukota.	Amount.			Total Cost.		
	RS.	A.	P.	RS.	A.	P.
Fire-paths including exterior and interior lines	97	6	6			
Cutting and spreading grass	137	12	0			
Do. and clearing trees on fire lines ...	41	4	6			
Carriage of do. from do. ...	20	10	0			
Fire-patrols	20	7	0			
Sheds for fire-patrols	8	0	0			
				325	8	0

"Two other tracts (*a*) Kottakota 3,840 acres, (*b*) Amagondapaliem 2,560 acres, situated in the southern taluks, viz., Penukonda and Hindupúr, have been partially protected by the employment of a staff of fire-patrols to guard against incendiarism; and in these only one or two small fires have occurred."

Mr. Brougham talks of increasing the specially protected area next year, but such an increase, if any, can only be very small; for it is better to make sure of a small area than to "chance" a large one. The protection from fire of the Muchukota Reserve has proved most useful; for during July, when fodder for cattle was very scarce in the district and cattle dying, the reserve was opened to grass-cutters, and the inhabitants of the neighbouring villages and away as far as Tádpatri on one, and Anantapur on the other side, flocked to the reserve and carried away the grass. The District Forest Officer has brought to notice the conduct of the headman of Muchukota (Narsa Reddi) who has used his endeavours and his influence over the villagers to explain to them the mistake of burning the forest.

70. Fires on the grass lands of the Nílgiris were very bad this year, and some of the sholas were badly scorched along the edges. The plantations, however, except Sígúr, escaped, and the ghât forests suffered comparatively little. The fire in the Sígúr sandalwood plantation was due to the negligence of the fire-patrols who failed to watch a fire that came from hills about Northern Hay.

71. The whole area attempted to be protected was 237,042 acres, and of this only 18,877 acres or about 8 per cent. was burnt. The cost of protection was Rs. 5,371 or less than 5 pies per acre. The Conservator has been unable to give the usual table showing the expenses incurred in the previous and current year and their connection with the figures here given. The amount spent during the year under sub-head A VIII*c* was Rs. 5,636 of which Rs. 1,565 were on account of 1882-83.

(*d*) *Grazing.*

72. Very little information on this subject is available from the reports submitted this year. In future years it will be specially treated and the arrangements for grazing grounds which have been made under the rules will be duly reported.

(*e*) *Natural Reproduction.*

73. This subject has not been specially treated in the reports sent in from the districts, as it was not referred to in previous years. It is, however, very important, and in future years will receive full consideration.

74. Reproduction in the sál forests of Gumsoor is everywhere most favorable, and it is especially noticeable that coppice reproduction is far better on lands that have been cleared for "kumri" and then left than on lands on which villagers have cut produce. The system of cutting which villagers employ in all districts is most wasteful, rarely is a tree cut at less than three feet from the ground, so much good wood being consequently wasted, while instead of sending up good coppice shoots from the base capable of forming trees, pollard shoots are sent out which as they grow older envelope

the old stool and leave a hollow rotten centre which quite prohibits the lower part of the tree being ever utilized for timber. District Forest Officers everywhere should endeavour to get all cuttings made close to the ground, both in the reserves and by license-holders.

75. In the coast hills of Ganjam and Vizagapatam the reproduction partly by coppice, partly by seedlings, of *Xylia dolabriformis* and *Chloroxylon Swietenia* is remarkable. A good example, however, of the evil of cutting trees too high is to be seen in the so-called topes of Voni and Lakshmipuram in the Pálkonda Hills, where more than half the trees are cripples, so to speak, and the growth in spite of protection is really no better than that of the adjacent forest and not so likely to be valuable in the future. At the time of the Conservator's visit the men in charge of the topes were occupied in sweeping together and burning the dead leaves, so leaving the ground hard and bare and in fact doing exactly the opposite to what they should have done.

76. In *Nellore* district, the pollard reproduction of trees at Sriharikóta is very good, the growth of Neredu (*Eugenia Jambolana*) being especially noticeable, but seed reproduction will not be really good until cattle and goats are excluded.

77. The reproduction of coppice in the *Nílgiri* Eucalyptus plantations has been most satisfactory, and that of the sholas shows every sign of being good where cattle can be kept out. In almost all the sholas there are numbers of young trees ready to take the place of old ones, and those who think that shola reproduction is not safe should visit a small piece of the old great Kotah forest near Coonoor (now "Old Forest Plantation") where the growth of ten-year coppice shoots is so dense as to be almost impenetrable. The same dense growth may be seen in sholas at Naduvatam and in a small way in various places near Ootacamund.

78. The experience of natural reproduction, however, which it is most important for us to gain is how it will succeed on the hills of Cuddapah, Kistna, Bellary and Anantapur when the reserved forests are formed and the goats can be controlled, The Conservator is of opinion that natural reproduction will in a few years be very good indeed in such localities, if protection against goats and fire can be assured. Future district reports should record the results of protection in all forests.

In Cuddapah the Pálkonda hills seem to show an improvement in the amount of seedlings of red sanders while the better growth in the Nigadi, Horsleykonda and other old protected blocks in the sub-division is noticeable. The Muchukota forest in Anantapur shows that seedlings and *C. Hardwickia* are beginning to appear in vacant places.

(*f*) *Artificial Reproduction.*

79. In the Ganjam District the only plantation is that near Mojagodo, where a number of teak trees were planted, topé fashion, in 1869. The trees are doing well, the measurements of some of the largest, taken by the Conservator in January 1884, showing a girth of 20 to 28 inches, with a height of 42 to 50 feet. The plantation has been recorded under the head of "Cultural operations," as it is experimental only to replant a small blank in a good forest of sál poles. It will not be extended, but the Conservator hopes before long to use the experience gained in the growing of teak and its reproduction (for it is coming up self-sown all about the plantation) in acclimatizing it on some of the hills where sál does not grow.

80. *Vizagapatam District.*—The so-called "topes" of Voni and Lakshmipuram have now been placed also under "Cultural operations." They are not really plantations but pieces of the natural forest on which a number of sál poles have been retained, almost all other vegetation being cleared and kept regularly away. The trees are not remarkably good, and the Conservator would wish to see them included in a reserved forest with as large an area of the surrounding forest which abounds in trees of good kinds, and the whole allowed to grow together, with merely an occasional thinning of climbers and bad kinds. The closer the growth can be kept while young the better the moisture in the soil will be preserved, and it is quite a mistake to commence thinnings too soon as has been done in the "topes," or to clear the ground of dead leaves. Some planting works have been carried out, so the areas are included under "Cultural operations."

81. From *Godávari* the District Forest Officer reports that he has not yet visited the plantations which were made by the late Jungle Conservancy Fund.

82. The plantations in the *Kistna district* were all visited and reported on by the District Forest Officer, and some of them by the Conservator during the year. Many of them have been found to be worthless and not fit for retention, and the following list therefore is made, showing those which it is proposed to sell with the sanction of the Board :—

Taluk.			A.
Nandigáma	...	Kanchikicherla	14
Bezváda	...	Kondapalli	10
Gudiváda	...	Guraza	20
		Allinagaram	7
		Kanukollu	5
Bandar	...	Gundupalem	13
		Chinnapuram	29
		Kona	30
		Masulipatam	2
Répalle	...	Iskapalle	2
		Peteru	5
Bápatla	...	Appicatla	7
		Bethapudi	7
		Ipurpalem	14
		Perali	15
		Ravurpeta	10
		Kadavakudhuru	18
		Chebrolu	20
		Total ...	228

83. The condition of these plantations is very wretched. Some of the others are not very good, but every endeavour will be made to improve them, and in some cases several of them will be joined together into one for easier management and less cost of protection. The chief tree is *Casuarina*, but there is a good deal of palmyra, which should not again be planted unless other trees do not grow, and *Albizzia*, *Melia* and other trees make up the rest.

84. The casuarina plantations in the *Nellore district* were visited by the Conservator during the year, and in forwarding the results of Mr. Hutchins' work to Government he reported on them and their probable yield. His opinion on the previous system of planting was then sent to the Board, and he can now do no better than reproduce the Collector's remarks in the Nellore Annual Report :—

"The number of plantations remains the same as last year, except that Pullanilapalli has now been excluded ; it was cleared in the famine, and not having been replanted has no right to be called a plantation. The total area of the plantations given in Form No. 5 is 1,846 acres, the total cost up to March 1884 being Rs. 2,19,000. All are planted with casuarinas, except a 20-acre cocoanut plantation at Kothapatam. The average cost per acre is Rs. 118, as compared with Rs. 127 last year. I regret, however, to report that the areas given are not to be trusted, as in the two plantations surveyed by Mr. Lodge, Dugarázpatam and Taminapatnam, the following large differences occur :—

Correct Areas.

Dugarázpatnam—40 acres less than given in form No. 5.
Taminapatnam —60 „ do. do. do. do. 5.

The corrected areas are not shown in Form No. 5, as the survey of the other plantations is not completed.

The following new extensions were made during the year, the total area planted being 188 acres :—

	ACRES.
Dugarázpatnam...	75
Kothapatam	38
Taminapatnam	75

In making these fresh extensions, the work has been confined to the low-land within a quarter mile of the sea, experience having conclusively shown that vigorous growth ceases beyond that distance and that the trees die out rapidly when much exposed to the land wind and away from the sea breeze. It is unfortunate that this was not found out earlier. At Dugarázpatnam part of the sandy flat between the backwater and the sea has been planted.

At Kothapatam, some low-land to the north-east of the existing plantations was selected.

At Taminapatnam some sandy land near the sea, including some bad hills of drifting sand near the sea has been planted. This work will be rather expensive, but it is some advantage to fix the sand. The total cost of these extensions has been Rs. 717 or about Rs. 3-13-0 an acre, from November 15th, the date of planting out, to March 31st; with economy it is hoped that the entire cost of those plantations will not be over Rs. 40 an acre.

The expenditure of the year amounted to Rs. 10,633, which compares favorably with that of last year, Rs. 16,649.

The want of care and system displayed in the earlier plantations is now beginning to make itself shown by heavy mortality. In some plantations half the trees have already died, whilst the rest are sickly and dying off so rapidly, that one plantation (at Dugarázpatam) it was thought better to clear entirely. The causes of this mortality are probably want of care in selecting the soil, and (chiefly) planting carelessly and too close. On digging up the trees which have thus died off, most of the roots are found tied in a knot and to have been planted in any but the right way, so that, except under the most exceptional circumstances, not even a casuarina could be expected to live long.

Since 1880, the planting has been done more carefully, but the appearance of the plantations of that year and of 1881 is in many places spoilt by patches of careless work, the full effects of which are not noticeable until the watering is stopped, when the trees are 3 or 4 years old.

Planting in the Chingleput District and in Nellore are two very different things, the soil here is very much poorer, the water level is deeper, the rainfall is less, the land winds are very trying, and consequently the sea breeze, on which the casuarina seem to thrive, is felt less. If the casuarina is to succeed in Nellore, it is evident that the planting must be done more carefully and by giving greater attention to the roots, that they should be induced to go down deeper for moisture. Mr. Vincent has consequently abolished the Madras style of transplanting, roots being shoved in anyhow with the finger and thumb, after the manner of ragi seedlings. The seedlings are now carefully pricked out into lines when they are three months old ; six weeks before planting out, the plants are transferred to palmyra baskets eight inches deep, and five inches broad ; the baskets are then stood in lines on the ground and kept well watered. The plants soon take root, and when the time for transplanting comes, the baskets are put into the ground without disturbing their contents. The result is that the plants begin their growth immediately ; the roots at once force their way through the basket, and instead of being weakly plants when the hot weather comes on, they are in full vigour of growth.

The cost of the baskets is one pie each or under 3 rupees an acre, and the present condition of the plants put out in baskets in the most unfavorable position, compared with others planted simultaneously without baskets in lower ground, shows that the money was well laid out. The basket plants having better roots require less water, and in planting the hills of drift sand at Taminapatnam, when, as in this year, the long shore winds have been bad, the baskets have saved us the usual mortality of 75 per cent."

The remarks on the revised working scheme are deferred until correct area statements are available.

85. In the *Cuddapah District* no additions were made during the year, but the gardeners in charge have been employed in the filling of blanks by sowing seeds, the result of which is not yet known. The sample area in Kódúr Red Sanders plantation was measured on the 1st April again showing the increase of growth that was to be expected. About 100 mahogany plants were planted at Arimanabundur, where they are doing well and growing fast.

86. In *Kurnool* two small areas have been set apart as experimental grounds for cultural operations ; they are Orwakul on red soil and Mandlam on black cotton, the results will be reported next year.

87. No planting work was undertaken in *Bellary* during the year ; the two babul plantations referred to last year were not visited, but are quite unimportant. Neither was there any planting work in *Anantapur* except some small experiments in growth of babul from broad-cast sowing, which were not successful.

88. *Nilgiris.*—The results of the felling operations have been recorded in paragraphs 37 and 38. It was noticed that the reproduction had been very successful.

89. *Ootacamund Plantations.*—In the *Aramby* plantation 3,000 Eucalyptus were planted, a good many of which were damaged by frost. The nurseries in the Koolie section were kept up and we have now a large collection of conifers including pinaster, larch, *Pinus longifolia*, Spruce fir, Scotch fir, *Callitris rhomboidea* and *Cryptomeria japonica*. The two latter especially have done well ; the *Callitris* will be used to make boundary fences, while we shall, it is hoped, have some 36,000 good plants of *Crypto-*

meria ready to plant out in 1885. The Pinaster and *Pinus longifolia* have also done very well. A large quantity of Eucalyptus were also grown for the planting of 1884.

90. In the *Bathri* plantations (Cairn Hill Reserve) 70 acres were planted, but the Conservator regrets to report that about half of them succumbed to an exceptionally severe winter. The vacancies will be refilled this year and greater care exercised in the choice of well-grown transplants. The Bathri nurseries were also maintained and in them also we have a small stock of conifers among which are Pinaster, Weymouth pine, larch and *Abies Pinsapo*, with some good plants of *Callitris*, which are being put out along the boundaries of the reserve in the hope of forming a thick hedge.

91. The *Governor's Shola* plantations (Nanjanad Forest Reserve) have very little to record. At Baikie 12 acres were planted with Eucalyptus and a few *Acacia decurrens*, but, as at Bathri, a very large percentage were destroyed by frost. At Madana also, close by, the frost destroyed many plants of larger size, up to 6 feet high even.

92. In *Marliamund* 2,000 vacancies were replaced and at *Muthanad* 7,000; the *Norwood* plantation was thinned out.

93. *Coonoor Plantations.*—The fences of the "old forest" plantation were repaired and compartment lines cleared. In *Bandy Shola* the reproduction by seed of the *Acacia Melanoxylon* is very good. This plantation will very soon be put under a working scheme. A small plantation of *Acacia decurrens* was formed in Coonoor Peak Forest.

94. The following return contains that given in paragraph 103 of last year's report:—

Name of Plantation.	Area stocked up to 31st March 1884.	Receipts. From the commencement up to the end of 1876-77 (estimate).	Receipts. 1877—1883.	Receipts. 1883-84.	Receipts. Total up to the end of 3 st March 1884.	Cost. From the commencement up to the end of 1876-77 (estimate).	Cost. 1877—1883.	Cost. 1883-84.	Cost. Total up to the end of 31st March 1884.	Surplus or deficit up to date.
		Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Arnakal ..	8	..	..	..	..	..	..	..	..	..
Governor's Sholah.	55	3,866	..	182	182	150	160	10	320	— 138
Hoopatti ..	12	..	2,995	303	7,164	1,040	271	9	1,320	+ 5,844
Andy	60	..	260	65	325	224	138	15	377	— 52
Sheffield ..	23	1,626	363	..	363	1,111	161	23	1,295	— 932
Cally	17	1,206	2,266	31	3,923	427	146	8	581	+ 3,342
Choughat cally ..	26	..	2,843	..	4,049	316	245	12	573	+ 3,476
Baikie	46	..	3,200	..	3,200	485	295	14	794	+ 2,406
Madana ..	18	..	740	38	778	641	2,312	483	3,406	— 2,628
Chanengoolie ..	33	..	1,354	..	1,354	150	796	149	1,095	+ 259
Muthanad ..	95	..	..	..	..	..	3,845	16	3,861	— 3,861
Brooklands ..	10	366	69	..	69	..	6,271	383	6,654	— 6,585
Aramby ..	58	..	376	..	742	187	130	11	328	+ 414
Koolie	58	..	1,071	4,919	5,990	1,075	1,270	151	2,496	+ 3,494
Marliamund ..	11	..	..	..	..	1,075	2,513	476	4,064	— 4,064
Norwood ..	26	..	78	..	78	205	531	94	830	— 752
Snowdon ..	7	506	185	156	341	485	201	8	694	— 353
Bathri	60	..	350	..	856	130	80	4	214	+ 642
Deva Sholah ..	14	..	..	..	..	..	3,902	2,282	6,184	— 6,184
Black Bridge ..	48	..	..	..	..	..	1,629	8	1,637	— 1,637
Rock	8	..	..	..	..	890	484	143	1,517	— 1,517
Bleakhouse ..	235	16,466	..	..	..	150	161	8	319	— 319
Old Forest ..	200	..	3,380	393	20,239	4,350	67	8	4,425	+ 15,814
Tippakutchi ..	35	..	5,421	3,474	8,895	3,635	423	319	4,377	+ 4,518
Rallia	60	..	18	3	21	650	121	12	783	— 762
Little Rallia ..	10	..	9	18	27	1,115	183	21	1,319	— 1,292
Newman ..	35	..	..	..	..	..	501	14	515	— 515
Total ..	..	24,036	25,780	9,582	59,398	19,111	26,907	4,697	50,715	+ 8,631

95. The Conservator regrets to report that fire got into the Sigúr Sandalwood Plantation and did some damage. Otherwise there is nothing to record regarding this and the Mudumalai Plantations.

Topes.

96. In the *Ganjam District* the Tonnarada tope was visited by the Conservator. It contains chiefly mango trees of good growth with a small experimental plot of divi-divi. The area will be this year extended by the addition of part of the Sál scrub adjoining. The Conservator also visited the topes at Chatrapur and Calingapatam.

He also visited the Tumarada tope at Pálkonda in Vizagapatam which is doing well under the careful supervision of the Deputy Collector and Tahsildar. From *Godávari* eight topes are reported. In the *Kistna District* ten topes are recorded in correction of the returns of last year.

97. In regard to the *Nellore* topes the District Forest Officer reports:—

"In last year's return Penubarthi was omitted and this brings the total number to 111 The difference between these and the figures alluded to by the Conservator in paragraph 110 of last year's report cannot be traced, although some time was spent in drawing up classified lists of all the topes. No new topes have been made during the year, but the District Forest Officer has endeavoured to get better results by working in fewer places and only on those topes which were most promising, and which were in the most useful situations.

"The gardeners have been carefully looked after, and, in consequence, growth has been much better than before, although most disappointing."

98. In *Cuddapah* there have been no additions; but one, that at Pedda Cheppalli, was abandoned as unfit for further expenditure and sold for Rs. 115. The Casuarina topes at Appiapalle have not done well. The cost of the topes was Rs. 6,578, an amount which must be very considerably reduced in future. The *Kurnool* topes were all inspected by the District Forest Officer and are reported in fair order.

99. The District Forest Officer writes as follows regarding the topes in *Bellary*:—

"Fisher's tope, Bellary taluk, was sold by auction realising Rs. 185. It contained small babúl trees planted thirteen years previously but of stunted unpromising growth owing partly to bad drainage and also to insufficient protection, the watcher in charge doing nothing to prevent the camp followers in the Bellary cantonment cutting as they liked.

"The casuarina trees at Taginaboodhial were also inspected. They are on the banks of the Huggri river, 8 miles from Bellary below and above the railway bridge. The trees are badly grown, much twisted and evidently under conditions unsuitable to their development. Many dry up each year and during the twelve months a number of dead trees were auctioned, leaving only 36 in Taginaboodhial out of 882 hitherto recorded. No expenditure was incurred on their up-keep.

"The tope recorded last year as No. 33, Bellary, comprises the trees in the compound of the Collector's office. The Forest Department has had no concern with them during the year, and as the trees are merely ornamental their entry is now omitted.

"In Hadagalli the Kotnacal tope was reported as worthless by the Head Assistant Collector and the watcher withdrawn, the tope being placed in the charge of the village officers, pending an inspection by the Forest Officer.

"In *Adóni* the mango grove in Emniganur has been left to the care of the Magistrate's establishment, being situated in the office compound. The trees are not healthy nor of a good variety and not worth our incurring expenditure upon their protection.

"*Kullobhavi.*—The only good tope in the district the Forest Officer has yet seen is situated near the Adóni railway station. Some dry badly-grown trees have been cut out. The expenditure on the tope has been Rs. 48 during the year. There appear to be no records concerning its past history."

while from *Anantapur* it is reported that the returns have now been revised and that care has been taken to properly dispose of the produce, chiefly babúl pods. The revenue received thus amounted to Rs. 3,434. It is doubtful whether in future years the babúl forests should be classified as topes, but this will be settled shortly.

100. The total number of topes maintained is 364, which are thus distributed:—

Ganjam	7
Vizagapatam	2
Godávari	8
Kistna	10
Nellore	111
Cuddapah	70
Kurnool	27
Bellary	31
Anantapur	98
Nílgiris	...
	364

There are none given for the Nílgiris though possibly the two or three in Coonoor ought to have been entered.

(*g*) *Works of Improvement.*

101. Under this head very little has been done during the year. The cutting of creepers in the Nílgiri sholas, where they do very great damage, has been commenced and similar work will have to be soon started in Kurnool and Ganjam, and in the evergreen forests of Cuddapah and Nellore.

102. At Striharikota, in Nellore, a long strip of from 1200 to 1500 acres was fenced in in the hope of natural reproduction being permitted, and at the same time seeds of the best forest trees were sown. A large number germinated, though from lateness of sowing many afterwards died down. They may, however, it is hoped, recover in the rains. The fence was over 8 miles long and cost Rs. 98, which is cheap for an impenetrable thorn hedge 6 feet high. The low cost is due to the employment of Yanadis. A further area of 4,000 acres will be similarly treated this year and a large number of seedlings planted out. The growth at Striharikota is much in need of improvement and the filling of blanks, and by gradually working in this way we may hope before long to see a much better stock.

103. In the *Kistna District* plots of vacant land in the forests were also sown with varying success. The chief forests so treated were Kondapalli, Bezváda, Mutukur, Ballapalle and Muttayyapalem. In the two first, the seeds came up well, the results in the others were not known at the date of report. A similar plan to that adopted in Nellore should be tried this year in Bellary where early steps to improve the growth on the hills are urgently required.

(*h*) *Experiments and Exotic Trees.*

104. There is not much to record which has not already been referred to under "Plantations." Mahogany plants (100) were planted in the Cuddapah forests and have done well. Divi-divi has been planted or sown in Ganjam, Bellary, Kistna and Nellore, but with only partial success. In the Nílgiris many coniferous trees have been successfully reared and *Acacia decurrens* has been planted both at Ootacamund and Coonoor. This is the wattle which gives the best bark for tanning.

105. Little in the way of experiment can really be done until the selection, demarcation and settlement of the reserves is completed, and it will be better in most cases to wait and make well-prepared and arranged experiments than to do them roughly and with little supervision at present with a much smaller chance of success.

(*i*) *Communications and Buildings.*

106. The following roads have been made in the *Cuddapah District*:—

		Rs.
(1)	Cart track into Pálkonda reserve, 2½ miles ...	100
(2)	Ballapalle west road	170

Both are useful roads for export purposes and the work of constructing more will now be pushed on.

107. In *Kurnool* the following roads were cleared:—

(1) The forest roads in Atmakúr from Nagaluti to Pecheruvu, from Bainuti to Mokotta and from Rollapenta to Pecheruvu;

(2) Path from the Adutla rest-house in the Velgode Pass to the Yerragalya house in the Gundla Brumeshwar Pass—

and others will be pushed on. The District Forest Officer is using every endeavour to make paths through the forests from north and south to supplement the existing east to west tracts and to facilitate inspection and protection.

108. In the *Nilgiri District* the roads from Mudumalai to Benné, from Tippakadu to Mudumalai, with branches, were, as well as the bridges on them, repaired during the year. The Aramby road was repaired but will be altered this year to a new and better alignment; inspection roads were cleared through Cally and Choughat Cally plantations. The road to the "Old Forest" plantation at Coonoor was mended but will now have to be put into permanent good order.

109. With these exceptions nothing has been done, but the Conservator hopes that next year will record the commencement of road work in Ganjam and Anantapur and its greater extension in Cuddapah and Kurnool.

Buildings.

110. In *Ganjam* the divisional head-quarters house at Russellkondah was repaired during the year as well as the inspection bungalow at Surada. Five other small rough inspection huts were erected at Khalogam, Birkút, Darpangia, Barúda and Gullery ghât, at a cost of Rs. 237-8-0, and another was commenced at Pipalapanka. A ranger's house was begun at Mojagodo. The beginning thus made is good and it will be a great thing if in a few years' time we have houses or huts at all important points so that District Forest Officer and Range Officers may be able to inspect their forests in the rice season, the time when the rivers are full and roads are almost impassable and the carriage of tents almost impossible.

111. In the *Godávari District* the forest office at Wudigudiem was repaired. In the *Kistna District* a Forester's house was commenced at Vinukonda.

112. In *Cuddapah* the Kódúr bungalow was repaired, the out-houses restored and a Ranger's house rebuilt at a cost of Rs. 410. The Sanipoya bungalow was also restored at a cost of Rs. 425. Negotiations were in progress during the year for the purchase of the bungalow on Horsleykonda and since its close they have been completed and the bungalow taken charge of.

113. In *Kurnool* three good rest-houses have been built inside the Nallamalais at Bainuti, Rollapenta and Adutla, the two former on the Mantralakanama, the last on the Velgode Pass, at a cost of Rs. 850 each for the first two and Rs. 910 for the third. Each consists of a large room with verandah and is built of stone with a concrete roof, and there are proper out-houses adjoining. The spots have been chosen where good water from a perennial stream is at hand, and their construction reflects great credit on Mr. Sim. A fourth house at a cost of Rs. 190 was built at Bundlapenta near where the chief felling works are going on. Two huts for forest guards and two for tannah peons were also built. It is intended to continue the erection of these most valuable buildings year by year until we have such a series that the whole of the Nallamalais can be constantly visited without the enormous cost of carriage and difficulty of procuring coolies which at present prevails, and with comparative immunity from sickness. The head-quarters bungalow at Nandyál was, at the end of the year, with the approval of Government, transferred on payment to the authorities of the Bellary-Kistna State Railway. A more convenient and less expensive house will now be built for the Forest Officer while the value of the present house to the Railway Department during the construction of the line will probably be great.

114. In the *Nilgiri District* the huts were repaired. It will now be necessary to construct two or three cheap rest-houses in different places, to enable inspection to be better carried on and with less danger to health than hitherto during the monsoon. Better buildings are more especially necessary in the Mudumalai and Benné forests, and in some localities in the Kundahs not easily reached from the present Local Fund house at Avalanché. A rest-house in the Coonoor valley is also required, as well as one on the slopes below Kótagiri.

CHAPTER V.

Yield and Working.

(1). *Departmental Work.*

115. In form No. 7, the number of trees felled by Government agency is represented by 440 casuarina converted into telegraph posts in Nellore. A large number of Eucalyptus trees was felled in the Nílgiri plantations and converted into fuel, but the actual number has not been ascertained and it is really sufficient to enter the works in form 8. So, too, in other districts, as in Godávari and Cuddapah, trees have been felled for fuel but not reported in form 7. Another year, it is hoped that more accurately kept statistics will enable this form to be more fully filled in. It has been found quite impossible to obtain proper statistics of the number of Sál trees felled in Ganjam and even of the number of logs brought out prior to the date of the Conservator's visit and his establishment of proper depôt books at Russellkondah. But it was intended that no trees should be knowingly felled by the department during the year, and that all

logs brought out should be from dry wood. Trees were, however, felled by the cartmen; for the Conservator found several such freshly cut in the forest. Such things will not be allowed again to occur, it is hoped.

116. Form No. 8 shows the timber and other produce cut in the forests by departmental agency and how it was disposed of. Passing over the return from Ganjam, which is doubtfully correct, as well as minor items of small consequence, it will be seen that the collections of wood in Nellore amounted to 960,687 pieces and 200,064 bundles or faggots. It would have been very useful if these could have been given in tons, at any rate by means of a factor of conversion, and this should be done next year, and it would simplify account very greatly if sales could be permanently made by weight, or, still better, by cubic foot of stacked wood. Of this and what was on stock previously 615,705 pieces and 248,304 bundles were taken to the Madras depôt. At the same time a large quantity of minor produce was also collected in the Nellore forest and taken to depôt for sale.

117. In Cuddapah 2,095 tons of red sanders roots were collected and sent to depôt, and a small amount of produce was collected in Anantapur. In the Nílgiris the large stock of old dry and refuse teak in the Mudumalai and Sigúr forests was either taken to depôt or sold off, while 2,577 tons of fuel were cut in the plantations, of which 1,295 departmentally. The work in Nílgiris also included 800 maunds of sandalwood roots from Sigúr and a large quantity of minor produce.

118. Form No. 9 shows the depôt transactions of the year. In Ganjam a large number of dry logs, the number of which is not ascertainable with exactitude, were collected in the forest, taken to the Russellkondah depôt and sawn up into broad-guage sleepers, while in Cuddapah, Nellore and Nílgiris the usual depôt sales of red sanders wood, fuel and teakwood were made.

119. The following amount was received in depôt.

Timber.

		Number.	Contents. Cubic feet.
Ganjam ..	Sál logs...	5,719	51,105
	Sál sleepers	7,684	26,680
	Other pieces	6,731	...
Cuddapah.	Casuarina poles	...38	...
Anantapur.	Teak pieces	72	10
Nílgiris ...	Teak logs	252	6,084
	Total ...	20,496	83,879

Red Sanders.

Cuddapah ... ... 2,095 tons.

Fuel.

Nellore ...	Casuarina	448 tons.
	Jungle-wood	615,705 pieces.
	Do.	66,286 bundles.
Anantapur.	Do.	200 maunds.
Nílgiris ...	Do.	425 tons.

Minor Produce.

Nellore ...	Nux vomica	1,223 maunds.
	Chay root	921 ,,
	Surati chekka	65 ,,
	Honey	29 ,,
	Wax	5 ,,
	Orchella	16 ,,
	Soapnuts	1,385 ,,
	Tamarinds	610 ,,
	Cashewnuts	181 ,,
	Rattans	198 bundles.
Kurnool ...	Myrabolams	45 maunds.
Cuddapah.	Honey	25 ,,
	Wax	6 viss.

120. Form No. 10 shows the sales made (1) from depôt, (2) locally in the forest, with the prices realised. The difference in systems of measurement prevents any abstract of value being made. After the Forest Code has been passed and promulgated and the accounts of all districts put on a proper footing, the returns will be kept in a uniform manner, and though it is not always easy to adopt a uniform standard of weights and measures for sales purposes, for returns purposes the results of the divisions will be reduced to one so that the outturn of the year may be calculated in one figure. It is to be regretted that the totals of the amounts received do not tally with the figures given by the office of audit as actuals for the year. The Conservator has made every endeavour to explain the discrepancy which is probably due to the wrong apportionment of certain sums among heads of service. The chief discrepancy is in Nellore but the District Forest Officer reports that though the figures of his return are correct, he cannot show the reasons why they differ from those of the audit. The only districts whose figures properly agree are Anantapur and Nílgiris, while from Kistna no return has been given or explanation afforded of the Rs. 1,094 received under head I. In Cuddapah the receipts under timber, I *a* agree, but it would seem that in the beginning of the year some revenue properly belonging to II was wrongly credited under I *b* (fuel) and I.*c* (minor produce). The following abstract shows the discrepancies referred to :—

Abstract Receipts.

District.	Depôt. Due.	Depôt. Received.	Local. Due.	Local. Received.	Total. Due.	Total. Received.	According to audit I.
							Rs.
Ganjam	13,421	13,421	..	..	13,421	13,421	14,663
Godávari	..	..	647	..	647	..	..
Kistna	..	..	..	..	..	..	1,094
Nellore	51,224	48,552	1,472	472	52,716	49,024	60,613
Cuddapah	20,402	16,443	..	..	20,402	16,443	20,576
Anantapur	5	..	47	47	52	47	47
Nilgiris	8,312	8,312	19,724	16,745	28,036	25,057	25,057

121. Form No. 12 shows the difference between the value of stock on hand at the beginning and end of the year, as follows :—

District.	On hand at the commencement of the Year.	On hand at the close of the Year.	Difference in Value.
	Rs.	Rs.	Rs.
Ganjam	723	8,660	+7,937
Nellore	2,670	2,304	— 366
Cuddapah	102	8	— 94
Kurnool	309	309	...
Nilgiris	979	4,967	+3,988
Total ...	4,783	16,248	11,465

122. In regard to the question of the financial results of the works in Ganjam, such as were considered in paragraph 120 of last year's Report, the Conservator's experience during the year of the value of the statistics kept up hitherto has led him to defer making any further comparison this year for Ganjam for it would only lead to statistics likely to mislead.

123. In Cuddapah 2,095 tons of red wood were received at a cost of Rs. 15,235, and 2119 tons were sold for Rs. 30,316, equivalent to Rs. 7-3-11 for cost and Rs. 14-4-11 for receipts per ton. This gives a surplus per ton of Rs. 7-1-0 only as against an average of Rs. 9-11-7 for the four previous years. The falling off is principally due to the non-success of the arrangement made during the year whereby the wood was sold in two classes, "picked" and "ordinary," instead of in one class as heretofore. The previous sale of picked wood had the result of inducing a low price for the ordinary kind.

124. As regards the fuel works in Nellore the District Forest Officer writes as follows:—

"In the report of last year it was not possible to analyse the results of departmental fire wood operations, so it may be interesting to give some particulars of the cost of working.

"From Striharikóta, green jungle-wood, withered or dry wood, jungle products and rattans are sold; from the Casuarina plantation, casuarina wood. The following are the average charges paid on cutting and carrying to sale depôt most of these forest products. The charges on some of the articles of minor produce are difficult to estimate as the collection is paid for in kind:—

——	Cutting.	Carting	Boat hire to Madras.	Depôt expenses.	Total cost in depôt.	Selling prices.	Profit.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Green wood Rasi per 1,000	1 4 0	1 4 0	1 6 4	0 1 8	4 0 0	13 12 0	9 12 0
Sannam per 1000	0 10 0	0 10 0	0 8 8	0 1 4	1 14 0	5 0 0	3 2 0
Thopudu per 1000	0 5 0	0 5 0	0 4 4	0 0 8	0 15 0	2 8 0	1 9 0
Salli bundles per 100	4 0 0	4 0 0	9 14 4	0 4 8	18 3 0	25 0 0	6 13 0
Casuarina wood per ton	0 15 0	0 11 0	2 0 0	0 2 0	3 12 0	8 0 0	4 4 0
Dry wood average of all kinds per 1,000	2 8 0	5 0 0	3 8 0	0 2 0	11 2 0	20 0 0	8 14 0
Nux vomica per candy of 500 lb. ..	2 14 0	0 4 0	0 3 6	0 1 0	3 6 6	10 0 0	6 9 6
Soapnuts per candy	1 10 0	0 4 0	0 1 3	0 0 9	2 0 0	6 8 0	4 8 0
Chey root per candy	20 0 0	..	0 8 0	..	20 8 0	84 0 0	63 8 0
Rattans per bundle	1 0 0	..	0 1 6	..	1 1 6	6 0 0	5 14 6

"To the cost of collection, &c., has to be added that of establishment and of depôt expenses. These do not amount to more than 2 per cent. altogether, and probably not as much; but allowing for these, it will be seen how profitable departmental work is if carefully managed. The selling prices have been taken at their lowest the *average of the past year* having been *20 per cent. over that assumed*.

"The rates for cutting and carting at Sriharikota are very low, and although the charge there is rather complicated, small 'customary' allowances being made for cutting or carting in certain places, they are much lower than in any other part of the district.

"The boat hire charges on the other hand are very high and might be reduced one half if Government had boats of its own, which it is hoped may be the case before very long. The boatmen give great trouble and the demand for boats in the canal is so great that large advances have to be given, which are often not cleared off for years."

(2).—*Removal by Purchasers.*

125. Form No. 11 gives the amount of material removed under license. It has had to be prepared somewhat roughly and may not be strictly accurate, and the figures of the actuals under II have been taken in the "value" column. The results as compared with the last two years are as follows:—

Districts.	1881-82.	1882-83.	1883-84.
	RS.	RS.	RS.
Ganjam	39,974	17,178	4,013
Vizagapatam	1,063	1,454	1,690
Godávari	19,990	12,166	37,062
Kistna	12,407	93,280	50,965
Nellore	67,319	9,805	11,369
Cuddapah	62,526	65,118	67,317
Kurnool	29,255	33,339	56,427
Bellary	2,592	7,039	9,738
Anantapur		13,175	9,275
Nígiris	8,037	11,914	18,608
Total ...	2,43,163	2,64,468	2,66,464

So that the figures for the year show a small increase. The decrease in Ganjam is due to the stoppage of the sale of Sál on permit; the increase in Godávari is said to be due to greater demand. The collections were best in the Bhadráchalam and Rékapalle Agency taluks and in Rajahmundry.

126. In Kistna there is a considerable falling off chiefly due to the grazing in the proposed reserves not having been sold as in other forest lands and as was formerly done. In Nellore there is a slight increase on last year, the system of collection having been carefully revised and there having been considerable sales for the Sangam works.

127. In Cuddapah the figures show a slight increase.

Arrangements were made to sell the dead and dry wood from the reserves and the results are as follows:—

——	Rate.	No. of Bandies.	Sum realised.
	RS. A. P.		RS.
Balapalle, East	1 0 0	1,250	1,250
Do. West	1 0 0	1,050	1,050
Kódúr Hill	0 9 0	1,803	1,014
Yerraguntlakota	0 9 0	1,425	802
Vagetekona	0 8 0	1,050	525
Gathala	0 6 0	709	266
Total ...	..	7,287	4,907

This wood was all taken by the purchasers for sale in Madras. The results have been good and not the least result will be the clearance from the forest of a large amount of easily inflammable material.

128. *Cuddapah Railway Engine Fuel.*—The revenue from fuel supplied to the Madras Railway from the Cuddapah forests amounted to Rs. 16,973 for 7,545 tons at Rs. 2-3-9 per ton, as compared with a revenue of Rs. 20,051 in the previous year derived from 8,345 tons collected in the ordinary way at Rs. 2-3-9 per ton, and 512 tons at Rs. 2-8-0 per ton collected from the cuttings made in Balapalle West Reserve.

The decrease is believed to be due to the failure of the Railway Company to maintain a sufficient number of contractors, or to their having allowed their existing contractors to decrease their supplies.

Cuttings were commenced in two compartments in Balapalle West Reserve within the year for the supply of fuel to the railway, but no wood was delivered.

129. In Bellary, there is a good increase, about 3,778 tons of fuel were removed from waste lands as well as about 880 tons of Tangedu bark for which Rs. 3,510 was received. In Anantapúr there has been a decrease, partly due to its having been found necessary to stop the sale of bamboos as there was danger of their being exterminated. It is hoped that bamboo purchasers may be induced to go to the forests of Kurnool instead, as on the Nallamalai hills there is an almost unlimited supply.

130. The increased sales in the Nílgiris are due to a better sale of timber from the Mudumalai forests and larger issue of firewood passes at Ootacamund.

131. During the year revised scales of rates were called for from all districts and these are now under consideration.

(3).—*Drift and Waif.*

132. In the Godávari District a large quantity of drift timber, chiefly teak, was collected and sent for sale to Rajahmundry. In Ganjam a considerable number of waif logs found about the edges of the forests are being collected, and, after due notice to claimants, will be sold. In other districts and especially in Kurnool and Cuddapah a considerable sum was received by the sale of timber confiscated.

CHAPTER VI.

Financial Results.

133. In Form No. 14 is given the Summary of Revenue and Expenditure of the year.

The total results were:—

		RS.
Revenue		4,13,333
Expenditure	A. 1,27,322 / B. 1,75,130	3,02,452
Surplus ...		1,10,881

the net revenue being thus about 26 per cent. of the *gross* revenue. There is an increase on 1882-83 both in revenue and expenditure, and had it not been that some large items in the Cuddapah district on account of sales of redwood were received a day or two too late for the year in which the real transactions took place the proportional increase would have been more regular.

134. The revenue and expenditure with corresponding "surplus" and "deficit" were as follows for the different districts compared with 1882-83 :—

Districts.	1882-83.			1883-84.		
	Revenue.	Expenditure.	Surplus or Deficit.	Revenue.	Expenditure.	Surplus or Deficit.
	RS.	RS.	RS.	RS.	RS.	RS.
Direction	...	12,485	— 12,485	...	35,071	— 35,071
Ganjam	37,105	20,301	+ 16,804	19,084	15,581	+ 3,503
Vizagapatam ...	1,454	169	+ 1,285	1,690	399	+ 1,291
Godávari	22,991	11,224	+ 11,767	44,471	8,571	+ 35,900
Kistna	93,989	21,735	+ 72,254	52,995	22,921	+ 30,074
Nellore	54,223	69,991	— 15,768	72,119	47,128	+ 24,991
Cuddapah	98,924	46,705	+ 52,219	89,289	60,681	+ 28,618
Kurnool	36,556	16,492	+ 20,064	70,649	30,864	+ 39,785
Bellary	7,137	15,556	— 8,419	9,750	28,659	— 18,909
Anantapur	8,281	970	+ 7,311	9,562	9,663	— 101
Nílgiris	28,452	35,695	— 7,243	43,724	42,914	+ 810
Total ...	3,89,112	2,51,323	+1,37,789	4,13,333	3,02,452	+1,10,881

The improvement of revenue in Godávari, Kurnool, Nellore and Nílgiris and more especially in Kurnool is the great feature of these figures. The deficits in Bellary and Anantapur were expected. The falling off in Ganjam is due to the temporary stoppage of the sale of sál on permit, a measure which was rendered necessary by the waste and loss that was going on.

135. The division of the figures under the three great heads of "Departmental Timber Works", "Other Revenue" and "Improvement of Forests" gives the following results, the division having been made in the same way as last year, except that the ratio has been altered for Kistna, Nellore, Nilgiris to 4—and for Bellary to 2—thirtieths :—

District.	Departmental Timber Works.		Other Revenue.		Formation, Improvement and Protection of Forest 3. Charges.	Total.	
	Receipts.	Charges.	Receipts.	Charges.		Receipts.	Charges.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjam	15,056	14,078	4,028	2,218	2,792	19,084	19,088
Vizagapatam	..	..	1,690	785	784	1,690	1,569
Godávari	7,109	2,984	37,302	4,041	3,884	44,471	10,909
Kistna	994	5	52,001	11,176	16,416	52,995	27,597
Nellore	60,613	23,456	11,506	7,424	20,924	72,119	51,804
Cuddapah	21,821	23,046	67,468	15,796	26,515	89,289	65,357
Kurnool	..	3	70,649	23,397	12,140	70,649	35,540
Bellary	12	73	9,738	9,493	21,431	9,750	30,997
Anantapur	47	48	9,515	5,530	6,423	9,562	12,001
Nilgiris	25,057	16,266	18,667	9,052	22,272	43,724	47,590
Total ..	1,30,769	79,959	2,82,564	88,912	1,33,581	4,13,333	3,02,452

The surplus from timber works is Rs. 50,810, chiefly in Nellore, but it would have been Rs. 65,000 at least if all revenue of the year had been duly received before its close. Rs. 13,959 for red sanders in Cuddapah were thus outstanding, as well as some smaller sums in Nellore, chiefly on sales of minor produce.

136. Form No 13 is the return showing livestock, buildings, stores, tools and plant, and their value at the beginning and end of the year. It will be seen that the difference of value is against the year by Rs. 4,635, due to the sale of the Nandyál bungalow.

CHAPTER VII.

General Remarks.

137. During the year His Excellency the Governor visited the forests of the Nallamalai Hills in Kurnool and of Sriharikóta in Nellore.

Tours.

138. The Conservator visited during the year the districts of Nellore, Kistna, Ganjam, Vizagapatam and Nílgiris. He spent 156 days on tour, but a considerable time was also devoted during his stay on the hills to work in the Nílgiri forest and plantations.

139. The following schedule shows the tours made by the district forest officers during the year, which will show that Messrs. Sim, Higgens, Boileau, Brougham and Hooper all spent a considerable time in camp. Time spent in camp is not necessarily always a correct gauge of useful inspection work, but the Conservator is satisfied that good work has been done in most districts, and especially by the officers mentioned in paragraph 140 :—

1883-84.

Division.	Name and Rank of Divisional Officer.	Number of Days.	
		In Charge.	On Tour.
Ganjam ..	Mr. E. Dampier, Sub-Assistant Conservator ..	309	145
	„ A. W. Lushington, Assistant Conservator ..	57	42
Vizagapatam ..	The Collector	355	...
	Somasundra Mudali, Sub-Assistant Conservator..	11	...
Godávari ..	Mr. H. Stafford, Sub-Assistant Conservator ..	310	174
	„ H. H. Ward, Forest Ranger	56	18
Kistna	„ E. H. Boileau, Deputy Conservator	366	214
Nellore ..	„ F. D. A. Vincent, Deputy Conservator ..	255	150
	Somasundra Mudali, Sub-Assistant Conservator ..	111	75
Cuddapah ..	Mr. A. W. B. Higgens, C.S., Deputy Conservator.	361	216
	„ G. Homfray, Assistant Conservator	5	...
Kurnool ..	„ H. A. Sim, C.S., Deputy Conservator ..	366	266
Bellary ..	„ E. D. M. Hooper, Deputy Conservator ..	276	209
	„ J. H. P. Brougham, Assistant Conservator ..	91	...
Anantapur ..	Do. do.	366	212
Nílgiris ..	Mr. H. A. Gass, Deputy Conservator	94	32
	Lieut.-Colonel R. S. Jago, Deputy Conservator ..	272	132

Officers' Services.

140. The Conservator is glad to record his appreciation of the work done by Mr. Higgens, C. S., in Cuddapah, and by Mr. Sim, C. S., in Kurnool. The latter has, in spite of constant attacks of fever, done very good work in the improvement of the revenue collections, the stoppage of timber smuggling, the construction of forest houses and the selection of reserves, while the former has kept up good arrangements for works in Cuddapah, and continued the work of reserved forests selection and settlement. Mr. Vincent has worked hard to bring the fuel forests and plantations on the Nellore coast into good working order and to improve the establishments and the system of export. Mr. Hooper, Lieutenant-Colonel Jago, and Mr. Brougham have all worked to the Conservator's satisfaction. Mr. Boileau has also worked hard in the Kistna district, but a little more firmness and attention to matters of greater importance would be useful.

141. Messrs. Lushington and Homfray were both unsuccessful in their language examinations, but both have had hard work to do, and in the case of the former especially, his non-success may have been somewhat due to his transfer to a distant district just before the time for examination came on. He was posted to Ganjam towards the end of the year.

142. Of the Sub-Assistant Conservators, the Conservator has to report the deaths during the year of Messrs. E. Dampier and T. M. Newman, both from illness contracted on forest work. He has been satisfied with the work of Somasundram Mudali but regrets he is unable to say the same regarding that of Mr. Stafford though he has reason to think that his work will improve after he has personally inspected his division.

143. *Health.*—The health of the establishment has not been good. The deaths of Messrs. Dampier and Newman have been already referred to, while others have suffered much from fever and from diseases due to exposure and bad water, such as forest officers have only too often to put up with.

144. The Forest Code was completed in draft during the year and submitted to the Board soon after its close. The forms of the new code have to a great extent been used in this report, but they have naturally not been easy of preparation at first.

145. Large collections of forest products were sent to the Calcutta International Exhibition and Medals were awarded to Messrs. Higgens, Lushington, Hooper and Stafford for various articles of forest produce. A small but good collection was also made and sent to the Edinburgh Forestry Exhibition.

APPENDICES.

APPENDICES.

Form No. 1.

Forest Department, Northern Circle, Madras.

Area of Reserved Forests, 1883-84.

District.	Taluk.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the Year. Acres.	Excluded or Transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	District Totals, Square Miles.
Godávari ..	Bhadráchalam.	Pedda Nallapalli ..	640	1	..	..	640	1	
		Arlagudiem ..	1,920	3	..	..	1,920	3	
		Tunikicheruvu ..	2,560	4	..	..	2,560	4	
	Rékapalle ..	Bundereo ..	4,160	6½	..	..	4,160	6½	
		Erguratpalli ..	960	1½	..	..	960	1½	
		Sarival	3,840	6	..	..	3,840	6	
		Rapaka	5,120	8	..	..	5,120	8	
		Gamallakota ..	640	1	..	..	640	1	
		Ghandigudiem ..	1,920	3	..	..	1,920	3	
		Marsameddi ..	7,040	11	..	..	7,040	11	
		Sokanapalli ..	1,920	3	..	..	1,920	3	
		Bocharam ..	12,800	20	..	..	12,800	20	
Kistna ..	Bezváda ..	Kondapalli ..	8,320	13	..	..	8,320	13	68
	Bápatla ..	Muthayyapalem ..	1,070	1⅔	..	..	1,070	1⅔	
	Palnád ..	Shrigiripadu ..	23,680	37½	..	..	23,680	37½	
		Motukur	27,520	43	..	..	27,520	43	
	Vinukonda ..	Madhinapadu ..	6,826	10⅔	..	..	6,826	10⅔	
		Bollapalli ..	32,234	50½	..	..	32,234	50½	
Nellore ..	Gúdúr ..	Sriharikót ..	46,402	72½	..	..	46,402	72½	156
	Nellore, &c. ..	Nellore	46,862	73	..	..	46,862	73	*
	Kandukúr ..	Ramapatam ..	22,880	36	..	..	22,880	36	
	Rápúr, Atmakúr, &c.	Veligondas ..	23,360	36½	..	..	23,360	36½	
Cuddapah ..	Pullampet ..	Ballipalle, East ..	4,484	7	..	..	4,484	7	218
		Do. West ..	6,307	10	..	..	6,307	10	
		Kodur Hill ..	4,687	7⅓	..	..	4,687	7⅓	
		Vagetikona ..	3,595	5⅔	..	..	3,595	5⅔	
		Thanakonda ..	1,048	1⅔	..	..	1,048	1⅔	
		Yerraguntlakota ..	3,487	5⅓	..	..	3,487	5⅓	
		Rallakonda ..	1,565	2½	..	..	1,565	2½	
		Gathala	9,682	15	..	..	9,682	15	
		Rolamadugu ..	5,424	8½	..	..	5,424	8½	
		Sullavendra ..	7,680	12	..	..	7,680	12	
		Uparapalle ..	108	..	..	..	108	..	
		Kodur	50	..	..	..	50	..	
		Reddipalle ..	924	1⅓	..	..	924	1⅓	
		Pullampet ..	328	½	..	..	328	½	
	Cuddapah ..	Kamalapuram ..	263	⅓	..	..	263	⅓	
	Cuddapah and Ráyachóti.	Guvalacheruvu ..	14,720	23	..	..	14,720	23	
	Ráyachóti ..	Wongimalla ..	21,120	33	..	..	21,120	33	
	Ráyachóti and Pullampet.	Gadikota	4,480	7	..	..	4,480	7	
	Badvél ..	Mudampad ..	8,960	14	..	..	8,960	14	
	Proddutur ..	Nainapalle ..	15,360	24	..	..	15,360	24	†
		Ramesvaram ..	..	..	91	..	91	..	
		Thullamapuram ..	..	..	153	..	153	⅓	
		Vellala	..	..	258	..	258	⅔	
		Alladapalle ..	..	..	197	..	197	⅓	
		Paydala	..	..	99	..	99	..	
		Nedujuvi	..	..	696	..	696	1	
		Kathapalli ..	..	..	120	..	120	⅓	
		Kalamalla ..	..	..	430	..	430	⅔	
		Modumidapalle ..	..	..	86	..	86	..	
		Anantapuram ..	..	..	138	..	138	⅓	
		Vallur	..	..	160	..	160	⅓	
	Jammalamadugu.	Kondasankesala ..	..	..	858	..	858	1	
		Gondikota ..	..	..	372	..	372	⅔	
		Kosinipalle ..	..	..	300	..	300	⅓	
		Yamaveram ..	..	..	200	..	200	⅓	
		Dhodiem	..	..	589	..	589	1	
		Morupandi ..	..	..	756	..	756	1	
		Molamidakambola-dinna.	..	..	787	..	787	1	

* In several blocks.

† These were last year given as village forests by error, and are now brought on the list here.

Area of Reserved Forests, 1883-84—(*Continued*).

District.	Taluk.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the Year. Acres.	Excluded or Transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	District Totals, Square Miles.
Cuddapah—(*Continued*).	Jammalamadugu—(*Continued*).	Kódúr	..	..	579	..	579	1	
		Aravetipalle ..	..	..	200	..	200	⅓	
		Devepalli ..	..	..	350	..	350	⅔	
		Pedda Dudiala ..	..	..	300	..	300	½	
	Kadiri ..	Nigadi	19,000	30	..	..	19,000	30	
		Malakavemula ..	5,500	8½	..	..	5,500	8½	
		Kondagamerla ..	2,700	4	..	..	2,700	4	
		Tummala ..	2,500	4	..	..	2,500	4	
		Kokanti	2,000	3	..	..	2,000	3	
		Gorivikanama ..	18,000	28	..	..	18,000	28	
	Madanapalle ..	Rekkalakonda ..	1,200	2	..	..	1,200	2	
		Mallayakonda ..	2,200	3½	..	..	2,200	3½	
		Kosuvaripalle ..	1,400	2	..	..	1,400	2	
		Sompalle	800	1½	..	..	800	1½	
		Horsleykonda ..	9,630	15	..	..	9,630	15	
	Váyalpád ..	Yellutla	3,500	5½	..	..	3,500	5½	
		Nadimcherla ..	2,000	3	..	..	2,000	3	
		Váyalpád	3,700	5½	..	..	3,700	5½	
		Ankalammakonda ..	2,800	4	..	..	2,800	4	
		Gorantlapalle ..	4,000	6	..	..	4,000	6	
Bellary ..	Bellary ..	Malpangudi ..	1,000	1½	..	300*	700	1	316½
Anantapur ..	Gooty ..	Gooty	331	½	..	..	331	½	1
	Anantapur and Tadpatri.	Muchukota ..	2,994	5	..	..	2,994	5	
Nilgiris ..	Munanad ..	Benne	10,880	17	..	..	10,880	17	5½
	Tódanád ..	Sigur	25,600	40	..	..	25,600	40	
	Tódanád and Merkunád.	Ootacamund Plantations.	629	1	..	..	629	1	
	Paranginád ..	Coonoor Plantations.	631	1	..	..	631	1	59
		Grand Total ..	519,941	812	7,719	300	527,360	824	824

* Reduced according to survey made by Survey Department.

Form No. 2.

Forest Department, Northern Circle, Madras.

Area of Leased Forests, 1883-84.

District.	Taluk.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the Year. Acres.	Eluded or Transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	District Totals, Square Miles.
Bellary ..	....	Sandur	40,000	62½	..	..	40,000	62½	62½
Nilgiris ..	....	Mudamalai ..	128,000	200	..	..	128,000	200	200
			168,000	262½	..	..	168,000	262½	262½

FORM No. 3.

Forest Department, Northern Circle, Madras.

Area of Forest Tracts protected from Fire during the Dry Season of 1883 to accompany Report for 1883-84.

District.	Forest Tracts.	Up to end of Dry Season of 1883.		During Dry Season of 1883-84.				Total cost up to end of Dry Season of 1884.	Year in which protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected.	Amount expended.			
		ACRES.	RS.	ACRES.	ACRES.	ACRES	RS.	RS.		
Kistna ..	Kondapalli	..	..	8,320	1,920	6,400	27	27	..	
	Other small expenses	..	..	..	..	..	9	9	..	
	Total ..	..	..	8,320	1,920	6,400	36	36	..	
Nellore ..	.....	..	..	..	..	..	..	..	..	
	Pullampet Taluk. — Ballipalle, West	6,306	451	6,306	1,400	4,906	287	738	1867 ..	Specially protected.
	Do. East	4,484	492	4,480	2,200	2,280	263	755	1871 ..	Do.
	Kodur Hill	3,187	263	4,686	400	4,286	235	498	1871—1874 ..	Do.
	Vagetikona	1,595	138	3,594	1,200	2,394	145	283	1874 ..	Protected with ordinary staff.
	Yerraguntlakota	3,487	176	3,487	360	3,127	203	379	1873 ..	Specially protected.
	Rallakonda	1,065	124	1,565	..	1,565	48	172	1879 ..	Protected with ordinary staff.
	Gathala	6,682	188	9,682	1,000	8,682	96	284	1874 ..	Do.
	Rollamadugu	5,424	60	5,424	2,200	3,224	47	107	1878 ..	Do.
	Thanakonda	548	132	1,047	15	1,032	74	206	1874 ..	Specially protected.
	Uparapalle Plantation ..	..	..	108	..	108	..	..	1884 ..	Protected by Plantation establishment.
	Kodur do. ..	..	..	37	..	37	..	..	..	Do.
	Reddipalle do. ..	..	..	925	..	925	..	..	..	Do.
	Pullampet do. ..	..	..	426	..	426	..	..	..	Do.
Cuddapah ..	Kadiri Range. — Nigadi	70,300	150	19,000	..	19,000	82	232	1880-81 ..	Specially protected.
	Malakavemala		75	5,500	500	5,000	40	115	Do. ..	Do.
	Kondagamarla		52	2,700	..	2,700	70	122	Do. ..	Protected with ordinary staff.
	Thummala		52	2,500	300	2,200	52	104	Do. ..	Do.
	Kokanti		52	2,000	250	1,750	40	92	Do. ..	Do.
	Gorivikanama		125	18,000	250	17,750	40	165	Do. ..	Do.
	Madanapalle Range. — Rekkalakonda	900	50	1,200	..	1,200	68	118	Do. ..	Protected with ordinary staff.
	Mallayakonda	..	74	3,000	..	3,000	53	127	Do.	
	Nurukuppalakonda	..	..	900	..	900	58	58	Do. ..	Specially protected.
	Kosuvaripalle	2,000	50	1,400	..	1,400	35	85	Do. ..	Protected with ordinary staff.
	Sompalle	500	25	800	..	800	53	78	Do. ..	Do.
	Horsleykonda	4,980	125	8,000	..	8,000	53	178	Do. ..	Do.
	Vâyalpâd Range. — Yellutla	21,990	100	5,000	..	5,000	45	145	Do. ..	Do.
	Nadimcherla		75	5,000	..	5,000	40	115	Do. ..	Do.
	Nurukuppalakonda		50	3,700	..	3,700	27	77	Do. ..	Specially protected.
	Ankalammakonda		75	3,500	..	3,500	40	115	Do. ..	Do.
	Gorantlapalle		76	5,000	..	5,000	33	109	Do. ..	Protected with ordinary staff.

Area of Forest Tracts protected from Fire during the Dry Season of 1883 to accompany Report for 1883-84—(*Continued*).

District.	Forest Tracts.	Up to end of Dry Season of 1883.		During Dry Season of 1883-84.				Total cost up to end of Dry Season of 1884.	Year in which protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected.	Amount expended.			
		ACRES.	RS.	ACRES.	ACRES.	ACRES.	RS.	RS.		
Cuddapah—(*Cont.*)	Cuddapah Range. Mamillapalle Block.	..	..	3,000	..	3,000	46	46	1883 ..	Specially protected.
	Ráyachóti Range. — Guvalacheruvu ..	..	..	7,600	..	7,600	32	32	Do. ..	Do.
	Gadikota ..	..	..	12,000	..	12,000	69	69	1884 ..	Do.
	Rájampet .. Srirangarazupoliem	..	..	4,800	..	4,800	47	47	Do. ..	Do.
	Siddhavattam .. Arepoyakanama ..	..	..	9,000	..	9,000	16	16	Do. ..	Do.
	Proddutur Range. — Mudduredipalle	..	..	8,400	240	8,160	44	44	Do. ..	Do.
	Ramesvaram	91	15	91	..	91	10	25	1880-81 ..	Protected with ordinary staff.
	Thallamapuram	153	15	153	..	153	15	30	Do. ..	Do.
	Vellala	258	16	258	..	258	14	30	Do. ..	Do.
	Alladapalle	197	15	197	..	197	14	29	Do. ..	Do.
	Payadala	99	15	99	..	99	..	15	Do. ..	Do.
	Nidijuru	696	35	696	..	696	14	49	Do. ..	Do.
	Kottapalle	120	15	120	..	120	..	15	Do. ..	Do.
	Kolamalla	430	30	430	..	430	16	46	Do. ..	Do.
	Modanuthapalle	86	15	86	..	86	..	15	Do. ..	Do.
	Anantapuram	138	15	138	..	138	..	15	Do. ..	Do.
	Kallur	160	15	160	..	160	..	15	Do. ..	Do.
	Jammalamadugu Range. — Kondasankesala	858	19	858	..	858	16	35	Do. ..	Do.
	Gandikóta	192	18	372	..	372	18	36	Do. ..	Do.
	Kosinepalle	300	18	300	..	300	16	34	Do. ..	Do.
	Yamavaram	200	19	300	..	300	16	35	Do. ..	Do.
	Dhodiem	589	9	589	..	589	18	27	Do. ..	Do.
	Morupandi	756	10	756	..	756	12	22	Do. ..	Do.
	Molamidukumbolathum ..	787	19	787	..	787	13	32	Do. ..	Do.
	Kodur	579	19	579	..	579	16	35	Do. ..	Do.
	Aravetipalle	200	6	200	..	200	5	11	Do. ..	Do.
	Denapalle	350	7	350	..	350	6	13	Do. ..	Do.
	Pedda Dudiala	300	7	300	..	300	5	12	Do. ..	Do.
	Total ..	140,987	3,582	181,586	10,315	171,271	2,705	6,287		
Kurnool ..	Velgode	..	..	12,800	6,400	6,400	200	200	1883-84.	
Bellary ..	Rámandrug Range. — Sandúr Block	3,000	505	2,750	40	2,710	229	734	1882-83.	
	Dhermapur	1,500	90	2,150	50	2,100	124	214	..	
	Gound	3,500	65	5,050	..	5,050	132	197	..	
	Gurga	1,300	143	2,430	100	2,330	195	338	..	
	Kanavihalli	1,000	130	4,160	..	4,160	143	273	..	
	Hospet	3,500	317	1,050	..	1,050	191	508	..	
	Venkatigiri	..	..	1,150	..	1,150	137	137	..	
	Malpangudi	..	..	700	40	660	71	71	..	
	Total ..	13,800	1,250	19,440	230	19,210	1,222	2,472		

Area of Forest Tracts protecte from Fire during the Dry Season of 1883 to accompany Report for 1883-84—(*Continued*).

District.	Forest Tracts.	Up to end of Dry Season of 1883.		During Dry Season of 1883-84.				Total cost up to end of Dry Season of 1884.	Year in which protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected.	Amount expended.			
		ACRES.	RS.	ACRES.	ACRES.	ACRES.	RS.	RS.		
Anantapur ..	Muchukota	..	..	7,040	..	7,040	325	325	1883-84.	
	Kottakota	..	..	3,840	..	3,840	} 8	8	..	
	Amagundapaliem	..	..	2,560	..	2,560				
	Total ..	..	..	13,440	..	13,440	333	333		
Nilgiris ..	Mudumalai Plantation	101	129	101	..	101	104	363	..	
	Benne do.	23	93	23	12	11	130	204	..	
	Sigúr do.	572	185	701	..	701	111	482	..	
	Ootacamund do.	388	70	631	..	631	297	303	..	
	Coonoor do.						233			
	Total ..	1,084	477	1,456	12	1,444	875	1,352		
	Grand Total ..	155,871	5,309 *	237,042	18,877	218,165	5,371	10,680		

* This amount is less than that given last year by Rs. 50, which it was found had been erroneously added in the Cuddapah District.

FORM No. 4.

Forest Department, Northern Circle, Madras.

Prosecutions for breach of Forest Rules during 1883-84.

District.	Cases pending from 1882-83.	New cases of the year.				Disposed of during the year.						Cases pending at the close of 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 number of cases of the year.	Total number of cases.	Convictions.		Acquittals.		Total.	
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Ganjam ..	8	..	..	..	3	3	11	2	65	8	12	10	77	1
Vizagapatam ..	..	..	12	..	4	16	16	11	57	3	17	14	74	2
Godávari ..	..	1	17	..	..	18	18	18	34	..	11	18	45	..
Kistna ..	..	..	9	..	7	16	16	13	55	4	7	17	62	..
Nellore ..	21	..	139	..	10	149	170	98	225	13	37	111	262	59
Cuddapah ..	2	12	116	32	7	167	169	141	486	19	121	160	607	9
Kurnool ..	7	..	124	..	..	124	131	88	202	42	84	130	286	1
Bellary ..	1	2	12	23	..	37	38	33	84	2	7	35	91	3
Anantapur ..	..	..	20	..	6	26	26	11	21	4	14	15	35	11
Nilgiris ..	..	..	11	..	..	11	11	10	41	1	1	11	42	..
Total ..	*39	15	460	55	37	567	606	425	1,270	96	311	521	1,581	86

* For explanation of the difference between this number and the closing balance of last year, see para 59.

FORM NO. 5.

Forest Department, Northern Circle, Madras.

Area of Plantations, 1883-84.

District.	Taluk.	Name of Plantation.	Description of Tree.	On 1st April 1883.		Added during 1883-84.		On 31st March 1884.		Remarks.
				Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
			PLANTATIONS.							
				ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Godávari ..	Narsápur	Rustumbadu	Casuarina	24	4,153	..	..	24	4,153	Formed in 1866-67.
		Sitarampuram ..	Do.	26		..	..	26		
		Bendemurlanka ..	Do.	27	2,014	..	..	27	2,014	Do. 1875-76.
	Amalápuram ..	Do. ..	Do.	20	516	..	176	20	692	Do. 1882-83.
			Total ..	97	6,683	..	176	97	6,859	
Kistna ..	Bandar	Karrimid	Casuarina and Palmyra ..	20	..	..	133	20	133	
		Mugudhuru	Casuarina and Inga ..	15½	..	..	122	15½	122	
		Arisepalli	Casuarina and Palmyra ..	25	..	..	169	25	169	
		Gundupalem	Do. do. ..	30	..	..	..	30	..	
		Chinnapuram ..	Casuarina, Palmyra and Babul.	25	..	..	..	25	..	
		Kodur	Palmyra	38	..	..	54	38	54	
	Gudivada	Guraza	Palmyra and Casuarina, &c.	22	..	..	..	22	..	
		Kankollu	Do. do. &c.	17	..	..	556	17	556	
		Allinagaram	Do. do. &c.	126	..	— 1	173	125	173	1 acre excluded as re-measurement.
		Dakaram	Casuarina	25	..	..	..	25	..	
		Konkolu	Casuarina and Palmyra, &c.	15	..	..	..	15	..	
		Karamenapudi ..	Do. do. ..	39	..	..	..	39	..	
		Korlapadu	Do. do. ..	20	..	..	63	20	63	
		Mandaralli	Do. do. ..	20	..	..	..	20	..	
		Iyawar Rudraveram ..	Palmyra	20	..	..	63	20	63	
		Bomminampadu ..	Casuarina and Palmyra ..	16	..	10	102	26	102	
		Venarrapadu	Do. do. ..	16	..	..	101	16	101	
		Venudhuru	Do. do. ..	29	..	35	104	64	104	
	Bezvada	Bezvada	Babul, &c.	25	..	..	..	25	..	
		Ibrampatam	Do.	24	..	..	62	24	62	
		Nandigama	Casuarina and Margosa ..	20	..	..	..	20	..	
	Nandigama ..	Gannavaram	Palmyra and Babul ..	39	..	..	60	39	60	
		Kanchikicherla ..	Do. do. ..	24	..	..	..	24	..	
	Palnad	Thumerikodu ..	Palmyra	21	..	..	227	21	227	
	Narsaraopet ..	Narsaraopet	Babul, &c.	15	..	..	..	15	..	
	Répalle	Peteru	Casuarina	5	..	..	..	5	..	
		Iskapalle	Do.	2	..	..	..	2	..	
	Bápatla	Chebrolu	Palmyra	20½	..	..	..	20½	..	
		Bápatla	Casuarina	21	239	..	95	21	334	

Area of Plantations, 1883-84—(*Continued*).

District.	Taluk.	Name of Plantation.	Description of Tree.	On 1st April 1883.		Added during 1883-84.		On 31st March 1884.		Remarks.
				Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
				ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Kistna—(*Cont*)...	Bápatla—(*Continued*).	Appicatla	Casuarina	7	..	..	..	7	..	
		Karlapalem	Casuarina, &c.	236	3,273	..	258	236	3,531	
		Vedhullapalle ..	Casuarina	20	149	..	73	20	222	
		Ipurpalem	Do.	14	..	..	..	14	..	
		Bethapudi	Do.	7	..	..	..	7	..	
		Perali	Do.	15	..	..	..	15	..	
		Chirala	Do.	17	1,080	..	64	17	1,144	
		Wardarevu	Do.	23	3,205	..	138	23	3,343	
		Arumülapeta ..	Do.	26	1,505	..	105	26	1,610	
		Nayanipalli	Do.	17	801	..	72	17	873	
		Ravurpeta	Do.	10	..	..	..	10	..	
		Pandhillapalli ..	Do.	49	143	..	73	49	216	
		Kadavakuduru ..	Do.	18	..	..	..	18	..	
			Total ..	1,194	10,395	44	2,867	1,238	13,262	
Nellore ..	Gúdúr	Dugarázpatnam ..	Do.	290	27,433	75	1,866	365	29,299	Commenced 1873.
		Kothapatnam ..	Do.	280	22,978	38	1,526	318	24,504	
		Tamminapatnam ..	Do.	370	34,692	75	2,635	445	37,327	Do.
	Nellore	Allipuram	Do.	39	8,649	..	423	39	9,072	Do.
		Utukur	Do.	180	11,936	..	1,794	180	13,730	Do. 1875.
		Varani	Do.	290	30,908	..	1,590	290	32,498	Do. 1874.
		Iskapalli	Do.	19½	847	..	48	19½	895	
	Kávali	Pullamellapalli ..	Do.	1	795	— 1	— 795	..	..	Wrongly included last year.
	Atmakúr	Mamudur	Do.	9	1,345	..	64	9	1,409	
	Kávali	Tummalapenta ..	Do.	54	18,386	..	186	54	18,572	Commenced 1873.
	Kandukúr ..	Binginipalli	Do.	12½	308	..	40	12½	348	Do. 1871.
		Ramayapatnam ..	Do.	40	19,264	..	146	40	19,410	Do. 1873.
	Ongole	Kottapatnam ..	Do.	35	14,457	..	113	35	14,570	Do. 1874.
		Kanuparthi	Do.	20½	16,200	..	202	20½	16,402	Do. 1873.
	Gúdúr	Kothapatnam ..	Cocoanut	20	493	..	554	20	1,047	Do. 1883.
			Total ..	1,660½	2,08,691	187	10,392	1,847½	2,19,083	
Cuddapah ..	Pullampet	Kodur	Red Sanders	37	6,601	..	124	37	6,725	Do. 1865.
		Uparapalle	Mixed	108	8,034	..	77	108	8,111	Do. 1868-69.
		Reddipalle	Do.	925	12,939	..	77	925	13,016	Do. 1869-70.
		Pullampet	Do.	426	7,675	..	66	426	7,741	Do. 1871.
	Cuddapah	Camalapuram ..	Do.	332	9,874	..	72	332	9,946	Do. 1869.
		Aremanabunda ..	Mahogany Plants ..	..	..	..	173	..	173	Do. 1883-84.
			Total ..	1,828	45,123	..	589	1,828	45,712	

Area of Plantations, 1883-84—(*Continued*).

District.	Taluk.	Name of Plantation.	Description of Tree.	On 1st April 1883.		Added during 1883-84.		On 31st March 1884.		Remarks.
				Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
				ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Anantapur ..	Gooty	Gooty	Babul and Palmyra ..	197	..	— 197	..	..	..	Excluded, as on investigation they proved to be natural-grown areas.
	Tadpatri	Sixteen Plantations ..	Babul	40	..	— 40	..	..	..	
	Dharmavaram ..	Twenty-one Plantations.	Do.	1,041	536	—1,041	— 536	..	..	
	Gooty	Gooty	Do.	1,483		—1,483		..	..	
				..	..	331	48	331	48	Brought on list properly.
			Total ..	2,761*	536	—2,430	— 488	331	48	* In last year's report "2524" should have been "2761."
Nilgiri ..	Nambolukod ..	Mudumalai	Teak	101	27,182	..	58	101	27,314	
	Munanád	Benne	Do.			..	75			
	Tódanád ..	Sigúr	Sandalwood	23	9,938	..	112	23	10,050	
		Arnakal	Eucalyptus	8	310	..	10	8	320	Commenced 1873.
		Governor's Sholah ..	Eucalyptus and Acacia ..	55	1,311	..	9	55	1,320	Do. 1863.
		Hoopatti	Eucalyptus	12	362	..	15	12	377	Do. 1873.
		Andy	Eucalyptus and Acacia ..	60	1,272	..	23	60	1,295	Do. 1873.
		Sheffield	Acacia	23	573	..	8	23	581	Do. 1862.
		Cally	Do.	17	561	..	12	17	573	Do. 1870.
		Chougat Cally ..	Eucalyptus	26	780	..	14	26	794	Do. 1871.
		Baikie	Do.	46	2,923	12	483	58	3,406	Do. 1874.
		Madana	Acacia Melanoxylon ..	18	946	..	149	18	1,095	Do. 1882 addition Eucalyptus.
		Chemenguli	Eucalyptus	33	3,845	..	16	33	3,861	Do. 1879.
		Muttinad	Do.	95	6,271	..	383	95	6,654	Do. 1880.
		Brooklands	Eucalyptus and Acacia dealbata.	10	317	..	11	10	328	Do. 1862.
		Aramby	Eucalyptus	58	2,345	3	151	61	2,496	Do. 1863.
		Koolie	Do.	58	3,588	..	476	58	4,064	Do. 1875.
		Marlimund	Eucalyptus and Acacia ..	11	736	..	94	11	830	Do. 1860.
		Norwood	Eucalyptus	26	686	..	8	26	694	Do. 1872.
		Snowdon	Acacia dealbata	7	210	..	4	7	214	Do. 1860.
		Bathri	Eucalyptus	60	3,902	70	2,282	130	6,184	Do. 1877.
		Deva Shola	Do.	14	1,629	..	8	14	1,637	Do. 1880.
		Black Bridge	Do.	48	1,374	..	143	48	1,517	Do. 1874.
		Rock	Do.	8	311	..	8	8	319	Do. 1875.
	Paranginád ..	Bleak House ..	Acacias	235	4,417	..	8	235	4,425	Do. 1857.
		Bandy Shola ..								
		Old Forest ..	Eucalyptus	200	4,058	..	319	200	4,377	Do. 1872.
			Acacia decurrens	..	..	..	26	..	26	Do. 1882.
		Tippakutchi	Eucalyptus	35	771	..	12	35	783	Do. 1875.
		Rallia	Eucalyptus and Acacia Melanoxylon.	60	1,298	..	21	60	1,319	Do. 1872.

Area of Plantations, 1883-84—(*Continued*).

District.	Taluk.	Name of Plantation.	Description of Tree.	On 1st April 1883.		Added during 1883-84.		On 31st March 1884.		Remarks.
				Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
				ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Nilgiri—(*Continued*).	Paranginád—(*Contd.*)	Little Rallia	Eucalyptus	10	501	..	14	10	515	Commenced 1877.
		Newman	Do.	35	721	..	16	35	737	Do. 1870.
			Total ..	1,392	83,138	85	4,968	1,477	88,105	
			CULTURAL OPERATIONS.							
Ganjam ..	Goomsur	Mojagodo	Teak	3½	504	..	36	3½	540	Formed in 1869-70.
			Total ..	3½	504	..	36	3½	540	
Vizagapatam ..	Pálkonda ..	Voni	Sál ete	25	137	..	314	25	451	Transferred from "topes." "Guggilam" was last year erroneously called *Boswellia*, it really is *Shorea robusta*.
		Lakshmipuram ..	Do.	26	41	..	314	26	355	
			Total ..	51	178	..	628	51	806	
Kurnool	Nandyál	Orwakul	Yepi	..	..	46	20	46	20	Commenced 1883-84.
	Nandikótkur	Mandlam	Babul	..	..	10	10	10	10	Do. do.
			Total ..	..	..	56	30	56	30	
Bellary ..	Hospet ..	Gundlavathigiri ..	Babul	4	..	..	..	4	..	
		Nayanahalli	Do.	10	..	..	..	10	..	
			Total ..	14	..	..	..	14	..	
			Grand Total ..	9,001	3,55,070	— 2,058	18,567	6,943	3,73,606	

FORM No 6.

Forest Department, Northern Circle, Madras.

Register of Topes.

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Area.	Cost		Remarks.
						During Year.	To end of Year.	
					ACS.	RS.	RS.	
Ganjam.	Berhampore ..	1	Chatrapur ..	Casuarina ..	6	..	Not reported.	
		2	Lord Napier's Garden	Cashew, Mango ..	5	..		
		3	Mr Knox' Garden ..	Casuarina, Mango.	2	..		
	Goomsur ..	4	Tonnarada ..	Mango ..	27	105		
	Chicacole ..	5	Calingapatam ..	Cashew, Margosa.	4	..		
		6	Púndi	Do. do.	½	..		
		7	Bananapád ..	Margosa and *Cordia myxa.*	½	..		
				Total ..	45	105	..	
Vizagapatam.	Pálkonda ..	1	Tumarada ..	Teak, Mango, Maddi, &c.	16	..	4	
		2	Chinnamangalapuram	Jachi, Teak, Maddi, Mango, &c.	40	..	4	
				Total ..	56	..	8	
Godávari.	Rámachandrapuram.	1	Gollapolliem ..	Palmyra ..	2	..	Not reported.	
		2	Tapaswaram ..	Palmyra & Mango.	1	..		
		3	Mundapeta ..	Do. ..	2	..		
		4	Yedidi	Do. ..	8	..		
		5	Do.	Do. ..	6	..		
		6	Do.	Do. ..	6	..		
		7	Vakatippa ..	Rauvi	2	..		
		8	Amzur	Tamarind ..	3	..		
				Total ..	30	..	..	
Kistna.	Bandar ..	1	Bombay near Basin, Masulipatam.	Casuarinas ..	7	..	..	
	Gudiváda ..	2	Gudiváda ..	Mango, &c. ..	5	66	66	Figures for previous years not traceable except for Bápatla.
	Bezváda ..	3	Ellore Road ..	....	5	86	86	
		4	Vidiyadharapuram ..	Yapi, &c. ..	4	45	45	
	Nandigáma ..	5	Nandigáma ..	Margosa, Tamarind.	11	81	81	
	Vinukonda ..	6	Vinukonda ..	Margosa, &c. ..	6	71	71	
	Narsaraopet ..	7	Narsaraopet ..	Palmyras, Babul, &c.	7	37	37	
	Sattenapalle ..	8	Krossur	Mango, &c. ..	6	..	..	
	Bápatla ..	9	Bápatla	Do. ..	2	10	1,132	
	Répalle ..	10	Tsandole	Casuarina ..	1	..	..	
				Total ..	54	396	1,518	
Nellore.	Gúdúr ..	1	Ojili	Margosa, Tamarind and Neredu.	2	..	378	
		2	Gúdúr ..	Do. ..	10	72	1,149	
		3	Do.	Do. ..	3	..	468	
		4	Do.	Palmyra ..	12	..	33	
		5	Dugarázpatnam ..	Margosa, Tamarind and Neredu.	5	47	557	Area extended from 3 to 5 acres.
		6	Chilamathur ..	Palmyra ..	2	..	14	
		7	Gunapadu ..	Do. ..	6	..	55	
		8	Kottapatnam ..	Do. ..	37	..	200	
		9	Kommalapudi ..	Do. ..	16	..	100	
		10	Jottakanduru ..	Do. ..	16	..	70	
		11	Kanupur	Do. ..	15	..	20	
		12	Inkurthi	Margosa, Tamarind and Neredu.	½	..	20	
		13	Adurupalle ..	Do. ..	5	..	883	
		14	Rápúr	Do. ..	10	85	1,217	
		15	Dachur	Do. ..	4	..	1,173	
		16	Puligelapadu ..	Do. ..	½	..	310	
		17	Gottapalam ..	Do. ..	4	32	1,027	
		18	Marupur	Do. ..	4	..	903	
	Rápúr ..	19	Althurthy ..	Do. ..	4	48	954	
		20	Penubarthi ..	Do. ..	4	48	259	
		21	Deveravenuru ..	Palmyra ..	129	..	150	
		22	Veligonu	Do. ..	4	..	8	
		23	Sydapuram ..	Margosa, Tamarind and Neredu.	4	..	310	
		24	Rápúr	Do. ..	4	48	363	
		25	Chaganam ..	Do. ..	4	..	713	
		26	Gonupalle ..	Do. ..	2	..	170	

Register of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Area.	Cost		Remarks.
						During Year.	To end of Year.	
					ACS.	RS.	RS.	
Nellore—(*Continued*).	Nellore ..	27	Ambapuram ..	Margosa, Tamarind and Neredu.	6	36	873	
		28	Amancherla ..	Do. ..	6	37	778	
		29	Chinachankur ..	Do. ..	¼	..	81	
		30	Varigonda ..	Do. ..	½	..	310	
		31	Razupalem ..	Do. ..	4	37	629	
		32	Vidavalur ..	Do. ..	1½	..	180	
		33	Vutukur ..	Do. ..	¼	..	109	
		34	Minagallu ..	Do. ..	½	..	160	
		35	Kodavalur ..	Do. ..	¼	..	60	
		36	Veguru	Do. ..	½	..	40	
		37	Naidupalem ..	Do. ..	1	..	200	
		38	Maridigunta or Dandigunta.	Do. ..	½	..	20	
		39	Gandavaram ..	Do. ..	1½	..	266	
		40	Gundalummapalem ..	Do. ..	¼	..	125	
		41	Badduvaripalem ..	Do. ..	½	..	395	
		42	Siddhipuram ..	Do. ..	3	..	658	
		43	Varilla	Do. ..	¼	..	100	
		44	Gogulapalle ..	Do. ..	¼	..	100	
		45	Ponnur	Palmyra ..	6	..	20	
		46	Kodur	Do. ..	1½	..	36	
		47	Rámachandrapuram.	Do. ..	50	..	280	
		48	Allipuram ..	Do. ..	1	..	2	
		49	Gudipallipadu ..	Do. ..	4	..	7	
		50	Kakupalli ..	Do. ..	12	..	65	
		51	Bodduvaripalem ..	Do. ..	28	..	185	
		52	Inthupur ..	Do. ..	10	..	10	
		53	Allur	Do. ..	18	..	Not known.	
		54	Thaguthurty ..	Do. ..	9	..	40	
		55	Kodavaluru ..	Do. ..	53	..	150	
		56	Mareguntapadu ..	Do. ..	20	..	50	
		57	Dampur	Do. ..	6	..	15	
		58	North Mopur ..	Do. ..	17	48	275	
		59	Kodur	Do. ..	116	48	298	
		60	Chutti	Margosa, Tamarind and Neredu.	4	48	1,586	
	Venkatagiri ..	61	Akkampett ..	Do. ..	4	48	1,334	
		62	Chereddipalle ..	Do. ..	4	48	1,426	
		63	Nellorepalem ..	Do. ..	2	40	709	
		64	Yadavalli ..	Do. ..	2	40	402	
		65	Pramana ..	Do. ..	4	..	694	
		66	Atmakúr	Do. ..	2½	48	604	
	Atmakúr ..	67	Inugaluru ..	Palmyra ..	15	..	20	
		68	Mahimaluru ..	Do. ..	15	..	36	
		69	Razavalu	Do. ..	11	..	25	
		70	Mahamadapuram ..	Do. ..	4½	..	28	
		71	Kalurayi ..	Do. ..	74	..	200	
		72	Chinakraka ..	Margosa, Tamarind and Neredu.	2	40	1,061	
		73	Kávali	Do. ..	2	..	395	Transferred to Local Fund Department.
		74	Tummalapenta ..	Palmyra ..	10	..	62	
		75	Thullapalem ..	Do. ..	64	..	359	
		76	Reedrakota ..	Do. ..	18	..	70	
		77	Chinnayapalem ..	Do. ..	90	..	420	
		78	Moosoonoor ..	Do. ..	21	..	150	
	Kávali ..	79	Kávali	Do. ..	88	..	345	
		80	Munganoor ..	Do. ..	18	..	70	
		81	Jallathankay ..	Do. ..	140	..	615	
		82	Bramanakruka ..	Do. ..	100	..	212	
		83	Siddanakonduru ..	Do. ..	17	..	50	
		84	Vemulapadu ..	Do. ..	47	..	119	
		85	Thimasamudram ..	Do. ..	72	..	150	
		86	Kaligiri	Do. ..	21	..	40	
		87	Beedamagunta ..	Do. ..	4	..	20	
		88	Chinna Annalur ..	Do. ..	28	..	19	
		89	Nandavaram ..	Margosa, Tamarind and Neredu.	16	54	1,120	
	Udayagiri ..	90	Marripadu ..	Do. ..	6	54	557	
		91	Duttalur	Do. ..	3	49	768	
		92	Chintagunta ..	Do. ..	4	49	120	
		93	Chagolu	Do. ..	3	..	120	
		94	Kuridu	Do. ..	1	..	250	
	Kandukúr ..	95	Pakala	Do. ..	½	..	167	
		96	Somarazupalli ..	Do. ..	4	42	443	
		97	Kamunalla ..	Do. ..	4	43	628	
		98	Ponnalur	Do. ..	½	..	190	

Register of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Area.	Cost During Year.	Cost To end of Year.	Remarks.
					ACS.	RS.	RS.	
Nellore—(*Continued*).	Kanigiri ..	99	Kanigiri	Margosa, Tamarind and Neredu.	2	48	212	
		100	Kanchulapadu ..	Do. ..	5	40	125	
		101	Hanumanthapadu ..	Do. ..	4	40	536	
		102	Thimmareddipalle ..	Do. ..	4	..	400	
		103	Nanthanamarella ..	Do. ..	4	..	60	
	Ongole ..	104	Ongole	Do. ..	5	63	527	
		105	Nidamalur ..	Do. ..	2	..	78	
		106	Padarthy	Palmyra ..	50	..	236	
		107	Alluru	Do.	50	..	338	
	Podili Division.	108	Talamalla ..	Margosa, Tamarind and Neredu.	4	..	100	
		109	Gosukondavari Agraharam.	Do. ..	1	..	415	
		110	China Arikatla ..	Do. ..	4	..	400	
		111	Nagellamudupu ..	Do. ..	4	..	250	
				Total ..	1,752	1,380	37,272	
Cuddapah.	Pullampet ..	1	Pullampet ..	Mango, Albizzia,&c.	2	91	383	1879
		2	Utukur	Mango, Margosa ..	15	91	1,385	1879
		3	Chinna Orampad ..	Mango, &c. ..	8	91	600	1879
		4	Anantampalle ..	Mango & Albizzia.	6	91	442	1880
		5	Rajampet	Mango & Tamarind.	5	91	523	1880
		6	Kodur	Do. ..	7	92	1,119	1880
		7	Najireddipalli ..	Palmyra	19	92	202	1881
	Siddhavattam ..	8	Kondur	Albizzia, &c. ..	11	100	2,702	1873
		9	Siddhavattam ..	Mango, &c. ..	9	80	2,321	1873
		10	Rajupolliem ..	Eugenia, &c. ..	8	100	1,161	1873
		11	Obalam	Tamarind, &c. ..	12	101	1,380	1873
	Badvél ..	12	Payalakunta ..	Margosa, &c. ..	2	67	401	
		13	Badvél	Do. ..	13	67	372	
		14	Tanjanarajapalle ..	Do. ..	12	67	447	
		15	Venkatapuram ..	Tamarind, &c. ..	12	67	263	
		16	Porumanilla ..	Do. ..	11	67	275	
		17	Wottimadugu ..	Do. ..	13	66	260	
	Proddutur ..	18	Chintakunta ..	Mango & Margosa.	25	166	166	1836
		19	Mydukur	Tamarind & Mango.	7	156	156	1835
		20	Digavapatnam ..	....	11	48	1,564	1866
		21	Moodanur ..	....	5	63	519	1879
		22	Vemaguntlapalle ..	....	2	46	287	1879
		23	Ponnathota ..	....	2	67	390	1879
	Jammalamadugu.	24	Thalla Proddutur ..	....	86	63	1,912	1866
		25	Kodur	....	21	67	2,019	1866
		26	Pattipaud ..	....	99	67	405	1880
		27	Kondapuram ..	....	25	123	1,048	1879
		28	Gandlur	....	38 / 20	125	3,457	1864
		29	'dupalapoya ..	Palmyra	517	118	1,095	1783
		30	Pulivendla ..	....	32	69	435	1863
		31	Abbireddipalle ..	....	16	32	32	1878
		32	Vempalle	....	15	60	240	1863
		33	Thellur	....	6	72	762	1879
	Pulivendla ..	34	Velpula	....	4	65	571	1877
		35	Mallila	....	6	60	317	1879
		36	Nidenagola ..	....	15	33	96	1878
		37	Kasnoor	....	7	36	121	1878
		38	Balapanur ..	....	20	36	133	1878
		39	Bhakarapet ..	....	7	39	125	
		40	Ootukur	....	2	38	236	
		41	Lingala	....	10	59	219	
		42	Kokatam	....	12	95	609	1880
		43	Peddacheppalli ..	....	23	39	64	Sold.
	Cuddapah ..	44	Yerraguntla ..	....	5	64	863	1880
		45	Kondur	....	19	38	137	
		46	Pushpagiri ..	....	7	38	189	
		47	Appiapalli ..	....	80 / 13	623 / 71	1,959 / 331	1880
		48	Isadam	....	10	78	156	1877
		49	Vadulapalle ..	....	12	78	156	1877
		50	Sydapuram ..	....	5	78	373	1879
		51	Kadiri	....	5	78	360	1879
	Kadiri	52	Obaladeveracheruvu.	....	12	78	216	1877
		53	Gunjapalle ..	....	8	78	144	1877
		54	Dhanayanicharu ..	....	8	77	149	1877
		55	Kurli	....	13	77	215	1877
	Madanapalle ..	56	Basinikonda ..	....	16	72	1,766	1874
		57	Madavapalle ..	Casuarina ..	25	72	2,239	1874

Register of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Area.	Cost During Year.	Cost To end of Year.	Remarks.
					ACS.	RS.	RS.	
Cuddapah—(*Continued*).	Madanapalle—(*Continued*).	58	Madanapalle New Tope.	....	3	73	210	1881.
		59	Do. near Taluk Cutcherry.	....	3	..	..	
		60	Bathalamithyeddu ..	....	2	78 / 73	557 / 625	1881.
		61	Vempalle ..	....	10	..	..	
		62	Thettu	....	6	..	..	
		63	Guvalacheruvu ..	Margosa & Tamarind.	14	69	273	
	Ráyachóti ..	64	Sambapalle ..	....	15	68	200	
		65	Chittoor	....	17	68	331	
		66	Hasnapuram ..	Palmyra ..	44	68	398	
		67	Galivedu	....	5	68	134	
	Váyalpád ..	68	Kalikiri	....	13	72	1,138	1876.
		69	Kalakada	....	9	72	1,156	1876.
		70	Pilér	....	8	72	826	1876.
	Pullampet			Scattered trees ..	....	359	..	..	In 89 villages.
	Siddhavattam			Do. ..	....	190	..	..	In 72 do.
	Badvél			Do. ..	....	413	..	..	In 52 do.
	Proddutur			Do. ..	....	1,122	..	..	In 15 do.
	Jammalamadugu.. ..			Do. ..	....	1,943	..	..	In 16 do.
	Pulivendla			Do. ..	....	756	..	..	In 35 do.
	Cuddapah			Do. ..	....	981	..	..	In 38 do.
					Total ..	7,349	5,644	46,315	317
Kurnool.	Rámallakót ..	1	China Tikur ..	Tamarind, Mango, &c.	7	48	144	Commenced 1872.
		2	Ulindakonda ..	Do. ..	7	48	144	Do. 1871.
		3	Veldurti and Bramagoondan.	Do. ..	24	48	144	Do. 1869.
		4	Udumalapad ..	Do. ..	5	48	144	Do. 1872.
		5	Kothapalli ..	Do. ..	6	52	148	Do. 1871.
		6	Pyalakurthi ..	Do. ..	6	..	..	Do. 1875.
		7	Koorva Uzalavaram.	Do. ..	11	..	..	Do. 1870.
	Pattikonda ..	8	Kodanur	Do. ..	3	..	..	
		9	Karvemula ..	Do. ..	6	48	509	
		10	Billakallu ..	Do. ..	5	48	542	Do. 1870.
		11	Vanugamarri ..	Do. ..	6	48	438	
		12	Chentzu Yerragudi..	Do. ..	9	..	348	
	Koilkuntla ..	13	Kristopad ..	Do. ..	3	47	586	Do. 1871.
		14	Alavakonda ..	Do. ..	2	..	1,013	Do. 1872.
		15	Tumaladinna ..	Do. ..	3	..	1,106	Do. 1872.
		16	Rupanagudi ..	Do. ..	1	..	884	Do. 1873.
	Nandikótkóur ..	17	Vipanaguntla ..	Do. ..	2	46	94	Do. 1870.
	Nandyál ..	18	Tammarazpalli ..	Do. ..	4	46	133	Do. 1871.
		19	Kakanur ..	Do. ..	25	96	283	Commenced in 1871. To these may be added the topeat Nandyál and Wonkarum.
		20	Ayalur	Do. ..	4	48	334	
	Sirvél ..	21	Nallaguntla ..	Do. ..	6	48	51	Commenced in 1868.
	Cumbum ..	22	Govindampalli ..	Do. ..	10	48	59	
		23	Soorapalli ..	Do. ..	4	..	2	Do. 1868.
		24	Bestwarapet ..	Do. ..	9	..	20	Do. 1869.
	Márkápur ..	25	Márkápur ..	Do. ..	a	..	97	Do. 1873.
		26	Doopaud ..	Do. ..	4	48	144	
		27	Ramachendrakota ..	Do. ..	2	..	..	
				Total ..	182	815	7,367	
Bellary.	Bellary ..	1	Thuginaboothalall ..	Casuarina ..	29	..	..	32 trees left.
		2	Paramadavanihalli ..	Do. ..	31	..	..	440 do.
		3	Koodoothini ..	Tamarind, Margosa.	3	..	..	90 do.
		4	Kodagal ..	Tamarind ..	5	..	..	166 do.
		5	Rupanagudi ..	Tamarind and Margosa.	13	..	..	239 do.
		6	Kuggal	Tamarind, &c. ..	5	..	..	165 do.
	Kúdligi ..	7	Cooppanakai ..	Mango, &c. ..	5	..	..	203 do.
		8	Bundri	Do. ..	3	..	..	124 do.
		9	Ramadurgam ..	Do. ..	1	..	..	45 do.
		10	Hosakeri ..	Do. ..	..	..	..	11 do.
	Hadagalli ..	11	Kotnakal ..	Tamarind and Margosa.	9	41	..	404 do.
		12	Hadagalli ..	Margosa ..	2	..	..	85 do.
	Harpanahalli ..	13	Kuravurti ..	Figs	1	..	..	15 do.
		14	Talighi	Tamarind, Mango.	2	..	..	81 do.
	Alúr ..	15	Lingathahaili ..	Do. ..	16	..	..	487 do.

Register of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Area.	Cost During Year.	Cost To end of Year.	Remarks.
					ACS.	RS.	RS.	
Bellary—(*Continued*).	Alúr—(*Cont.*) ..	16	Alúr	Tamarind, Ippa ..	20	..	..	721 trees left.
		17	Aspary	Do. ..	8	..	..	307 do.
		18	Kokkarachadu ..	Tamarind ..	1	..	..	116 do.
		19	Narainiki ..	Do. ..	5	..	..	172 do.
		20	Solavayi	Do. ..	12	..	..	23 do.
		21	Kurukundi ..	Do. ..	10	..	..	18 do.
		22	Toranacallu ..	Do. ..	2	..	..	14 do.
		23	Chippigiri ..	Do. ..	19	..	..	14 do.
		24	Banigara ..	Do. ..	7	..	..	2 do.
		25	Hanigara ..	Do. ..	1	..	..	11 do.
	Adóni ..	26	Kallabhari ..	Casuarina, &c. ..	8	..	..	1,601 do.
		27	Yemmiganur ..	Mango ..	5	40	..	220 do.
		28	Raidrug	Various kinds ..	3	..	..	70 do.
		29	Somalapuram ..	Tamarind, Margosa.	4	..	..	154 do.
	Ráyadrug ..	30	Malapuram ..	Tamarind ..	5	..	..	188 do.
		31	Udagalam ..	Tamarind, Margosa	5	..	..	185 do.
				Total ..	240	81	..	
Anantapur.	Anantapur ..	1	Casuarina Tope ..	Casuarina ..	42	96	96	Two watchers at Rs. 4 each per mensem.
		2	Mango do. ..	Mango and other trees.	9			
		3	Somanthoddy ..	Palmyra ..	30	..	..	
		4	Koodair	Do. ..	50	..	..	
		5	Maliavantham ..	Do. ..	15	..	..	
		6	Kurugunta ..	Do. ..	8	..	..	
		7	Tope on tank bund ..	Babul, Margosa ..	25	..	..	
		8	Huzur Cutcherry Tope.	Mango, Tamarind, Neem, Ippi, &c.	2	48	48	One watcher at Rs. 4 per mensem.
		9	Dispensary Compound Tope.	Do. do. Neredu.	2			
	Gooty ..	10	Gundacul	Tamarind, Margosa.	21	..	..	
		11	Jakalchervoo ..	Palmyra ..	4	..	..	
		12	Thunniala ..	Babul, &c. ..	40	..	..	
		13	Karoor	Do. ..	20	..	..	
		14	Pathacottuchervoo ..	Do. ..	40	..	..	
		15	Gundacul ..	Do. ..	50	..	..	
		16	Tadpatri Tope ..	Neem ..	1	48	48	One watcher at Rs. 4 per mensem.
		17	Do. ..	Casuarina ..	11	..	..	
		18	Hussainpuram ..	Tuma	34	..	..	
		19	Muchukota ..	Do.	80	..	..	
		20	Yellanoor ..	Do.	80	..	..	
		21	Senegalgoodur ..	Do.	51	..	..	
		22	Poottoor	Do.	50	..	..	
		23	Thadithota ..	Do.	80	..	..	
		24	Amalladinna ..	Do.	40	..	..	
		25	Chippaloor ..	Do.	40	..	..	
	Tadpatri ..	26	Rayalchervoo ..	Do.	40	..	..	
		27	Nittoor	Do.	80	..	..	
		28	Bogasamudram ..	Do.	80	..	..	
		29	Yadiki	Do.	80	..	..	
		30	Jootoor	Do.	80	..	..	
		31	Peddapapoor ..	Do.	40	..	..	
		32	Nagaroor	Do.	80	..	..	
		33	Thavinapalapadu ..	Do.	40	..	..	
		34	Tadpatri	Palmyra ..	20	..	..	
		35	Chinna Aloor ..	Do. ..	15	..	..	
		36	Yellaloor	Do. ..	15	..	..	
	Dharmavaram ..	37	Dharmavaram ..	Tuma	63	1,200	1,200	Twenty-five watchers at 4 Rs. each per mensem.
		38	Pothukunta ..	Do.	62			
		39	Gollapalli ..	Do.	11			
		40	Aparacherla ..	Do.	40			
		41	Dadaloor	Do.	80			
		42	Chennacottapalli ..	Do.	80			
		43	Thimajipalli ..	Do.	40			
		44	Kamyonpalli ..	Do.	80			
		45	Sanapa	Do.	40			
		46	Ganginapalli ..	Do.	40			
		47	Thopudurty ..	Do.	80			
		48	Thogarukunta ..	Do.	80			
		49	Thoomacherla ..	Do.	80			
		50	Thippapalli ..	Do.	30			
		51	Noothunadagu ..	Do.	80			
		52	Rollagiri	Do.	40			
		53	Nasanakota ..	Do.	50			
		54	Golla	Do.	40			
		55	Peroora	Do.	72			

Register of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Area.	Cost During Year.	Cost To end of Year.	Remarks.
					ACS.	RS.	RS.	
Anantapur—(*Continued*).	Dharmavaram—(*Cont.*)	56	Cumbadore ..	Tuma	80	1,200	1,200	Twenty-five watchers at 4 Rs. each per mensem.
		57	Mikanoor	Do.	40			
		58	Palavaye	Do.	40			
		59	Kalliandrug ..	Do.	80			
		60	Chintherlapalli ..	Palmyra and Babul.	51			
		61	Lutchmipalli ..	Do. ..	50			
		62	Nagavalli ..	Do. ..	50	..	..	
		63	Moolakaladu ..	Do. ..	40	..	..	
		64	Pothulanagapalli ..	Palmyra ..	20	..	..	
		65	Yemmuladodi ..	Do. ..	16	..	..	
		66	Kodihalli	Babul	6	..	..	
	Hindupur ..	67	Hindupur ..	Mango, &c. ..	3	90	90	Three watchers at Rs. 2-8-0 each per mensem.
		68	Kodikonda ..	Ippi, Mango ..	4			
		69	Somaghatta ..	Ippi, Neradi, Neem.	6	..	..	
		70	Palasamudram ..	Tamarind and Tuma.	8	..	..	
		71	Pooliar	Tamarind, Ippi, Mango.	9	..	..	
		72	Vadigapalli ..	Neem, Tamarind, Neradi.	6	..	..	
		73	Kodihalli ..	Yapa, Mango, Tamarind, Wood-apple, &c.	6	..	..	
		74	Kagull	Tamarind, Ippi, Banyan, Yapa.	12	..	..	
		75	Kondur	Mango, Tuma, Tamarind.	6	..	..	
		76	Karikera	Neem, Mango, Tamarind, &c.	5	..	..	
		77	Bavinahalli ..	Tamarind, Ippa, Neradi, &c.	6	..	..	
		78	Sasanakota ..	Tamarind, Yapa ..	4	..	..	
		79	Hindupuram ..	Tamarind, Mango.	12	..	..	
		80	Parighi	Do. do.	8	..	..	
		81	Paideti	Palmyra ..	20	..	..	
		82	Yerragunta ..	Neradi, Neem ..	6	..	..	
		83	Mangala Madaka ..	Palmyra ..	20	..	..	
		84	Roddum	Do. ..	20	..	..	
		85	Kogira	Babul	14	..	..	
		86	Mulkalchervoo ..	Do.	9	..	..	
		87	Chollawari ..	Do.	10	..	..	
	Penukonda ..	88	Cherukuru ..	Do.	6	..	..	
		89	Thalamerla ..	Do.	109	..	..	
		90	Kuppalabunda ..	Do.	50	..	..	
		91	Makkajipalli ..	Do.	10	..	..	
		92	Guttur	Do.	50	..	..	
		93	Pedapalli	Do.	5	..	..	
		94	Reddipalium ..	Ippa, Mango, Neradi, Neem, &c.	5	..	..	
		95	Kotta Tope ..	Do. ..	11	..	..	
	Madakasíra ..	96	Tirumaladeverpalli ..	Do. ..	4	..	..	
		97	Anantapuram ..	Ippi, Mango, Tamarind, &c.	4	36	36	One watcher at Rs. 3 per mensem.
		98	Agrampalli ..	Do. ..	2	..	..	
				Total ..	3,406	1,518	1,518	
				Grand Total ..	13,114	9,939	93,998	

FORM No. 7.

Forest Department, Northern Circle, Madras.

Trees felled by Government Agency during the year 1883-84 (Selection Fellings).

Forest Division.	Range Forest or Working Circle.	Description of Trees.	Number of Trees: On hand at commencement of the year.	Felled during the year.	Total.	Disposed of during the year: How disposed of.	Number.	Total.	Balance at end of the year.	Remarks.
Nellore.	Tarminapatnam.	Casuarina ..	..	440	440	Converted into Telegraph poles.	440	440	..	

FORM No 8.

Forest Department, Northern Circle, Madras.

Statement of Timber and other Produce cut and collected by Government Agency during the Year 1883-84.

Forest Division.	Forest Range, Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of Year.		Collected during Year.		Total.		Disposed of during Year.			Balance at end of Year.	
			Number.	C. ft.	Number.	C. ft.	Number.	C. ft.	How disposed of.	Number.	C. ft.	Number.	C. ft.
Ganjam.	Goomsur	Dry Sál Logs	..	..	5,719	51,105	5,719	51,105	Taken to Russellkonda Depôt.	5,719	51,105	..	..
		Sál Poles	..	..	25	..	25	..	Do. ..	25	..	..	..
		Total, Timber ..	..	..	5,744	51,105	5,744	51,105	....	5,744	51,105	..	..
Godávari.	Bhadráchalam.	Firewood	..	..	1,500 c. yds.	..	1,500 c. yds.	..	Sold to Public Works Department.	1,138 c. yds.	..	362 c. yds.	..
		Total, Fuel ..	..	..	1,500 c. yds.	..	1,500 c. yds.	..	....	1,138 c. yds.	..	362 c. yds.	..
		Country Iron ..	..	..	80 lb.	..	80 lb.	..	Sold to Public Works Department.	80 lb.	..	..	..
		Total, Minor Produce ..	..	..	80 lb.	..	80 lb.	..	....	80 lb.	..	..	..
Nellore.	South Plantations.	Casuarina Poles ..	..	..	440	..	440	..	Sold to Telegraph Department.	440	..	..	..
		Pegs and Stakes ..	..	..	25,218 pcs.	..	25,218 pcs.	..	Sold to Salt Department.	25,218 pcs.	..	..	..
		Total, Timber ..	..	..	440 25,218 pcs.	.. ..	440 25,218 pcs.	.. ..	....	440 25,218 pcs.	..	..	..
	North Plantations.	Casuarina Billets, Roots, &c.	30 tons.	..	464 tons.	..	494 tons.	..	Taken to Madras Depôt. Do. to Nellore do. ..	428 tons. 11 tons.	..	55 tons.	..
		Do. do. ..	..	..	4	..	4	..	Do. to Ongole do. ..	3	..	1	..
	Sriharikót	Junglewood, green ..	3,338 pcs.	..	934,512 pcs.	..	937,850 pcs.	..	Do. to Madras do. ..	567,850 pcs.	..	370,000 pcs.	..
		Do. do. ..	65,949 bdls.	..	200,064 bdls.	..	266,013 bdls.	..	Do. to do. do. ..	248,304 bdls.	..	17,709 bdls.	..
		Do. Fuel, dry ..	28,680 pcs.	..	26,175 pcs.	..	54,855 pcs.	..	Do. to do. do. ..	47,855 pcs.	..	7,000 pcs.	..
		Do. do. ..	..	..	6 tons.	..	6 tons.	..	Sold locally	6 tons.	..	..	..
		Total, Fuel ..	30 tons. 32,018 pcs. 65,949 bdls.	.. .. ..	474 tons. 960,687 pcs. 200,064 bdls.	.. .. ..	504 tons. 992,705 pcs. 266,013 bdls.	.. .. ..	....	448 tons. 615,705 pcs. 248,304 bdls.	.. .. ..	56 tons. 377,000 pcs. 17,709 bdls.	.. .. ..

Statement of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Forest Division.	Forest Range, Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of Year.		Collected during Year.		Total.		Disposed of during Year.			Balance at end of Year.	
			Number.	C. ft.	Number.	C. ft.	Number.	C. ft.	How disposed of.	Number.	C. ft.	Number.	C. ft.
Nellore—(*Continued*).	Sriharikót—(*cont.*)	Nux Vomica seed ..	262 mds.	..	961 mds.	..	1,223 mds.	..	Taken to Madras Depôt..	1,223 mds.	..	..	..
		Chay Root	610 ,,	..	311 ,,	..	921 ,,	..	Do. do. do. ..	921 ,,	..	..	..
		Surati Chekka ..	57 ,,	..	8 ,,	..	65 ,,	..	Do. do. do. ..	65 ,,	..	..	..
		Honey	23 ,,	..	6 ,,	..	29 ,,	..	Do. do. do. ..	29 ,,	..	..	..
		Wax	3 ,,	..	2 ,,	..	5 ,,	..	Do. do. do. ..	5 ,,	..	..	..
		Orchella	11 ,,	..	5 ,,	..	16 ,,	..	Do. do. do. ..	16 ,,	..	..	..
		Soapnuts	..	..	1,385 ,,	..	1,385 ,,	..	Do. do. do. ..	1,385 ,,	..	..	..
		Tamarind	..	..	1,210 ,,	..	1,210 ,,	..	Do. do. do. .. Sold locally	610 ,, 600 ,,	..	..	..
		Cashew-nuts	..	..	181 ,,	..	181 ,,	..	Taken to Madras Depôt..	181 ,,	..	..	..
		Rattans	19 bdls.	..	233 bdls.	..	252 bdls.	..	Do. do. do. .. Sold locally	198 bdls. 54 ,,	..	..	..
		Total, Minor Produce	966 mds. 19 bdls.	.. ..	4,069 mds. 233 bdls.	.. ..	5,035 mds. 252 bdls.	.. ..	....	5,035 mds. 252 bdls.	..	..	..
Cuddapah.	Cuddapah Range.	Casuarina Poles ..	..	..	38	..	38	..	Taken to Cuddapah Depôt.	38	..	..	..
		Red Sanders ..	..	..	2,095 tons.	..	2,095 tons.	..	Do. to Sale Depôts ..	2,095 tons.	..	..	..
	Kódur Range.	Total Timber and Wood.	..	..	38 2,095 tons.	.. ..	38 2,095 tons.	.. ..	....	38 2,095 tons.	..	..	..
		Honey	..	..	25 meas.	..	25 meas.	..	Taken to Sale Depôt ..	25 meas.	..	..	..
		Wax	..	..	6 viss.	..	6 viss.	..	Do. do. do. ..	6 viss.	..	..	..
		Total, Minor Produce ..	..	..	25 meas. 6 viss.	.. ..	25 meas. 6 viss.	.. ..	....	25 meas. 6 viss.	..	..	..
Anantapur.	Penukonda ..	Teakwood pieces ..	..	..	72	10	72	10	Taken to Anantapur Depôt	72	10	..	..
		Total, Timber ..	..	..	72	10	72	10	....	72	10	..	..
		Firewood	..	..	200 mds.	..	200 mds.	..	Taken to Anantapur Depôt.	200 mds.	..	..	..
		Total, Fuel ..	..	..	200 mds.	..	200 mds.	..	....	200 mds.	..	..	..
		Gallnuts	..	..	48 mds.	..	48 mds.	..	Sold in Forest ..	48 mds.	..	..	..
		Honey	..	..	342 seers.	..	342 seers.	..	Do.	342 seers.	..	..	..
		Wax	..	..	45 ,,	..	45 ,,	..	Do.	45 ,,	..	..	..
		Total, Minor Produce ..	..	..	48 mds. 387 seers.	.. ..	48 mds. 387 seers.	.. ..	....	48 mds. 387 seers.	..	..	..

Statement of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Forest Division.	Forest Range, Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of Year.		Collected during Year.		Disposed of during Year.			Total.		Balance at end of Year.	
			Number.	C. ft.	Number.	C. ft.	How disposed of.	Number.	C. ft.	Number.	C. ft.	Number.	C. ft.
Nilgiris.	Mudumalai	Teak dry logs	359	8,914	..	..	{ Sent to Ootacamund Depôt. / Sold in the Forest Depôt.	252 / 82	6,084 / 2,282	359	8,914	{ 25	548
		Teak refuse	1,000	13,348	..	..	Sold	1,000	13,348	1,000	13,348	..	..
		Do. do.	745	7,401	..	..	Sold	745	7,401	745	7,401	..	..
	Masnacoil.	Vengai	..	500	..	..	....	..	..	..	500	..	500
		Blackwood	..	200	..	..	....	..	..	..	200	..	200
		Total, Timber	2,104	30,363	..	..	....	2,079	29,115	2,104	30,363	25	1,248
	Aramby	Firewood	99 tons.	..	468 tons.	..	Taken to Ootacamund Depot ...	425 tons.	..	567 tons.	..	{ 42 tons.	..
							Sold at auction	100 ,,	..				
	Coonoor Peak	Do.	..	..	827	..	Sold at auction	509 ,,	..	827	..	{ 169 ,,	..
							Dyrage	149	..				
		Total, Fuel	99	..	1,295	..	....	1,183	..	1,394	..	211	..
		Sandalwood Roots	73 mds.	..	800 mds.	..	Sold in Forest	873 mds.	..	873 mds.	..	..	..
		Total, Sandalwood	73 mds.	..	800 mds.	..	....	873 mds.	..	873 mds.	..	..	..
	Sigúr	Myrabolams	240 mds.	..	960 mds.	..	Sold in Forest	1,200 mds.	..	1,200 mds.	..	..	..
		Do.	..	..	50	..	Do.	50	..	50	..	..	..
	Benne	Tamarind	12	..	40	..	Do.	52	..	52	..	..	..
	Sigúr	Sheakoy	6	..	5	..	Do.	11	..	11	..	..	..
		Total, Minor Produce	258	..	1,055	..	....	1,313	..	1,313	..	..	..

The figures compare as marginally noted with the combined totals of the two previous years. There is, it is observed, a considerable increase in the expenditure, the greater portion of which occurs under Establishments, and is due to the reorganization of the subordinate staff.

	Receipts.	Expenditure.
	RS.	RS.
1881-82	8,05,884	6,03,069
1882-83	9,03,914	6,36,558
1883-84	9,58,991	7,80,916

17. *Exhibitions.*—Large collections of forest produce were sent to the International Exhibition at Calcutta, in connection with which several officers of the department received medals. A small but carefully selected collection was also sent to the Edinburgh Exhibition.

18. In concluding this review, the Government resolve to place on record their satisfaction with the operations of the year.

(True Extract.)

(Signed) H. E. STOKES,
Secretary to Government.

To the Board of Revenue, with eight maps returned.
,, the Public Works Department.
,, the Military Department.
,, the Director, Government Cinchona Plantation[illegible]

G[illegible]

No. 248A.

Copy to the Government of India, Home Department.

(Signed) H. E. STOKES,
Secretary to Government.

Exd. W. H. French.

100 Copies.

Govt. of {1885} Madras.

REVENUE.

671 Wajt 18 Feb

Communicated to
Supdg. Engineers for
information -
(Signed) [illegible]

Issued

Recd. Encl.

G.O., 24th February 1885,
Nos. 248, 248A.

671 Wajt 18 March 85

FEBRUARY.

Total, Timber ..	500	200
Firewood ..	30,363	
Do. ..		
Total, Fuel ..		
Sandalwood Roots		
Total, Sandalwood ..		
..		
eak ..		

tons.

S. Ex.

Forest Administration Report,
1883-84,

reviewed.

With order

Date taken out.	For what purpose.			Initials of clerk taking the paper or order.	Date returned.	Initials of attender.
	Department.	C. No.	Year.			

[Ref. 4]

15,080—10-2-06.

DEPARTMENT.

Paper taken out of the Records from the charge of the Referencer.

Press / Miscellaneous / Routine No. 67[illegible], dated [illegible] 190 .

Date taken out.	For what purpose.			Initials of clerk taking the paper or of attender.	Date returned.	Initials of attender.
	Department.	C. No.	Year.			
20-12-08	P.W. Committee				30-5-07	98
C-A-23	W20	711	/23		4/10/23	AA

Statement Showing the Establishment requemployment on the maintenance of the main road from Kullar to Gudalur and the Completion of alur road improvements.

No.	Name.	Rank	Salary.	Remarks.
	Permanent.			
1.	Mr. P. Pereira	Overseer 2nd Grade	80.	Mr. Pereira is ocal Fund Overseer at Gudalur. He was Sub Overseer in the D.P.W. was originally a Nilgiri Division Office on Rs. 60 per mensem. Recommended by the Executive Engineer ocal Fund Engineer as his services will be dispensed with by the Local Fund Boa the transfer of the road to the D. P.W.
2.	Mr. Whittock.	Sub Overseer 1st Grade	50.	Now employed in the Ootacammnd European Jail. Recommended by the Executive E
3.	Doraswamy Moodr	Do.	50.	Now employed ans D. P.W. Recommended by Major A. C. Smith.
	Temporary. To be charged to the estimates or g			
1.	Kenchappa	Sub Overseer 1st Grade.	100.*	Is a practical re passed no Examination. Is now employed on the improvements of the Gud. His employment would cease when the improvements are completed.
1	Ramalingam	Maistry	30.	Passed no Exe Been 6 months in employ; at present employed on the road and charged to ance grant.
2	Pappannah	Do.	30.	Is a practica Does not know English Nor has passed any Examination. at present employed, and charged to the grant.
3.	Parasaraman.	Do.	25.	Has passed tions; at present employed ___ do. ___ do. ___
4.	David	Do.	20.	Lately thrown ploy by want of funds; to be re-employed when funds are available

* The pay of a Sub Overseer 1st Grade is Rs. 100 per mensem.

Supg. Engineer's Office IV Circle
Coimbatore 25th February 1885

Note. Under 90 of the Code, the Temporary Establishment charges estimates & incd grants can be sanctioned by the Supg. Engineer.

Col. R.E.
Engineer IV Circle

P. Beatty. Col. R.E.
Superintending Engineer IV Circle.

No. 91
E.W.

Supg. Engineer's Office IV Circle
Coimbatore 25th February 1885.

From

The Superintending Engineer
IV Circle

To

The Chief Engineer
Public Works Department

Sir,

I have the honor to forward herewith for your information and approval a Statement of the establishment required for the Main Road from Kullar to Gudalur in the Nilgiri Division, which is to be transferred to the care of this Department on 1st April next.

Enclosure
1 Statement.

2. The piece of road from Mettupalaiyam to Kullar lies in the Coimbatore Division and will be taken over by the Executive Engineer of that Division.

I have the honor to be,
Sir,
Your most obedt. Servt.,

F. Beatty Col. R.E.
Superintending Engineer IV Circle

No. 523 D

To C

For remarks

Chepauk
2nd March 85
R. No 826
2. 3. 85

From
The Supg. Engineer,
Fourth Circle

DW
27.2.85

Dated 25th
Despd: 26th } Febry: 85

No. 91
E.W.

Establishment required for the main road from Kallar to Gudalur:—

Forwarding for information & approval a statement of the establishment in the Nilgiris D.no. which is to be transferred to the care of the P.W.D. on 1st April next.

To D.W.

C. No. 2D. 1.

18/3

Orders are requested as to the first three entries on the list. If sanctioned at all, they might come under "Temporary establishment"?

Or it would perhaps be better to bring on all the staff under the head of "Petty Supervision" when the S.E. can deal with them himself.

Mr. Serrins has already been appointed to the III Circle.

R.S
12.3.85.

[Form No. viii.]

GOVT. OF MADRAS. } 1885. { P. W. DEPT.

EXAMINER, P. W. ACCOUNTS.

1111W/A d/8.5.84
1203W/A d/12.5.84
2350W d/23.9.84

Madras, 10 March 1885.

OFFICE NOTE No. 903.

To W.

SECRETARY TO GOVERNMENT P.W. DEPARTMENT 11 MAR 85

Encs: 2.

Under P.W. Department Code para 1090, the Superintending Engineer can sanction the entertainment of the necessary temporary (work) Establishment against the sub head " Petty Supervision".

2. The Superintending Engineer proposes the entertainment of an Overseer 2nd. Grade and 2 Sub Overseers 1st. Grade on the permanent Establishment. Any addition to the existing strength of permanent Upper Subordinate Establishment will require the sanction of the Govt. of India vide Code para 34. The Sub Overseers can be sanctioned by the Local Government.

3. It is not known whether Mr. Pereira who has been proposed for Overseer 2nd. Grade, has passed the necessary test and is within 25

KEEP WITH Genl. No.

dated 188 .

Public Works Department.

Proceedings of the Madras Government.

Under date the

Read the following :-

From the Supty: Engr: IV Circle N. E. No 91 E.W. dy 25th Jany 1885

Office Note from the Exh P.W.A. N. E. No 903 dy 10th March 1885

1. The S.E. is himself authorised, under para 1090 of the P.W. Code, to entertain the requisite temporary work on Establishment, charging the cost against the sub-head "Petty Supervision".

2. The two Sub-Overseers 1st grade, on Rs 50 each, are sanctioned by Govt, as an addition to the permanent Lower Subordinate Establishment of the Presidency.

The

3. The sanction of the Govt of India will be requested to the additional Overseers on Rs 80 per mensem, stated to be necessary. The man nominated to the appointment by the S.E. has already been posted to Railway relief works in Bellary.

4. The sanction accorded in para 2 of these Pros: has been registered as Provincial No 94 of 1884-85, and classified as Establishment Lower Subordinate, Permanent.

(WE. No 673 dated 18th March 85)

To

The Secretary to the
Govt of India, P.W.D.

Sir,

The Govt having decided,

for

S.E. IV circle
Exd P.W. Accts.
Dated 18-3-85.

for administrative reasons, to relieve the L. F. Board of so much concerned of the control and maintenance of the through line of communication extending from Mettupalaiyam in the Coimbatore District to Gudalur in the Wynaad, the road will be taken over by the P.W. Dept with effect from the 1st April next. In addition to certain lower subordinate and temporary work Establishment, the S.E. now applies for sanction to the entertainment of a second grade Overseer, on Rs 80, as an addition to the permanent Establishment of the Circle, to admit of the work being properly supervised.

H.E. the Governor in Council is of opinion that this

this proposed addition to the Upper subordinate Establishment is necessary, the existing scale being insufficient to meet this additional demand.

I am accordingly to request the sanction of the Govt of India to the charge, the effect being to raise the number of Overseers allowed to the Presidency from 92 to 93.

22-12-84 ✓
8-2-28

SECRETARY TO GOVERNMENT
16 MAR 85
DEPARTMENT

Cl. 13.3.85

Ul. 13-3-85

FR. 10.0

M 14/3

M 22/3

R/S Circ: 13/3/85

Circ: 15/3

FORM No. 9.

Forest Department, Northern Circle, Madras.

Receipts and Issues of Timber and other Produce in Sale Depôts during the Year 1883-84.

Division.	Name of Depot.	Description of Timber and other Produce.	On hand 1st April 1883.		Received during the Year.		Total.		Disposed of during the Year.			Balance on 31st March 1884.	
			No. or Quantity.	Cubic Feet.	Whence received.	No. or Quantity.	No. or Quantity.	Cubic Feet.	How disposed of.	No. or Quantity.	Cubic Feet.	No. or Quantity.	Cubic Feet.
Ganjam.	Russell-konda.	Sál logs	..	..	Forests ..	5,719*	5,719	51,105	Cut into sleepers	5,338	47,478	867	3,486
		Do. b. g. sleepers	..	..	Conversion ..	7,684	7,684	26,680	Sold	14	141	2,835	9,843
		Do. slabs ..	..	..	Do. ..	4,556	4,556	..	Do.	4,849	16,837	1,007	..
		Do. ends ..	..	..	Do. ..	750	750	..	Do.	2,900	..	..	..
		Do. side pieces	..	..	Do. ..	1,400	1,400	..	Used by dept.	550	..	..	..
		Do. poles ..	..	..	Forests ..	25	25	..	Sold	750	..	..	..
		Total ..	..	..	....	20,134	20,134	77,785	Do.	1,400	..	..	..
									....	..	..	4,234	13,329
Nellore.	Nellore ..	Casuarina firewood	..	..	Tamimpatam.	11 tons.	11 tons.	..	Sold	11 tons.	..	..	..
		Do. do. ..	..	..	Kottapatam ..	3 ,,	3 ,,	..	Do.	3	..	..	..
	Ongole ..		..	..	S. plantations.	428 ,,							
		Do. do. ..	277 tons.	..	Found excess.	6 ,,	711 ,,	..	Do.	634	..	77 tons.	..
		Green junglewood ..	1,548,670 pcs.	..	Sriharikót ..	567,850 pcs.							
		Do. do. ..	25,622 bdls.	..	Do. ..	66,286 bdls.	2,116,520 pcs.	..	Do.	1,993,300 pcs.	..	111,950 pcs.	..
		Dry ..	150,345 pcs.	..	Do. ..	47,869 pcs.	91,808 bdls.	..	Wastage	11,270 ,,	..	1,533 bdls.	..
							198,200 pcs.	..	Sold	90,275 bdls.	..	4,365 pcs.	..
									Do.	193,835 pcs.	..		
		Total, Fuel ..	277 tons.	..	....	....	725 tons.	..	....	648 tons.	..	77 tons.	..
			1,699,015 pcs.	..			2,314,720 pcs.	..	....	2,198,405 pcs.	..	116,315 pcs.	..
			25,622 bdls.	..			91,808 bdls.	..	....	90,275 bdls.	..	1,533 bdls.	..
	Madras ..		..	..	....	....	1,223 mds.	..	Sold	1,223 mds.	..	..	..
		Nux Vomica ..	..	..	Sriharikót ..	921 ,,	921 ,,	..	Do.	921 ,,	..	..	..
		Chay-root ..	..	..	Do. ..	65 ,,	65 ,,	..	Do.	65 ,,	..	..	..
		Surati chekka	..	..	Do. ..	29 ,,	29 ,,	..	Do.	29 ,,	..	..	..
		Honey ..	..	..	Do. ..	5 ,,	5 ,,	..	Do.	5 ,,	..	..	..
		Wax ..	..	..	Do. ..	16 ,,	16 ,,	..	Do.	16 ,,	..	..	..
		Orchella ..	..	..	Do. ..	1,385 ,,	1,385 ,,	..	Do.	1,385 ,,	..	..	..
		Soapnuts ..	..	..	Do. ..	610 ,,	610 ,,	..	Do.	610 ,,	..	..	..
		Tamarind ..	..	..	Do. ..	181 ,,	181 ,,	..	Do.	181 ,,	..	61 bdls.	..
		Cashewnuts ..	..	..	Tamimpatam.	198 bdls.	198 bdls.	..	Do.	137 bdls.	..		
		Rattans ..	..	..	Sriharikót ..	....	....	..	....	....	..	61 bdls.	..
		Total, Minor Produce.	..	..	....	....	4,435 mds.	..	....	4,435 mds.	..	..	..
							198 bdls.	..		137 bdls.	..	61 bdls.	..

* A larger number was really brought out and cut into sleepers, but there is no sufficient record.

Receipts and Issues of Timber and other Produce in Sale Depôts during the Year 1883-84—(*Continued*).

Division.	Name of Depôt.	Description of Timber and other Produce.	On hand 1st April 1883. No. or Quantity.	On hand 1st April 1883. Cubic Feet.	Received during the Year. Whence received.	Received during the Year. No. or Quantity.	Received during the Year. Cubic Feet.	Total. No. or Quantity.	Total. Cubic Feet.	Disposed of during the Year. How disposed of.	Disposed of during the Year. No. or Quantity.	Disposed of during the Year. Cubic Feet.	Balance on 31st March 1884. No. or Quantity.	Balance on 31st March 1884. Cubic Feet.
Cuddapah.	Cuddapah ..	Casuarina poles ..	..	..	Kamalápuram ..	38	..	38	..	Sold	38	..	..	..
	Orampad ..	Redwood	8 tons.	..	Forests ..	40 tons.	..	48 tons.	..	Sold	48 tons.	..	..	..
	Reddipalle ..	Do.	..	..	Do.	130	..	130	..	Do.	130	..	..	..
	Nandalúr ..	Do.	..	..	Do.	372	..	372	..	Do.	372	..	..	..
		Do.	..	..	Do.	1,553	..	1,553	..	Do.	1,553	..	..	..
	Kódúr ..	Total, Redwood ..	8 tons.	..	.....	2,095 tons.	..	2,103 tons.	..	.....	2,103 tons.	..	..	..
		Honey	..	..	Veligondas ..	25 mes.	..	25 mes.	..	Sold	25 mes.	..	..	..
		Wax	..	..	Pullampet ..	6 viss.	..	6 viss.	..	....	..	..	6 viss.	..
Kurnool ..	Atmakúr ..	Myrabolams ..	573 mds.	..	Remeasurement ..	45 mds.	..	618 mds.	..	.....	..	..	618 mds.	..
Anan apur..	Anantapur ..	Teakwood pieces ..	..	..	Penukonda ..	72	10	72	10	Sold	72	10	..	..
		Total, Timber ..	..	..	.....	72	10	72	10	.....	72	10	..	..
		Firewood	..	..	....	200 mds.	..	200 mds.	..	. ..	200 mds.	..	..	..
		Total, Fuel ..	..	..	.....	200 mds.	..	200 mds.	..	.....	200 mds.	..	..	..
Nílgiris ..	Ootacamund..	Teak logs	..	..	Mudumalai ..	252	C. ft. 6,084	252	6,084	Sold	110	2,839	142	3,245
		Total, Timber ..	..	..	.....	252	6,084	252	6,084	.....	110	2,839	142	3,245
		Firewood	133 tons.	..	Aramby ..	425 tons.	..	558 tons.	..	Sold .. .. / Dryage ..	498 tons. / 7	.. / ..	53 tons.	..
		Total, Fuel ..	133 tons.	..	.....	425 tons.	..	558 tons.	..	.....	505 tons.	..	53 tons.	..

Form No. 10.

Forest Department, Northern Circle, Madras.

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84.

Division.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cub. feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces removed.	Number Sold but remaining unremoved.
			Sold from Depôt.				Rs.	Rs.		
Ganjam ..	Russellkonda ..	I (*a*)	Sál logs	14	141	10annas.	88	88	14	..
			Sál b. g. sleepers	4,849	..	Auction.	12,940	12,940	4,849	..
			Sál slabs	2,990	..	Do.	349	349	2,990	..
			Sál ends	750	..	..	7	7	750	..
			Sál side-pieces	1,400	..	..	27	27	1,400	..
			Sál chips	..	..	..	10	10	..	..
			Total, Timber ..	10,003	..	..	13,421	13,421	10,003	..
Nellore ..	Nellore, Ongole and Madras.	I (*b*)	Casuarina firewood .. .. Tons	648	..	Rs. 6-4—11-4	6,321	6,321	..	..
	Madras		Green jungle firewood .. .. Pieces	1,993,300	..	,, 0-4—1-9 per 100.	13,319	13,319	1,993,300	..
			Do. do. do. .. .. Bundles	90,275	..	,, 0-4—0-7	27,352	27,352	90,275	..
			Dry do. do. .. .. Pieces	193,835	..	,, 0-9—3-6 per 100.	3,926	3,926	193,835	..
			Chips	..	..	..	5	5	..	..
			Total, Fuel ..	Pieces 2,187,135 / Bdls. 90,275	..	..	44,602	44,602	Pieces 2,187,135 / Bdls. 90,275	..
	Madras	I (*c*)	Nux Vomica seed .. .. Maunds	1,223	..	Rs. 9 Candy.	551	551	Mds. 1,223	..
			Chay root .. .. .. ,,	921	..	,, 83-6	3,839	1,417	340	581
			Surati chekka .. .. .. ,,	65	..	,, 90-0	295	295	65	..
			Honey .. .. .. ,,	29	..	,, 40-0	58	..	..	29
			Wax .. .. .. ,,	5	..	,, 85-0	22	22	5	..
			Orchella .. .. .. ,,	16	..	,, 25-4	21	21	16	..
			Soap-nuts .. .. .. ,,	1,385	..	,, 7-2	494	302	847	538
			Tamarind .. .. .. ,,	610	..	,, 15-0	457	457	410	200
			Cashew-nuts .. .. .. ,,	181	..	,, 7-0	63	63	181	..
			Rattans .. .. .. Bundles	137	..	,, 6-0	822	822	137	..
			Total, Minor Produce ..	Mds. 4,435 / Bdls. 137	..	..	6,622	3,950	Mds. 3,087 / Bdls. 137	Mds. 1,348

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Division.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cub. feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces removed.	Number Sold but remaining unremoved.
							Rs.	Rs.		
Cuddapah ..	Cuddapah, Kódúr, and others.	I (*a*)	Casuarina poles	38	..	Rs. 1-8—2-4	59	59	38	..
			Red Sanders wood .. .. Tons	113*	..	,, 21	2,373	2,373	97	16
			Red Sanders roots .. .. ,,	932	..	,, 15	13,984	13,984	932	..
				1,074	..	,, 13	13,959	..	..	1,074
			Total, Wood ..	No. 38 Tons 2,119	..	..	30,375	16,416	38 1,067	1,090
	Kódúr	I (*e*)	Honey .. .. Measures	25	..	..	27	27	25	..
			Total, Minor Produce ..	25	..	..	27	27	25	..
Anantapur ..	Anantapur ..	I (*a*)	Teak pieces	72	10	..	2	..	72	..
			Total, Timber ..	72	10	..	2	..	72	..
		I (*b*)	Firewood .. .. .. Maunds	200	..	Rs. 1-8 per 100.	3	..	200	..
			Total, Fuel ..	200	..	..	3	..	200	..
Nilgiris ..	Ootacamund ..	I (*a*)	Teak logs	..	2,839	Rs. 1-8 to 2-0	4,964	4,964	C. ft. 2,839	..
			Total, Timber ..	..	2,839	..	4,964	4,964	C. ft. 2,839	..
		I (*b*)	Firewood .. .. .. Tons	498	..	..	3,348	3,348	Tons 498	..
			Total, Fuel ..	498	..	..	3,348	3,348	Tons 498	..
			Sold Locally.							
Godávari ..	Bhadráchalam ..	I (*b*)	Firewood .. .. Cub. yds.	1,138	..	9 annas.	640	..	..	..
			Total, Fuel ..	1,138	..	..	640	..	..	..
		I (*e*)	Country Iron .. .. .. Lb.	80	..	..	7	..	..	..
			Total, Minor Produce ..	80	..	..	7	..	..	..
Nellore ..	S. Plantations ..	I (*a*)	Casuarina poles	440	..	Rs. 1-12	770	..	440	..
			Pegs and stakes	25,218	..	,, 4-0 per 1,000	100	..	25,218	..
			Total, Timber ..	25,658	..	..	870	..	25,658	..

* The 16 tons remained to be delivered at the close of the year, payment having been received in advance.

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Division.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cub. feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces removed.	Number Sold but remaining unremoved.
			Sold Locally—(Continued).				Rs.	Rs.		
Nellore—(*Continued*).	Sriharikót ..	I (*b*)	Firewood, dry .. .. Tons	6	..	Rs. 8-12—11-0	61	61	Tons 6	..
			Total, Fuel ..	6	..	..	61	61	6	..
		I (*e*)	Tamarind .. .. .. Maunds	600	..	Rs. 12-2-6 candy.	364	214	Mds. 600	..
			Rattans .. .. .. Bundles	54	..	About Rs. 4.	197	197	Bdls. 54	..
			Total, Minor Produce ..	..	..	..	561	411	..	..
Anantapur ..	Penukonda	I (*e*)	Myrabolams .. .. .. Maunds	48	..	..	25	25	Mds. 48	..
			Honey .. .. .. Seers	342	..	..	9	9	Seers 342	..
			Wax .. .. .. ,,	45	..	..	13	13	,, 45	..
			Total, Minor Produce ..	Mds. 48 Seers. 387	..	..	47	47	Mds. 48 Seers 387	..
Nilgiris ..	Mudumalai ..	I (*a*)	Teak, dry logs	..	2,282	Rs. 0-14	1,996	1,996	C. ft. 2,282	..
	Do. ..		Teak, refuse	..	13,348	,, 0-6-6	5,422	5,422	,, 13,348	..
	Sigúr		Do. do.	..	7,401	,, 0-5-6	2,544	2,544	,, 7,401	..
			Total, Timber ..	..	23,031	..	9,962	9,962	C. ft. 23,031	..
	Aramby	I (*b*)	Firewood, Eucalyptus .. .. Tons	1,188	..	..	3,226	347	Tons 1,188	..
	Coonoor Peak ..		Do. do. .. .. ,,	866	..	..	1,710	1,710	,, 866	..
			Total, Fuel ..	2,054	..	..	5,036	2,057	Tons 2,054	..
	Masnacoil	I (*d*)	Sandalwood roots .. .. Maunds	873	..	Rs. 4-8	4,013	4,013	Mds. 873	..
			Total, Sandalwood ..	873	..	..	4,013	4,013	Mds. 873	..
	Sigúr, &c.	I (*e*)	Myrabolams .. .. .. Maunds	1,250	..	Rs. 0-8	625	625	Mds. 1,250	..
	Do.		Tamarinds .. .. .. ,,	52	..	..	21	21	,, 52	..
			Sheakai .. .. .. ,,	11	..	..	4	4	,, 11	..
	Ootacamund ..		Eucalyptus seed .. .. Lb.	1	..	..	8	8	..	..
	Do. ..		Acacia decurrens seed	..	..	..	55	55	..	..
			Total, Minor Produce ..	Mds. 1,313 Lb. 1	..	..	713	713	Mds. 1,313	..

FORM No. 11.

Forest Department, Northern Circle, Madras.

STATEMENT showing the Quantity and Value of Timber and other Produce removed under the License System during the Year 1883-84.

Districts.	Timber. Quantity.	Timber. Value.	Fuel. Quantity.	Fuel. Value.	Bamboos. Quantity.	Bamboos. Value.	Minor Produce. Quantity.	Minor Produce. Value.	Grazing and Fodder Grass.	Total Value.
		RS.		RS.		RS.		RS.		RS.
Ganjam ..	Cubic feet .. 25,480	3,249	Firewood .. 2,123 tons .. / Charcoal .. 185 cavady-loads.	686	Cart-loads .. 158	47	Unspecified	31	..	4,013
Vizagapatam ..	Cart-loads .. 217	354	Firewood .. 753 tons .. / Charcoal .. 137 ,, ..	633 / 193	Tons .. 669	468	....	39	3	1,690
Godávari ..	Pieces .. 23,344	23,345	214 ,, .. / Firewood { 196 cart-loads .. / 32 c. yards .. / Charcoal { 25 cart-loads .. / 1,183 cavady do. ..	4,611	Number .. 269,812 / Cart-loads .. 5,687 / Head-loads .. 7,154 / Bullock-loads .. 943	7,695	Maunds .. 43 / Number .. 470 / Cavady-loads .. 57 / Kemthans .. 652 / Putti .. 53	490	921	37,062
Kistna ..	....	4,928	.....	10,674	....	1,520	....	7,581	26,262	50,965
Nellore ..	Trees 77 and c. ft. 1,760	1,080	3,000	8,921	Cart-loads .. 33	17	Palmyras, Tangedu bark, &c.	1,351	..	11,369
Cuddapah ..	Tons .. 2,999	12,810	Firewood .. 17,751 tons .. / Charcoal .. 252 ,, ..	33,628	Do. .. 3,316	3,543	Tons .. 749	16,849	487	67,317
Kurnool ..	Cubic feet .. 202,605	36,223	Firewood .. 3,383 ,, .. / Charcoal .. 754 ,, ..	5,770	Do. .. 12,088	11,937	Maunds .. 48,800	1,838	659	56,427
Bellary ..	Not given	198	Firewood .. 3,550 ,, .. / Charcoal .. 50 ,, ..	3,161	Number .. 41,730	417	Tons .. 880	5,940	22	9,738
Anantapur ..	Cart-loads .. 133	267	Firewood .. 3,236 cart-loads .. / Charcoal .. 60 ,, ..	1,274	Cart-loads .. 11	7	Cart-loads .. 2,185	7,701	26	9,275
Nilgiris ..	Timber. / Cart-loads .. 1,502 / Posts .. 353 / Saplings .. 280 / Other items .. .. /	7,945 / 250 / 6 / 48 / ..	Firewood { 1,910 tons .. / 38,775 head-loads .. / 18,027 bullock-loads. / Charcoal .. 29 head-loads .. / Other items	5,943 / 2,358 / 1,432 / 7 / 132	Do. .. 238 / Head-loads .. 769 / Bullock-loads .. 6 / Other items .. .. /	300 / 61 / 1 / 20 / ..	Head-loads .. 1,511 / Bullock-loads .. 15 / .... / .... /	101 / 4 / .. / .. / ..	.. / .. / .. / .. / ..	18,608 / .. / .. / .. / ..
	Total ..	90,703	Total ..	79,423	Total ..	26,033	Total ..	41,925	28,380	2,66,464

FORM No. 12.

Forest Departments, Northern Circle, Madras.

Abstract showing the Value of Timber and other Produce at Sale Depots for the year 1883-84.

District.	Description of Timber and other Produce.		On hand at commencement of the year. Number.	On hand at commencement of the year. Cubic feet.	On hand at commencement of the year. Value.	On hand at close of the year. Number.	On hand at close of the year. Cubic feet.	On hand at close of the year. Value.	Difference in value. In favor of the year.	Difference in value. Against the year.	Remarks.
					RS.			RS.	RS.	RS.	
Ganjam ..	Sál logs			* 2,344	* 723	397	3,486	2,200	7,857	..	* These figures do not agree with those of Form 9, but are here given as they are those of last year's closing balance.
	Sleepers					2,855	9,843	6,380			
	Slabs		..	..	..	1,907	..	80	80	..	
	Total ..		..	2,344	723	4,209	13,329	8,660	7,937	..	
Vizagapatam ..	Green wood ..		..	..	..	111,656	Pieces.	728	24	..	Figures of last year's return have been adopted for those of the "commencement of year."
	Dry wood ..		1,914			1,533	Bundles.	431			
						4,365	Pieces.	105			
						77	Tons.	673			
Godávari ..	Jungle Produce.	.. ..									
		.. ..		756	..	61	..	..	366	756	
	Total ..	..		..	2,670	..	..	2,394	..	390	
Cuddapah.	Redwood roots ..	8	Tons.	102	..	6	Viss.	..	8	102	
	Wax	..	..	..	..			..	8	..	
	Total ..	..		102	..	..	..	8	..	94	
Kurnool ..	Minor Produce ..	573	Maunds.	309	618	Maunds.	3,201	309	..	..	
Nilgiris ..	Teak	..	..	..	142	..	..	4,801	4,801	..	
	Other kinds ..	73	Maunds.	405	..	..	..	..	..	405	
	Sandalwood roots.	460	Tons.	364	53	Tons.	..	..	..	364	
	Firewood ..			210			..	166	..	44	
	Total ..	..	..	979	..	..	..	4,967	3,988	..	
	Grand Total ..	..	..	4,783	..	..	..	1,6243	11,441	..	

Form No. 13.

Forest Department, Northern Circle, Madras.

Return Showing Live Stock, Buildings, Stores, Tools and Plant during the year 1883-84.

Description.	On hand at commencement of the year.		On hand at close of the year.		Difference in Value.		Remarks.
	No.	Value.	No.	Value.	In favor of the year.	Against the year.	
		Rs.		Rs.	Rs.	Rs.	
Direction.							
Mathematical Instruments ..	..	..	7	78	..	..	
Furniture	41	435	41	435	..	..	
Total ..	41	435	48	513	78	..	
Ganjam.							
Bungalow, Head-quarters ..	1	1,000	1	1,200	..	..	Russellkonda.
Do. Inspection ..	1	200	1	200	..	..	Suradá.
Inspection huts	..	..	5	200	..	..	
Furniture	..	..	..	..	..	..	No. and value not reported.
Total ..	2	1,200	7	1,600	400	..	
Vizagapatam.							
Sheds	1	10	2	45	..	..	
Tools	8	4	5	2	..	..	
Total ..	9	14	7	47	33	..	
Godávari.							
Shed	1	10	1	10	..	..	
Surveying Instruments	..	..	3	27	..	..	
Total ..	1	10	4	37	27	..	
Kistna.							
Mathematical Instruments ..	11	..	11	..	..	..	Value not reported.
Tools	472	..	492	..	..	..	
Total ..	483	..	503	..	..	..	
Nellore.							
Cash Safes	3	195	3	195	..	..	
Scales and Weights (sets) ..	3	119	3	109	..	..	
Furniture	41	252	42	236	..	..	
Boxes	15	48	17	53	..	..	
Tools	464	288	476	301	..	..	
Miscellaneous	14	12	16	13	..	..	
Total ..	540	914	557	907	..	7	
Cuddapah.							
Bungalows, Inspection ..	2	4,275	2	5,000	..	..	Kódúr and Sanipaya.
Ranger's house	1	20	1	120	..	..	Kódúr.
Office house	1	200	1	200	..	..	Do.
Sheds	17	159	17	246	..	..	
Surveying Instruments ..	..	..	10	102	..	..	
Tools	29	118	29	118	..	..	
Furniture	20	125	45	306	..	..	
Total ..	70	4,897	105	6,092	1,195	..	
Kurnool.							
Bungalows, Head-quarters ..	1	9,700	..	..	..	..	Nandyál.
Do. Inspection	..	..	4	2,700	..	..	Bainuti, Rollapenta, Adutta and Mantikonda.
Furniture	13	50	28	146	..	..	
Tools	..	..	68	55	..	..	
urveying Instruments, &c. ..	2	70	12	187	..	..	
Total ..	16	9,825	112	3,088	..	6,737	

Return Showing Live Stock, Buildings, Stores, Tools and Plant, during the year 1883-84—*(Continued)*.

Description.	On hand at commencement of the year.		On hand at close of the year.		Difference in Value.		Remarks.
	No.	Value.	No.	Value.	In favor of the year.	Against the year.	
		Rs.		Rs.	Rs.	Rs.	
Bellary.							
Furniture	12	155	12	140	..	..	
....	..	..	..	..	..	..	
....	..	..	..	..	..	..	
Total ..	12	155	12	140	..	15	
Anantapur.							
Sheds	15	19	15	19	..	..	
Surveying Instruments	4	52	4	52	..	..	
Total ..	19	71	19	71	..	..	
Nilgiris.							
Sheds	9	135	9	135	..	..	
Surveying Instruments ..	1	9	1	9	..	..	
Furniture	12	126	27	276	..	..	
Tools	92	175	198	416	..	..	
Elephants	2	3,000	2	3,000	..	..	
Total ..	116	3,445	237	3,836	391	..	
Grand Total ..	1,309	20,966	1,611	16,331	..	4,635	

FORM NO. 14.

Forest Department, Northern Circle, Madras.

Detailed Statement showing the Revenue of the Northern Circle for the Official Year 1883-84.

Budget Heads.	Ganjam.	Vizag-apatam.	Godávari.	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nilgiris.	Total.
	RS.	RS.	RS.	RS..	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I.—Timber and other Produce removed from the Forests by Government Agency—											
(*a*) Timber	14,659	..	..	124	55	16,415	..	..	..	14,927	46,180
(*b*) Firewood and charcoal	..	..	..	18	54,558	507	..	..	..	5,405	60,488
(*c*) Bamboos	..	..	..	70	1	..	..	..	..	..	71
(*d*) Sandalwood	..	..	..	..	..	..	..	..	..	4,013	4,013
(*e*) Grass and other minor produce	4	..	..	882	5,999	3,654	..	12	47	712	11,510
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—											
(*a*) Timber	3,249	..	23,345	4,928	1,080	12,810	36,223	198	267	8,249	90,349
(*b*) Firewood and charcoal	686	1,180	4,611	10,674	8,921	33,628	5,770	3,161	1,274	9,872	79,777
(*c*) Bamboos	47	468	7,695	1,520	17	3,543	11,937	417	7	382	26,033
(*d*) Grazing and fodder grass	..	3	921	26,262	..	487	659	22	26	..	28,380
(*e*) Other minor produce	31	39	490	7,581	1,351	16,849	1,838	5,940	7,701	105	41,925
III.—Confiscated drift and waif wood	393	..	7,169	227	135	1,245	2,631	..	216	2	12,018
IV.—Revenue from Forests not managed by Government—											
(*a*) Duty on foreign timber and other forest produce	..	..	..	..	..	..	..	..	..	..	..
(*b*) Revenue from shared and private forests	..	..	..	..	..	..	..	..	..	..	..
V.—Miscellaneous—											
(*a*) Fines and forfeitures	..	..	4	..	2	..	..	..	..	..	6
(*b*) Refunds	..	..	83	523	..	16	..	..	24	57	703
(*c*) Other sources	15	..	153	186	..	135	11,591	..	..	..	12,080
Total Receipts	19,084	1,690	44,471	52,995	72,119	89,289	70,649	9,750	9,562	43,724	413,333

FORM NO. 14.

Forest Department, Northern Circle, Madras.

DETAILED statement of Expenditure under A "Conservancy and Works" in the Northern Circle for the Official Year 1883-84.

Budget Heads.	Ganjam.	Vizaga-patam.	Godávari.	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nilgiris.	Total.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I.—Timber and other produce removed by Government Agency—											
(*a*) Timber	9,616	..	..	..	15	15,576	2	..	17	3,503	28,729
(*b*) Firewood and charcoal	..	..	515	..	13,922	..	..	..	3	2,575	17,015
(*c*) Bamboos	..	..	..	5	..	..	..	..	..	..	5
(*d*) Sandalwood	..	..	..	..	..	..	..	..	..	1,386	1,386
(*e*) Grass and other minor produce	4	..	..	..	2,067	28	1	73	28	509	2,710
II.—Timber and other produce removed by consumers, &c.	..	..	158	..	..	1,550	3,217	9	..	2,320	7,254
III.—Confiscated drift and waif wood	78	..	521	21	..	105	620	16	..	..	1,361
IV.—Revenue from Forest not managed by Government—											
(*a*) Duty on foreign timber and other forest produce.	..	..	..	..	..	..	..	..	..	..	..
(*b*) Revenue from shared and private forests	..	..	..	..	..	..	..	..	..	..	..
V.—Rent of leased forests and payments to shareholders, &c.	..	..	..	..	..	..	..	14,167	..	3,500	17,667
VI.—Live Stock, Stores, Tools, and Plant—											
(*a*) Purchase of cattle	..	..	..	..	..	..	..	..	..	..	..
(*b*) Feed and keep of cattle	41	..	..	..	..	..	..	..	..	907	948
(*c*) Stores, tools, and plant	1	..	27	15	13	109	174	..	49	308	696
VII.—Communications and Buildings—											
(*a*) Roads and bridges	..	..	..	..	..	250	175	..	..	350	775
(*b*) Buildings	107	..	9	..	104	1,011	517	..	..	148	1,896
(*c*) Other works	..	..	..	..	..	..	..	..	..	..	..
VIII.—Demarcation, Improvement, and Extension of Forests—											
(*a*) Demarcation	2	..	..	..	18	516	1,045	13	..	1,953	3,547
(*b*) Compensation for land and rights	..	..	..	..	..	..	..	..	..	57	57
(*c*) Surveys and working plans	13	..	..	217	1	4	..	..	..	..	235
(*d*) Plantations	60	..	..	4,515	13,372	6,282	841	266	631	7,057	33,024
(*e*) Protection from fire	355	..	1	36	..	2,933	200	1,145	259	707	5,636
(*f*) Other works	78	..	..	283	107	2,103	22	768	..	..	3,361
IX.—Miscellaneous—											
(*a*) Refunds	..	..	..	209	1	..	..	275	4	1	490
(*b*) Law charges	..	..	..	..	..	..	..	..	..	..	..
(*c*) Other charges	87	..	..	..	..	322	54	24	..	43	530
Total, A "Conservancy and Works"	10,442	..	1,231	5,301	29,620	30,789	6,868	16,756	991	25,324	1,27,322

FORM No. 14.

Forest Department, Northern Circle, Madras.

DETAILED statement of Expenditure under A "Conservancy and Works" and B "Establishments" in the Northern Circle for the Official Year 1883-84.

Budget Heads.	Direction.	Ganjam.	Vizagapatam.	Godávari.	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nilgiris.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Salaries—												
(*a*) Conservator	12,100	..	..	..	..	..	..	..	..	..	..	12,100
(*b*) Superior Officers	7,392	720	..	..	6,441	5,625	12,868	13,369	8,638	4,603	8,563	68,219
(*c*) Subordinate Forest and Depôt Establishments.	..	3,268	399	5,013	7,555	9,215	8,773	4,399	908	1,870	4,143	45,543
(*d*) Office Establishments	7,393	468	..	783	788	666	1,880	1,426	395	571	1,694	16,064
(*e*) Deputation and Special Allowances ..	..	..	..	..	..	..	215	..	..	..	..	215
II.—Travelling Allowances—												
(*a*) Conservator	2,655	..	..	..	..	..	..	..	..	..	..	2,655
(*b*) Superior Officers	1,107	240	..	..	1,636	1,010	3,000	3,317	1,648	1,358	1,740	15,056
(*c*) Subordinate Forest and Depôt Establishments.	..	349	..	844	593	525	2,029	546	63	..	441	5,390
(*d*) Office Establishments	648	16	..	224	133	73	208	540	4	120	32	1,998
III.—Office Contingencies—												
(*a*) Stationery	10	..	..	..	9	..	6	..	22	..	..	47
(*b*) Carriage of Tents and Records ..	93	..	..	194	109	..	44	104	43	31	..	618
(*c*) Rents, Rates, and Taxes	600	..	..	60	..	..	180	48	53	..	360	1,301
(*d*) Pay of Police Guards	..	..	..	..	..	..	..	..	..	..	..	..
(*e*) Official Postage	518	50	..	85	146	179	458	146	92	53	104	1,831
(*f*) Sundries	2,555	28	..	137	210	215	231	101	37	66	513	4,093
Total of B "Establishments" ..	35,071	5,139	399	7,340	17,620	17,508	29,892	23,996	11,903	8,672	17,590	1,75,130
Total of A "Conservancy and Works" ..	..	10,442	..	1,231	5,301	29,620	30,789	6,868	16,756	991	25,324	1,27,322
Grant Total of all Expenditure ..	35,071	15,581	399	8,571	22,921	47,128	60,681	30,864	28,659	9,663	42,914	3,02,452

APPENDIX I.

CONVENTION.

Article 1. The Raja of Sandúr for himself, his heirs and successors hereby grants to the Secretary of State for India in Council, for the term of twenty-five years, all the forests in his State of Sandúr, as shown on the accompanying plans (marked A, B, &c.,) and containing about 40,000 acres, more or less, in consideration of the payment by the Secretary of State to him, through the Collector of Bellary, of the sum of Rs. 2,500 paid quarterly and in arrear.

Article 2. The Raja of Sandúr for himself, his heirs and successors agrees to renew the said grant, on the same terms, for a further term of twenty-five years, should the Secretary of State, on the expiry of the said term, desire such renewal, and similarly to renew the grant at the expiry of each successive term of twenty-five years.

Article 3. The plateau of Rámandrug and the village of Ramanamalai, with the forest adjoining it on the south and containing about 485 acres, more or less, are not included in this grant.

Article 4. The Raja of Sandúr for himself, his heirs and successors hereby agrees to consider the penal clauses of the Madras Forest Act No. V of 1882, or any subsisting statutory modification thereof as in force in his territory, in respect of the forests hereby granted, and to enforce them in cases of complaints lodged before his agent against persons committing offences in the said forests during the term of this grant.

Article 5. The Raja of Sandúr hereby binds himself, his heirs and successors not to levy any toll or tax on any of the produce of the said forests hereby granted which may be carried over the road between Rámandrug and Yettinhatti, or over the road between Rámandrug and Hospet.

Article 6. The Secretary of State on his part agrees to pay the stipulated rent regularly and to restore the forests in as good condition as they were in when granted to him.

रामचंद्रविठलरावविंदूरावघोपिडे.

SANDUR,
17th March 1884.

(Signed) J. MACARTNEY,
Agent to the Raja of Sandúr.

(Signed) H. ST. A. GOODRICH,
Ag. Collector of Bellary and
Political Agent for Sandúr.

APPENDIX II.

Preliminary List of the Trees and Shrubs of the Northern Circars recorded on tour in 1883-84.

DICOTYLEDONS.

I.—Dilleniaceæ.

1. Dillenia pentagyna, Roxb. Vernacular—*Rai*, Uriya, Khond.
   Tree. Common in sál and mixed forests.

II.—Anonaceæ.

1. Polyalthia suberosa, Bth. and H. f. Vernacular—*Kuradia*, Uriya.
   Small tree. River banks, especially in Goomsur along the Mahanadi.
2. Polyalthia cerasoides, Bth. and H. f.
   Shrub. Ravines in the hills.
3. Saccopetalum tomentosum, H. f. and T. Vernacular—*Gonda palaso*, Uriya.
   Tree. Sál forests, not uncommon.
4. Miliusa velutina, H. f. and Th.
   Tree. Kurcholy forests: scarce: one or two other species also occur, which are not yet determined.
5. Anona squamosa, L. The Custard Apple.
6. Anona reticulata, L. The Bullock's heart.
   Cultivated. The former is often found run wild on dry isolated hills.

Several species of Menispermaceous climbers occur, but none of any great importance. They belong to the genera *Stephania*, *Cocculus*, *Pachygone*, and *Tinospora* chiefly.

III.—Capparideæ.

1. Capparis zeylanica, L.
   Shrub. Coast scrub forests: common.
2. Capparis olacifolia, H. f. and Th.
   Shrub. Mahendragiri sholas.
3. Capparis horrida, Linn.
   Climber. Coast scrub.

IV.—Bixineæ.

1. Cochlospermum Gossypium, D.C. Vernacular—*Bendia murdoni, popso koniari*, Uriya; *Onkúr*, Saora.
   Tree. Rocky hills: common.
2. Flacourtia Ramontchi, L'Hér. Vernacular—*Potwa, boincho*, Uriya; *Sapka*, Khond; *Mulu anam*, Pálkonda.
   Tree. Sál and mixed forests: common.
3. Flacourtia sepiaria. Roxb.
   Thorny shrub. Coast scrub forests.
4. Xylosma longifolium, Clos.
   Small tree. Mahendragiri and Pálkonda hills: scarce.

V.—Pittosporeæ.

1. Pittosporum tetraspermum, W. and A.
   Small tree. Mahendragiri sholas: above 4,000 feet.

VII.—Guttiferæ.

1. Garcinia Xanthochymus, H. f.
   Tree. Mahendragiri sholas, about 4,000 feet.
2. Calophyllum inophyllum, L.
   Tree. Planted near the coast.

VIII.—Dipterocarpeæ.

1. Shorea robusta, Gaertn. The Sál. Vernacular—*Saiwa*, Uriya; *Jargi*, Khond; *Guggilapu*, Pálkonda.
   Large tree. The chief tree of the Goomsur forests, extending southwards to the Pálkonda and Jeypore hills.

IX.—Malvaceæ.

1. Thespesia populnea, Corr.
   Tree. Planted near the coast.
2. Thespesia Lampas, Dalz. and Gibson.
   Common shrub of the undergrowth of sál and hill forests.
3. Kydia calycina, Roxb. Vernacular—*Kopásia*, Uriya; *Wala*, Khond.
   Tree. Common.
4. Bombax malabaricum, D.C. The silk-cotton tree. Vernacular—*Buroh, bouro*, Uriya: *Kamba*, Khond; *Buroh*, Saora; *Wuraga*, Pálkonda.
   Large tree. Not uncommon, especially on the hills.

X.—Sterculiaceæ.

1. Sterculia urens, Roxb. Vernacular—*Kodaro*, Uriya; *Genduli*, Khond.
   Tree. Common on dry rocky hills.
2. Sterculia villosa, Roxb.
   Tree. Rather scarce.
3. Sterculia colorata, Roxb.
   Tree. Scarce.
4. Helicteres Isora, Linn. Vernacular—*Ovla*, Uriya; *Kapeli*, Khond.
   Shrub. Common in forest undergrowth.
5. Pterospermum suberifolium, Lam. Vernacular—*Bailo, Bayalo*, Uriya: *Baili*, Khond.
   Tree. Common, especially on outer hills.
6. Eriolæna Hookeriana, W. and A. Vernacular—*Bona hendi*, Uriya.
   Tree. Scarce.

XI.—Tiliaceæ.

1. Grewia tiliæfolia, Vahl. Vernacular—*Dhamono*, Uriya; *Kehel nohra*, Khond: *Tara*, Pálkonda.
   Tree. Common in sál and mixed forests.
2. Grewia salvifolia, Heyne. Vernacular—*Kulo*, Uriya.
   Shrub. Forest undergrowth.
3. Grewia pilosa, Lawk. Vernacular—*Kulo*, Uriya.
   Shrub. Coast scrub forests.
4. Grewia sclerophylla, Roxb.
   Shrub. Hill dry slopes; scarce.
5. Grewia lævigata, Vahl. Vernacular—*Kolakadi*, Khond.
   Small tree. Ravines in the hills.
6. Grewia bracteata, Roth.
   Small tree. Pálkonda hills.

XII.—Malpighiaceæ.

1. Hiptage Madablota, Gaertn.
   Large. Climber: common.
2. Aspidopterys Roxburghiana, Juss.
   Climber. Rather scarce: found near Vishnuchákram.

XIII.—Geraniaceæ.

1. Averrhoa Carambola, L.
   Tree. Cultivated.

XIV.—Rutaceæ.

1. Zanthoxylon alatum, Roxb.
   Shrub. Mahendragiri sholas, above 4,000 feet.
2. Toddalia aculeata, Pers. Vernacular—*Han mochu*, Uriya.
   Climber. Common in scrub forests.
3. Clausena Willdenovii, W. and A.
   Small tree. Mahendragiri sholas, above 3,000 feet.
4. Glycosmis pentaphylla, Correa. Vernacular—*Haumircho*, Uriya.
   Shrub. Common in two varieties, but not in high forest.
5. Murraya exotica, L.
   Small tree. Hill forests.
6. Murraya Königii, Spr.
   Small tree. Mahendragiri and Pálkonda hills.
7. Limonia acidissima, L. Vernacular—*Bhenta*, Uriya; *Toli elaga*, Pálkonda.
   Tree. Common throughout, and often of large size.
8. Atalantia monophylla, Correa. Vernacular—*Kata narunga*, Uriya; *Motameri*, Pálkonda.
   Small tree. Coast scrub chiefly; also in Kurcholy.
9. Citrus medica, L. The lemon.
   Shrub. Cultivated and run wild.
10. Citrus Aurantium, L. The orange.
    Shrub. Cultivated and often seemingly wild, as in Suradá.
11. Citrus decumana, Willd. The pumelo.
    Shrub. Cultivated.
12. Feronia Elephantum, Correa. The woodapple. Vernacular—*Koito*, Uriya.
    Tree. Commonly planted.

13. Ægle Marmelos, Correa. The bael. Vernacular—*Baelo*, Uriya; *Belana*, Khond; *Marudu*, Pálkonda.
    Tree. Common, both wild and planted: always the glabrous form.

XV.—Simarubeæ.

1. Ailanthus excelsa, DC. Vernacular—*Gormi kawat*, Mahanim, Uriya; *Pedda mandu*, Pálkonda.
    Large tree. Fairly common and often planted.
2. Balanites Roxburghii, Planch. Vernacular—*Gara*, Pálkonda.
    Tree. Pálkonda: scarce.

XVI.—Ochnaceæ.

1. Ochna squarrosa, L. Vernacular—*Koniari, nobunisero*, Uriya.
    Small tree. Not uncommon.

XVII.—Burseraceæ.

1. Bursera serrata, Colebr. Vernacular—*Sorupotri moi*, Uriya; *Saradi*, Khond.
    Large tree. Valleys in the hills and along streams.
2. Garuga pinnata, Roxb. Vernacular—*Sompotri*, Uriya; *Sorupotri dopé*, Khond.
    Large tree. Common.

XVIII.—Meliaceæ.

1. Melia Azadirachta, L. The margosa.
    Large tree. Planted.
2. Melia azedarach, L. The Indian lilac.
    Tree. Planted.
3. Cipadessa fruticosa, Bl. Vernacular—*Ranabili*, Uriya; *Kiner*, Khond.
    Shrub. Common everywhere.
4. Walsura ternata, Roxb.
    Tree. Pálkonda hills.
5. Soymida febrifuga, Adr. Juss. Vernacular—*Sohan*, Uriya; *Somengi*, Khond; *Soymide*, Pálkonda.
    Large tree. Common and of large size, especially on kunkur soils. Considered unlucky by natives and therefore rarely cut.
6. Chloroxylon Swietenia, DC. Vernacular—*Bheru*, Uriya; *Bella*, Pálkonda.
    Large tree. Common especially on outer ranges as in the Kurcholy, Suradá, Mohiri and Pálkonda hills.
7. Cedrela Toona, Roxb. Vernacular—*Mahalimbu*, Uriya; *Grawa*, Khond; *Mahalimo*, Saora.
    Large tree. Inner ranges and slopes of the Maliah hills.

XIX.—Olacineæ.

1. Olax scandens, Roxb. Vernacular—*Boderia*, Uriya; *Madalkura*, Khond.
    Climber. Common in sál forests.
2. Opilia amentacea, Roxb.
    Climber. Pálkonda forests.
3. Cansjera Rheedii, Gmelin. Vernacular—*Pita bodalya*, Uriya.
    Climbing shrub. Scarce.
4. Natsiatum herpeticum, Ham.
    Climber: Mahendragiri hills.

XX.—Celastrineæ.

1. Celastrus paniculata, Willd. Vernacular—*Korsano, noi bada*, Uriya.
    Large climber. Common.
2. Celastrus emarginata, W. and A. Vernacular—*Gouro kosai*, Uriya; *Sinni*, Pálkonda.
    Tree. Coast scrub forests.
3. Celastrus rufa, Wall.
    Small tree. Mahendragiri, about 4,000 feet.
4. Celastrus Oxyphylla, Wall.
    Small tree. Mahendragiri, about 4,000 feet.
5. Elæodendron glaucum, Pero.
    Tree. Not uncommon.
6. Salacia prinoides, DC.
    Small tree. Pálkonda hills.

XXI.—Rhamneæ.

1. Zizyphus Jujuba, Lam. Vernacular—*Boro kuli*, Uriya; *Boré*, Khond.
    Tree. Cultivated and run wild.
2. Zizyphus Œnoplia, Mill. Vernacular—*Kontai kuli*, Uriya.
    Thorny climber. Very common.
3. Zizyphus xylopyra, Willd. Vernacular—*Goto*, Uriya; *Kotori*, Khond; *Goté*, Pálkonda.
    Tree. Common.
4. Zizyphus horrida, Roth.
    Shrub. Only once seen in Goomsur.
5. Zizyphus rugosa, Lam. Vernacular—*Chunu koli*, Uriya; *Sana gadu*, Khond.
    Straggling small tree. Not uncommon in sál forests.
6. Ventilago maderaspatana, Gaertn. Vernacular—*Sajumalo*, Khond.
    Climber. Common.

7. Rhamnus Wightii, W. and A.
    Small tree. Mahendragiri, about 4,500 feet.
8. Sageretia oppositifolia, Brongn.
    Shrub. Mahendragiri, about 4,000 feet.

XXII.—Ampelideæ.

1. Leea umbraculifera, Clarke.
    Small tree. Mahendragiri and Pálkonda hills.
    Several species of vine occur. *Vitis quadrangularis* is common on dry lands near the coast, and other species are found in the Sál forests.

XXIII.—Sapindaceæ.

1. Hemigyrosa canescens, Thw. Vernacular—*Eskombo*, Khond.
    Tree. Coast forests; scarce.
2. Erioglossum edule, Bl.
    Tree. Pálkonda hills.
3. Schleichera trijuga, Willd. Vernacular—*Kusumo*, Uriya; *Kosengi*, Pálkonda.
    Large tree. Common and large.
4. Sapindus emarginatus, Vahl.
    Tree. Coast forests and cultivated.
5. Dodonæa viscosa, Linn.
    Shrub. Coast forests and on hills like Mahendragiri.

XXIV.—Anacardiaceæ.

1. Mangifera indica, L. The mango. Vernacular—*Ambo*, Uriya; *Maha*, Khond.
    Large tree. Cultivated and everywhere self-sown in the forests.
2. Anacardium occidentale, L. The cashew.
    Small tree. Cultivated.
3. Buchanania latifolia, Roxb. Vernacular—*Charo*, Uriya; *Jaru mamidi*, Pálkonda.
    Tree. Common.
4. Odina Wodier, Roxb. Vernacular—*Gangara moi*, Uriya; *Dopé*, Khond; *Gumpeni*, Pálkonda.
    Large tree. Common.
5. Semecarpus Anacardium, Linn. f. The marking nut. Vernacular—*Bhalia*, Uriya; *Shidi*, Pálkonda.
    Large tree. Common.
6. Nothopegia Colebrookiana, Bl.
    Tree. Common in the Mahendragiri and Pálkonda hills.
7. Spondias mangifera, Pers. The hog plum. Vernacular—*Ambota*, Uriya; *Ambeti, lima*, Khond.
    Tree. Not common; occasional in Goomsúr.

XXV.—Moringeæ.

1. Moringa pterygosperma, Gaertn. The horse-radish tree.
    Tree. Cultivated.

XXVI.—Leguminosæ (Papilionaceæ).

1. Indigofera pulchella, Roxb. Vernacular—*Vréda*, Khond.
    Common shrub.
2. Millettia auriculata, Baker. Vernacular—*Rekorlo*, Uriya; *Kissi*, Khond.
    Common climber.
3. Millettia racemosa, Bth.
    Climber. Scarce: found on Nyagarh frontier.
4. Ougeinia dalbergioides, Bth. Vernacular—*Bandkono*, Uriya; *Jaru*, Khond.
    Tree. Common tree of sál and hill forests.
5. Abrus precatorius, Linn.
    Common small climber. Noticeable for its red and black seeds.
6. Mucuna pruriens, DC. The Cowhage.
    Common climber. Remarkable for the stinging hairs on its pod.
7. Erythrina indica, Lamk.
    Tree. Rather scarce in forests: often planted.
8. Erythrina suberosa, Roxb. Vernacular—*Paldua, Chaldua*, Uriya; *Muskamba*, Khond.
    Tree. Scarce in forest: sometimes planted.
9. Spatholobus Roxburghii, Bth. Vernacular—*Poraso*, Uriya.
    Large climber. Common.
10. Butea frondosa, Roxb. Vernacular—*Polásu*, Uriya.
    Tree. Rather scarce.
11. Butea superba, Roxb. Vernacular—*Modugo*, Pálkonda.
    Climber. Coast forests: Parlákimedi and Pálkonda.
12. Pueraria tuberosa, DC.
    Climber. Pálkonda hills.
13. Cajanus indicus, Spr.
    Shrub. Mahendragiri: apparently wild.
14. Flemingia congesta, Roxb.
    Common shrub in forest undergrowth; often with red glands on flowers and fruit

15. Flemingia Chappar, Ham.
Shrub. Rather scarce and local.
16. Flemingia stricta, W. and A.
Shrub. Scarce: Goomsur and Pálkonda.
Several species of *Desmodium* occur, especially *D. gyrans*, DC., in the undergrowth of sál forests, *D. gangeticum* and *D. latifolium* on hill slopes, *D. Cephalotes*, Wall; and *D. triquetrum*, DC., in mixed forest.
17. Dalbergia latifolia, Roxb. Blackwood. Vernacular—*Sissua*, Uriya; *Iridi*, Pálkonda.
Tree. Not common; more abundant to south.
18. Dalbergia lanceolaria, Linn.
Tree. Scarce.
19. Dalbergia paniculata, Roxb. Vernacular—*Dhupi*, Uriya.
Tree. Common everywhere in the forests.
20. Dalbergia volubilis, Roxb. Vernacular—*Bamba*, Khond.
Climber. Common.
21. Pterocarpus Marsupium, Roxb. Vernacular—*Piasál*, Uriya; *Vengis*, Khond; *Amé*, Saora; *Yegisha*, Pálkonda.
Large tree. Not uncommon in parts of Goomsur: more scarce elsewhere.
22. Pongamia glabra, Vent. Vernacular—*Koronjo*, Uriya; *Karandjé*, Khond.
Tree. Common along streams.
23. Derris scandens, Bth.
Climber. Scarce.
24. Cæsalpinia sepiaria, Roxb. Mysore thorn. Vernacular—*Gilo*, Uriya.
Thorny shrub. Hedges and thickets in the cultivated country.
25. Parkinsonia aculeata, Linn.
Small tree. Planted and run wild in the rice country.
26. Cassia Fistula, L. Vernacular—*Sunari*, Uriya; *Pundali*, Khond; *Rela*, Pálkonda.
Large tree. Common in the forests everywhere.
27. Cassia siamea, Lamb.
Tree. Planted in Russellkonda and elsewhere and along roads.
28. Cassia auriculata, L. Vernacular—*Merika Tangaru*, Pálkonda.
Shrub. Scrub land, especially about Chicacole and Pálkonda, but not very common.
29. Bauhinia malabarica, Roxb.
Small tree. Sál and mixed forests in Goomsur, not common.
30. Bauhinia racemosa, Lamb. Vernacular—*Ambata*, Uriya; *Choveri*, Khond.
Small tree. Kimedi and Mahendragiri, also Pálkonda, not so common in Goomsur.
31. Bauhinia purpurea, Linn. Vernacular—*Choveri*, Khond.
Tree. Common in Goomsur, chiefly along watercourses.
32. Bauhinia variegata, Linn. Vernacular—*Borara*, Uriya; *Kopu*, Khond; *Boda*, Pálkonda.
Tree. Dry rocky hillsides: common.
33. Bauhinia retusa, Ham. Vernacular—*Aré*, Pálkonda; *Makarokranda*, Khond.
Tree. Scarce: only found on the slopes of the ghâts as at Katingia.
34. Bauhinia Vahlii, W. and A. Vernacular—*Shiali*, Uriya; *Pairmal*, Khond.
Large climber. Common everywhere in forests.
35. Tamarindus indica, Linn. The tamarind. Vernacular—*Koya*, Uriya; *Neddi*, Khond; *Shenta*, Pálkonda.
Large tree. Commonly planted: also found commonly run wild throughout the forests, especially in Goomsur and Suradá.
36. Saraca indica, Linn. Vernacular—*Oshoko*, Uriya.
Tree. Pálkonda hills, along streams: common.
37. Entada scandens, Bth.
Climber. Scarce.
38. Adenanthera pavonina, Linn.
Tree. Planted only.
39. Dichrostachys cinerea, W. and A.
Small tree. Common in coast forests, chiefly in small scrub.
40. Mimosa rubicaulis, Lamk. Vernacular—*Tsikeri*, Khond.
Common thorny undershrub.
41. Xylia dolabriformis, Bth. The ironwood. Vernacular—*Tangani*, *malimo*, Uriya; *Orjo*[illegible], Khond; *Tangani*, Saora; *Tangudu*, Pálkonda.
Large tree. Common in the coast forests from the Mohiri hills through Mahendragiri, Kimedi and the Pálkondas, in all of which it is the chief tree.
42. Acacia Farnesiana, Willd.
Small tree. Commonly planted and often run wild.
43. Acacia arabica, Willd. The babúl.
Tree. Commonly planted and self-sown in the rice country.
44. Acacia leucophlœa, Willd. Vernacular—*Gwaria*, Uriya; *Goiri*, Khond; *Tella tumma*, Pálkonda.
Tree. Goomsur forests and southwards; sometimes of large size.
45. Acacia ferruginea, DC. Vernacular—*Woni*, Pálkonda.
Tree. Forests of Suradá.
46. Acacia Catechu, Willd. Vernacular—*Khoiro*, Uriya.
Tree. Rather scarce.
47. Acacia Suma, Buch. Vernacular—*Gonharea*, Uriya.
Tree. Common in Goomsur.
48. Acacia Intsia, Willd. Vernacular—*Tsikeri*, Khond.
Thorny climber, Common.

49. Acacia pennata, Willd.
Thorny climber. Chiefly in hill forests and valleys.
50. Albizzia Lebbek, Bth. Vernacular—*Sirsi*, Uriya; *Sirisemu*, Pálkonda.
Large tree. Rather scarce in Sál forests: more common in open country and planted.
51. Albizzia odoratissima, Bth. Vernacular—*Sirsi tentura*, Uriya, Khond.
Large tree. Common in the forests.
52. Albizzia procera, Bth. Vernacular—*Sirsi*, Uriya; *Gura nanja*, Khond.
Large tree. Rather scarce: chiefly along streams.
53. Albizzia stipulata, Boivin. Vernacular—*Goiri*, Khond.
Tree. Slopes of Eastern Ghâts, chiefly above 1,000 feet.
54. Albizzia amara, Boivin.
Tree. Coast scrub lands, in Chicacole and Vizagapatam.
55. Pithecolobium dulce, Bth.
Small tree. Planted; Berhampore, Russellkonda and elsewhere.
56. Leucœna glauca, Bth.
Small tree. Sometimes planted.

XXVII.—Rosaceæ.

1. Rubus ellipticus, Sm. } higher hills as at Mahendragiri: thorny straggling shrubs.
2. Do. lasiocarpus, Sm. }

XXVIII.—Rhizophoreæ.

1. Carallia integerrima, DC.
Tree. Along water-courses, chiefly about Kurcholy.

XXIX.—Combretaceæ.

1. Terminalia belerica, Roxb. Vernacular—*Bahara*, Uriya; *Bahré*, Khond; *Tadé*, Pálkonda.
Large tree. Common everywhere in the forests.
2. Terminalia Chebula, Retz. Vernacular—*Horada*, *haredha*, Uriya; *Kharaka*, Pálkonda.
Large tree. Common on the hills above 2,000 feet: scarce in the low country.
3. Terminalia tomentosa, W. and A. Vernacular—*Sahajo*, *kola Sahajo*, Uriya; *Mardi*, *asono*, Khond; *Maddi*, Pálkonda.
Large tree. Common and of large size in the Goomsur forests: smaller in those of Kimedi and Pálkonda.
4. Terminalia Arjuna, Bedd. Vernacular—*Arjuno*, *panda Sahajo*, Uriya; *Mardi*, Khond.
Large tree. Along rivers.
5. Terminalia Catappa, L.
Tree. Commonly planted in Berhampore, Chicacole, Russellkonda, &c.
6. Calycopteris floribunda, Lam. Vernacular—*Kokundia*, Uriya.
Very common straggling shrub.
7. Anogeissus latifolia, Wall. Vernacular—*Dhau*, Uriya; *Muniah*, *miriah*, Khond; *Sirikara*, Pálkonda.
Large tree. Very common everywhere, on the hills often of very large size and fine timber.
8. Anogeissus acuminata, Wall. Vernacular—*Pasi*, Uriya.
Large tree. Common along rivers in Goomsur and reaching a large size.
9. Combretum decandrum, Roxb. Vernacular—*Kora kukundi*, Uriya; *Tirumal*, Khond.
Common white-bracted climber.
10. Combretum ovalifolium, Roxb.
Very common large climber, chiefly of topes and near villages: the twigs are used to tie up cattle.
11. Gyrocarpus Jacquini, Roxb.
Tree. Coast forests: scarce.

XXX.—Myrtaceæ.

1. Psidium Guava, Raddi. The guava.
Small tree. Cultivated.
2. Eugenia Jambos, Linn. The rose-apple.
Tree. Cultivated.
3. Eugenia Jambolana, Lamk. Vernacular—*Jamu*, *jambo*, *kudijamu*, Uriya; *Lohadru* Khond.
Large tree. Common in Goomsur forests, as also is the variety *E. caryophyllifolia*, (*Bhatajana*, Uriya).
4. Eugenia operculata, Roxb. Vernacular—*Monisia jamu*, *panapoki*, Khond.
Large tree. Goomsur forests; rather scarce.
5. Eugenia Heyneana, Wall.
Small tree. Common along streams.
6. Barringtonia acutangula, Gaertn. Vernacular—*Hinjolo*, Uriya.
Tree. Along streams, not uncommon.
7. Careya arborea, Roxb. Vernacular—*Kumbi*, Uriya; *Kumbé*, Khond; *Kumbé*, Pálkonda.
Large tree. Common and often of large size.

XXXI.—Melastomaceæ.

1. Melastoma malabathricum, Linn.
Shrub. Occasional in swamps and on banks of streams.

2. Memecylon edule, Roxb. Vernacular—*Niraso*, Uriya.
Small tree. Coast forests and inland as far as Suradá and Russellkonda, also southwards to Pálkonda Hills.
One species of *Osbeckia*, perhaps *Nepalensis*, Hook, is found on Mahendragiri.

XXXII.—LYTHRARIEÆ.

1. Woodfordia floribunda, Salisb. Vernacular—*Jatiki, dhatiko*, Uriya; *Pota beluri*, Khond; *Kerani*, Pálkonda.
Extremely common shrub, everywhere.
2. Lawsonia alba, Lamk.
Shrub. Planted only.
3. Lagerströmia parviflora, Hook. Vernacular—*Sidha*, Uriya; *Nahna*, Khond; *Sianangi* Pálkonda.
Large tree. Common in Goomsur and southwards.
4. Lagerströmia Reginæ, Roxb.
Tree. Cultivated, but may perhaps occur wild in the Agency Tracts.

XXXIII.—SAMYDACEÆ.

1. Casearia tomentosa, Roxb. Vernacular—*Giridi*, Uriya; *Gidugum*, Pálkonda.
2. Casearia graveolens, Dalz. Vernacular—*Giridi*, Uriya.
Trees. Both are common, chiefly on old cultivated lands.

XXXIV.—PASSIFLOREÆ.

1. Carica Papaya, L. The Papaw.
Cultivated.

XXXV.—CACTEÆ.

1. Opuntia Dillenii, Haw. The Cactus.
Coast dry scrub. Not in Goomsur forests.

XXXVI.—ARALIACEÆ.

1. Heptapleurum venulosum, Seem. Vernacular—*Susurudi*, Khond.
Climber of hilly country.

XXXVII.—CORNACEÆ.

1. Alangium Lamarckii, Thw. Vernacular—*Ankulo*, Uriya; *Akori*, Khond; *Wudaga*, Pálkoda.
Common, especially on road sides and on old cultivations.

XXXVIII.—CAPRIFOLIACEÆ.

1. Viburnum acuminatum, Wall.
Mahendragiri sholas, above 4,000 feet.

XXXIX.—RUBIACEÆ.

1. Anthocephalus Cadamba, Bth. and H. f.
Large tree. Occasionally found along rivers in Goomsur.
2. Adina cordifolia, Hook. f. Vernacular—*Holondho*, Uriya; *Mandugram*, Khond.
Large tree. Common and much valued.
3. Stephegyne parvifolia, Korth. Vernacular—*Mundimundi*, Uriya; *Pujikiru*, Khond; *Kamba*, Pálkonda.
Large tree. Not very common, but widely spread.
4. Hymenodictyon excelsum, Wall. Vernacular—*Bodaka*, Uriya.
Tree. Not common; mixed forests in Goomsur.
5. Wendlandia exserta, DC. Vernacular—*Tilai*, Uriya; *Tieko*, Khond.
Tree. Not very common. Sál forests.
6. Wendlandia tinctoria, DC. Vernacular—*Tilai*, Uriya; *Tilki*, Khond.
Tree. Common especially on dry poor soils.
7. Wendlandia glabrata, Ham.
Tree. Mahendragiri hills above 3,000 feet.
8. Webera corymbosa, Willd.
Large shrub. Coast scrubs and forests of Pálkonda and Kimedi Hills.
9. Randia dumetorum, Lam. Vernacular—*Potowa*, Uriya.
Small tree. Coast scrubs and undergrowth of Sál forest.
10. Randia uliginosa, DC. Vernacular—*Pendra*, Uriya.
Small tree. Goomsur-Suradá forests; scarce.
11. Randia malabarica.
Thorny shrub. Coast scrub forests.
12. Gardenia turgida, Roxb. Vernacular—*Bamunia*, Uriya.
Small tree. Often growing to fairly large size in Goomsur; elsewhere small.
13. Gardenia gummifera, L. Vernacular—*Gurudu*, Uriya; *Kurudu, kanga*, Khond.
Small tree. Dry forests and poor soils.
14. Gardenia latifolia, Aiton. Vernacular—*Juntia, dhantia*, Uriya; *Goteni*, Khond.
Small tree. Common, often half epiphytic.
15. Canthium didymum, Gaertn. Vernacular—*Pita koluchia, dhalasinga*, Uriya; *Pita Kolaria*, Khond; *Konda, Kolinu*, Pálkonda.
Small tree. Common on banks of streams.
16. Canthium parviflorum, Roxb.
Thorny shrub of coast forests and rocky hills.

17. Ixora parviflora, Vahl. Vernacular—*Kilakerwa*, Uriya; *Tutu kuruperi*, Khond; *Koringi*, Pálkonda.
Small tree. Common.
18. Ixora nigricans, Br.
Small tree. Mahendragiri hills, above 3,000 feet.
19. Pavetta tomentosa, Sm. Vernacular—*Kotapengu*, Uriya.
Large shrub. Common in forest undergrowth.
20. Morinda bracteata, Roxb. Vernacular—*Achu*, Uriya; *Aschu, atzu*, Khond.
Tree. Common and of good size in Goomsur forests.
21. Hamiltonia suaveolens, Roxb. Vernacular—*Jana mirgiri, Pitondi*, Khond.
Shrub with handsome flowers. Slopes of the Maliah hills.

XL.—COMPOSITÆ.

1. Senecio corymbosus, Wall.
Climber, often 3 to 4 inches in diameter. Mahendragiri above 3,000 feet.
Senecio candicans, DC., is a climber also found on Mahendragiri, while some *Vernonias*, and especially *V. pectiniformis*, DC., occur in the Sál forests, and attain almost the size of shrubs.

XLI.—MYRSINEÆ.

1. Mœsa indica, Wall.
Shrub. Hill forests and slopes of the Eastern Ghats.
2. Embelia robusta, Roxb. Vernacular—*Nuninunika*, Uriya; *Saradi*, Khond.
Shrub. Forest undergrowth and hill slopes.
3. Ardisia humilis, Vahl. Vernacular—*Katapengu*, Uriya; *Bonderi*, Khond.
Shrub or small tree. Common along shady hill streams, especially in Pálkonda hills.

XLII.—SAPOTACEÆ.

1. Sideroxylon tomentosum, Roxb. Vernacular—*Kontaboro*, Uriya.
Tree. Forests of Goomsur: not common.
2. Bassia latifolia, Roxb. Vernacular—*Moholo*, Uriya; *Irpi*, Khond.
Large tree. Common.
3. Mimusops indica, A.DC. Vernacular—*Khiri, kirakuli*, Uriya; *Pál*, Pálkonda.
Small tree. Scarce in Goomsur, except in Suradá and Kurcholy.

XLIII.—EBENACEÆ.

1. Maba buxifolia, Pers. Vernacular—*Pisinika, gulugu*, Pálkonda.
Shrub. Coast jungles.
2. Diospyros montana, Roxb. Vernacular—*Kossé kuli*, Uriya.
Small tree. Not common; found in Suradá and at Chicacole.
3. Diospyros Embryopteris, Pers. Vernacular—*Gusva kendhu*, Uriya; *Titia*, Khond; *Nititumika*, Pálkonda.
Tree. Common everywhere along streams.
4. Diospyros sylvatica, Roxb. Vernacular—*Kauchia, kaluchia* Uriya; *Gata*, Pálkonda.
Tree. Very common in Goomsur forests.
5. Diospyros Chloroxylon, Roxb. Vernacular—*Kosai*, Uriya; *Tori*, Pálkonda.
Small tree. Coast scrubs and dry forests in outer hills.
6. Diospyros tomentosa, Roxb. Vernacular—*Kendhu*, Uriya.
Large tree. Common and often of large size in Goomsur; small elsewhere. There is another species near this but closely resembling it, which we have not identified.
7. Diospyros orixensis, Wight (?).
Tree. Common on Mahendragiri above 4,000 feet.
There are probably also 2 or 3 other species not yet identified, one especially is a large tree of vallies in the Pálkonda hills.

XLIV.—STYRACEÆ.

1. Symplocos spicata, Roxb.
Small tree. Mahendragiri above 4,000 feet.

XLV.—OLEACEÆ.

1. Nyctanthes Arbor-tristis, L. Vernacular—*Godokodika*, Uriya; *Dor, kalangreti*, Khond.
Large shrub. Dry hills.
2. Schrebera swietenioides, Roxb. Vernacular—*Neniburo*, juntia, Uriya; *Moko*, Khond.
Tree. Goomsur forests, common.
3. Linociera intermedia, Wt. var, Roxburghii. Vernacular—*Exumuko*, Khond.
Tree. Suradá forests and along the ghâts.
There are probably two other species of Olea or Linociera on the Mahendragiri hills, not yet identified. And one or two species of *Jasminum* are not uncommon.

XLVI.—SALVADORACEÆ.

1. Azima tetracantha, Lamk.
Thorny shrub. Coast scrub forests.

XLVII.—APOCYNEÆ.

1. Carissa Carandas, L.
Thorny shrub. Common in dry low forests.
2. Alstonia scholaris, R. Br. Vernacular—*Chochina*, Khond.
Large tree. Scarce and only seen two or three times in Goomsur.

3. Alstonia neriifolia, Dm.
   Shrub. Suradá forests. Scarce.
4. Holarrhena antidysenterica, Wall. Vernacular—*Kherwa, Patrukhorwa,* Uriya; *Pardali,* Khond.
   Tree. Very common everywhere.
5. Wrightia tinctoria, B. Br.
   Small tree. Pálkonda forests.
6. Wrightia tomentosa, R. and S. Vernacular—*Pal kherwa,* Uriya; *Palsi,* Khond.
   Small tree. Common.
7. Ichnocarpus frutescens, R. Br.
   Climber. Common in outer forests and by road sides.
8. Plumeria acutifolia, Poir.
   Small tree. Often cultivated.
9. Thevetia neriifolia.
   Small tree. Cultivated.

XLVIII.—Asclepiadeæ.

1. Calotropis gigantea, R. Br. The Mudar.
2. Calotropis procera, R. Br.
   Common on waste lands. The former often a large shrub.
   There are also many climbers of this order, but none of particular importance. The chief are perhaps.—
   Cryptolepis Buchanani, R. and S., which is common in the Sál forests.
   Dœmia extensa, remarkable for its strong fibre: which is found along the coast.

XLIX.—Loganiaceæ.

1. Buddleia asiatica, Lour.
   Shrub. Old cultivation on the slopes of the ghâts.
2. Strychnos potatorum, Linn. f. The clearing nut. Vernacular—*Kotoko,* Uriya.
   Tree. Rather scarce.
3. Strychnos Nux-vomica, Linn. The strychnine tree. Vernacular—*Kora,* Uriya.
   Large tree. Often planted. Commonly wild in the coast forests and outer hills.
   A climbing *Strychnos* is also met with in the Pálkonda hills.

L.—Boragineæ.

1. Cordia Myxa, Linn. Vernacular—*Ambata,* Uriya; *Bholiya, pajipotong,* Khond.
   Tree. Rather scarce.
2. Cordia Macleodii, H. f. and Th. Vernacular—*Baurlo,* Uriya; *Borla mehranu,* Khond.
   Tree. Goomsur forests. Rather scarce.
3. Ehretia lævis, Roxb. Vernacular—*Guachipo,* Uriya.
   Small tree. Suradá forests.
4. Ehretia buxifolia, Roxb.
   Shrub. Coast scrub forests.

LI.—Convolvulaceæ.

1. Erycibe paniculata, Roxb. Vernacular—*Katapergu,* Uriya.
   Large climber. Common.
   There are several other climbers, species of *Argyreia, Lettsomia, Porana,* and *Ipomœa,* but none of importance; *Argyreia speciosa* occurs about Aska; *Lettsomia bella* in the Sál forests, *Ipomœa biloba* on the coast sands and *Ipomœa cymosa* with its white flowers in the coast scrub.

LII.—Bignoniaceæ.

1. Millingtonia hortensis, Linn. The cork tree.
   Tree. Commonly planted in avenues in Berhampore, Russellkonda and elsewhere.
2. Oroxylum indicum, Bth. Vernacular—*Pomponia,* Uriya; *Dokeri,* Khond.
   Tree. Not uncommon in Goomsur.
3. Stereospermum chelonoides, DC. Vernacular—*Patoli,* Khond.
   Large tree. Goomsur forests.
4. Stereospermum suaveolens, DC. Vernacular—*Patuli,* Uriya.
   Large tree. Goomsur forests.

LIII.—Acanthaceæ.

1. Petalidium barlerioides, Nees., is a common and pretty shrub of the Mohiri Hills and some species of *Strobilanthes,* especially *S. jeyporensis,* Bedd, occur on the Mahendragiri Hills above 4,000 feet. *Barleria strigosa,* Willd, is a handsome blue-flowered small shrub of the Pálkonda Hills.

LIV.—Verbenaceæ.

1. Callicarpa arborea, Roxb. Vernacular—*Sanugambari,* Uriya; *Borodo,* Khond.
   Tree. Found in the Ghât forests above 2,000 feet.
2. Tectona grandis, Linn f. The teak.
   Large tree. Not wild but often planted. It has grown well and reproduces naturally at the Mojagodo plantation.
3. Premna tomentosa, Willd.
   Tree. Common in mixed forests.
4. Gmelina arborea, Roxb. Vernacular—*Gambari,* Uriya; *Gamberi,* Khond.
   Large tree. Not very common, but widespread.
5. Gmelina asiatica, L.
   Shrub. Coast forests.

6. Vitex Negundo, L. Vernacular—*Beyguna,* Uriya.
   Shrub. Planted about villages.
7. Vitex altissima, L. Vernacular—*Teradendong,* Khond.
   Large tree. Common, especially in Goomsur.
8. Vitex pubescens, Vahl. Vernacular—*Dhalasinga,* Uriya.
   Tree. Pálkonda Hills.
9. Vitex Leucoxylon. Vernacular—*Nevaledi,* Pálkonda.
   Tree. Pálkonda Hills.
10. Clerodendron infortunatum, L. Vernacular—*Bania,* Uriya.
    Shrub. Forest undergrowth: common.
11. Clerodendron serratum, Spr.
    Small shrub. Common on the ghât slopes, has pretty blue flowers.
    Another species with sweet-scented flowers is frequently planted near villages.

LV.—Labiatæ.

1. Colebrookia oppositifolia, Sm. Vernacular—*Merota, darigopa,* Khond.
   Shrub. Slope of the Maliah hills, Mahendragiri and Pálkondas.
2. Pogostemon plectranthoides. Bth.
   Shrub. Mahendragiri Hill and Pálkondas.

LVI.—Nyctagineæ.

1. Pisonia aculeata, L.
   Thorny climber. Coast forests.

LVII.—Lauraceæ.

1. Beilschmiedia Roxburghiana, Nees.
   Tree. Common in sholas on Mahendragiri, above 4,000 feet.
2. Tetranthera monopetala, Roxb. Vernacular—*Mosonea,* Uriya.
   Tree. Valleys in the hills, not common. Occasional in mixed forests in the plains.
3. Litsæa zeylanica, Nees. Vernacular—*Bodeda,* Saora.
   Tree. Mahendragiri sholas, above 3,000 feet.
   There are some few other species to be found on Mahendragiri which have not yet been identified. *Cassyta filiformis* is a common plant in the coast forests.

LVIII.—Loranthaceæ.

1. Loranthus longiflorus, Desr.
   Parasitic shrub with handsome red flowers. Common, especially on Bassia latifolia.
   There are some other species of *Loranthus* and *Viscum,* but none of any importance.

LIX.—Santalaceæ.

1. Osyris arborea, Wall.
   Shrub. Mahendragiri, above 4,000 feet.

LX.—Urticaceæ.

1. Phyllochlamys spinosa, Bureau.
   Small tree. Pálkonda Hills.
2. Streblus asper, Lour. Vernacular—*Sahara, Sahada,* Uriya.
   Tree. Common in scrub forests and along streams.
3. Plecospermum spinosum, Trécul.
   Thorny climbing shrub. Coast forests.
4. Artocarpus integrifolia, Linn. The Jack. Vernacular—*Pandisa,* Uriya.
   Tree. Planted in towns and villages and on roadsides.
5. Artocarpus Lakoocha, Roxb. Vernacular—*Joito,* Uriya; *Losendi,* Khond.
   Tree. Slopes of the Goomsur Maliahs. Seen on Katingia ghât, but probably not common.
6. Ficus bengalensis, L. The Banyan. Vernacular—*Boru,* Uriya.
   Large tree. Wild and planted.
7. Ficus religiosa, L. The Pipal. Vernacular—*Usto,* Uriya; *Pipali,* Khond.
   Large tree. Wild and planted.
8. Ficus infectoria, Willd.
   Large tree. Wild and planted, but not very common.
9. Ficus retusa, L. Vernacular—*Burdungi,* Khond.
   Tree or epiphyte. Common in banks of streams.
10. Ficus Tsiela, Roxb. Vernacular—*Jari,* Uriya.
    Small tree. Wild and planted, but not very common.
11. Ficus Cunia, Buch. Vernacular—*Boroha,* Khond.
    Small tree. Not very common.
12. Ficus glomerata, Roxb. Vernacular—*Dhimeri,* Uriya; *Toga,* Khond.
    Large tree. Common, but chiefly planted.
13. Ficus hispida, Linn. f. Vernacular—*Kerken,* Khond.
    Small tree. Chiefly in wet places.
14. Ficus tomentosa, Willd.
    Tree. Common on hill slopes in dry places.
15. Ficus parasitica, König. Vernacular—*Raseri,* Khond.
    Epiphytic shrub. Common, especially in damp places, near rivers in the open country.
    Some other species of fig also occur, notably *F. biglandulosa,* Miq. found in the valleys of Mahendragiri.

16. Ulmus integrifolia, Roxb.
Large tree. Common, especially near streams.
17. Celtis Wightii, Planch.
18. Celtis Roxburghii, Bedd.
Trees. Mahendragiri slopes, above 3,000 feet.
19. Sponia orientalis, Planch. Vernacular—*Grui*, Khond.
Small tree. Slopes of Eastern Ghâts on old cultivated lands.
20. Cudrania javanensis, Trécul.
Climbing thorny shrub. Pálkonda forests.
Böhmeria platyphylla occurs in the ghât forests.

LXI.—Casuarineæ.

1. Casuarina equisetifolia, Forster.
Tree. Planted in towns and on the coast sands, as at Gopálpur and elsewhere.

LXII.—Euphorbiaceæ.

1. Antidesma Ghæsembilla, Gaertn. Vernacular—*Nuniari*, Uriya.
Small tree. Rather scarce.
2. Antidesma diandrum, Tul. Vernacular—*Nuninunika, nuniari*, Uriya.
Small tree. Very common in Goomsur. The leaves are acid and eatable as spinach.
3. Antidesma Bunias, Spr.
Small tree. Ghât forests.
4. Phyllanthus lanceolarius, Müll. Arg.
Small tree. Rather scarce.
5. Phyllanthus sp.?
Tree of the Glochidion section. Valleys of the Pálkonda Hills.
6. Phyllanthus reticulatus, Müll. Arg.
Straggling shrub. Coast forests and wet places.
7. Phyllanthus Emblica, L. Vernacular—*Onra, Ounla*, Uriya; *Durga*, Khond.
Small tree. Common everywhere.
8. Phyllanthus distichus, Müll. Arg.
Tree. Planted in gardens only.
9. Breynia rhamnoides, Müll. Arg.
Shrub. Common.
10. Putranjiva Roxburghii, Wall. Vernacular—*Paichandia*, Uriya.
Tree. Often of some size. Valleys of the ghât forests.
11. Securinega Leucopyrus, Müll. Arg.
Shrub. Coast scrub forests.
12. Securinega obovata, Müll. Arg.
Shrub. Suradá forests.
13. Bischoffia javanica, Bl.
Large tree. Upper plateau of Pálkonda Hills.
14. Briedelia retusa, Spr. Vernacular—*Kosi*, Uriya, Khond; *Rugendi*, Khond; *Anepu*, Pálkonda.
Tree. Common: thorny — stemmed when young.
15. Briedelia stipularis, Bl.
Large climber. Not uncommon.
16. Briedelia tomentosa. Bl.
Small tree. Suradá forests.
17. Lebedieropsis orbicularis, Müll. Arg. Vernacular—*Korada, Korera*, Uriya; *Karada*, Khond; *Odeshi*, Pálkonda.
Small tree. Extremely common. Makes good house posts.
18. Croton caudatus, Müll. Arg.
Straggling shrub. River banks and damp places.
19. Trewia nudiflora, L.
Tree. Rather scarce. Goomsur.
20. Mallotus philippinensis, Müll. Arg. Vernacular—*Sundragundi, sinduri*, Uriya, Khond.
Tree. Very common and commonly planted about Khond villages for the dye.
21. Macaranga tomentosa, Müll. Arg.
Small tree. Scarce, and only in hill vallies.
22. Ricinus communis, L.
The castor-oil tree, cultivated.
23. Homonoya riparia, Lour.
Shrub. River-beds.
24. Jatropha Curcas, L. Physic nut.
Shrub used for hedges.
J. glandulifera is a common wayside weed, as everywhere along the coast.
25. Gelonium lanceolatum, Willd. Vernacular—*Kakra*, Uriya; *Gulung*, Pálkonda.
Tree. Common.
26. Euphorbia Tirucalli, L. Milk-hedge.
Small tree. Used for hedges.
27. Euphorbia Cattimandoo, Elliot. Vernacular—*Kattimandu*, Pálkonda.
Small tree. Vizagapatam coast.
28. Euphorbia antiquorum, L.
Small tree. Very common in dry outer ranges.
29. Euphorbia neriifolia, L.
Small tree. Sometimes planted or run wild: commonly used for hedges.

30. Euphorbia Nivulia, Ham.
Shrub. Dry rocky hills in Mohiri and the Pálkondas.
31. Sarcococca Hookeriana, Baill.
Shrub. Mahendragiri, above 4,000 feet.

LXIII.—Salicineæ.

1. Salix tetrasperma, Roxb. The willow.
Tree. River banks in Suradá.

LXIV.—Gnetaceæ.

1. Gnetum scandens, Roxb. Vernacular—*Apzu tzulu*, Saora.
Large climber. Mahendragiri sholas, above 4,000 feet.

LXV.—Cycadaceæ.

1. Cycas circinalis, Linn. Vernacular—*Orguna, oruna*, Uriya; *Nareni*, Khond.
Small tree, sometimes with long stems up to 20 feet in height. Very common in forest undergrowth.

MONOWTYLEDONS.

LXVI.—Palmæ.

1. Borassus flabelliformis, Linn. Palmyra.
Tree. Commonly planted in coast taluks.
2. Phœnix sylvestris, Roxb. Date.
Tree. Commonly planted.
3. Phœnix acaulis, Roxb. Vernacular—*Kojiri*, Uriya; *Seeta*, Khond.
Stemless palm. Common in Sâl forest undergrowth.
Another species with a stem up to 6 feet in height is found all over the grassy slopes on Mahendragiri and neighbouring hills. It may be *P. farinifera* or *P. Ouseleyana*, but these species of *Phœnix* are very difficult to distinguish.
4. Caryota urens, L. Vernacular—*Solopo*, Uriya; *Sarta*, Khond; *Jilugu*, Pálkonda.
Tree. Planted and run wild throughout the hills, and largely used by Khonds for toddy.
5. Areca Catechu, L. Areca-nut.
Small tree. Planted.
6. Cocos nucifera, L. Cocoanut.
Tree. Commonly planted.
7. Calamus fasciculatus, Roxb. Vernacular—*Pepa beti*, Pálkonda.
Climber. The common cane of Orissa and the Circars, in the inner country.
8. Calamus Rotang, Roxb.
Climber. Coast taluks, but scarce.

LXVII.—Pandaneæ.

1. Pandanus odoratissimus, Willd. The screwpine.
Shrub. Very common along the coast, especially along backwaters.

LXVIII.—Gramineæ.

1. Bambusa arundinacea, Retz. Vernacular—*Konta bansu*, Uriya.
Thorny bamboo. Valleys in the hills and thickets in open country: very common.
2. Dendrocalamus strictus, Nees. Vernacular—*Salimbo bansu*, Uriya; *Mani, maringo*, Khond.
Male bamboo. Hill slopes. Common.

Some other bamboos may also occur planted, though none were seen. Of the large grasses, *Thysanolæna acarifera* (Vernacular—*Saperi*, Khond) is largely used for fodder and to make brooms, and *Andropogon involutus*, which is extremely common in Goomsúr, is nearly equal to "esparto" as a material for paper manufacture.

Noticeable among other Monocotyledonous plants are the plantain, *Musa paradisiaca*; the bowstring hemp, *Sansevieria zeylanica*, not uncommon in some forests and used for fibre; the aloe, *Agave americana*, planted for fences and used for the fibre; and the thorny climber, *Smilax ovalifolia*.

Note.—The area visited consisted of the Berhampore, Goomsúr and Chicacole Taluks of Ganjam, the Pálkonda Taluk of Vizagapatam, the Parlákimedi Zemindari, the Zemindaris of Dhárákót, Budarsing, Tarlá and Mandasa, and a portion of the Goomsúr Maliahs. These included the chief important points of the ghât range, such as the Kriyamba Hills, those of Darpangia and Dohu, the hills of Suradá, the Mohiri Hills, the Mahendragiri Hill and the Pálkondas.

The vernacular names are few only, and those must be cautiously received. It is hoped that local forest officers will help to complete the list by adding to it the trees and shrubs not mentioned, and by correcting and completing the vernacular names. The names given in Captain Phillips' List of Parlákimedi trees published in 1855, Captain Macdonald's List of Goomsúr trees published in 1854 and Colonel Beddome's List of 1863-64 (Annual Forest Report) have been referred to and to some extent incorporated. Several other trees were seen and specimens collected, but they have not yet been identified.

Camp, Anantapur,
30th July 1884.

J. S. GAMBLE,
Conservator of Forests, Northern Circle.

Resolution—dated 18th October 1884, No. $\frac{3597}{\text{Forest 341.}}$

The Administration Reports of the two Forest Conservancy Circles in the Presidency of Madras are submitted to Government.

2. These reports are drawn up in accordance with the arrangement of matter proposed in the Forest Code, but the District Reports are still in the old form, and, therefore, the information in some of the sections is incomplete. The statements which accompany the two reports are not arranged in the same order, and those of the Southern Circle Report are not numbered in one consecutive series.

3. Rules under Section 26 of the Forest Act were issued by Government in March 1884 for all districts except South Canara, and in May 1884 for that district. A correspondence took place concerning rules under Sections 35 and 63 which have since been issued.

4. The Southern Circle was under charge of Major Walker, the Northern Circle under that of Mr. Gamble, and the Central Office under Mr. Douglas, throughout the year. The Conservator, Southern Circle, visited every district in his circle, and the Conservator, Northern Circle, inspected five of the ten districts in his circle during the year. The amount of time spent on tour by the district officers is, in almost every instance, satisfactory. No doubt, as Mr. Gamble remarks in paragraph 139, "time spent in camp is not necessarily always a correct gauge of useful inspection work," but, on the other hand, a Forest Officer, entrusted with a charge so extensive as a Madras district, cannot possibly be efficient unless he spends a large portion of the year in camp. The Board, therefore, have pleasure in bringing the following figures to the notice of Government:—

	Days in Camp.
Mr. H. A. Sim	266
„ H. A. Gass	236
„ Higgens	216
„ Boileau	214
„ Brougham	212
„ Hooper	209
„ Peet	194
„ Sheffield	189
„ Wooldridge	177
„ Morgan	174
„ Stafford	174
„ Bradley *	151

* Out of 189 days in charge.

The Conservators commend the work done during the year by Messrs. Sim, Higgens and Bradley, of the Civil Service, and by Colonel Jago and Messrs. Peet, Gass, Sheffield, Vincent, Hooper and Brougham. The Conservator, Southern Circle, remarks that Mr. Stanbrough did not travel enough, and the Conservator, Northern Circle, is not satisfied with the work done by Mr. Stafford. The Board do not understand how Mr. Stafford spent 174 days in camp without visiting the Jungle Conservancy plantations in his district (Godávari) which have been made over to the Forest Department. As the Conservator will shortly inspect that district, this matter will, no doubt, receive his attention.

5. During the year, the subordinate Forest establishments and the office establishments of the department were re-organised, and very great progress was made in the selection and submission of proposals for notification of reserved forests under Sections 4 and 25 of the Act.

6. The following statement shows the area of reserved forests in the two circles:—

—	Southern Circle.		Northern Circle.		Total.	
	Acres.	Sq. Miles.	Acres.	Sq. Miles.	Acres.	Sq. Miles.
Area on 1st April 1883	1,261,003	1,970	519,941	812	1,780,944	2,782
Added during the year	77,305	120	7,719	12	85,024	132
Total ..	1,338,308	2,090	527,660	824	1,865,968	2,914
Excluded or transferred to other heads	28,677	45	300	..	28,977	45
Area on 31st March 1884 ..	1,309,631	2,045	527,360	824	1,836,991	2,869

These figures represent the area of certain tracts which are actually reserved, and of which the area has been approximately ascertained. They do not include the Nallamalai Hills in Kurnool, the slopes of the Nílgiris towards Coimbatore and Malabar, the sholas on the Nílgiris, the Bolampatti and Tadagam Forests, portions of the Anamalai Hills in Coimbatore, three blocks of the Pachaimalais in Trichinopoly and three tracts in Madura, with various others which are, in fact, reserved, but of which the area has not been ascertained. In the Northern Circle there were, during the year under report, no reserves constituted under the Act, for, although several settlements under it were in progress, the final notification had not in any case been issued. In the Southern Circle, also, several settlements under the Act were in progress, but 683 square miles had actually been constituted "reserved forest" under Section 25 of the Act. The areas shown in the above statement as added during the year consist chiefly of the old Jungle Conservancy reserves and the so-called "village forests" in the Cuddapah District. The areas shown as excluded or transferred during the year comprise the Zemindari reserves in Madura, omitted pending further action under Chapter IV of the Act, and the Kadiramalai reserve in Tinnevelly, transferred to the list of plantations.

7. In connection with the figures which represent the areas of Reserved Forests in Appendix I of the Southern Circle Conservator's report, although it is clear that, in the absence of demarcation and survey, they cannot be regarded as more than mere approximations to accuracy, yet the arithmetical manipulation of the figures does not appear to be always correct. For instance, it appears that an area of 14319·15 acres of forest, belonging to certain zemindaris in Madura, has been excluded from the area of Government Reserved Forests during the year under report, pending further action under Chapter IV of the Forest Act. But the details of this acreage are not given, nor the names of the zemindaris alluded to. Turning, however, to the report for 1882-83, and G.O., of 29th August 1881, No. 1284, it is gathered that the following zemindaris and areas are those referred to:—

	Sq. Miles.
No. 1. Warsanad Valley	45·95
„ 2. Erasakanayakanur	1·78
„ 5. Kottagudi Valley	13·79
„ 6. Chothaperai Odai	1·60
„ 7. Kandamariyan Odai	2·49
„ 8. Anrivi Ar	5·93
Total ...	71·54

These areas together make up 71·54 square miles, which is equal to 45785·6 acres instead of only 14319·15. The discrepancy is serious, and should be explained or corrected. Again, the area of the Sandanam Shola on the Upper Palnis in the same district is put down as 300 *square miles*. This is probably a mistake for 300 acres. If so, the error should be corrected. There is, moreover, a want of system in the preparation of the Appendix No. 1 for the Southern Circle. For some districts the areas of reserved forest, as they stood on the 1st April 1883, are given, but not for others, a total for that date for the whole district being only given.

8. The demarcation of reserves appears to have made some progress in the Southern Circle, but the Conservator, Northern Circle, expresses dissatisfaction with the amount of work done in his circle. Paragraph 21 of his report shows that only Rs. 3,547, out of Rs. 15,500, were spent on demarcation. The attention of the Collectors in the Northern Circle is especially asked to this matter, and they are requested to see that the District Forest Officers make use of the budget allotments before the close of each year.

9. In the same paragraph, Mr. Gamble remarks that in one or two districts, especially on the Nílgiris, settlement work would seem to be proceeding unnecessarily slowly. A Forest Settlement Officer, as such, is not subordinate to the Conservator, and it is not desirable that the Conservator should criticize the work of Forest Settlement Officers. Their work is *quasi*-judicial, and—especially on the Nílgiris—must involve the decision of questions strenuously contested; so that it must take time.

10. The forests under lease comprised, as in former years, the Mudumalai Forests, in the Nílgiri District. Under a convention with the Rajah of Sandúr, signed on 12th March 1884, the forests of the Sandúr State, in the Bellary District, were formally taken under lease during the year.

11. In the Southern Circle, the Forest officers selected for the approval of the Board various tracts as fuel and fodder reserves, and many of the actual reserves which await formal notification under the Act are reserved under the powers given by the rules issued by Government under Section 26. No separate mention of these areas is made by Major Walker, and it is difficult, during the present transition, to classify accurately the areas in charge of the Forest Department. Thus the 866 square miles selected by the special Forest officer in Salem District are for the present reserved under these rules, but they include portions of old reserves, which will, in due course, be notified under the Act. In the Northern Circle, areas for fuel and fodder reserves have been selected by the Forest officers in the Ganjam, Vizagapatam and Kurnool districts, as is mentioned in paragraph 24 of the circle report.

12. In the Southern Circle, the department carried out considerable survey operations, especially in Trichinopoly and South Arcot. The Board imagine that there must be some clerical error in paragraph 33 of Major Walker's report where he states that a detailed survey of the Tiruvannámalai Hill was made for the purpose of obtaining two photographs to illustrate the report on Trinomalai Hill chain (*sic*). The allusion to a chain is not understood, Trinomalai being an isolated hill. In the Northern Circle, the only departmental surveys were those executed by Mr. Brougham in Anantapur, and by Mr. Lodge, Assistant Conservator, in Nellore.

13. In the Southern Circle, there are as yet no working plans, and in the Northern Circle, the only working plans are those for certain plantations on the Nílgiris, and a preliminary scheme for the Ballipalle Forests in Cuddapah.

14. The distribution of the staff throughout the districts is, to a great extent, tentative, especially in the Northern Circle, but it is believed that at the close of the present year, the Conservators will be able to place before Government a comprehensive view of the requirements of all the districts in the two circles and to adjust accordingly the establishment which is available.

15. The statistics showing the result of prosecutions for breaches of the Forest laws call for no special remark. In Kurnool, Mr. Sim appears to be doing good work in the repression of smuggling in timber. The Conservator mentions A. Kuppuswami Mudali, the present Tahsildar of Márkápur; M. V. Chellapatti Naidu, Tahsildar of Huvinahadgalli; and A. Akhilandum Mudali, now Tahsildar of Hospet, as officers who assisted the Forest Department.

16. On perusing the remarks of both Conservators on the important subject of forest fires and fire-protection, it would appear that the Northern Conservator has not obtained as much attention to this matter on the part of the district officers as he desires. Collectors are requested to bear this in mind, and to give due weight to the instructions issued by the Conservators. In Ganjam and Vizagapatam, nothing has as yet been done to protect forests from fire. In the Godávari District, most of the reserves had fires in them. In the Kistna District, the Forest Department had under

special fire-protection the Kondapalle reserve, in which the late Collector, Mr. Horsfall, had taken much interest, spending on it large sums from the Jungle Conservancy Fund. Of this reserve, three square miles were burnt. The Board cannot but regard this as discreditable to Mr. Boileau. Other fires took place in the Kistna District, one in a plantation near Masulipatam. In Nellore District nothing was done, although fires are frequent on the Veligondas, and the Conservator had recommended a special area to be selected for fire-protection. In Cuddapah and Kurnool, where fires used to be habitually kindled on the hills every hot season, much has been done by Messrs. Higgens and Sim to put a stop to fires by protecting certain areas and chiefly by inducing the villagers to assist. In Bellary, Mr. Hooper paid attention to the subject, and in Anantapur, special protective works were quite successful. The fires on the grass lands of the Nílgiris are said to have been very bad, and one fire, by the negligence of the fire-patrol, reached the Sígúr sandalwood plantation. The work done in the Southern Circle is detailed at paragraphs 64 to 76 of the report for that circle. The Board are unable to clearly follow Major Walker's observations. The result is said to be very satisfactory, and great credit is said to be due to district officers because Major Walker makes out that the cost of fire protection was reduced by one-half during the year under report, viz., from 4 to 2 pies per acre, although in the very same paragraph in which he congratulates himself on this result, he admits that he regards Mr. Sheffield's figures (on which the result chiefly depends) as almost incredible. That officer has reported that he fire-protected 233,000 acres at a cost of Rs. 1,144. The rate is rather less than 1 pie per acre, but compares unfavorably with the rate at which Mr. Wooldridge in South Arcot appears to have worked, who fire-protected 63,910 acres for Rs. 144, or for less than half-a-pie per acre, without eliciting any remark from Major Walker. It is clear, however, that there is some mistake in Mr. Sheffield's figures, for whereas he reports that the reserves under fire-protection remain the same as last year, the detailed statement shows both their number and extent to have been largely increased. Moreover, Major Walker is evidently doubtful whether Mr. Sheffield clearly understands what fire-protection is and what charges are debitable to that head; and this, too, after he had himself personally inspected the district during the year under report. In the course of his inspection, the Board would have thought that much or all of Mr. Sheffield's fire-protection would have come under the Conservator's notice and attracted his attention, but it does not seem to have done so, and it appears rather late in the day now to call on an officer of Mr. Sheffield's service in the Forest Department to explain his views on such an elementary forest detail as fire-tracing. The Board fear that the Southern Circle Conservator's conclusion in paragraph 64 must be rejected as unsound. In the Wynaad and Pálghat Division, the Conservator was not satisfied with the results of the fire-protection during the year.

17. In paragraphs 73 to 78, Mr. Gamble discusses natural reproduction and urges the importance of felling trees flush with the ground instead of pollarding them, so that there may be good coppice shoots capable of forming good trees, instead of pollard shoots which, as they grow older, cause the centre of the old stool to rot and prevent its ever being used as timber. The need to rigidly exclude goats, which eat the young shoots and seedlings, is also strongly pointed out.

18. There is nothing new that calls for special notice with regard to the plantations and topes in charge of the department. In paragraph 84 of Mr. Gamble's report is quoted the Collector's description of Mr. Vincent's work in the casuarina plantations of Nellore, and in paragraph 33 of Major Walker's report, mention is made of certain data regarding casuarina plantations compiled by Mr. Brasier. The distinction drawn by both Conservators between "Regular Plantations," "Cultural Operations," and "Topes" is rather confusing in the absence of any explanation of what is meant by cultural operations as distinguished from "topes." In paragraph 5 of the Government of India review of the Forest Reports for the Madras Presidency, dated 31st March 1884, No. 194-F, they observe that an uniform classification of plantations and other cultural operations should be made, but no allusion is made to topes, and the Board think that topes should be included under the heading of "Cultural operations including topes," unless any good reason for keeping them separate can be shown. This also

is apparently what was directed in Paragraph 8 of G.O., No. 101, dated 21st January 1884.

19. Paragraphs 104 and 105 of the Northern Circle Report and paragraphs 106 to 114 of the Southern Circle Report mention the various experiments with exotic plants undertaken by different officers.

20. Statement No. 8 appended to the Northern Circle Report, and the corresponding statement of the Southern Circle Report, show the several descriptions and quantities of timber and other forest produce collected by departmental agency in each division and their disposal. The quantities are given in various denominations, and the Board approve of the proposal of the Conservator, Northern Circle, in paragraphs 116 and 120 of his report, to adopt a uniform standard of weights and measures in his next report. The next two statements show (1) the timber and other forest produce received into and issued from the depôts, and (2) sales in the depôts and in the forests, with the prices realized. The total receipts from departmental sales amounted to Rs. 1,22,062 in the Northern Circle and to Rs. 1,96,626 in the Southern Circle, making a grand total of Rs. 3,18,688. The value of stock on hand at the close of the year was Rs. 16,248 in the Northern Circle and Rs. 1,16,216 in the Southern Circle, or Rs. 11,465 and Rs. 14,163, respectively, more than in the previous year.

21. Statement No. 11 in the Northern Circle Report, and the corresponding statement of the Southern Circle Report, show the quantity and value of timber and other produce removed from the forests under the permit system. The receipts realized under this system were Rs. 2,66,164 in the Northern Circle and Rs. 3,32,798 in the Southern Circle, making a total of Rs. 5,99,262, against Rs. 2,64,468 and Rs. 2,95,694, making a total of Rs. 5,60,162, in the previous year.

22. The receipts and charges of the two circles for the year under report, compared with those of the preceding year, are shown below:—

	Receipts.		Charges.		Surplus.	
	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Northern Circle ..	3,91,298	4,13,333	2,53,925	3,02,452	1,37,373	1,10,881
Southern do. ..	5,15,144	5,45,658	3,90,940	4,78,464	1,24,204	67,194
Total ..	9,06,442	9,58,991	6,44,865	7,80,916	2,61,577	1,78,075

23. The surplus revenue, as shown in the above statement, was less than that in the preceding year by Rs. 26,492 in the Northern Circle, and by Rs. 57,010 in the Southern Circle. This was chiefly due to the increase of establishments consequent upon the re-organization of the department.

24. The Board are surprised to find that Major Walker appears to have been under the serious misapprehension that, by the mere passing of the Forest Act, all the old rates of seigniorage leviable under the Jungle Conservancy régime and rules had "become a dead letter" (*vide* paragraph 147 of his report). Those rules remain in full force and effect until superseded by new rules and rates of seigniorage under the Forest Act, which have not yet been sanctioned by Government. If Major Walker has acted in all districts in his circle as he seems to have acted in Chingleput, the Board fear there must have been a serious loss of Forest revenue from his mistaken view of the matter. They hope, however, that such was not the case, and that the above paragraph is merely an abstract from the District Forest Officer's report entered by a clerk in the Conservator's report and passed by him carelessly. Even in that case, the Chingleput Forest Officer should be disabused of his erroneous impression, and it would be well if the Conservator went through his report and its appendices

in future himself, with care, before sending it up to Government, as there are many indications in it of haste or want of care in its preparation.

(True Copies and Extract.)

(Signed) G. MACKENZIE.
Acting Sub-Secretary.

To the Secretary to Government, Revenue Department, with maps.
" all Collectors.
" the Conservator of Forests, Northern Circle.
" the " " Southern "
Copy to the Deputy Conservator, in charge of
Central Office of Forest Accounts.

READ—the following Proceedings of the Board of Revenue, dated 3rd December 1884, No. $\frac{4137}{\text{Forest } 425}$:—

Read—the following letter from Major I. CAMPBELL WALKER, Conservator of Forests, Southern Circle, to the Secretary to the Board of Revenue, dated Chittoor, 20th November 1884, No. 1799:—

Referring to Board's Proceedings, No. $\frac{3597}{\text{Forest } 341}$, of 13th ultimo, I have the honor to submit the following remarks, premising that the proofs of the annual report were not revised by me, as they reached the office just before I left for England on privilege leave.

2. *Paragraph 7 of Board's Proceedings.*—The area of reserved forests in the Madura district is correctly given in paragraph 13 of the report, subject to correction of areas on survey.

On the 31st March 1883, it was 306·54 square miles, from which the area of six zemindari tracts, 71·54 square miles, is deducted, and to which 49·17 square miles, area of late jungle conservancy and railway fuel reserves and plantations, is added, making 284·17 square miles as shown in the margin.*

	Sq. mls.	
* Area on 1st April 1883	306·54	
Deduct six zemindari tracts ...	71·54	
	235·00	
Add additional areas of old jungle conservancy, &c., reserves and plantations	49·17‡	
Total on 1st April 1884	284·17	
† Area of six zemindari tracts deducted or excluded	71·54	
Excess area of old jungle conservancy, &c., tracts added ...	49·17‡	
Difference ...	22·37	
or 14,316·8 acres.		

The area shown as "excluded," 22·37 square miles or 14,316·8 acres, is the difference between that deducted and added during the year.†

In the detailed statement (Appendix I), the acreage is correct, but the total under square miles embraces the areas shown in square miles only and not those whose extent is shown in acres, which should have been added.

The grand total of forests classed as reserved, 2,045 square miles, in the circle, is correctly given.

3. The district returns and especially that for Madura, where the District Forest officer was absent, were most confusing, as will be seen by a reference to them, and time did not admit of my sending for explanation.

The registers maintained in my office show only the forests finally reserved under Chapter II of the Act, and even for those the areas are not always available in the absence of surveys.

4. The entry of 300 under square miles opposite the Sandanam shola in Appendix I is erroneous. In the manuscript copy to which I have referred, the figures "300" or "3·00" occur amongst others, which I directed to be struck out as inaccurate. The clerk ran his pencil through them, but the 300 appears to have been printed and overlooked in correcting the proof. It is not included in the total and is a palpable printer's error.

5. As explained above, the areas of reserved forest on 1st April 1883 in the district reports differed so widely from those given in the reports for that year, that I was obliged to discard them and adopt those of my report for 1882-83, which rendered it impossible to give the areas in detail for some districts, the total only being available.

6. *Paragraph* 12 *of Board's Proceedings.*—The word "chain" is an obvious misprint for "claim" as entered in my manuscript. The sentence is, if I mistake not, taken from the district report, but should read "a detailed survey of Tiruvannámalai hill was made and two photographs taken to illustrate the report on the Tiruvannámalai hill claim."

7. *Paragraph* 16 *of Board's Proceedings.*—Mr. Sheffield has explained that the apparent cheapness of his fire-protection is due to considerable areas being plantations and areas in the plains in which there is little or no grass or danger from fire, and from the pay of the fire-patrols not having been debited in the accounts for 1883-84. The circumstances of the fire-protected areas in South Arcot are exceptional, as they are almost entirely situated in the plains and cattle are more or less admitted, which graze down the grass and reduce the danger from fire and expense of fire-protection to a minimum. I did not, therefore, think it necessary to allude to the cost of fire-protection in that district, with which I was satisfied. The North Arcot protection embraced hill forests, and cattle are excluded. Hence my doubts, which Mr. Sheffield has now set at rest.

When I visited the North Arcot district in February, the fire season had not commenced, and Mr. Sheffield's measures of fire-protection could not, therefore, come under my notice.

I personally impressed upon him and his rangers the correct principles of fire-protection, and can assure the Board that proper "fire-tracing," which is only one of several details in fire-protection, is by no means so elementary or so easy as they would appear to imagine. It is a professional matter requiring, like any other, care and experience to effect properly and economically.

There is, however, I am glad to say, no reason for the Board to fear that my conclusion as to results "must be rejected as unsound." It is perfectly correct.

8. *Paragraph* 18 *of Board's Proceedings.*—"Cultural operations" may, of course, be held to embrace plantations and topes. Topes are plantations, though all plantations are not topes; but the terms "regular plantations" and "cultural operations" have now a distinct and separate meaning for the forester, the latter being applied for the most part to sowings or preparation of the ground to receive seed in aid of natural reproduction, and to any operations short of regular planting out from nurseries, undertaken for the regeneration of the forest and re-clothing of denuded areas. I think that, in future, established topes might well be classed with plantations, the area of "cultural operations" being separately exhibited.

9. *Paragraph* 24 *of Board's Proceedings.*—I find nothing to justify the Board's conclusion that I or the District Forest officer, Chingleput, was under a "serious misapprehension" with regard to the effect of the passing of the Forest Act on the old Jungle Conservancy Rules. I merely stated a fact, the absolute correctness of which, I feel sure, the Collector will confirm, that "the old Jungle Conservancy Rules and rates of seigniorage had become a dead letter" in Chingleput. With the causes or reasons for this I had nothing to do, for the district was not under the Forest Department prior to reorganization.

I proposed to re-enforce the old seigniorage rates, but the Collector thought it better to wait till new rates were sanctioned under the Forest Rules, and I deferred to his opinion and took no further action.

I now see that, during my absence on leave, the levy of seigniorage on certain articles has been tentatively adopted, and I have already submitted a scale of new rates for approval.

10. It is a significant comment on the Board's criticisms on the report generally and especially on the concluding paragraph of their Proceedings, that it is the first annual report for many years which has been almost entirely written by the Conservator himself, and that I took special pains to make it accurate and clear without being diffuse, though I explain the exceptional difficulties in my opening paragraphs.

I regret that my efforts would appear to have fallen so far short of the Board's standard, and can only try and do better in future and bear in mind that I am addressing non-professional critics requiring presumably fuller information than I gave.

I beg that this explanation may be submitted to Government as early as practicable, in order that they may have it before them whilst reviewing the report.

Resolution—dated 3rd December 1884, No. $\frac{4137}{\text{Forest 425.}}$

Submitted to Government.

2. The Conservator explains that, while 71·54 square miles of zemindari forest were excluded from the Government reserved forests in Madura, 49·17 square miles were added to them, which had formerly been under jungle conservancy, and that the 14,319·15 acres entered at page 52 of Appendix I represent the difference between these two areas, or 22·37 square miles. As no mention was made of the 49·17 square miles of jungle conservancy areas in the report or appendix, the Board were of course unable to guess the explanation. That the various district returns are very confusing, they can well believe, and Major Walker's not having had the opportunity of revising the proofs of his report accounts for such errors as 300 square miles as the area of Sandanam shola, and the allusion to the Tiruvannámalai hill chain appearing in print.

3. The Board have not seen Mr. Sheffield's explanation regarding his fire-protection operations, but they are unable to understand why he should have included in fire-protected areas "plantations and areas in the plains in which there is little or no grass or danger from fire," and, as the pay of the fire-patrols was not debited in the accounts of 1883-84, it seems clear that his figures of average cost of protection must have been erroneous.

4. The Conservator's remark that in South Arcot the expense of fire-protection and the danger of fire are reduced to a minimum because cattle are admitted to graze in the fire-protected areas seems to the Board of doubtful accuracy. The Board have always understood that the chief cause of forest-fires is the carelessness or mischievousness of the cowherds attending cattle while grazing in the forests. Spontaneous fires are almost unknown in this Presidency; so that, in the absence of some person to set the grass on fire, it cannot make any difference in the risk of a forest-fire whether cattle are admitted to the forests or not, while it would certainly seem that that risk must be greater in a forest where cattle and cowherds are admitted than where they are excluded.

5. The Conservator shows that he was not responsible for the abolition of the jungle conservancy seigniorage rates in Chingleput. At the same time, the Board think he should not have stated the fact of their abolition without commenting on it, seeing that, since the reorganization (a period of now about two years), he has been content to let the collection of fees in the district remain a dead letter, when a reference to the Board would have set the matter right.

(A true Copy and Extract.)

(Signed) C. F. MACCARTIE,
Acting Sub-Secretary.

To the Secretary to Government, Revenue Department.
Copy to the Conservator of Forests, Southern Circle.
" " " " Northern Circle.
" " Deputy Conservator of Forests, in charge of Central Office of Accounts.

Order—dated 24th February 1885, No. 248, Revenue.

Forest, No. 37.

With the first of the Proceedings read above the Board of Revenue submit the administration report of the Madras Forest Department for the year 1883-84.

2. *Leading Events.*—No changes of importance took place in the constitution of the superior staff of the department. The subordinate forest and office establishments were reorganized during the year, and two special Forest Settlement officers appointed from the ranks of the Covenanted Civil Service for the Coimbatore and Nílgiri districts, respectively. A code of rules under Section 26 of the Forest Act for the constitution and protection of "reserved lands" was promulgated in March 1884, but no action was, or could be, taken upon them before the close of the year. Rules were also issued under Section 35 of the Act for the regulation of the transit of timber between the Kurnool district and the territories of His Highness the Nizam.

3. *Inspection.*—Of the ten districts in the Northern Circle, five were inspected by the Conservator during the year. Mr. Gamble's examination of the Ganjam and Vizagapatam forests, which was undertaken at the special desire of Government, was of a peculiarly careful and searching description and will, there is every reason to believe, be productive of very beneficial results. In the Southern Circle the Conservator was able to visit the whole of his districts within the year. The Government note with satisfaction the activity displayed by the District Forest officers generally in the inspection of their charges.

4. *Reserved Forests.*—The extent of forest treated locally as reserved has risen from 1,970 square miles in the Southern Circle to 2,045, and from 812 in the Northern Circle to 824. Of the area claimed in the Southern Circle, 683 square miles are reserved forest in every sense, having been so constituted under Act V of 1882. The remaining area in this circle, as well as the whole of that shown in the returns of the Northern Circle, represents tracts regarded as reserved prior to the passing of the Act. Certain reserves of the old Jungle Conservancy Department having been overlooked in the returns for 1882-83 have now been included, which accounts for the variation in the figures for the Northern Circle as compared with those of that year. As already observed in the Proceedings of Government reviewing the report for 1882-83, these totals include only those tracts of which the area is approximately ascertained, and do not embrace large extents of forest country which have, as a matter of fact, been under the management of the department for many years, but of which the area cannot even be roughly estimated. The Board of Revenue have remarked that Statement No. I of the appendix to the report for the Southern Circle is imperfect, the details of the district totals of forests reserved prior to the 1st April 1883 being in many cases omitted owing, it is now explained, to discrepancies and inconsistencies in the district reports. The practice of showing only the *net* resultant of areas added or excluded during the year is also erroneous and liable to mislead. In future all areas added or excluded for whatever reason during the year should be entered in the appropriate column.

5. The demarcation of reserves made fairly good progress in the Southern Circle, the expenditure of the year aggregating Rs. 14,428 against a sanctioned grant of Rs. 20,450 and a revised estimate of Rs. 18,054. In the Northern Circle the amount of work done under this head was not satisfactory. The Government desire to impress upon all officers of the department that the subject to which their chief attention must be directed at present and for several years to come is the demarcation and settlement of permanent forest estates, and that, as remarked by the Government of India, "until considerable progress has been made in this respect, the more professional work of the forester can only be attempted on a moderate scale." The Government note that in the opinion of the Conservator, Northern Circle, forest settlement of the Nílgiris is not progressing as rapidly as could be desired. It is the duty of a Conservator to bring to the notice of the Board of Revenue or of the Collector concerned any delay which may seem to him to be uncalled for on the part of a Forest Settlement officer, but this should be done in a separate communication.

6. As regards forest survey but little work was done departmentally during the year, except perhaps in South Arcot, and little expenditure was incurred as compared with the budget grant. Work of this description must of course yield precedence to

the more urgent work of selection and demarcation. For the same reason little has been, or can be, done as yet as regards the preparation of working schemes or plans of operations.

7. The convention for the lease of the Sandúr forests from the Raja of that State was finally concluded in March 1884. These and the Mudumalai and Kolangód forests are the only forest tracts administered by Government under lease from their owners.

8. *Reserved Lands.*—As remarked in paragraph 2, the code of rules under Section 26 of the Act came into force too late in the year to admit of action being taken under them. Numerous selections were, however, made in both circles, and most of these will probably be notified as reserves in due course. In future, a list of reserved lands, similar to that of reserved forest, should be appended to the reports of the Conservators.

9. *Protection.*—The distribution, as well as the organization of the subordinate forest establishments, came under revision during the year. A similar revision will be carried out in future at the commencement of each official year.

10. Out of 588 prosecutions in the Southern Circle and 606 in the Northern, 114 in the former and 96 in the latter resulted in acquittals. Of the remainder, 25 were pending at the close of the year in the Southern and 86 in the Northern Circle. The efforts made in 1882-83 for the repression of timber-smuggling in the Kurnool district were continued during the year under report, and much useful assistance was received from the Land Revenue officers of that district and of Bellary. The attention of the Collectors of Ganjam and Kistna will be drawn to Mr. Gamble's remarks in paragraph 63 of his report.

11. There was a considerable improvement both in the extent and in the cost of fire-protection, as appears from the following statement:—

Year.	Circle.	Area attempted.	Failures.	Percentage of Failures in Area attempted.	Cost of Protection.	
					Per Square Mile in Rupees.	Per Acre in Pies.
		SQ. MLS.	SQ. MLS.			
1882-83	Northern	232	39	14	22	7
	Southern	327	1	0·3	15	4
	Total	609	40	7	18	5
1883-84	Northern	370·4	29·5	7·9	15·7	4·7
	Southern	530·5	6·7	1·26	7	2·1
	Total	900·9	36·2	4	10	3·1

Much of this improvement appears, however, to be due to the fact that large areas in the plains, especially of North and South Arcot, have been included, the cost of protecting which is exceptionally small. The Government concur in the views expressed in paragraph 3 of the Proceedings of the Board of Revenue of the 3rd December, No. 4137.

12. *Plantations, Cultural Operations and Topes.*—The area of regular plantation in the Northern Circle is now given as 6,818 acres as against 8,950 acres shown in the report for 1882-83, the difference being due chiefly to the erroneous inclusion in the returns of the latter year of some 2,700 acres of natural grown jungle by the District Forest officer of Anantapur. In the Southern Circle the discrepancy is still more serious, the area now shown being 29,179 acres as against 36,027 acres in 1882-83. This the Conservator explains, without comment, to be due principally to an extraordinary error on the part of the District Forest officer of Tanjore, who took credit for no less than 11,254 acres of plantation, of which 9,260 acres were in reality natural jungle and only 704 acres regular plantation. Similarly in South Arcot no less than 4,864 acres of land as yet unplanted were taken into account last year, which are now excluded. It is obvious that as long as mistakes of this nature are likely to occur, the returns must be absolutely worthless, and the Government trust that steps will be

taken without delay in every district to verify the figures now reported. There can, for instance, be no doubt that the entry of 19,550 acres against Tinnevelly alone is an enormous miscalculation. The only real additions of any importance during the year seem to have been certain extensions, aggregating 188 acres, to the casuarina plantations of Nellore and the planting of a few small areas on the Nílgiris and in Kurnool. The returns of the Southern Circle, as well as the abstract on page 18 of Major Walker's report, show signs of hasty compilation. In some cases the cost of areas excluded during 1883-84 is added to the cost of those existing on the 1st April 1883, while in other cases it is deducted. Moreover, areas shown as under cultural operations in 1882-83 are omitted in the columns for 1883-84, although not shown under areas excluded during the year. The total area under cultural operations is given in the Northern Circle as 144½ acres against 68½ in 1882-83, and in the Southern Circle as 4,728 acres against 7,709, the difference in the latter case being explained to be due to the transfer of certain areas to "topes," of which both Conservators now submit detailed lists. These lists, which are of course tentative at present and liable to future correction, show that there were 617 Government topes in the Southern and 364 in the Northern Circle, covering aggregate areas, respectively, of 16,172 and 13,114 acres.

13. *Exotics.*—The Government are glad to learn from Major Walker's report that the *Landolphias* received from Ceylon at Nilambúr in August 1882 are growing well. The plants of *Cephaelis Ipecacuanha* sent there from Ootacamund are also stated to have made good progress. Further inquiry should be made as regards the growth of the *Castilloa* and *Hevea* plants under the care of Mr. T. J. Ferguson of Calicut, and the District Forest officer of Tanjore should be instructed to pay particular attention to the date trees planted in that district, which are stated to be sickly in appearance.

14. *Departmental Working.*—Statements 8, 9 and 10 are intended to show the quantities of timber and other produce collected by departmental agency and sold during the year. As, however, the quantities are given in varying denominations for different districts, no attempt has been made to calculate the total for each circle, and the returns are thus of little practical use. This should be remedied in future years. The total receipts from departmental sales were Rs. 1,96,629 in the Southern and Rs. 1,22,062 in the Northern Circle. The value of stock on hand at the close of the year is shown as Rs. 1,16,216 in the Southern and Rs. 16,248 in the Northern Circle. It is observed that the corresponding figures now given for the commencement of the year differ widely from those shown as the closing figures of 1882-83 in the report of that year. In future reports it should be shown to what extent the requirements of the Public Works and Ordinance Departments have been met by the Forest Department.

15. *Permit System.*—The revenue from forest produce removed by purchasers under permit was Rs. 3,32,798 in the Southern Circle and Rs. 2,66,464 in the Northern, showing a total advance of Rs. 39,100 on the revenue for the previous year under this head.

16. The following statement shows the financial results of the year for each circle as well as for the whole Presidency :—

—	Northern.	Southern.	Presidency.
	Rs.	Rs.	Rs.
Receipts	4,13,333	5,45,658	9,58,991
Expenditure—			
Conservancy and Works	1,27,322	2,24,123	3,51,445
Establishment and Contingencies	1,75,130	2,54,341	4,29,471
Total Expenditure ...	3,02,452	4,78,464	7,80,916
Surplus ...	1,10,881	67,194	1,78,075

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following Proceedings of the Board of Revenue, dated 18th October 1884, No. 3597 / Forest 341 :—

PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE SOUTHERN CIRCLE, MADRAS,

FOR THE YEAR 1883-84.

CHAPTER I.

Introductory Remarks.

In submitting the Annual Administration Report for the Forests of the Southern Circle, which have been under my charge throughout the year 1883-84, I adopt the arrangement prescribed in the draft Forest Code for Madras now before Government, which is based on that of the Forest Department under the Government of India.

2. Under present circumstances, it is impossible to make the several chapters and sections as complete as could be wished, especially as the district reports are submitted in the old form ; but we shall, I hope, improve in these respects year by year.

3. *Inspection Tours.*—My inspections commenced on the 4th of July 1883, and continued until the 28th of March 1884, when I left Coimbatore for the hills. Every division was visited except Nilambúr, and special attention directed to the working of the Act, including the selection of reserved forests, framing of rules, general and local, and re-organizing the Forest establishments.

4. Inspection memoranda, with an outline of operations for the year, were submitted to Collectors on completion of inspection, and by them communicated to District Forest Officers for guidance. My suggestions, in all but a few trivial cases, met with approval and concurrence.

5. The results of my tour in South Canara, which had not been visited since 1874, were especially satisfactory. I remained in that district from the 17th November till the 8th December, making a thorough inspection with the Collector and District Forest Officer (Mr. Bradley, C. S.)

The result is that, for the first time since the department commenced operations in that district, the Collector, Conservator and District Forest Officer are in complete accord as to the system of working to be pursued and the limits within which the privileges of the people may be exercised. Our views are summarized in a joint memorandum printed with Board's Proceedings No. 120, dated 16th January 1884.

The rules under Sections 26, 33 (*b*) and 35, submitted with the same, have since met with the approval of Government and were promulgated in the *Fort St. George Gazette* of the 20th May 1884.

6. My nine months' inspection was chiefly devoted to the forests proper (in addition to the re-organization generally), whereas I propose on my next cold weather tour to give special attention to the late jungle conservancy tracts in the plains, and to the formation of fuel and fodder reserves, whilst urging on the selection and settlement of reserved forests and initiating technical arrangements for working the reserved forests already constituted under proper principles of forestry.

7. The time spent on inspection by the District Forest Officers is entered in the following table :—

Name of Officer.	Designation or Rank in the Department.	Name of Division.	No. of Days absent from Head-quarters.	Remarks.
Mr. C. E. Brasier ..	Assistant Conservator.	Chingleput	95	For six months. No Forest Officer during six months of the year prior to 1st October 1883.
,, T. Sheffield	Deputy Conservator.	North Arcot ..	189	
,, H. L. Wooldridge ..	Do. ..	South Arcot ..	177	
,, A. W. C. Stanbrough.	Do. ..		*151	* Relates to Mr. Cherry only.
,, J. W Cherry ..	Do. ..	Salem	1	
,, H. G. Joseph, C. S..	Head Assistant Collector.		63	For 2½ months. Assumed charge in the middle of June 1883.
,, H. A. Gass ..	Deputy Conservator.	Trichinopoly ..	48	For seven months. Assumed charge at the end of August 1883.
,, A. W. C. Stanbrough.	Do. ..		118	For 7½ months subsequent to 14th September 1883—the date on which Mr. Carroll took charge as District Forest Officer.
,, W. Carroll ..	Sub-Assistant Conservator.	Tanjore	194	On leave for two months during the year.
,, A. W. Peet ..	Deputy Conservator of Forests.	North Coimbatore ..	151	
T. Muhammad Alí Sáhib Bahádur.	Sub-Assistant Conservator.	South Coimbatore ..	27	From 1st April to 24th Aug. 1883.
Mr. F. E. Robinson, C.S.	Assistant Collector.		141	The rest of the year for seven months.
,, H. A. Gass	Deputy Conservator of Forests.	Madura	49	On privilege leave for three months during the year.
,, W. C. Hayne ..	Do.	Tinnevelly	174	On privilege leave for one month during the year.
,, R. W. Morgan ..	Do.	Wynaad and Pálghat	41	
,, J. Ferguson ..	Do.		46	1st April to 7th September 1883.
,, G. Hadfield ..	Assistant Conservator of Forests.	Nilambúr	7	
,, W. Carroll ..	Sub-Assistant Conservator.	South Canara ..	151	From 24th September to end of the year.
,, M. D. Bell ..	Assistant Collector..			
,, H. Bradley, C. S. ..	Acting Head Assistant Collector and District Forest Officer.	Do. ..		

8. Messrs. Peet, Gass, Sheffield and Bradley have been most energetic, but all the officers appear to have travelled sufficiently except Mr. Stanbrough. The Collector of Trichinopoly has been asked to impress upon that officer the necessity of more frequent inspection and personal supervision, which will doubtless have the desired effect.

9. *Rules under Section* 26 *of Forest Act.*—Towards the end of the year, general rules under Section 26 of the Act, a copy of which accompanies this report, were promulgated by Government, but no action had been taken under them up to the close of the year. Special rules under Sections 26 and 33 (*b*) for South Canara District were promulgated on the 20th May.

10. *Rules under Section* 35.—Draft rules under Section 35 have been submitted for approval, and lists of reserved trees and seigniorage rates are in active preparation district by district.

11. *Special Duty Office.*—Mr. Cherry, the Deputy Conservator on special duty for the preliminary selection of forests to be reserved, assumed charge of the Salem Division as District Forest Officer on the 1st April 1883, from which date the special duty office was abolished. His report on selections has since been before Government.

12. *Forest Settlement Officers.*—Mr. Wolfe-Murray, C. S., was appointed Special Forest Settlement Officer for the circle on the 3rd July 1883, and has made good progress with settlement in the South Coimbatore Division, where he was still employed at the end of the year.

Divisional Officers (Revenue Department) were appointed Forest Settlement Officers in the districts of Malabar, Trichinopoly, Madura and North Arcot.

CHAPTER II.

Areas and Boundaries.

13. The subjoined statement gives approximately the area of reserved forests; details are furnished in the Appendix.

District.	Area on 1st April 1883.		Added during the Year.		Excluded or transferred to other Heads		Area on 31st March 1884.	
	Acres.	Equivalent in Square Miles.	Acres.	Equivalent in Square Miles.	Acres.	Equivalent in Square Miles.	Acres.	Equivalent in Square Miles.
Chingleput	53,808·21	84·06	2,558·65	3·94	..	..	56,366·86	88·
North Arcot	173,480·	271·05	58,437·	91·04	..	..	231,917·	362·09
South Arcot	255,821·	399·69	2,117·	3·34	..	..	257,938·	403·03
Salem	28,188·79	44·03	1,344·10	2·11	..	..	29,532·89	46·14
Trichinopoly ..	4,176·	6·52	507·	·79	..	..	4,683·	7·31
Tanjore	..	..	11,092·	17·30	..	..	11,092·	17·30
Coimbatore .. { North ..	16,118·61	25·18	..	..	13,754·80	21·48	2,363·81	3·70
Coimbatore .. { South ..	104,878·72	163·87	13,565·66	21·13	..	..	118,444·38	185·
Madura	196,182·32	306·54	..	..	14,319·15	22·37	181,863·17	284·17
Tinnevelly	201,923·40	315·50	..	..	9,469·	14·81	192,454·40	300·69
Malabar. { Wynaad ..	186,161·24	290·87	..	..	..	..	186,161·24	290·87
Malabar. { Pálghat ..	19,386·	30·29	1,250·	1·94	..	..	20,636·	32·23
Malabar. { Nilambúr	20,000·	31·25	..	..	4,642·80	7·25	15,357·20	24·
South Canara ..	879·	1·43	..	..	57·	·14	822·	1·29
Total ..	1,261,003·29	1,970·28	90,871·41	141·59	42,242·75	66·05	1,309,631·95	2,045·82

14. In the report for last year, the area of reserved forest is entered as 1,261,003 acres or 1,970 square miles. The district returns for this year exhibit a total area of 1,309,631 acres, or 2,045 square miles, being an addition of 75 square miles; but it must be clearly understood that these figures represent the areas locally classed as reserves, and are subject to revision and modification as settlement under the Act progresses. Of the 2,045 square miles, however, areas estimated at 683 square miles have actually been constituted "Reserved Forests," under Section 25 of the Act during the year, and 261 square miles notified for settlement under Section 4. The 683 square miles of reserved forests proper are situated in the following Forest divisions :—

	Approximate Areas. SQ. MILES.
Chingleput	4·12
Trichinopoly	3·
North Coimbatore	162·
South Coimbatore	216·77
Madura	286·81
Tinnevelly	,,
Malabar—	4·75
Wynaad and Pálghat	6·
Nilambúr	

The 261 square miles notified for settlement are in North Arcot, besides which, settlement is in progress in other divisions with regard to forests, some of which are included in the total area claimed as reserved and some are not, being new selections or extensions, such as the Bolampatti, Tadágam Forests, and the whole of the Ánaimalai Forests not already constituted reserved forests in South Coimbatore, three blocks on the Pachaimalais in Trichinopoly and three in Madura.

As the area of these tracts has, as a rule, not even been estimated, I think it better to exclude them altogether, pending settlement, and restrict the entries to those shown last year, supplemented by the addition of former Jungle Conservancy reserves, &c., the areas of which are known with sufficient accuracy to justify their inclusion.

In Madura, the Zemindari reserves have been excluded altogether, pending further action under Chapter IV of the Act. In Tinnevelly, the area of Kudiraimalai Reserve (9,469 acres) has been excluded from the reserved area and shown under plantations. The Sholákarai Reserve and areas, known as the H, K and M Reserves were transferred from North to South Coimbatore, and further selections explain the increase in other districts.

15. This area—605,760 acres or 944 square miles—classed as "Reserved," does not represent a tithe of that under the departmental officers, the bulk of which consists in scattered forests, "jungles" and "topes" extending over many thousands of square miles. Our efforts are now directed to selecting out of this large extent the areas to be constituted reserved forests under the Act to form the permanent Forest estate, and those to be protected as reserved lands under Section 26 of the Madras Forest Act corresponding to "Protected Forest" in other provinces, and including, *pro tem.* at all events, the fuel and fodder reserves or "District Forests," pending settlement.

16. As remarked by the Inspector-General to the Government of India in his review of Forest Administration for the year 1882-83, "owing to the passing of the Madras Forest Act No. V of 1882, an entirely new classification must be made, so that the areas recorded as reserves will, for some years to come, undergo considerable changes."

17. The boundaries of the reserved forests are, as a rule, only demarcated in a preliminary manner, but sufficiently for ready identification. In the case of those now legally constituted under Section 25 of the Act, permanent demarcation is in progress in the Coimbatore and Madura Districts, to be followed by survey and the erection of forest boundary pillars. The best progress in this direction has been made in Madura, where Mr. Gass has demarcated three of his reserved forests placed under special fire-protection with an aggregate area (estimated) of 71 square miles and 32½ acres. The survey and mapping of these areas is in progress by the Revenue Survey Department, and operations in this direction will be steadily continued during the current and future years.

18. The description of forest boundary pillars adopted varies according to circumstances. Long slabs of stone firmly fixed in the ground and standing at least six feet above it, with consecutive numbers for each reserved forest, form excellent land-marks, but unless procurable on the spot, their price is prohibitive.

Cairns of rough stones with posts bearing consecutive numbers are the common type of forest boundary pillars in the Madura and Coimbatore hill forests, the cost varying from Rs. 1 to As. 8 per pillar. Longitudinal mounds of earth with trenches at intervals are also being tried as boundary marks, chiefly in the plains of the South Arcot District.

The details under this chapter for each division are as follows:—

19. *Chingleput.*—Three blocks in the Chingleput Taluk, *viz.*, Tirukalikundram, Uragadam and Madayattúr, with an estimated area 696;540 and 697 acres, respectively, have been proposed for reservation under Section 4 of the Forest Act. All the tracts have been preliminarily demarcated.

The Tandrai jungles in the Saidápet Taluk measuring 827 acres, and the Kámbákam in the Tiruvallúr Taluk with 1,363 acres, and forty others in the same taluk extending over 42,242 acres, have also been selected for notification under Section 4 of the Act; but the draft notifications had not been submitted at close of the official year.

20. *North Arcot.*—Of the reserves shown in last year's list, those situated on the ghâts and main ranges have been notified for Settlement under Section 4 of the Act; those on detached hills as well as areas of waste land in the plains are being dealt with as fuel and fodder reserves under Section 26 of the Act. The former are shown in dark-green color and the latter in pale green on the map appended to this report and their respective estimated areas are given separately in Return No. 1. Most of these reserves have been demarcated and some have also been surveyed. About 200 miles of boundary lines around reserves were cleared.

21. *South Arcot.*—None of the forests in this district were notified under Sections 4 or 25 of the Act. One hundred and twenty-seven trenches, 6′×2′×1′ each, at intervals of about one chain were cut along a distance of 5 miles to demarcate the eastern limit of Tagarai Forest in Kallakurchi Taluk, and 2,275 yards of the western boundary was also cleared of dense undergrowth to a width of four yards.

A distance of 5 miles of the northern boundary of Damarakádu Forests on North Arcot forest frontier attached to Tiruvannámalai Range, 10 miles of block lines of

Tenmalai Forest and 1 mile of the Parúr Forest boundary were cleared—the first named to a width of 7 yards, the second 3½ yards and the third 2 yards.

The Kalráyan boundary dispute has not yet been finally settled, the appeal to the District Court being still pending.

22. *Salem.*—As already noted, the special duty office was abolished, and Mr. Cherry's report on the selection of reserves embodied in Board's Proceedings, No. 532. of 16th February 1884, now awaits the orders of Government.

The total area of all the selections amounted to 866·21 square miles. Further selections extending over 39 square miles were also made by the District Forest Officer during the year in the low-lands of Krishnagiri, Salem and Tiruchengód Taluks. A notification under Section 25 of the Act was submitted for fifteen reserves with an aggregate area of 22·14 square miles.

The Sellandampalli boundary dispute in the Tirupatúr Taluk was settled in favor of Government, but the Mittádár has appealed to the District Court. Seven miles of an important boundary line between Kótapatti Valley and Ariyagoundannád, in the Uttankarai Taluk, demarcated in 1876, has been re-cleared to a width of six yards.

Twenty-five miles of the boundaries of the Munchi and Gulhatti sandalwood reserves (selected), which had been roughly demarcated, was also cleared.

A boundary line, which will make a better separation of the Javadis between Salem and North and South Arcot Districts, was decided upon in consultation with the District Forest Officers concerned; but the proposals have not yet been placed before the Board and Government.

23. *Trichinopoly.*—Four blocks on the Pachaimalais, viz., Sengattupatti, Mélúr and Manalodai, in the Musiri Taluk, and Solamatti in the Perambalúr Taluk, with a total estimated area of about 12,000 acres, were notified for settlement as reserves under Section 4 of the Act; but the settlement was not proceeded with, owing to transfer of officer appointed for the purpose.

The three so-called railway fuel reserves in the Manapárai Sub-division known as Panjantangai, Minnakaradu and Tainimalai were notified as reserved forests under Section 25 of the Act. A draft notification of the padugai (river banks) reserves and plantations was submitted by Mr. Gass, whilst Acting District Forest Officer, but the Collector has doubts as to the inclusion of certain areas. A preliminary demarcation and survey is in progress.

24. *Tanjore.*—There are no "Reserved Forests" in this district. Those shown in Return No. 1 are only locally recognized as "Fuel Reserves," and the areas entered are also approximate, as none of them have yet been surveyed.

25. *North Coimbatore.*— Three sandalwood blocks in the Kollegál Taluk, *viz.*, Jadatalaihalla, Udayárpálaiyam and Bailúr, with an area of 361·01, 209·63 and 1,186·39 acres, respectively, and one block named Germalam in the Satyamangalam Taluk covering an area of 519·78 acres, were notified as reserved forests under Section 25 of the Act, and they have all been demarcated, surveyed and mapped.

Fuél and fodder reserves were selected in the Erode Taluk, but no report or definite proposals have yet been received.

A preliminary demarcation was made round the Vellamundai block in the Satyamangalam Taluk.

26. *South Coimbatore.*—The two blocks of Tunakadavu and Púnáchi in the Polláchi Taluk, and the Amarávati valley block in the Udamalpet Taluk, comprising in all about 162 square miles, were notified as reserved forests under Section 25 of the Act.

The western boundary of the first-named block was cleared, demarcated and surveyed during the year to a distance of 5 miles from Pálakadavu to Mudiyantód and of 5½ miles from Kalyánapandal to Panimédkuttu; but the final settlement of this district boundary awaits ratification by the Cochin Sirkar.

The following were notified under Section 4 of the Act:—

(*a*) Three blocks in the Bolamputti Valley, Coimbatore Taluk.
(*b*) Tadágam Forest in the Coimbatore Taluk.
(*c*) The whole of the Anaimalais in the Polláchi and Udamalpet Taluks not already included in Nos. I, II and III Reserved Forests.

The Settlement Officer (Mr. Wolfe-Murray) commenced operations in the Bolamputti Valley in the early part of July, and the following is an account of the progress made as given in the District Forest Officer's report:—

Two hundred and thirty claims were preferred, of which 206 were admitted and 24 rejected. Out of these 230, 11 were to rights-of-way and to the use of water; 14 by the hill people to right of collecting the forest produce, such as honey, &c., and to patta rights over the hills; 4 to a right of grazing cattle and cutting wood for fuel and agricultural purposes; and 194 to patta rights over lands within the reserved limits; and 7 to miscellaneous rights such as mortgage and so forth.

The 194 claims preferred to patta rights over lands were for Acres 8,708, of which 182 claims for 7,020 acres were admitted, and 12 claims for 1,688 acres were rejected. Of the 7,020 acres of land the claims to which were admitted, 1,739 acres were acquired for the reserves as follows:—

One hundred and fifty-five acres by grant of fresh land in exchange outside the reserve limits, and 1,584 acres on payment of compensation of Rs. 7,927.

Four thousand two hundred and sixty-seven acres were excluded from the limits of the reserve as they were not required. Negotiations are still being carried on for the acquisition of about 125 acres of land in Block No. I, east of and adjoining Sholakarai Big Reserve, and it may be possible to acquire it by giving the little Sholakarai Reserve, south of the Railway, in exchange.

There are also 233 acres of land in the shrotriem village of Vellamalaipatnam 2nd Bit. It has not yet been decided whether the Forest Department will acquire this land or not, as, in addition to these 233 acres, the Shrotriemdár claims 802 acres adjoining. The Forest Settlement Officer rejected his claim, and the case will come on in appeal before the District Judge in the month of June.

Appeals have been filed against the decisions of the Forest Settlement Officer in two claims—one in the District Court by the Shrotriemdar of Vellamalaipatnam relating to the 802 acres of patta land included in Block No. II of the Bolampatti Valley; the other appeal was by one Shanmuga Véláyudam Pillai, of Sundakámuttúr, for the right of pasturage in Block No. I of the said valley, filed in the Collector's Court.

As regards the Ánaimalai Reserve (*c*), the District Forest Officer reports that nearly all the notices had been served and that several claims had already been preferred, but the Settlement Officer had not gone up to the Ánaimalais, season being unfavorable.

The Tadágam (*b*) Settlement had not commenced at close of the official year, the three months' notice required by the Act not having expired.

Selections are being made for fuel and fodder reserves in the Palladam Taluk, but no special report has yet been received.

27. *Madura.*—The reserves notified under Section 25 of the Act are shown in Return No. 1 with their approximate areas, &c. The two small plantations of the Forest Department on the Palni Hills and a number of small hills, plantations and topes of the late Jungle Conservancy Department, the areas of which were not known, were also notified under the above section. A fine shola on the Aggamalais, named Tambirankánal, estimated at 250 acres, and two small tracts of forests at foot of the Cumbum Valley named Mela Gúdalúr and Mutchakal, Periyakulam Taluk, were notified for settlement under Section 4 of the Act.

Two other blocks named "Velankombai" and "Parappár" were also selected for notification.

The following reserves were demarcated by means of special boundary pillars during the year:—

	Area.
Alagármalais	20 square miles.
Pámbár	8 do.
Vannattipárai	43 do.
The Kodaikánal plantations—	
Eucalyptus	14½ acres.
Acacia	18 do.

A statement of rights admitted in the demarcated reserves was recorded and published.

The boundary of the Kannivádi Zemindari was marked out in accordance with the decree of the District Court.

The hill known as Vagguttamalai, lying to the south-east of the Sirumalai Range, was notified as a fuel and fodder reserve. Another tract was also selected for the purpose and demarcated with boundary pillars.

28. *Tinnevelly.*—Certain forests on the Tinnevelly Ghâts in the taluks of Nángunéri, Ambásamudram, Tenkási, Sankaranainárkoil and Srívilliputur, with an aggregate estimated area of 286·81 square miles, were constituted reserved forests under Section 25 of the Act.

The demarcation of the unsettled portion of the Tinnevelly-Travancore boundary line to the north and south of Shenkóta, in the Tenkási Taluk, and at Mahéndragiri, in the Nángunéri Taluk, was completed and sent for the approval of the Travancore Government.

Two miles and 410 yards of the Tinnevelly-Travancore boundary in the Ambásamudram Taluk was re-cleared.

Fifty-one miles of boundary lines between Government and other private forests were also cleared to a width of six feet.

The boundary line between Government and Tiruvadutoraimatam, at the foot of the Vadagarai Hills, in the Nángunéri Taluk, was cleared under the immediate supervision of the Tahsildar and Revenue Inspector, but the Sub-Assistant Conservator of Forests, who inspected the line, has brought to notice certain deviations from the actual line, as decided by Mr. Broadfoot, the Acting Head Assistant Collector, acting under Act XXVIII of 1860.

29. *Malabar District—Wynaad and Pálghat Division.*—The Bégúr Teak Forest, in the Wynaad Taluk, was notified for settlement under Section 4 of the Act, and the Settlement Officer (Mr. Ross, Sub-Collector, Tellicherry) issued his proclamation under Section six (6) and fixed the first day of June for hearing claims. The Chenat Náir Forest, in the Pálghat Taluk, was also notified under Section 4, and the Settlement Officer (*i.e.*, the Head Assistant Collector) is reported to have enquired into and decided sixteen claims, of which fourteen referred principally to rights to water, &c., and very small blocks of lands of a few acres in extent, alleged to have been wrongly included in the survey of 1880-81: Of the other two claims, one was to a block of some four square miles in the Kalladikót section of the forests, and was admitted by the Settlement Officer. The late Mr. Ratnavélu Chetti would also appear to have inquired into the same claim, and decided in the claimant's favor.

The remaining one was for a tract of some five square miles in the Elivál section, and was rejected by the Settlement Officer, as it had already been decided in favor of Government by a Court of Law in 1862.

The two blocks of Pulamparai and Warlapadi covering the Wálayár Forests, in the Pálghat Taluk, were constituted "Reserved Forests" under Section 25 of the Act.

The demarcation and survey of one-half of the Kánot block, in Kóttayam Taluk, had been completed. The taluk boundary between Wynaad and Kóttayam was definitely settled, but it had neither been demarcated nor surveyed.

30. *Nilambúr Division.*—The Karimpoy Forest block, in the Ernád Taluk, with an area of six square miles, and the Amarampulam block (forests) in the same taluk

measuring ·09 square miles, and the teak plantations, ·64 square miles, were constituted reserved forests under Section 25 of the Act.

31. *South Canara.*—The area of the existing old reserves is shown in Return No. 1. None of them was legally declared "Reserved Forests" under the Act during the year. They have all been demarcated and enclosed by a ditch or small fence.

CHAPTER III.

Surveys, Working Schemes and Annual Plans of Operations.

32. The progress made in the preliminary demarcation and survey of forests was, on the whole, satisfactory. In South Arcot and Trichinopoly, the department carried on considerable survey operations, whilst in Madura, the Revenue Survey Department commenced the survey of the Lower Palnis—a work of great importance to this department. No working schemes were prepared, but plans of operations for the year, based on the budget estimates, were drawn up for each division and generally adhered to. Such annual outlines of operations will gradually become more detailed and reliable, and develop into working schemes extending over a series of years. The following is the summary of districtwár operations under this section :—

33. *South Arcot.*—6,574 acres of forests and 2,040 acres of plantations in the taluks of Tindivanam, Cuddalore, Vriddháchalam and Tiruvannámalai were surveyed departmentally. Seven hundred and eighty-seven stations were fixed and 3,824 linear yards of theodolite traverses and chain lines cleared to obtain bearings and measurements. The length of survey circuits aggregated 56½ miles. Eight blocks were surveyed and plotted to scale, and the aggregate area was computed to be 8,620 acres.

The following areas were surveyed :—

	Circuit.	Areas.
	MILES.	ACRES.
The Merkanam Plantation	13	690
The Fort St. David do.	1¼	18
Talankádu Plantation	2¼	32
Nochikádu do.	3	80
Periyakuppam do.	11	1,600
The Donaidurair do.	5	200
Tiruvannámalai do.	9	3,000
The Parúr Forests do.	12	3,000

A detailed survey of the Tiruvannámalai Hill was made for the purpose of obtaining two views (photographs) to illustrate the special report on Tiruvannámalai Hill chain. Two other views, of an excavation made in silt which had filled up a tank fed by a stream direct from the reserved portion of the hill, were also obtained, principally to show strata of detritus caused by action of the weather, fires and excessive fellings on the surface of the hill over a long course of years, to aid scientific observations on rainfall and the result of excessive unregulated clearing and grazing.

Copies of the views are attached to the district report.

Mr. Brasier, Assistant Conservator of Forests, while working in this district, appears to have discovered certain valuable data as to growth and yield of casuarina of different ages and planted at various distances along the coast. These results would appear to show that close planting gives the heaviest annual acre increment in the district. An instance is quoted of nine-year old trees in a closely-planted good plantation yielding 90 tons of dry wood per acre, 56 lb. being equal to one cubic foot. These data will be of great value in preparing the annual plans of operations and working schemes in future years.

34. *Trichinopoly.*—The Cauvery and Coleroon Plantations were surveyed departmentally, and survey is also in progress of all padugai lands that lie between Katalai and Elamanúr, together with a re-survey of the plantations, in order to afford reliable data as to yield per acre planted and the area available for extension and constitution of reserves.

35. *Madura.*—The demarcation and survey of Lower Palnis commenced on 1st November, but there was not much progress during the year. Up to the end of March, about 1,600 acres had been demarcated and about 700 actually surveyed.

Work commenced in Palatúr was continued in Komerakádu and Punnakadu.

36. *Malabar District—Wynaad and Pálghat Division.*—The demarcation and survey of one half the Kánot block had been completed. In Pálghat the survey and demarcation of the Wálayár Reserves were checked by a Surveyor, and a combined map of the reserves showing compartments, &c., is under preparation.

37. *South Canara.*—The Chembugudde and Kuttiyár Reserves were surveyed departmentally during the year and found to contain 78 and 25 acres, respectively.

CHAPTER IV.

Protection and Improvement.

Sections 1 and 2.—*Reserved and other Forests.*

38. Under present circumstances, it is impossible to deal separately with the reserved and other forests, as the establishments are not separately employed on one or other class, and operations have not sufficiently advanced to enable us to make a separation which could lay any claim to accuracy. I, therefore, deal with the two sections together in summarizing the operations of the year.

(*a*) *Establishment, Ranges and Beats.*

39. The accompanying table shows the distribution of the establishment—controlling, executive and protective—during the year 1884-85—over the eleven districts constituting the Southern Circle :—

District.	Controlling.	Executive.		Protective.		
	Deputy Conservators.	Assistant Conservators.	Sub-Assistant Conservators.	Rangers.	Foresters.	Forest Guards.
Chingleput	...	1	...	...	2	8
North Arcot	...	1	...	3	10	45
South Arcot	1	...	...	3	9	50
Salem	1	...	...	5	8	50
Trichinopoly	...	1	...	2	3	18
Tanjore	...	...	1	...	...	1
Coimbatore. { North	1	...	...	3	3	15
Coimbatore. { South	...	1	1	4	6	31
Madura	1	...	...	3	6	27
Tinnevelly	1	..	1	2	6	24
Malabar. { Wynaad and Pálghat ...	1	...	1	2	3	23
Malabar. { Nilambúr	...	1	...	1	2	6
South Canara	...	1	...	2	4	24
Forest School	...	...	...	1	1	...
Total ...	6	6	4	*31	63	322

* Includes one Supernumerary, 5th Grade, *vice* one Ranger, 4th Grade, on duty at the Forest School.

40. It is to be understood that the numbers are not permanently fixed. There will be changes as reserved forests are settled and constituted, and we concentrate our special establishment on them, restricting ourselves, with regard to the unreserved forests, to general supervision and inspection.

At present we are merely initiating and organizing regular measures of conservancy, protection, and improvement, and it is not possible to record anything definite regarding the strength and distribution of the establishments.

41. Each forest division constituting a District Forest Officer's charge is divided into ranges and sub-ranges, which in turn are divided into "beats." Rangers or Senior Foresters hold charge of the ranges, Junior Foresters of sub-ranges, and Forest Guards of beats. The "guards" patrol the forests within their beats, prevent damages, and report any breaches of the law to their immediate superiors. They are assisted by watchmen and fire-patrols on the temporary establishments. Tánnádárs are also appointed to check the removal of timber, &c., from the forests and recover the permits. Their numbers vary according to circumstances.

42. The arrangement of ranges and sub-ranges in some districts during the year is shown in the following details as a sample, complete information from all divisions not having been furnished by District Forest Officers. It is hoped that it will be available next year with the approximate areas of the respective charges.

43. *North Arcot District.*—The district is divided into three ranges, *viz* :—

(1) Vellore (comprising Vellore and Pólúr Taluks).
(2) Palmanér (comprising Palmanér and Gudiyátam Taluks).
(3) Chandragiri (comprising Chandragiri and Chittoor Taluks).

Each of the above ranges is in charge of a ranger. The first and second ranges have each thirteen forest guards while the third has nineteen.

The following places constitute sub-ranges with a forester in charge of each :—

Chittoor.	Pólúr.
Gudiyátam.	Wálajápet.
Veppankuppam.	Wandiwash.
Temkumbadi.	

44. *South Arcot District.*—This is divided into six ranges, *viz.* :—

No. 1 or the Northern Range (comprising Tiruvannámalai, a small part of Kallakurchi, and a small part of the Javadi Hills in Tirupatúr Taluk, Salem District).

No. 2 or the Gingee Range (comprising Tindivanam and Gingee Sub-division).

No. 3 or the North-eastern Range (comprising Tindivanam and Villupuram Taluks).

No. 4 or the South-eastern Range (comprising Cuddalore, Chidambaram and Vriddháchalam Taluks).

No. 5 or the Central Range (comprising Tirukoilúr Taluk).

No. 6 or the South-western Range (comprising Kallakurchi Taluk).

No. 1 Range is under the charge of a ranger, No. 2 under a forester, No. 3 under a ranger assisted by two foresters, No. 4 under two rangers assisted by two foresters, No. 5 under a forester, and No. 6 under two foresters. The sanctioned number of forest guards is fifty, but the District Forest Officer has not given their distribution amongst the ranges.

45. *Salem District.*—This is divided into nine ranges conterminous with each taluk, *viz.* :—

(1) Salem Range (with Omalúr as sub-range).
(2) Atúr Range.
(3) Námakal Range.
(4) Tiruchengód Range.
(5) Úttankarai Range.
(6) Tirupatúr Range.
(7) Krishnagiri Range.
(8) Dharmapuri Range (with Pennagaram as sub-range).
(9) Hosúr (with Denkanikóta as sub-range.)

Of the above the most important, *viz.*, (1), (2), (6) and (9), are under the charge of rangers, the rest under the charge of foresters. There are fifty forest guards distributed amongst the nine ranges.

46. *Trichinopoly District.*—This is divided into five ranges, *viz* :—

(1) Trichinopoly.
(2) Kulitalai.
(3) Musiri.
(4) Perambalúr.
(5) Udayárpálaiyam.

Nos. (2) and (5) are in charge of rangers assisted by five and four forest guards, respectively, and (1), (3) and (4) in charge of foresters with four, three and two guards, respectively.

47. *South Coimbatore Division.*—There are eight ranges, *viz.* :—

No. I—Ánaimalai Teak Forest (with the leased forest as a sub-range).
No. II—Punáchi.
No. III—Polláchi Taluk.
No. IV—Udamalpet.
No. V—Palladam.
No. VI—Mettupaláiyam Forests.
No. VII.—Bolampetti and Tadágam Forests.
No. VIII.—Sholakarai Forests.

Nos. I, IV, VI and VII are in charge of rangers and the others in charge of foresters.

The sanctioned number of forest guards was twenty-eight.

48. *Madura District.*—This district is divided into three charges :—

No. I Range (comprising Tirumangalam Taluk, Gundamanáyakanúr Estate and Cumbum Valley).
No. II Range (comprising Palni Taluk with Palni Hills, Periyakulam Taluk *minus* Cumbum Valley).
No. III Range (comprising Madura, Melúr and Dindigul Taluks).

Nos. I and II have each a ranger in charge, while III has a forester. There are twenty-seven forest guards.

(*b*) *General Protection and Breaches of Forest Laws.*

49. The general protection of the forests appears to have been fairly well looked after during the year. According to Statement No. 5 appended, the number of prosecutions during the year, including those that were pending, amounted to 588, of which 449 resulted in conviction and 114 in acquittal. There were twenty-five cases under trial at the close of the year. As will be seen from the following summary, the whole of the offences were disposed of under the Indian Penal Code, the Forest Rules under the Act not having been promulgated till the close of the year.

50. *Chingleput.*—Of the three prosecutions for theft of wood under the Indian Penal Code, two resulted in conviction and one in acquittal. The number of persons convicted was two.

51. *North Arcot.*—There were sixteen cases of unauthorized felling, one of injury by fire, and two of cheating. In twelve of these, twenty-three persons were convicted, and in seven, forty-five acquitted.

A case of assault against two persons under Section 352 of the Indian Penal Code was also acquitted.

52. *South Arcot.*—Five cases were pending last year and twenty-seven cases (fourteen for unauthorized felling and thirteen for other offences) were added during the year. Of these twenty resulted in conviction of fifty-nine, and five in the acquittal of twenty-one persons, and seven were pending. Judgments were appealed against in two cases, of which one was confirmed and the other reversed. Besides these, eighteen petty cases were tried by Village Magistrates and 11,258 head of cattle were impounded for trespassing into forest tracts in which grazing is specially prohibited.

53. *Salem.*—Six cases were pending last year to which the year under report added eighty-two, *i.e.*, twenty-nine for injury to forests by fire, three for unauthorized felling, one for grazing without permission, and forty-nine for other offences. Of these, seventy-eight cases were disposed of during the year; fifty-eight resulted in the conviction of 250 presons, and twenty in the acquittal of ninety-four persons; ten cases were pending at the close of the year.

54. *Trichinopoly.*—One case was pending last year and there were fourteen new cases (thirteen for unauthorized felling and one for grazing without permission); thirteen cases were disposed of during the year, of which seven ended in the conviction of thirty-three persons, and six in the acquittal of seventeen persons; two cases were pending.

55. *Tanjore.*—The District Forest Officer reports that there were no prosecutions for breaches of the forest laws.

56 *Coimbatore—Northern Division.*—There were forty cases during the year, of which thirty-five resulted in the conviction of seventy-nine persons and five in the acquittal of thirty-five persons.

57. *Southern Division.*—Of the fifty-three cases tried during the year (including one pending last year) forty-six cases ended in the conviction of 171 persons, and 25 in the acquittal of fifty-three persons.

58. *Madura.*—There were fifty-one cases of unauthorized felling three of grazing without permission, and nine of other offences. Of these, fifty-one cases resulted in the conviction and twelve in the acquittal, of 183, and ninety-two persons, respectively.

59. *Tinnevelly.*—There were fifty prosecutions, including two pending from last year; of these, forty-five resulted in the conviction of 187 persons and 22 were acquitted in the remaining five. It is, however, believed that a greater number were disposed of, the result of which the Taluk Magistrates have not duly reported.

60. *Malabar*— *Wynaad and Palghat Division.*—There were three cases of unauthorized felling during the year and one was pending. Of these, two cases resulted in the conviction of seven persons and one in the acquittal of three, leaving one pending.

61. *Nilambúr Division.*—In the case of mischief by fire pending in 1882-83, the defendant was acquitted. Of the two cases during the year, one of clandestine felling is now pending and the other of theft of forest produce was dismissed.

62. *South Canara.*—Two cases were pending last year to which 215 were added, *viz.*, 18 for unauthorized felling of wood, 195 injury to forests by fire including 191 kumari cases in the Kásaragód Taluk, and two other offences. One hundred and seventy-one cases ended in the conviction of 190 persons, and 42 in the acquittal of 65 persons.

(c) Forest Fires and Fire Protection.

63. Statement No. 4 gives the details of Forest tracts protected from fire of which the following is an abstract:—

Districts.	Up to 15th June 1883.		During 1883-84.				Total cost up to the end of 1883-84.	Year in which protection commenced.	Remarks.
	Area actually proteced.	Total cost.	Area attempted to be protected.	Failures.	Actually protected.	Amount expended.			
	ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.		
Chingleput	..	..	..	..	..	..	..	..	
North Arcot	173,525	4,701	233,470	500	232,970	1,144	5,845	1879	
South Arcot	17,510	896	63,910	341	63,569	144	1,040	1877	
Salem	12,261·42	4,065	7,000	300	6,700	383	4,448	1866-67	In his statement for 1883-84, the District Forest Officer shows the figures as 2,971 instead of 4,065. The decrease in area attempted is not explained, but there was a mistake in the figures for last year.
Trichinopoly	..	..	..	..	..	..	..	..	
Tanjore	..	..	..	..	..	..	..	..	
Coimbatore .. { North	..	397	..	..	..	..	..	1880	Sholakarai Reserve was transferred from North to South Coimbatore; hence the absence of any entry against North Coimbatore. The expenditure, Rs. 397, shown in last year's return under North Coimbatore has been added to the total under South Coimbatore.
Coimbatore .. { South	4,821	274	8,327	200	8,127	653	1,324		
Madura	3,000	2,060	17,120	204	16,916	789	2,942	1882-83	The District Forest Officer enters Rs. 2,153 under total cost up to 15th June 1883, instead of Rs. 2,060 exhibited last year; the difference, Rs. 93, is therefore added to the whole cost.
Tinnevelly	..	..	..	..	..	..	..	..	
Malabar .. { Wynaad	4,480	13	4,480	2,560	1,920	142	155	1882-83	
Malabar .. { Palghat	3,017	2,338	3,017	200	2,817	372	2,710	1873-74	
Malabar .. { Nilambúr	..	..	1,799·38	..	1,799·38	..	45	1883-84	
South Canara	..	..	435	..	435	*89	89	1882-83	* Includes Rs. 38 spent last year.
Total ..	218,614·42	14,744	339,558·38	4,305	335,253·38	3,716	18,598		

64. There is a marked improvement in the extent and cost of fire-protection. During the year 335,253 acres or 524 square miles of forests were actually protected at a cost of Rs. 3,716, which gives a little over 2 pies per acre, compared with 218,614 acres or 341 square miles at a cost of Rs. 4,763, or 4 pies per acre in 1882-83. The percentage of failure to area attempted in 1883-84 is only 1·26, but there have been some petty fires in the protected areas since the Divisional reports were submitted, which will be exhibited in next year's returns. The result is very satisfactory and great credit is due to the District officers. This is especially the case with regard to North Arcot where Mr. Sheffield appears to have protected 233,000 acres at a cost of Rs. 1,141, which is almost incredible. The percentage of failure is highest in the Wynaad where 2,560 acres were burnt out of a total of 4,480 acres attempted.

65. *Chingleput.*—A fire and boundary line 5½ miles in length and 18 yards in breadth was cleared on the western and southern side of Kámbákam Hill at a cost of Rs. 707, but the area was not actually brought under special fire-protection during the year.

66. *North Arcot.*—The reserves under fire-protection are stated by the District Forest Officer to remain the same as last year, but it will be seen from the detailed statement that their number and extent have been largely increased. Mr. Sheffield will be called upon to explain more clearly what he understands by fire-protection and what expenditure he includes under that head in order that there may be no doubts with regard to this important branch of forest work during the current official year. Five hundred acres are entered under "failures" in the district statement, the causes of which are not explained.

67. *South Arcot.*—About 100 square miles in seven forest blocks of the Tiruvannámalai and Kallakurchi Taluks are under special fire-protection. Of these, about 431 acres were burnt during the fire season of the year by accidents while fire-tracing and by other causes not explained by the District Forest Officer. No incendiaries appear to have been detected or prosecuted, but none of the forests are "reserved" in the strict sense of the word which renders conviction difficult to obtain. In the beginning of the dry season of 1884, 14,500 acres in three forests were specially fire-traced for Rs. 100. The grass and undergrowth was unusually green and the cost of fire-tracing was consequently less than in the previous season. The plan of Kavattimalai block appended to this report illustrates the special protection of forests in this district by fire-lines.

68. *Salem.*—A good deal of fire-tracing is reported to have been done in the old Railway fuel reserves of Vadugampatti, Marur, Mallapuram, Kariyappa Kombai, Ammanéri and Karuvadupárai; lines from 15 to 30 feet broad were cleared for 29 miles at an average cost of Rs. 28 per mile.

The Harúr, Uttankarai and Singárapet Reserves in the Uttankarai Range, Pudur and Yelagiri Teak Reserve in the Tirupatúr Range, Barúr and Tagarapalli Reserves in the Krishtnagiri Range were also fire-traced.

Owing to stringent measures adopted during the year, forest fires generally were less prevalent than usual.

69. *Trichinopoly and Tunjore.*—There were no fire-tracing operations in these districts.

70. *Coimbatore—Northern Division.*—A small fire got into the Jadatalaihalla block; but the other reserves were kept clear from fire by mere watching and warning villagers, &c.

71. *Southern Division.*—The areas under special fire-protection are shown in Return No. 4 and estimated at 8,177 acres.

The large Sholakarai Reserve (1,142 acres) was carefully fire-traced during the year at a cost of Rs. 127 and fire-patrols were employed to watch the fire-lines and keep them clean, but notwithstanding the care bestowed by them, a fire broke out in the north-western corner and passed over 50 acres. It was, however, put down before any great damage was done. On a careful inspection by the District Forest Officer, it was found that the fire had originated from a spot inside the fire-lines and must have doubtless been the work of an incendiary, who was, however, not detected.

The little Sholakarai Reserve (150 acres) was also fire-traced by means of exterior lines at a small cost; but as the lines along the Railway were not well burnt, a spark from a passing engine got into the grass which resulted in the fire passing over the whole area It is stated that only the grass and other undergrowth were burnt, and that but little damage was done to the trees. The fire-tracing operations in the Palár, Punáchi and selected portions of No. I Reserves were also carefully carried out and proved successful. There were not many fires in the unprotected areas as compared with the previous year. This fact would seem to have been specially noticeable on the Bolampatti hills now under settlement as Reserved Forests.

72. *Madura.*—The principal tracts protected from fire are shown in Return No. 4.

The outer slopes of Alagármalai Reserve having also been brought under protection during the year, the area has increased to 12,000 acres. The average cost per acre during the year did not however exceed 10 pies, which is exceedingly moderate as compared with the cost of the preceding year.

A fire broke out accidently on a grassy slope of this reserve when one of the fire-lines was being burnt and passed over fifty acres, doing no great damage. The protection was otherwise successful.

A large fire from Shembaganúr on the Palni hills crossed a fire-line of the Pámbár Reserve and burnt down about 200 acres of grass and three or four acres of forest land on a rocky precipitous slope in the reserve, but there was fortunately no serious damage. The servants of an adjoining proprietor were charged before the Sub-Magistrate of Kodaikánal with neglecting to take reasonable precaution and kindling fire so as to endanger the forests, notwithstanding due warning under Section 21 (*b*). The case was not concluded when the District Forest Officer submitted his report, but has since resulted in acquittal. Protection may on the whole be considered a success and the arrangements reflect much credit on the District Forest Officer and his subordinates.

73. *Tinnevelly.*—No steps were taken towards the protection of forests from fire in this district, although they were repeatedly urged on the District Forest Officer (Mr. Hayne) by the Collector and myself.

74. *Malabar District—Wynaad and Pálghat Division.*—The Bégúr and Kurchiyat Forests in Wynaad and the Wálayár railway Fuel Reserves in Pálghat were fire-protected.

A large forest fire from the Mysore direction, helped by a strong easterly wind, crossed the fire-trace and entered the Bégúr Reserves, burning 2,560 acres.

There are great difficulties in the way of ensuring fire-protection in the Wynaad as the fire season is very feverish and wild elephants render patrolling dangerous. I am not, however, satisfied with the measures taken, as isolation clearly was not secured, and the Sub-Assistant Conservator in immediate charge does not appear to have realized the importance of the work. The District Forest Officer's report and statement do not agree, as in the former he writes of the Kurchiyat block of 8,000 acres being successfully protected at a cost of three pies per acre. This finds no place in his tabular statement.

The protection of the Wálayár Reserves cost Annas 2-1 per acre, but was not effective, several fires having broken out within the protected areas. Two Mulcers were arrested "*flagrante delicto.*" Both men escaped, but one of them was subsequently taken into custody by the police, put on trial and sentenced to three months' imprisonment under Section 21 of the Forest Act in April last. Mr. Morgan and his establishment cannot be congratulated on the results of these fire-protection during the year, and must be much more careful and attentive to details, if they are to obtain success in the future. I have pointed this out to them.

75. *Nilambúr Division.*—The Nellikutta Forests in which logs of timber had been out lying in several places, were specially fire-traced and fire was entirely kept out.

76. *South Canara.*—About 115 acres of the forest tract of Parapa were successfully protected from fire.

The Pillárkán Reserve was also protected.

(*d*) *Grazing.*

77. With exception of the districts noted below, no information has been furnished concerning the revenue from this source and measures adopted for the protection and improvement of grazing tracts. The matter will receive special attention next year.

78. *North Arcot.*—The question of levying fees on cattle grazed in the Ghât Forests was considered, but nothing had been definitely settled during the year.

79. *South Arcot.*—A small amount was collected on cattle grazing within the Tiruvannámalai Hill Reserves. The District Forest Officer questions the necessity for villagers seeking pasture for their cattle in the Government Forests at all.

80. *Tinnevelly.*—The grazing of cattle in the Ghât Forests and in the Reserved Forests or lands in the plains has been strictly prohibited with a view to secure better protection, but I doubt if the cattle are really excluded, and do not consider it necessary to exclude them entirely from the large areas not under special protection.

Under proper arrangements, we should secure a good revenue from grazing fees which were formerly willingly paid by the people. I shall confer with the Collector on the subject during the course of the year.

(*e*) *Natural Reproduction.*

81. The details in the district reports under this head are very meagre; in fact, the question is barely alluded to, except in North Arcot where a marked improvement in growth, &c., in most of the reserves (Natural Forests), doubtless due to exclusion of cattle and fire, is reported. The Napier Reserve in the Chandragiri Taluk and the Carnatic Ghur Reserve in the Pólúr Taluk are quoted as particular instances. In the former Yellama (*Anogeissus latifolia*) and Red-wood (*Pterocarpus santalinus*) saplings and seedlings are coming on plentifully, besides other good timber tree seedlings, such as Yeppi (*Hardwickia binata*), Pala (*Mimusops Elengi*), Karakái (*Terminalia Chebula*), Jitaji (*Dalbergia latifolia*), Billu (*Chloroxylon Swietenia*), &c. In the latter, the growth of the seedlings on old kumari clearings is very promising except in the rocky parts.

The District Forest Officers will be requested to pay more attention to this important branch of forestry in future.

(*f*) *Artificial Reproduction.*

82. The details of operation under this section will be found in Appendix No. 2, of which the following is an abstract:—

District.	On the 1st April 1883.						Added or excluded during 1883-84.		
	Area.			Cost.			Area.		
	Regular Plantations.	Cultural Operations.	Total.	Regular Plantations.	Cultural Operations.	Total.	Regular Plantations.	Cultural Operations.	Total.
1	2	3	4	5	6	7	8	9	10
	ACS.	ACS.	ACS.	RS.	RS.	RS.	ACS.	ACS.	ACS.
Chingleput	801·44	..	801·44	40,075	..	40,075	— 254·92	..	— 254·92
North Arcot	1,558·00	725·00	2,283·00	86,887	1,450	88,337	— 5·	..	— 5·
South Arcot	5,600·	410·	6,010·	68,945	8,712	77,657	— 4,864·	..	— 4,864·
Salem	5·00	2,500·00	2,505·00	2,644	15,137	17,781	— 5·	..	— 5·
Trichinopoly	2,183·25	A. 29·75 M. 100·50	2,213·00 100·50	57,534	26,275	83,809	+ 144·75	..	+ 144·75
Tanjore	11,254·50	..	11,254·50	7,887	..	7,887	— 10,550·50	..	— 10,550·50
Coimbatore .. North	177·00	71·26	248·26	46,418	24,864	71,282	..	..	..
Coimbatore .. South	19·50	105·56	125·06	4,402	8,362	12,764	..	..	..
Madura	224·14	219·87	444·01	12,952	..	12,952	— 137·50	8·75	— 128·75
Tinnevelly	10,081·70	3,645·88	13,727·58	1,251	2,245	3,496	+ 9,469·	..	+ 9,469·
Malabar—									
Wynaad	..	2·50	2·50	..	274	274	41·50	..	41·50
Pálghat	..	..	..	..	..	..			
Nilambúr	3,435·98	..	3,435·98	4,31,892	..	4,31,892	..	..	..
South Canara	687·00	..	687·00	13,687	..	13,687	— 687·	..	— 687·
Total ..	36,027·51	7,709·82 M. 100·50	43,737·33 100·50	7,74,574	87,319	8,61,893	— 6,848·67	8·75	— 6,839·92

Note.—The area and cost brought forward by District Forest Officers differed considerably. Their figures on the 31st March 1884 were, therefore, retained and the rest altered. Columns 10 and 13 do not, therefore, give the actual areas added and excluded or the amount expended during the year under report.

District.	Added or excluded during 1883-84—(*Contd.*). Cost. Regular Plantations.	Cultural Operations.	Total.	On the 31st March 1884. Area. Regular Plantations.	Cultural Operations.	Total.	Cost. Regular Plantations.	Cultural Operations.	Total.
	11	12	13	14	15	16	17	18	19
	Rs.	Rs.	Rs.	Acs.	Acs.	Acs.	Rs.	Rs.	Rs.
Chingleput	14,614	..	14,614	546·52	..	546·52	25,460	..	25,460
North Arcot	4,001	..	4,001	1,553·	..	1,553·	90,888	..	90,888
South Arcot	4,579	..	4,579	736·	..	736·	73,523	..	73,523
Salem	..	..	..	..	..	..	..	..	..
Trichinopoly	3,245	1,284	4,529	2,328·	A. 29·75 M. 100·50	A 2,357·75 M. 100·50	60,779	27,559	88,338
Tanjore	— 7,886	..	— 7,886	704·	824·	1,528·	..	..	..
Coimbatore .. { North	824	..	824	177·	..	177·	47,242	..	47,242
Coimbatore .. { South	..	..	..	19·50	..	19·50	4,402	..	4,402
Madura	— 8,910	..	— 8,910	86·64	271·11	357·75	4,042	11,508	15,550
Tinnevelly	1,049	1,413	2,462	19,550·70	3,602·79	23,153·49	2,300	3,670	5,970
Malabar—									
Wynaad	2,429	..	2,429	41·50	..	41·50	2,429	..	2,429
Pálghat	..	..	..						
Nilambúr	6,45,230	..	6,45,230	3,435·98	..	3,435·98	10,77,122	..	10,77,122
South Canara	..	..	..	..	..	..	..	..	..
Total ..	6,59,175	2,697	6,61,872	29,178·84	4,727·65 M. 100·50	33,906·49 M. 100·50	13,88,187	42,737	14,30,924

Note.—The area and cost brought forward by District Forest Officers differed considerably. Their figures on the 31st March 1884 were, therefore, retained and the rest altered. Columns 10 and 13 do not, therefore, give the actual areas added and excluded or the amount expended during the year under report.

83. The area under regular plantation at the close of last year was shown as 36,02751 acres. The year under report shows a difference of 6,848·67 acres, due chiefly to an error in the area exhibited under Tanjore last year, which should be a good deal less than what was entered, and to the District Forest Officer, South Arcot, having now excluded the unplanted area, 4,864 acres, from the list of the current year, in which he is correct. The divisions noted below show also some fluctuations for reasons noted opposite to them :—

Chingleput — 254·92.—Two plantations, about 37 acres, near Kattivákam, were sold and some topes transferred to South Indian Railway, the areas of which are not stated.

North Arcot — 5·—Not accounted for.

South Arcot — 4,864·—Last year the area included all land, whether planted or not; the current year's figures represent the planted area only.

Salem — 5·—There are no plantations; the sandalwood plantation of five acres at Kanavinagasamudram has been abandoned or included in an adjoining forest reserve selection.

Trichinopoly + 144·75.—Due to actual survey.

Tanjore — 10,550·50.—The District Forest Officer states that during last year the district is credited with no less than 11,254·50 acres of regular plantation. From the returns he finds that, taking plantations, topes and other jungles into account, the total area amounts to 10,788 acres, of which there are about 704 acres of regular plantation, 824 cultural operations and 9,260 natural jungles.

Madura — 137·50.—Of this, 104 acres are stated to have been included in the Vannattiparai No. I Reserve; the remainder of the discrepancy is not accounted for.

Tinnevelly + 9,469.—The increase appears in Kudiraimalai Téri in Tenkarai Taluk; last year the area appeared under "Reserve" and now transferred to "Plantation" as being the correct head.

Malabar, Wynaad and Pálghat + 41·50.—This was not shown in last year's statement.

South Canara — 687.—In paragraph 28 of the report it is stated that, owing to some mistake, the old jungle conservancy reserves were entered last year twice, *i.e.*, under the head of "Reserves" and under "Plantations"; they are now excluded from the latter.

84. There has been no extension of the areas actually planted, but estimates for considerable extensions during the current and future years have been sanctioned and funds allotted. A separate statement of topes is submitted in accordance with the orders of Government, of which the following is an abstract :—

District.	Extent.	Cost during the Year.	Cost to end of the Year.	Remarks.
	Acs.	Rs.	Rs.	
Chingleput	149·30	871	13,577	
North Arcot	1,106·57	...	...	
South Arcot	393·51	...	8,712	
Salem	2,555·5	9,430	1,78,997	
Trichinopoly	...	...	...	
Tanjore	153·	572	...	
Coimbatore {North ...	11,309·60	...	26,949	
Coimbatore {South ...	100·79	...	5,197	
Madura	228·43	385	12,483	Area and cost are included in the plantation statement and, therefore, omitted here.
Tinnevelly	...	...	...	
Malabar {Wynaad and Pálghat ...	3·	...	...	
Malabar {Nilambúr	172·	995	16,986	
South Canara	...	...	...	
Total ...	16,171·70	12,253	2,62,901	

85. It has been extremely difficult to compile, and I have even now doubts as to its accuracy. Until the amalgamation of the jungle conservancy fund with forests

the topes were under the charge of the Revenue Department, and no regular lists were kept. The only information available on paper was the jungle conservancy budget note, but in that only those topes, &c., were entered on which establishments were employed or in which operations were proposed. Our officers have now to find out what are Government topes and what are not, which is no easy task even with the assistance of the taluk and village Revenue authorities. The area under topes will gradually be merged in that of regular plantations to which it rightly belongs; but we must first ascertain more accurately the extent actually planted and condition of the trees. Instructions to this effect will be issued to all District Forest Officers. It should be explained that the distinction hitherto obtaining between regular plantations and topes is that the former were formed for the growth and supply of timber, firewood, &c., whilst the latter were more generally composed of fruit trees, such as tamarind, ilupai, jack, &c., which it was never intended to fell but to retain for the value of their fruit, and as shade for travellers, camping grounds, &c.

86. It is observed that the District Forest Officer, Salem, enters 2,555·5 acres under topes, whilst the same area,—73, is shown under plantation. The area has been retained under topes and excluded from plantations for the present.

87. The area under cultural operations, as given last year, amounts to 7,709·82 acres and 100·50 running miles of channel banks, but the returns of the year under report show only 4,727·65 acres and 160·50 miles, being a decrease of 2,982·17 acres. The cause of this is not clearly accounted for by District Forest Officers, but it is presumed that, owing to some misapprehension, the majority of them have shown under topes the area exhibited by them last year as appertaining to cultural operations. We must hope for fuller and clearer information next year. A circular letter explaining what we required was issued to all District Forest Officers, but the result is not encouraging.

88. The net result, so far as can be gathered from the district reports, is as follows:—Areas classed as regular plantations, 29,178·84 acres; topes, 16,171·70; cultural operations, 4,727·65; and 100·50 running miles of channel banks. If the areas under topes are added to that under regular plantations, we have a total of Acres 45,350 planted, and 4,727 acres under cultural operations, which may be accepted subject to correction year by year as the classification is better understood.

89. *Chingleput.*—Of the two casuarina plantations near Kattivákam formed by the late jungle conservancy department, the larger, Kilinjal Kuppam, 14·43 acres, containing 2,343 trees, 8 years old, was sold for Rs. 1,805, while the other, Talam Kuppam, 25 acres, with 856 trees, similarly aged, realised only Rs. 302, the growth being rather poor. Meyúr plantation supplied 120 telegraph posts, at Rs. 1-9-0 each, including carriage. Nine thousand casuarina and 2,000 mango plants were put out during the year. The topes at the Railway stations were handed over to the Railway authorities, and others, numbering six, to the care of village officers. The principal operations in respect to the remainder were confined to maintaining the present stock and fencing.

90. *North Arcot.*—All the plantations have been notified under the Act for settlement as reserved forests and included in the list of reserves. Their area, *viz*, 1,553 acres, is the same as in 1882-83 and cost Rs. 4,076 in the shape of maintenance against a revenue from sales of Rs. 2,616. The whole of the plantations are not expected to pay, some of them partaking more of the nature of topes than regular plantations for the supply of timber or firewood.

About $2\frac{1}{2}$ lakhs of casuarina were planted out during the year, of which half-a-lakh died. Other kinds, such as Kát vágai (*Albizzia Lebbek*), Korakapilli (*Inga dulcis*), and Babúl (*Acacia arabica*), were also planted and one lakh and-a-half of palmyra seeds sown.

The number of topes in the district is given as 83, but their areas and cost are not given. There were considerable cultural operations, in which the Collector takes special interest, but the district report is silent on the subject.

91. *South Arcot.*—The area set apart for plantations is 5,600 acres, of which 736 acres, in 12 blocks, have been planted up at the close of the year. It is stated that the yield from plantations is annually increasing. The total receipts under this head

is given as Rs. 8,112-15-11 against an expenditure of Rs. 4,579-5-10. The principal operations were forming and stocking the nurseries preparatory to extending the planted area during the current year.

92. *Salem.*—There are no regular plantations in the district, those that exist being classed as topes and the experimental sandalwood plantation having been transferred to reserves. The area covered by topes in all the taluks is 2,555 acres. One hundred and ten watchers were employed to supervise 102 topes and the rest are left in charge of village officers. The number of watchers has recently been greatly reduced. There were no cultural operations of importance.

93. *Trichinopoly.*—There were 16 plantations, occupying an area of 2,328 acres, of which $144\frac{3}{4}$ were added during the year by re-survey. The cost of formation and upkeep is given as Rs. 60,779 up to the close of the year. Cultural operations were carried on in 16 places over an area of $29\frac{3}{4}$ acres and $100\frac{1}{2}$ miles of channel banks. The operations under this head appear to be extensive. The chief seeds sown and transplanted were *Inga dulcis*, Divi-divi, Casuarina, Vágai, Babúl and Nim. The District Forest Officer's report is very confused and there are numerous palpable inaccuracies.

94. *Tanjore.*—There are about 704 acres of plantation, 153 acres of topes and 824 acres of cultural operations in this division. During the year under review very little, in the way of planting, was done. About 6,000 casuarina seedlings were put out in three villages at a cost of Rs. 32, of which about 25 per cent. perished. Felling operations were confined to the plantations in which the trees were too close together. There were such thinnings in five plantations to the extent of 1,004 tons, all of which, except 52 tons, were sold. The maintenance of all the plantations cost Rs. 3,480. Considerable reductions in the establishment were effected.

The topes in Patukóta and Mannárgudi Taluks appear to have been leased out at an annual rental of about Rs. 8 per tope.

95. *North Coimbatore.*—The sandalwood plantation at Bailúr is more or less a failure and I consider that better results can be secured by natural reproduction, aided by cultural operation.

The number of topes in the division is entered as 155 with an area of 11,309 acres.

96. *South Coimbatore.*—The three small teak plantations on the Ánaimalais are in a promising condition and they have been cleared and fire-protected.

97. *Madura.*—The area under regular plantation and cultural operation is respectively 86·64 and 271·11 acres, costing Rs. 4,042 and 11,508 up to the close of the year. The teak plantation of Vannattipárai is stationary in its growth. The *Eucalyptus* plantation at Kodaikánal is looking well and the coppicing has been very successful. A small nursery of *Eucalyptus globulus* was formed for future operations. Some *Eucalyptus eugenioides* plants were transplanted in the nursery and cut back and are doing very well. The Velankombai Teak Plantation, consisting of 4,347 trees, is in good condition. In the Parappar Plantation on the Palni hills a nursery was formed for *Eucalyptus globulus*, *Acacia pycnantha*, *Callitris Rhomboidea* and *Cryptomeria japonica*.

98. *Tinnevelly.*—The area of regular plantations is entered as 19,550·70 acres and that of cultural operations 3,602·79, but the classification is, I fear, inaccurate and misleading. It will be checked and revised next year. An area of 43·59 acres in the Tinnevelly Taluk, shown under cultural operations last year, was transferred to the Local Fund Department as it consisted of avenues. There was also a small relinquishment at Kulasekharapatnam. Cocoanuts were imported from Colombo and put down in the nursery garden, Tinnevelly Taluk. Nurseries of other species were also formed and the seedlings sold at different rates. All the Foresters have been instructed to collect the seeds of valuable and fruit-bearing trees which germinate readily and thrive without artificial watering.

99. *Malabar.*—The Kánot Teak Plantation is not favorably reported on. It was formerly in charge of the Sub-Collector, though the funds were supplied from forests. It is proposed to plant the whole up with *Ficus elastica* or mahogany.

The Botanical Garden at Manantoddy is in a flourishing condition. Some of the *Eucalypti* and *Aleurites* have suffered much from borer. Two hundred plants of Divi-divi were raised at Pálghat and will be put out during the monsoon.

100. *Nilambúr.*—There are 3,436 acres of plantation, of which that at Amarampulam (408·77 acres) was notified as reserved forest under Section 25 of the Act. The other blocks will be notified as soon as the existing rights of the proprietors are acquired. All the plantations have been fire-traced and protected and are reported to be in good condition.

101. *South Canara.*—The Parapa Teak Plantation is in a very poor condition. The receipts were Rs. 13-4 0, whilst the expenditure amounted to Rs. 48-15-6. The plantations will be merged in the adjoining forests to be reserved under Section 4 when orders are passed on the Collector's special report on the lands at the disposal of Government.

The condition of the casuarina plantation at Ullál is remarkably good. One acre, containing 170 trees, was sold for Rs. 249-10-0.

The Honne (*Calophyllum inophyllum*) Plantation is doing well.

Tannir Bhávi.—This is a new plantation, 11 acres in extent, situated on the northern side of the backwaters upon which the town of Mangalore stands. It was planted with casuarinas. The plantations at Kuguiangai and Mukkada with 2,810 teak saplings are now in the way to improvement.

(*g*) *Works of Improvement.*

102. It is difficult to give information under this very wide sub-head of the code form in the absence of special reference to it in the district reports. Almost every operation in the forest should be a work of improvement, but the sub-head is, I believe, intended to apply specially to those works which are undertaken to promote and protect the forest growth and place the timber and other produce in the market at the lowest price, and in the best condition. We are scarcely yet in a position to carry on operations of this nature and record them in a systematic manner. We must first constitute our reserved forests, house our establishments in them and develop roads and other communications, and in these matters it will be observed that good progress has been made during the year.

Amongst works of direct improvement, the following may be mentioned:—

103. *North Arcot.*—Some of the fuel and fodder reserves were fenced with a good ditch bank and aloe hedge. In Sholinghur, Ammanúr and Uriyúr, stone walls were erected in places where the line of fence is crossed by streams.

Lines 24 feet wide were cleared round most of the reserves in the Vellore, Chandragiri, Palmanér and Arni ranges.

Block division lines in the Carnatic Ghur, Napier, and three reserves of the Wálajápet Taluk were also cleared.

104. *South Arcot.*—Four hundred and fifty-two yards of rough stone wall (2 feet wide 3 feet high) were repaired; 1,960 yards of ditch, 3 feet wide by $1\frac{1}{2}$ feet deep, were dug chiefly to protect supplemental plantings, and 1,352 yards were planted with aloes one foot apart. Prickly-pear was laid alongside of roads intersecting forests to a distance of 597 yards. Two thousand nine hundred and five yards of prickly-pear fencing was done by watchers. One and-a-half miles of new inspection lines were cut and 66 miles of old lines maintained clear of re-growth.

The total length of inspection and patrol lines existing in the forests amounts to 150 miles.

105. *Madura.*—The depôt site at Kodaikánal was much improved by extension, fencing, clearing of long grass, &c. Several inspection pathways were cut in the Alagármalai Reserve.

(*h*) *Experiments and Exotic Trees.*

106. It is satisfactory to note that the District Forest Officers have evinced much interest in this branch of their work. Exhaustive accounts are given of each experiment, of which the following is an epitome. I find that many of our officers are only too much inclined to devote time and attention to experiments with exotics, which are more interesting and less laborious than pure forest work, which latter must, however, be the first consideration.

107. *North Arcot.*—The District Forest Officer offers no remarks as to the condition of *Eucalyptus* and *Acacias* (from South America) experimentally planted in the district.

The several species of *Pithecolobium Saman* (rain tree) are said to grow rapidly. The District Forest Officer states that the wood is not much valued as fuel, but the pods seem to be good fodder for cattle.

108. *South Arcot.*—Mr. Norfor's two plots of Ceara rubber plantation covering two acres of loamy red soil 50 feet above sea level, were flourishing when the District Forest Officer visited them in April 1883. The trees are said to be watered daily. The older ones are 16 months old and the largest are 13 feet high and 7 inches girth at 6 inches above ground. The seedlings in the second plot planted in September last before the monsoon do not show so strong a growth. Planting after the rains appears, therefore, to suit the plant in this climate and soil.

Of Mahogany (*Swietenia Mahagoni*), Belgaum walnut (*Aleurites triloba*), Divi-divi (*Cæsalpinia coriaria*), *Albizzia Lebbek*, Cashew (*Anacardium occidentale*), Margosa (*Melia indica*), Jack (*Artocarpus integrifolia*), and country almond (*Terminalia Catappa*) planted by Mr. Norfor, the almond does not succeed, but all the others thrive, especially the cashewnut.

Cuttings from 16 months' old Ceara saplings were shooting well, but the result of seeds sown from them were not visible at the time of the District Forest Officer's visit.

The growth of this plantation has induced the District Forest Officer to try Ceara rubber plants in the adjoining forest land. Those planted in January by Mr. Weld, the Sub-Collector, near Tindivanam, on red, gravelly soil are reported to be so far successful.

Divi-divi (*Cæsalpinia coriaria*).—A plantation of six acres (loamy clay soil) in Siruvanur village, Tirukoilúr Taluk, belonging to one Dévanáyaga Mudaliyár, is thriving well. The trees are seven years old and are considered to have been originally planted too far apart. A cart load of pods was obtained this season.

The plants tried by Mr. Weld in the topes and reserves near Tindivanam and those at Villupuram and Gingee in forest lands and in the sandy tracts near Cuddalore, though healthy, do not show much growth. Their appearance, however, encourages extended planting.

Dalbergia sissoo.—Several four years old saplings on exceptionally rich soil on the Coleroon bank near Chidambaram are 35 feet high, with $2\frac{1}{2}$ feet girth at surface. The growth in other places, though not so large, is good.

Rain trees (*Pithecolobium Saman*).—Those planted in sandy loam have succeeded better than those in clay. Some planted with casuarinas have grown well, while others in sandy loam, with *Poinciana regia* and *Odina Wodier* have done even better. The value of the wood as timber is doubtful. The structure of the wood, as judged from saplings, appears similar to that of *Albizzia Lebbek*.

A single specimen of *Pterocarpus santalinus* planted with teak, *Albizzias* and *Cassias*, though not watered or particularly tended, is 13 feet high with a straight pole.

109. *South Coimbatore.*—The seeds of Divi-divi (*Cæsalpinia coriaria*) sown in a nursery bed in the Coimbatore depôt germinated within a week, and sixty of the seedlings transplanted when six months old are stated to have grown to a height of from 1 to 3 feet in the tenth month.

110. *Madura.*—5 oz. of Divi-divi (*Cæsalpinia coriaria*) seed were sown in the Navinipatti garden at Melúr in May 1883, and of the seedlings transplanted in August, $2\frac{1}{2}$ feet apart, 190 plants are now alive. They are watered daily and are all healthy and thriving. The soil of the garden (gravel and red earth) appears well suited for the species. Many of the seedlings were destroyed in the bed by white-ants and birds, hence the small number of plants secured.

Fourcroya.—Five hundred of these plants were put down in Navinipatti garden, of which 400 now alive are healthy. Two thousand and forty planted on both sides of Tirtha Aravi path in the Alagármalai Reserve for 600 yards have not been very successful. Of the 200 plants put out on the northern margin of the Vírapannaimédu, 191 are alive and healthy.

Reana luxurians.—Of the one lb. of this seed obtained from the Government Farm, Saidápet, half was sown broadcast in Máttupannai in the Alagármalai Reserve in August 1883, in a piece of ground 6 yards by 4 yards, at an elevation of about 2,000 feet. The bed was well watered, but no shade put up. The plants grew rapidly, attaining a height of 6 feet in December and have yielded 1½ lb. of seed. The other half sown in November in a plot 30 yards by 6 yards in Kannaimaráttukádu, at an elevation of about 5,000 feet, did not germinate so quickly as in the Máttupannai. The plants withered a little for want of rain, but revived on a subsequent shower and were five inches high at the end of March.

111. *Malabar—Wynaad and Pálghat Division.*—The Botanical Garden at Manantoddy has continued to flourish, but many valuable plants are reported to have been damaged by cattle. The following statement, furnished by the District Forest Officer, shows the number of plants alive, their age, height, girth of stem, and present condition :—

Name of Tree.	Number Planted and now Alive.	Age.	Height.	Girth.	Present Condition.
Belgaum walnut (*Aleurites triloba*) ...	260	...	36″	2¼″	
Ceara rubber (*Manihot Glaziovii*)	303	...	72″	3″	Poor looking.
Eucalyptus	73	...	54″	1″	
Rain tree (*Pithecolobium Saman*)	84	...	50″	2½″	
Sappan (*Cæsalpinia Sappan*)	500	...	15″	1″	
Cocoa (*Theobroma Cacao*)	50	...	...	...	All have died out.
Mahogany (*Swietenia Mahagoni*)	2	...	48″	1½″	
Ficus elastica	3	..	18″	1¼″	
Garcinia sp.	17	...	...	...	
Jámun (Rose apple) (*Eugenia Jambos*) ...	15	...	...	...	
Oranges (*Citrus Aurantium*)	10	...	...	...	
Carob (*Ceratonia siligna*)	4	...	...	...	
Bilimbi (*Averrhoa Bilimbi*)	5	...	...	...	
Casuarina (*Casuarina equisetifolia*) ...	32	...	...	...	
Adenanthera paronina	22	...	...	...	
Cocoa palm (*Theobroma Cacao*)	2	..	...	...	
Arnotto (*Bixa Orellana*)	475	...	...	...	
Cinnamon (*Cinnamomum Zeylanicum*) ...	47	...	...	...	

Some of the *Eucalypti* and walnut (*Aleurites*) suffered from borer.

Divi-divi (*Cæsalpinia coriaria*).—Two hundred fine Divi-divi plants were raised at Pálghat during the year. The largest of these is stated to be three feet high.

Mahogany (*Swietenia Mahagoni*). Six mahogany plants planted near the Wálayár river in the Warlapadi block have grown two feet high, presenting a healthy appearance. Of the twelve plants put out in the Kanoth teak plantation, eleven are reported to be growing well. A few plants of Cocoa (*Theobroma Cacao*) and Ceara (*Manihot Glaziovii*) planted during the year are thriving.

Castilloa and Hevea Experiments.—These were entrusted to Mr. T. J. Ferguson of Messrs. Hinde and Co., Calicut. The District Forest Officer does not state the progress made up to March 1884. According to a report furnished by Mr. Ferguson, under date 3rd October 1883, six young plants of *Castilloa*, each about 4 to 6 inches high, and twenty-seven rooted stumps of *Hevea braziliensis* were received from the Government of Ceylon in the beginning of April 1883, and in October five of the former are stated to have exhibited a remarkably good growth, measuring as follows :—

(1) 3′ 3″ high, 6 branches, foliage luxuriant.
(2) 3′ 3″ do. 2 do. do.
(3) 2′ 6″ do. 2 do. do.
(4) } 2′ 0″ do. no do. do.
(5) }
(6) 0′ 10″ do. sickly and stunted.

Mr. Ferguson proposed to commence propagating from these very shortly and he has doubtless since done so. The leaves of the best trees measured 12″ × 5″.

Hevea braziliensis sent out shoots shortly after arrival, but two plants subsequently died. Each of the remaining twenty-five sent out from 2 to 4 shoots 2½ to 6 feet high and propagation was about to be commenced. The cost of these experiments up to October last amounted to Rs. 39. A further supply of *Hevea* and *Castilloa* plants were received from Ceylon about the end of March 1884.

The cinchona experiments were ordered to be discontinued.

112. *Nilambúr Division.*—The growth of the mahogany (*Swietenia Mahagoni*) plants, about 4,000 in number, is not promising. The following statement, furnished by the District Forest Officer, shows the measurement, &c., of a few of the largest plants :—

When Planted.	Number.	Height when Planted.	Measurement in May 1883. Height.	Measurement in May 1883. Circumference. At base.	Measurement in May 1883. Circumference. 5 Feet up.	Present Measurement. Height.	Present Measurement. Circumference. At base.	Present Measurement. Circumference. 5 Feet up.
		INCH.	FEET.	INCH.	INCH.	FEET.	INCH.	INCH.
September 1873	1	Situ.	65	42	30	67	47	34½
June 1878	2	6	25	16½	12¾	27	19	15
Do.	3	6	17¾	12¼	9	18	13	10
October 1879	4	6	17	9	..	18	11	8
	5	6	13	8½	..	18	10	8
	6	6	18	10	..	19	14	8¾
	7	6	15¾	9	..	19	11½	8¼
	8	6	17	8½	..	18	14½	11¼
	9	6	15	9½	..	17	10½	7½

With the exception of No. 1, the plants are shrubby, having been several times injured by the borer. The moths are plentiful during the rains and disappear in the dry season (December to March). Specimens of caterpillar and moth were sent to Lord Walsingham and to Dr. Bidie, Superintendent, Government Central Museum, for examination.

South American India Rubbers.—Measurement of a few of the best plants are shown in the following table supplied by the District Forest Officer :—

Date Planted.	Number planted Alive.	Number Measured.	Height when Planted.	Measurement in May 1883. Height.	Measurement in May 1883. Girth at base.	Measurement in May 1883. Girth, 5 feet up.	Present Measurement. Height.	Present Measurement. Girth at base.	Present Measurement. Girth, 5 feet up.	Remarks.
			IN.	FT.	IN.	IN.	FT.	IN.	IN.	
Ceara or Manihot Glaziovii.						17¾			21	
		1	30	35	32		36	36		Double top tree.
October 1878	4 alive					18½			21½	
		2	20	33	24	18	33	32	28	
		3	20	33	22½	17	34	24½	20½	
		4	20	34	30½	23	35	23	18½	
		5	15	28	21½	14¾	..	..	..	Broken by the gale, 26th August 1883 ; has three shoots from the start.
June 1880	42 alive	6	40	30	19	15	32	23½	19¼	
		7	40	32	22¼	18	34	23½	18½	
		8	40	32½	21	17¾	33	28	23	
September 1880	..	9	Situ	26½	26¾	20	28	32	24	
July 1881	57 alive	10	28	38	19¾	14½	35	25	21	Broken and died, 26th August 1883.
		11	28	31½	16¼	13	..	..	..	
			28	29½	16¾	12	37	22	19	
Hevea Braziliensis.										
		1	30	32½	14½	9	38	19	11¼	
June 1879	28 alive	2	30	33	14½	9	37	20	12	
		3	30	31	14	8½	33½	19½	12¼	
		4	30	31	12¾	8¼	34	19½	12	
		5	30	29	10½	5¾	34	19	9½	
Castilloa Elastica.										
		1	36	8	7¾	4½	10½	9	6	
June 1880	3 alive	2	30	16	15	12½	19	16¾	13	
		3	18	16½	14½	11	19½	19½	16	
		4	9	3½	..	..	5	..	..	
August 1882	3 alive	5	9	3	..	..	3½	..	..	
		6	23	3½	..	..	6	7	..	Rooted cutting.

Ceara (*Manihot Glaziovii*).—Of the 6,900 seedlings of Ceara put out during the year, 6,000 are alive, besides the 1,700 planted in June 1882. The growth is good as usual, but it is feared that they will not stand any gale after the burst of the monsoon, the wood being soft and brittle. In August last, eight plants of three years' growth were blown down. There are some six years old trees to experiment with as to their yield. All the trees of 1878, 1880 and 1881 seeded and yielded 80,000 seeds, of which 40,000 were sent to the District Forest Officer, Wynaad and Pálghat Division.

The *Hevea braziliensis* are increasing in girth, the growth in height being less rapid than in previous years.

The *Castilloas* are in a flourishing state.

The *Landolphias* from the Royal Botanical Gardens, Ceylon, planted out in August 1882 (when 18 inches high), are growing well, being now 3 feet 9 inches high. They remained dormant for some months after planting and commenced growth only in November last.

Ten plants of *Cephaëlis Ipecacuanha* from the Government Gardens, Ootacamund, were planted three feet apart on a raised bed of grass under cover of teak trees. The grass being periodically cut protects the plants. Of these, one died, and of the other nine, which are growing with copious foliage, two have flowered. There are besides six plants put down by Mr. Ferguson in a low shed, but they have not thrown out fresh shoots or leaves, and have a poor appearance.

The clump of yellow bamboo (*Bambusa vulgaris*) is handsome in appearance, but the hulms do not attain the average size of the ordinary bamboo, though shoots are thrown annually.

The clump of Giant bamboo (*Bambusa Brandisii*) is growing luxuriantly, throwing out several shoots annually. The hulms already exceeding the length and girth of the ordinary bamboo are likely to attain huge dimensions. This species, if well propagated, will be of much use, specially for floating. The several nodes of the hulms of both varieties planted out in August last under the instructions of Mr. Morgan, Deputy Conservator of Forests, failed, only five cuttings having established themselves. It is believed that success can be ensured if the cuttings are struck in the beginning of July.

113. *Tanjore.*—Of the 71 mahagony (*Swietenia Mahagoni*) plants 12 to 24 inches high, put out at Vettangudi in 1881, 48 from 6 to 13 feet high, with a girth of from 4 to 13 inches at 4 feet from the ground, are now alive and healthy, with some exceptions.

Persian dates.—Of the 170 plants put out at the back of the Vedarniyam Deputy Tahsildar's office in the Tiruturaipúndi Taluk during 1879 or 1880, 103 have died and those remaining are not in a thriving condition.

Of the 443 plants put out at Vattangudi in the Shiyáli Taluk, 245, with an average height of about four feet, survive, presenting a sickly appearance.

114. *South Canara.*—There are four clumps of *Bambusa Brandisii* doing fairly well.

Divi-divi (*Cæsalpinia Coriaria*).—About half-an-acre of the new plantation at Tannir Bhávi was planted with this tree. The seedlings were much too young when put out and they cannot, therefore, be said to have established themselves well as yet.

(*i*) *Communications and Buildings.*

115. Considerable progress has been effected under this section, the work having been executed departmentally and, on the whole, very cheaply and well.

The communications are chiefly in the districts of North Arcot and Tinnevelly, where the District Forest Officers deserve much credit for their exertions in this respect.

Rest-houses were erected in North Arcot, South Coimbatore and Tinnevelly, and a Ranger's office in the Madura District.

Much remains to be done in housing our officers of all ranks in the forests and improving forest communications, without which real progress and protection of the forests is impossible.

116. *North Arcot.*—The roads and buildings constructed during the year are shown below:—

Name of Range.	Description of Road.	Distance in Miles.	Cost.	Description of Building.	Cost.
			Rs.		Rs.
Vellore ..	From Ambúr to Assanampet cart road	10⅛	901	A rest-house at Náiknéri ..	350
				Do. at Patrakád ..	350
				Do. at Carnatic Ghur.	350
	From Puttúr to Arasampet, riding	9	426		
	From Puttúr to Patrakád, riding	3½	227		
	Leading from Ammerdi to Padri (riding)	9	559		
	From Ambúr road to Náiknéri (cart)	1¼	84		
Palmanér ..	From Ambúr to Peddúr (cart) ..	9¾	570	A rest-house at Palmanér ..	480
				Do. at Peddúr ..	250
	From Kadapanattam to Butanapalli (cart)	9	516		
Chandragiri ..	Karakambadi to Venkatagiri Raja's chatram (cart) ..	7	140		
	Mámandúr to Venkatagiri Raja's chatram (cart)	7	140		
	Road through Mamandúr Reserve	4	80		
	Total ..	69⅝	3,643	Total ..	1,780

The Collector remarks that if all the roads were as well done as that from Kadapanattam to Butanapalli, the work may be considered very satisfactory. The District Forest Officer explains that last year's was the first attempt at real road-making, and that with the experience gained better work would be done in future.

I was well satisfied with what I saw of the work when I inspected the district in February. The roads are being used by the public as well as by our employés, and the rest-houses, which are very good for the money, enable the District Forest Officer and Range Officers to travel lighter and with less danger from fever and other ailments, the sites having been carefully chosen.

117. *South Arcot.*—No new roads were made, but some petty repairs were executed.

A tanna station, with tiled roof, was erected near Tiruvannámalai town. A culvert, with parapet walls, was built at Chengam depôt gate.

The forest house at Tiruvannámalai is in good order, but that at Chengam requires repair. The Forester's house at Shanikolam (Gingee) is in a good condition. The inspection bungalow there was repaired.

118. *Trichinopoly.*—The building occupied by the District Forest office was handed back to the Military authorities at their request, and a portion of the house occupied by the District Forest Officer has been rented for the office as a temporary measure. Accommodation will, it is hoped, be erected this year for the District Forest office by the Department of Public Works adjoining the Collector's cutcherry. The Pudupálaiyam and Kalpatti Travellers' bungalows were transferred to this department by the Local Fund Board. The former was partly repaired during the year for the residence of the Forest Ranger.

119. *Coimbatore Northern Division.*—Much inconvenience is stated to have been felt for want of sufficient accommodation for the office, and proposals for a new building (for both North and South Coimbatore offices) have been lately approved of by the Board and submitted for the orders of Government.

120. *Southern Division.*—A forest rest-house was built at Irutapallam in the Bolampatti valley at a cost of Rs. 2,000, exclusive of the value of timber supplied by the department.

This was strongly urged by Mr. Brandis as necessary for the Forest Settlement and District Forest Officer. It will form a nucleus for a forest station in the valley.

121. *Madura.*—The shed in the depôt at Kodaikánal was rebuilt and the depôt site improved and fenced at a cost of Rs. 51. A new Ranger's office building was

erected in the Taluk Cutcherry compound at Periyakulam at a cost of Rs. 1,084, the work reflecting much credit on the Ranger.

A new road leading from the pagoda to the Tirthamantapam, in the Alagármalai reserve, was traced to replace the old one which followed the bed of the stream.

Several inspection pathways were also cut in the above reserve.

122. *Tinnevelly.*—The 18½ miles of Pápanásam road from Anantham Odai to the water-shed boundary near Chembungi peak was completed at a cost of Rs. 5,225 in the year (inclusive of Rs. 300 sanctioned for tools). The Collector states that the first ten miles should be widened, so as to admit of cart traffic.

I inspected the whole length of road open in December and was much pleased with the work, which cannot fail to be of great service in exploring and working the forests hitherto little known, besides being most useful to the planters on the Travancore side of the mountains. I have no doubt that the track will eventually develop into a cart road, though the country is broken and difficult.

The Murukantundu road was repaired during the year at a cost of Rs. 150, the moiety being borne by the Local Fund Board as usual.

A ferry and wire rope over the Sarveyar and an iron wire rope and cradle over the Kareyar were put up for Rs. 550 and Rs. 48, respectively.

The total expenditure under roads amounted to Rs. 5,973, which has been well laid out.

The following buildings were erected during the year:—

	Cost. RS.	A.	P.
A rest-house (for the Forest Officer, Sub-Assistant Conservator) at Kannikuti Odai in the ghât forests	1,113	8	0
Two rest-houses (for the Northern and Southern Rangers) in the ghât forests at Rs. 275 each	550	0	0
Eleven Forest Guards' houses (at Rs. 36 each) in the ghât forests ...	396	0	0
Total ...	2,059	8	0

This is all good work, the necessity for which has long been recognized and was urged by Mr. Brandis when here.

The Rangers' office buildings at Vásudevanallúr and Ambásamudram were repaired at a cost of Rs. 50 and Rs. 70, respectively. Three temporary huts were erected at Adirmalai, Kannikuti Odai and Koranjan junction for Rs. 31. Thus the total expenditure under buildings amounted to Rs. 2,210-8-0 during the year.

123. *Malabar—Wynaad and Palghát Division.*—The forest house at Manantoddy was approaching completion at the end of the year.

CHAPTER V.

YIELD AND WORKING.

SECTION 1.—*Departmental Operations.*

124. The system of departmental operations chiefly obtains in forests, into which free access is prohibited for various reasons. This method of working is also carried on in open forests to afford supply of timber to consumers when they are unable to remove the timber under the license system. The returns received from the District Forest Officers are not very clear or complete, so that it is difficult to compare the rates or exhibit the net results district by district.

125. The important classes of timber which are generally worked by departmental agency are those noted in the margin, and the subjoined abstract shows the quantity and distribution of the aforesaid descriptions which were felled and removed by Government agency during the past official year compared with the quantities extracted in 1882-83:—

Teakwood.	Redwood.
Blackwood or rose-wood.	Sandalwood.

District.	Teakwood. C. FT.	Blackwood.	Redwood. TONS.	Sandalwood. MAUNDS.
North Arcot	...	...	775	679
South Arcot	176	...	...	150
Salem	...	...	...	172
North Coimbatore	700	...	...	5,287
Wynaad and Pálghat	21,770	12,946	...	...
Nilambúr	15,545			
Saplings	63,712	...	...	...
South Canara	...	1,355	...	...
Total ...	38,191	14,301	775	6,288
Saplings ... ... No.	63,712	...	...	...
Total of 1882-83 ...	22,561	12,803	200	7,361
Saplings ... ... No.	83,297	...	...	...

126. The total quantity of teak felled and removed during the year compared with the results of the previous year shows an increase of 15,630 cubic feet, which is due to large contracts having been secured for purchase of wood from the Wynaad forests. The slight increase in the quantity of blackwood felled is also due to the same reason.

127. The removals of redwood have been satisfactory during the year under review, and they are apparently due to revival of demand for redwood roots.

128. The collection of sandalwood during the past year shows a decrease when compared with that of 1882-83, which is due to two causes—slack demand and denudation of sandalwood tracts during former years. In Salem the quantity collected amounts to 172 maunds and the District Forest Officer did not attempt a larger collection, as he had already on hand a large stock of wood valued at Rs. 13,591 on the 31st March 1883.

Referring to paragraph 13 of the Board's Proceedings, No. 3357, of 10th November 1883, reviewing last year's report, it may be explained that whilst sales of sandalwood in North Coimbatore were considerable, the total sales fell short of those of the previous year, the Salem stock having remained unsold. Again, whilst sale rates fell, owing to a slack demand and large supply from Mysore, the cost of collection in North Coimbatore and elsewhere was increased owing to the greater distances which the billets and roots had to be transported.

129. In addition to the foregoing classes, the quantities of timber marginally entered have been removed by departmental agency, and when compared with the results of the preceding year, the following variations appear. Under junglewood there is a decrease of 6,243 cubic feet, which occurs in Pálghat, where felling was restricted, pending reservation of the forests and estimates of ripe trees available. The variation under firewood and bamboos being small, no remark is called for.

—		1882-83.	1883-84.	Difference.
Other junglewood ..	.. C. FT.	56,146	49,903	— 6,243
Firewood	.. No.	..	4,277	+ 4,277
Bamboos	.. Tons.	3,953	3,926	— 27
Minor Forest produce	.. No.	43,173	47,941	+ 4,768
	.. Mds.	9,118	58,410	+ 49,292

130. The increase under minor produce is distributed amongst the districts of South Arcot, Salem, and South Canara, in which there were large collections of gall-nuts, Shiyakai (*Acacia concinna*), Avaram bark (*Cassia auriculata*), besides a large quantity of catechu manufactured in South Canara.

The details of operations in the several districts concerned will be briefly noted as follow.

131. *North Arcot.*—In North Arcot 775 tons of redwood have been collected and removed into the sale depôt at a cost of Rs. 6,447-2-0. The rate of collection per ton is nearly the same as that of the two preceding years.

Six hundred and seventy-nine maunds of sandalwood have been prepared and stored in depôt at an outlay of Rs. 347-1-8. The cost per maund amounts to As. 8-2, the rates of the preceding years having been between Rs. 1 and Rs. 1-4-0 per maund. The District Forest Officer has not explained the cause of such a reduction in the cost of collection during the past year. He will be requested to do so.

132. *South Arcot.*—In South Arcot 3,217 cubic feet of timber were dragged to forest depôt and 2,003 cubic feet of timber removed to the market depôt. The expenditure on these operations has been moderate, the average working rates for felling and dragging having been 2 annas and 8 pies per cubic foot, while carting to market depôt was 3 annas and 4 pies per cubic foot.

The cost of felling and removing 150 maunds of sandalwood to the depôt has likewise been very moderate, as the rate per maund is As. 5-10.

The total revenue from departmental operations in this district amounts to Rs. 14,762, exclusive of Rs. 3,952, the sale-proceeds of sandalwood realized after the close of the year.

133. *Salem.*—The results of operations in Salem compared with 1882-83 show an increased removal of miscellaneous timber, such as vengai, vagai, bilvaram, &c., the reasons for which are not given by the District Forest Officer. Sales have been favorable on the whole. Under minor produce a sum of Rs. 2,061 was realized from the sale of tamarind, which had been collected by the department owing to the default of the Kollamalai contractor.

134. *North Coimbatore.*—There has been no timber-felling (except sandalwood) in the taluks of Bhaváni and Satyamangalam. 4,424 maunds of sandalwood billets and roots were prepared at a cost of Rs. 3,620-15-10 in the forests belonging to these taluks as well as Kollegál. This quantity of wood was sold for Rs. 16,636-8-6. In Kollegál 700 cubic feet of teak were felled and sold for Rs. 700-5-4, the profit per cubic foot being 8 annas.

135. *South Coimbatore.*—There was no felling in this division during the past year. 523 logs of timber felled in previous years were carted to the Coimbatore depôt and 71 logs to the Mangara depôt. 95 teak and 7 blackwood logs, containing in all 2,699 cubic feet, were floated from Mangara to Ponáni depôt and supplied from thence to the Bombay Marine.

136. *Madura.*—In this district only firewood was cut and stored in the depôt at Kodaikánal for supplying the demands of visitors to the Pálni hills. 240 tons of wood were collected, of which about 172 tons were sold.

137. *Tinnevelly.*—The departmental operations in felling and removal of timber have been restricted as compared with the figures of 1882-83, whilst a larger collection of minor forest produce, such as cardamom, gallnuts, &c., was made during the year.

The sale results of timber have likewise been poor owing to the substitution of license system for departmental working, as well as to the clearance sale of all old stock at the close of 1882-83.

138. *Malabar—Wynaad and Pálghat.*—During the working season of 1883 the following quantities of timber were squared up and dragged into the depôts:—

	Teak. C. FT.	Blackwood. C. FT.	Junglewood.
Wynaad	21,743	12,945	2,157
Pálghat	27	...	1,657
Total ...	21,770	12,945	3,814

The District Forest Officer reports that the stock of dead teak in the Begur forests has been exhausted, and there is very little dead blackwood or vengai left.

In Pálghat a block of 70 acres, known as the Tamburati Pottai forests (lately handed over by the Revenue Department), has been felled for railway fuel, and the trees will be allowed to grow from coppice after the clearing is completed.

In Walayar a block of 400 acres has been felled over, and well grown saplings of teak, blackwood, &c., left as standards.

Minor forest products have been leased out, with the exception of cardamoms, which were collected and sold departmentally.

139. *Nilambúr.*—In this division 15,545 cubic feet of teak and 34,435 cubic feet of other kinds of timber were felled during the year. A large quantity of saplings, valued at Rs. 25,000, was collected during the year. The sale results have been satisfactory; 17,321 cubic feet of teak, 27,815 cubic feet of other timber, and 39,719 saplings having yielded a revenue of Rs. 62,516.

140. *South Canara.*—During the year 200 logs of blackwood and junglewood, containing 2,438 cubic feet, have been felled near Uppinangadi and Jedkal, but the removal of the wood to the market depôt was delayed owing to the failure of the carting contractor in the one case and difficulty of procuring an elephant on hire in the other.

Certain tracts containing catechu trees were selected and the right of manufacture was given to the neighbouring landholders who undertook to sell the whole of the catechu manufactured by them to Government. 103 candies of the produce were manufactured, of which 50 were purchased by the department. The cost of purchase and the expenses of watching establishments amounted to Rs. 4,422-11-0, while the sale produced a revenue of Rs. 6,374-8-0, which is a satisfactory beginning.

Small quantities of minor forest produce, viz., cardamoms and myrabolams, were collected departmentally and sold at a small profit. But the greater part of the revenue realized from minor produce was obtained under a new system, under which depôts were established in three of the taluks of the district, and the keepers in charge sold on commission on behalf of the department what had been purchased from the collectors of minor produce. The financial result of this system, which was introduced during my visit to the district in November 1883, is very encouraging, a revenue of Rs. 3,049-15-4 having been realized against an outlay of 1,115-8-1. The supply is considerable and demand steady at remunerative rates. I expect a steadily increasing revenue from this source during the current and following years.

141. The subjoined abstract shows the quantity of timber and other produce felled and sold during the past year in comparison with the results of 1882-83:—

Description of Timber, &c.		Quantity Felled.		Quantity Sold.	
		1882-83.	1883-84.	1882-83.	1884-84.
Teakwood ..	No. ..	..	17	..	51
	C. feet ..	22,561	38,191	68,408	51,095
Teak saplings ..	Cart-loads ..	..	..	..	½
	No. ..	83,297	63,712	35,821	39,919
Blackwood ..	C. feet ..	12,803	14,301	16,284	14,724
Rosewood ..	Do. ..	..	..	290	..
Other junglewood	Do. ..	56,146	49,903	63,654	44,931
	No. ..	..	4,277	..	1,518
Redwood ..	Tons ..	200	775	400	628
Sandalwood ..	Maunds ..	7,361	6,288	6,878	5,307
Firewood ..	Tons ..	3,953	3,926 / Cart-loads 3	5,305	3,421½
Charcoal ..	Cwt. ..	..	..	..	2
Bamboos ..	Cart-loads ..	..	2	..	2
	No. ..	43,173	47,941	39,328	55,634
Minor forest produce.	Maunds ..	9,118	58,410	14,224	30,592
	No. ..	900	Cotas 1,444	900	502
	Measures ..	..	14	..	1,660¾
	Cart-loads ..	..	..	..	695
	Bottles ..	..	..	..	28

142. By reference to the foregoing abstract, it will be observed that 102,395 cubic feet of teak and other timber have been felled during the year, while the sales have amounted to 111,650 cubic feet, besides teak saplings which are returned in numbers

The surplus sales over fellings represent disposal of the stock of previous years which remained on hand on the 31st March 1883. Timber felled in one year is frequently not sold in the same year. It takes time to remove logs from the forests to market depôts, and logs are left to season in the forests, which decreases their weight and increases their value. As our organization improves and operations are more systematically conducted, the fellings will be based more or less on the annual increment and become more reliable and continuous, but the sales must depend on the demand, and the rates realized will vary according to the quality of the timber and the conditions on which it is placed upon the market.

143. The subjoined abstract furnishes the valuation of timber and other produce on hand in the sale depôts at the close of the past official year as compared with the opening balance :—

District.	Valuation of Stock.		Difference.	
	At the commencement of the year.	At the close of the year.	In favor of the year.	Against the year.
	Rs	Rs.		
Chingleput	..	..	..	..
North Arcot	3,183	5,617	2,434	..
South Arcot	2,463	2,679	216	..
Salem	14,302	14,758	456	..
Trichinopoly	..	..	..	..
Tanjore	..	..	..	..
Coimbatore .. North Coimbatore	..	..	..	..
Coimbatore .. South Coimbatore	21,015	13,891	..	7,124
Madura	41	218	177	..
Tinnevelly	1,381	9	..	1,372
Malabar .. Wynaad and Pálghat	2,210	2,273	63	..
Malabar .. Nilambúr	57,458	76,771	19,313	..
South Canara	..	..	..	..
Total ..	1,02,053	1,16,216	+ 22,659	8,496
	..	..	— 8,496	..
Net result ..	..	..	+ 14,163	..

The stock valuation at the close of the past official year shows a balance of Rs. 14,163 in favor of the department, which is satisfactory.

Section 2.—*Removal of Produce by Purchasers.*

144. The working under the license and voucher or permit system has yielded a total revenue of Rs. 3,32,799 during the year, which shows a considerable improvement over the actuals of 1882-83. The subjoined abstract exhibits the comparative results of the past two years in the removals of timber and other kinds of produce :—

Description of Timber and other Produce.	Number or Quantity.	Quantity.		Amount realized.	
		1882-83.	1883-84.	1882-83.	1883-84.
				Rs.	Rs.
Teak	Cubic feet	12,465	7,800	4,131	4,011
Junglewood	Do.	294,086	408,209	34,685	52,451
Firewood and railway fuel	Post and Sleepers, No.	610	393		
Charcoal	Tons	45,864	73,105	94,826	1,05,535
Bamboos	Do.	1,811	4,556	12,642	14,497
	No.	10,700	24,337	48,182	59,326
	Cart-loads	35,248	54,514		
Forest produce	Maunds	152,904	125,063 (Cart-loads. 11,315)	95,252	85,221
Grazing and fodder grass	.....	..	....	5,976	11,758
	Total ..	..	..	2,95,694	3,32,799

It will be observed that the seigniorage realized on 7,800 cubic feet of teakwood in 1883-84 amounted to nearly the same amount as on 12,400 cubic feet in 1882-83, the reasons for which are not apparent as the seigniorage rates were not raised.

145. The important variations in the value of timber and other produce removed during the year compared with its predecessor occur under the heads noted in the margin.

Junglewood	+ 17,766
Firewood	+ 10,709
Bamboos	+ 11,144
Forest produce	— 10,031

The increase under junglewood is distributed amongst the districts of South Arcot, Salem, Madura and Tinnevelly, and is principally due to greater check on illicit felling and removal which were minimized by the introduction of the Forest Act and the entertainment of more numerous and better organized establishments. In Tinnevelly the discontinuance of departmental working accounts for the increased revenue under this head.

Large removals of firewood in the districts of Salem and South Coimbatore account for the increase under firewood, whilst in North Arcot the improvements introduced of giving up forest blocks on contract has added to the development of revenue from bamboos. In South Coimbatore the transfer of the Coimbatore Taluk, where the demand for firewood and bamboos is great, has tended to the increase of revenue from these sources.

The decrease in the removal of minor produce is nominal, owing to the department having undertaken the collection of the produce on the Kollimalai hills, in the Salem District, for the reasons explained in paragraph 132 *supra*, and other causes. A larger revenue, therefore, appears under departmental working.

146. The important features and facts connected with this system of working will be detailed below.

147. *Chingleput.*—No permit system under the rules framed under Section 26 of the Madras Forest Act has yet been introduced in the district. Revenue was only collected from the sale of trees on poramboke land and plantations or topes, the old Jungle Conservancy rules and rates of seigniorage having become a dead letter.

148. *North Arcot.*—The system of working forest blocks on contract requires notice. The trees contained in these blocks are generally marked by the department before they are cut. The contractor who removes them brings them to the edge of the forest where they are inspected and stamped, the seigniorage collected and timber removed on way-permit. The contractor is bound to cut and remove all the trees marked by the department, and this condition induces him to find distant markets for Government timber, as the local demand is generally insufficient.

149. *South Arcot.*—There has been an improvement of revenue under this head, due to greater vigilance in checking removals. Ten tannahs were maintained at a cost of Rs. 549-8-1 for the year.

150. *Salem.*—The District Forest Officer dwells at length on certain defects in the permit system introduced into the district in a tentative manner two years ago by the former Forest Officer (Mr. Stanbrough) at the Collector's suggestion. He objects to the village officials being entrusted with the issue of permits, as opportunities are thereby afforded to them for malpractices, which generally escape punishment. He complains of other difficulties in recovering permits and rendering correct account of removals. These matters do not find a proper place in an annual report and are receiving attention in connection with the new rules under Sections 26 and 35 of the Act.

In spite of these defects, the financial results of the system during the year appear to have been fairly satisfactory.

151. *North Coimbatore.*—The revenue derived under the license system is only about Rs. 800 less than that of 1882-83, notwithstanding the transfer of the Coimbatore Taluk to the South Coimbatore Division.

152. *South Coimbatore.*—The financial results of the system were highly successful, the revenue exceeding that of last year by Rs. 15,000, which is ascribed to the conversion and removal of spokes, rafters, and felloes under the contract system from the Anaimalai Forest and the transfer of the Coimbatore Taluk from the Northern to this division.

153. In the districts of Madura and Tinnevelly also there has been a satisfactory increase of revenue, which is attributed to greater check on removals and prevention of clandestine felling.

The other districts where this system is in vogue being of less importance, no remark is called for.

Section 3.—*Free Grants of Forest Produce.*

154. The subjoined statement shows the removals of timber and other produce during the past official year on free pass :—

District.	Timber.		Firewood.		Bamboos.	
	Building purposes.	Agricultural purposes.	Agricultural and Domestic and for Manufacture of Jaggery.	Burning Corpse and erecting Corn-sheds, &c.	Building purposes.	Agricultural purposes.
	Quantity.	Quantity.	Quantity.	Quantity.	Quantity.	Quantity.
	C. FT.	C. FT.	TONS.	TONS.	CART-LOADS.	CART-LOADS.
Chingleput			*Nil.*			
North Arcot	7,300	..	..	..	48	..
South Arcot	..	1,020	84	..	..	24
Salem	3,198	8,832	..	..	178	22
Trichinopoly			Not given.			
Tanjore			*Nil.*			
Coimbatore .. North Coimbatore	..	4,703	423	..	..	298
Coimbatore .. South Coimbatore			*Nil.*			
Madura	5,435	..	..	..	17	..
Tinnevelly	627	..	876	..	..	..
Malabar .. Wynaad and Pálghat			*Nil.*			
Malabar .. Nilambúr			*Nil.*			
South Canara			*Nil.*			
Total ..	16,560	14,555	1,383	..	243	344

155. It is observed that there is a considerable reduction in the quantity of timber removed on free passes and that the reduction is progressive. In 1881-82 such passes were issued for 51,683 cubic feet, which in 1882-83 dwindled down to 39,959, and the grant for the current year both for building and agricultural purposes amounted to only 30,115 cubic feet. No reasons for this are given in the district reports, but my experience is that it is due to absence of *bonâ fide* demand and to the ryots preferring to purchase their requirements in the local markets or obtain them clandestinely from the forests.

Under recent orders, *i.e.*, the rules under Section 26 of the Act, tracts may be set apart by the Collector *bonâ fide* for own use, but not for sale or barter by the villagers. Free grants of timber, &c., will be the exception, not the rule, and may well be left to the District Forest Officer as representing the Collector.

CHAPTER VI.

Financial Results.

156. The total revenue of the circle realized during the past year amounts to Rs. 5,45,658, and exhibits a steady improvement when compared with the actuals of the preceding years as shown in the margin. The revenue rose from Rs. 4,52,651 in 1880-81 to Rs. 5,45,658 in 1883-84, and between these years there has been a steady rise of Rs. 30,000 on an average for each year. The causes for these results are to be found in increased supervision and more systematic management and control. The introduction of the Forest Act and the organization of establishments on a better footing with more definite duties and powers will result in a still larger annual increase within the next few years.

Years.	Rs.
1880-81	4,52,651
1881-82	4,81,958
1882-83	5,14,802
1883-84	5,45,658

The total expenditure under A. "Conservancy and Works" and B. "Establishments" amounts to Rs. 4,78,464, and the subjoined abstract shows the actuals under receipts and expenditure classified under budget sub-heads :—

Head.	Receipts.	Amount.	Head.	Expenditure.	Amount.
		Rs. A. P.			Rs. A. P.
I.	Timber and other produce removed by Government Agency—		I.	Timber and other produce removed by Government Agency—	
	(*a*) Timber	1,10,400 13 4		(*a*) Timber	27,434 3 9
	(*b*) Firewood and charcoal ..	12,861 15 2		(*b*) Firewood and charcoal ..	3,580 6 9
	(*c*) Bamboos	2,198 11 6		(*c*) Bamboos	467 2 8
	(*d*) Sandalwood	16,742 12 6		(*d*) Sandalwood	4,786 9 0
	(*e*) Grass and other minor produce	54,512 9 2		(*e*) Grass and other minor produce	4,228 15 8
II.	Timber and other produce removed by purchasers, &c.—		II.	Timber and other produce removed by consumers	18,110 4 8
	(*a*) Timber	56,461 13 0	III.	Confiscated drift and waif wood ..	215 7 5
	(*b*) Firewood and charcoal ..	1,20,031 13 0	V.	Rent of leased forests	1,462 3 3
	(*c*) Bamboos	59,327 0 9	VI.	Live and dead stock—	
	(*d*) Grazing and fodder grass.	11,758 1 3		(*a*) Purchase of cattle ..	40 0 0
	(*e*) Other minor produce ..	85,219 5 3		(*b*) Feed and keep of cattle ..	3,218 8 11
III.	Confiscated drift and waif wood	2,363 10 10		(*c*) Plant, tools, and instruments	2,143 13 6
IV.	Revenue from forests not managed by Government—		VII.	Communications and buildings—	
	(*a*) Duty on foreign timber.	0 6 0		(*a*) Roads and bridges ..	10,808 2 11
V.	Miscellaneous—			(*b*) Buildings	12,097 3 6
	(*a*) Fines and forfeitures ..	45 0 4		(*c*) Other works	188 15 6
	(*b*) Refunds	5,741 3 3	VIII.	Demarcation, improvement, and extension of forests—	
	(*c*) Other sources	8,082 7 11		(*a*) Demarcation	14,428 2 11
				(*b*) Compensation for land, &c.	8,308 13 9
				(*c*) Surveys and working plans	1,070 0 6
				(*d*) Plantations	32,301 3 7
				(*e*) Protection from fire ..	5,585 15 4
				(*f*) Other works	33,431 2 10
			IX.	Miscellaneous—	
				(*a*) Refunds	4,091 6 2
				(*b*) Law charges	93 4 0
				(*c*) Other do.	616 10 9
				Total expenditure actually adjusted ..	1,88,708 12 10
				Total outstanding and unadjusted balance ..	35,413 14 2
				Grand Total of A. "Conservancy and Works" ..	2,24,122 11 0
				Add total of B. "Establishments".	2,54,341 1 0
				Total Expenditure ..	4,78,463 12 0
				Add Surplus revenue of Southern Circle ..	67,193 15 3
	Total ..	5,45,657 11 3		Total ..	5,45,657 11 3

157. From the foregoing abstract it will be seen that the total cost surplus in favor of the department has amounted to Rs. 67,193-15-3, and if Rs. 35,413-14-2 shown as outstanding balance of the year be excluded from the actual expenditure as has hitherto been done, the total surplus will amount to Rs. 1,02,607-13-5, exclusive of an increase in the value of timber in stock amounting to Rs. 14,163.

158. It may be here explained that, under instructions from the Accountant-General, it has been decided to charge all funds drawn in one year as expenditure of the same year, as the practice hitherto observed of carrying forward the unadjusted balance of one year to the following year defeats the object of budget provision and sanction; in fact, money actually drawn and expended out of an allotment for certain work is exhibited as expenditure of another year, when perhaps such work is not sanctioned. District Forest Officers have, therefore, been called upon to report the classification of their unadjusted balances of the past year, and, on receipt of complete information, these balances will be charged off to the appropriate heads, so that nothing will remain as unadjusted balance.

This will, however, be very difficult to effect, as there must always be advances outstanding on account of timber felled and not lodged in the sale depôts, roads and buildings under construction, &c.

I confess that, in my opinion, the Account Department is striving at too much exactitude, and to make the accounts perfect, all the timber, &c., felled and removed and paid for in one year should be sold and the amount credited in the same year, which, as I have explained, is impossible.

159. *A.* "*Conservancy and Works.*"—Exclusive of the above balance, the actual expenditure of the circle during the past year under A. "Conservancy and Works" indicates an increase when compared with the figures of the preceding years which is noted in the margin. This increase is attributable to the employment of considerable protective establishments, such as fire-patrols, watchers, tannahdars, &c., as well as to the opening out of forest roads, construction of buildings and huts, compensation for land, and extensive demarcation operations under the forest settlement. Large outlay on capital works is necessary in the interest of forest conservancy, and it may be stated with confidence that too much has not been spent upon such operations.

Years.	Rs.
1880-81	1,30,507
1881-82	1,78,703
1882-83	1,76,520
1883-84	1,88,709

160. *B.* "*Establishments.*"—The cost of establishments during the past year, when compared with the actuals of the preceding three years, shows a gradual increase, which is the result of gradual development of establishments since the reorganization of the department and improved rates of pay and travelling allowances.

Years.	Rs.
1880-81	1,56,450
1881-82	1,88,984
1882-83	2,08,715
1883-84	2,54,341

CHAPTER VII.

General Remarks.

161. *Appointments, Promotions and Transfers of Charge amongst the Controlling Staff.*—Mr. Peake, appointed by the Secretary of State, joined in December 1883, and was posted to South Canara as an Assistant Conservator, 3rd grade.

Messrs. Hadfield and Stanbrough were promoted from the 2nd to 1st grade of Assistant Conservators in August 1883, and Mr. Sheffield was brought on the graded list as an Assistant Conservator of the 1st grade in January 1884.

Mr. Porter having qualified by the lower standard was promoted to the 2nd grade of Assistant Conservators from the 25th March 1884.

There have been numerous transfers of charge.

Mr. Cherry, Deputy Conservator, 2nd grade, assumed charge of the Salem Division from special duty in April, relieving Mr. Stanbrough as District Forest Officer.

Mr. Gass, Deputy Conservator, 4th grade, reverted from doing duty in the Northern Circle (Nilgiri Division) in June, and held charge of the Trichinopoly Division until the end of August, when he was relieved by Mr. Stanbrough, and proceeded to Madura, where he received charge from the Assistant Collector, Mr. Robinson, who had been in charge.

Mr. Ferguson, Deputy Conservator of Forests, in charge of Nilambúr Plantations, retired on a pension on the 28th of July, being relieved by Mr. Hadfield, Assistant Conservator.

In Mr. Ferguson we lost the services of an excellent officer, to whom the fine condition of the magnificent teak plantations at Nilambúr is mainly due.

The state of Mr. Carroll's (Sub-Assistant Conservator) health rendering a change from South Canara imperative, he was transferred to Tanjore as District Forest Officer in September, and Mr. Bradley, C.S., took charge of the South Canara forests as District Forest Officer, and has done excellent service.

Mr. Brasier, Assistant Conservator, 3rd grade, assumed charge of Chingleput as District Forest Officer in October.

The other District Forest Officers remained in charge of the same divisions as last year.

162. *Upper Subordinate Establishment.*—Mr. Eber-Hardie was appointed a Sub-Assistant Conservator, 2nd grade, on the 1st April 1883, and has held charge of the Tinnevelly ghât forests throughout the year. He promises well.

Great pains have been taken to weed out the staff of Rangers and Foresters and secure the services of competent and willing men, which is very difficult.

163. *Tests and Rules for the examination of Forest Subordinates.*—A complete set of tests and rules for the examination of subordinates was submitted to and approved of by the Board and Government. The rules came into force from the 1st of December 1883, and apply to all Rangers, Foresters, and Clerks who are now on probation, as well as to those who may be entertained in future.

The great difficulty is to secure the services of fairly educated men who have passed the tests and are willing to accept a forest life.

164. *Forest School at Dehra Dún.*—A Ranger and Forester from this circle proceeded to Dehra Dún as students in June 1883.

The Ranger, Gurunatha Pillai, has done very well and stood third on the list of students at close of the first year's course. The Forester's educational attainments are found not up to the mark, especially in arithmetic and mensuration, but the Director reports that he does his best and will make a good Forester. Both men like the school and climate and have enjoyed excellent health.

165. *Uniform and Warm Clothing for Forest Guards.*—A neat and inexpensive uniform of shikár cloth was decided upon during the year, and is being supplied to the guards at their own expense. New waist belts, with departmental badge and a number, were supplied, and Government sanctioned the annual supply of a suit of warm clothing and blanket being supplied to all guards and office peons whose duties take them into the hill forests. A good pattern of dark green cloth from the Elgin mills has been selected and is in course of issue. A pattern of badge for watchmen to be worn on the left arm was also selected.

The men are found to like the adoption of a uniform dress, which is also being adopted by the Foresters and Rangers.

166. *Maps.*—In accordance with the Proceedings of the Board, No. 2117, of 24th July, communicating a resolution of the Government of India on the subject of maps to elucidate annual reports, instructions were issued to District Forest Officers after consultation with the Superintendent, Revenue Survey.

All the District Forest Officers (except Salem and Tanjore) have done their best to comply with the demand, and all the maps are submitted; but I would only recommend that those marginally noted be printed with the report, together with Mr. Wooldridge's plan, showing the arrangement of fire-lines in the Kávatti Malai block reserve.

North Arcot.	Tinnevelly.
South Arcot	Malabar.
South Coimbatore.	Wynaad.
Trichinopoly.	Nilambúr.

Of the other maps, some are not of the proper dimensions and others give no information. This is especially to be regretted in the case of Madura, where good progress has been made in demarcating the reserved forests and fire-protection.

It has been found impossible to prepare a forest map of the circle, which would be of any value on the scale prescribed.

There is no greater want experienced than that of good forest maps, and measures must be taken to secure them at least of our reserved forests as soon as possible.

Instructions have been issued to District Forest Officers to report as soon as boundaries are settled, cleared, and ready for survey.

167. *International Exhibition at Calcutta.*—During the year specimens of forest products were contributed to the International Exhibition by the districts marginally noted. Madura unfortunately was just a little too late, and Tinnevelly was unable to send anything. The districts of Tanjore, Chingleput, and Trichinopoly being at the time without District Forest Officers, were likewise not in a position to supply specimens. The notice given by the

North Arcot.
South Arcot.
Salem.
Coimbatore . . { North Coimbatore Division. / South Coimbatore Division.
Malabar.
South Canara.

Government of India was somewhat short, especially as it involved the collection of easily spoilt articles; nevertheless everything was done to make the best representative collection possible, such as that sent to Amsterdam in 1882-83.

The list of awards had not been received at close of the year under review, but it includes the Conservator and District Forest Officer, Salem.

168. *Specimens from Mangrove Swamps and Tidal Rivers for Botanical identification —South Arcot.*—Twenty-four specimens of trees and vegetations found in the salt marshes and on islands in the tidal creeks near the mouth of the Coleroon were sent to Professor Lawson at Ootacamund for identification.

169. *Acquisitions of Forest Land—South Coimbatore.*—One thousand two hundred and seventy-three acres of land were acquired from the Shrotriemdar of Vellimalaitpatnam under the Land Acquisition Act for Rs. 4,224, and 306 acres of land situated on the road leading up to the Porati saddle were purchased for Rs. 3,550. A piece of land 349·87 acres, situated in the village of Akkarai Bolampatti, were sold for arrears of revenue, purchased by Government and transferred to this department.

An appeal from the decision of the Forest Settlement Officer, disallowing a claim advanced to certain land in the Bolampatti Valley, was pending before the District Court at close of the year.

170. *Boundary Dispute—Tinnevelly.*—Mr. Baber's decision in the Singampatti forest case under Act XXVIII of 1860 was upset by the District Court, whose judgment was, however, on the whole in favor of Government, subject to certain rights of easement.

Cross appeals are now pending preferred by the Zemindar and Government, and it is hoped that a final settlement of this long-standing dispute may be arrived at during the course of the current year.

Government gained the case in the Sivagiri inam dispute in the Madura District Court.

171. *Reclamation of Sandy Wastes.*—A special report on the reclamation of sandy wastes has been submitted in accordance with the orders of Government. Extensive operations in this direction are in progress and contemplated in South Arcot and on the "*teris*" or sand dunes of Tinnevelly.

172. *Departmental Code.*—The draft of the Departmental Code was completed during the year by the two Conservators and Deputy Conservator of Forests, in charge of Central Office of Accounts, in committee, and submitted for approval in May. Its introduction will secure uniformity in the accounts and departmental procedure generally and supply an undoubted want.

173. *Health of Establishments.*—The health of the officers of the controlling and executive grades has, on the whole, been good, but Mr. Douglas, in charge of the Central Offices at Madras, was seriously ill in March.

Two forest guards died of fever in North Coimbatore, and there was much small-pox in South Coimbatore, which carried off many of the hillmen.

Fever, cholera, and small-pox were very prevalent in Malabar, almost the whole of the establishments in Wynaad and Nilambúr having been prostrated during the hot months.

174. *Administration of the Department generally.*—The administration of the department has on the whole worked well and smoothly, and there is no doubt that great progress has been made in all important respects.

The Central Offices at Madras remained under the charge of Mr. Douglas, who reports well of my Head Clerk, Parthasarathy Mudaliyár, and the Clerks generally. My Circuit Clerk, Mr. Saldanha, has given me satisfaction.

The pressure of work on all ranks, both in and out of office, has been very great, and more liberal provision for granting leave and supplying the place of absentees is necessary.

175. The want of better office accommodation in a more central situation is much felt.

FORM No. 59.

Forest Department, Southern Circle.

APPENDIX I.

Area of Reserved Forests, 1883-84.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st March 1884. Acres.	Area on 1st March 1884. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Number and Date of Notification of Addition or Transfer.	Remarks.
Chingleput District.	Saidápet Taluk.	Tandrey	827·24	..	..	..	....	Names of two reserves, Muppipalli and Kamargiri, are not given. Lump area is given for twenty-four reserves in last year; their names are now entered. There is an excess of 2,558·65 acres over last year.
	Chingleput do.	Tirukalikundram	696·84	..	..	..	....	
		Oragadam	540·	..	..	..	....	
		Madayathúr	697·	..	..	..	....	
		Kambákam	11,363·56	..	..	..	....	
		Thamarieddore	899·89	..	..	..	....	
		Ugumudi	1,449·91	..	..	..	....	
		Santhamelur	923·11	..	..	..	....	
		Gudalvarpolliem	547·48	..	..	..	....	
		Vellachúr	725·20	..	..	..	....	
		Kadur ,,	1,420·5	..	..	..	....	
		Arulhur ,,	1,208·34	..	..	..	....	
		Kacherla ,,	632·25	..	..	..	....	
		Cherivi ,,	656·	..	..	..	....	
		Mupur Palloi	957·92	..	..	..	....	
		Chinnatippakam	1,861·46	..	..	..	....	
		Kotamerikuppam	2,100·4	..	..	..	....	
		Sattiveda ,,	2,922·19	..	..	..	....	
		Namadár ,,	937·84	..	..	..	....	
		Kallandúr ,,	481·53	..	..	..	....	
	Tiruvallur do.	Cheriyeegram ,,	327·17	..	..	..	....	
		Palvakam ,,	436·30	..	..	..	....	
		Seerni ,,	331·33	..	..	..	....	
		Sunkarai ,,	630·26	..	..	..	....	
		Mookarambakam ,,	590·	..	..	..	....	
		Ambakam ,,	2,457·42	..	..	..	....	
		Puvidam ,,	886·93	..	..	..	....	
		Padukuppam ,,	1,109·83	..	..	..	....	
		Chenneri ,,	677·2	..	..	..	....	
		Dasikuppam ,,	436·93	..	..	..	....	
		Nagalapuram ,,	4,556·59	..	..	..	....	
		Rangherry ,,	1,683·96	..	..	..	....	
		Krishnaparam ,,	271·64	..	..	..	....	
		Koppalpattu ,,	2,221·75	..	..	..	....	
		Mudiyur ,,	655·35	..	..	..	....	
		Hodsonparam ,,	981·83	..	..	..	....	
		Pusatpollium ,,	1,130·95	..	..	..	....	
		Gangoola Kadigai ,,	427·87	..	..	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
Chingleput District—(*Cont.*)	Tiruvallúr Taluk—(*Cont.*)	Alikuli	..	..	..	..	835·61	..	....	
		Ibrampuram	..	..	..	..	1,342·2	..	....	
		Hodsonnagaram	..	..	..	..	464·78	..	....	
		Pondúr	..	..	..	..	1,433·33	..	....	
		Kolathúr	..	..	..	..	248·	..	....	
		Palavakam	..	..	..	..	436 30	..	....	
		Irakolu	..	..	..	..	156·57	..	....	
		Total ..	53,808·21	84·06	2,558·65	..	*56,366·86	88		* Proposed to be constituted as reserves.
North Arcot District.	Vellore Taluk.	Sandalwood reserve	..	..	..	..	12,800	20	G.O., No. 1456, 5th Nov. 1880.	Partly demarcated.
		Javady timber reserve ..	..	..	..	..	19,200	30	Do. ..	Do.
		Naikaneri do.	..	..	..	..	6,400	10	Procs. No. 41, 7th Feb. 1884.	Demarcated.
		Thellay do.	..	..	..	..	12,800	20	G.O., No. 1456, 5th Nov. 1880.	Do.
		Ambúr fuel do.	..	..	..	..	3,840	6	G.O., No. 520, 9th April 1879.	Demarcated and surveyed.
	Pólúr do. ..	Carnaticghur do.	..	..	..	..	12,800	20	G.O., No. 1456, 5th Nov. 1880.	Demarcated.
	Chandragiri do.	Napier do.	..	..	..	..	8,772	13·70	G.O., No. 798, 30th Aug. 1879.	Demarcated, surveyed and fenced.
		Marmandur do.	..	..	..	..	1,776	2·77	G.O., No. 971, 1st June 1871.	Do.
		Chamala do.	..	..	..	..	9,600	15	Bd.'s Procs., No. 419, 7th Feb. 1884.	Partly demarcated.
		Panapak do.	..	..	..	..	6,400	10	Do. ..	Do.
		Puduputla byle	..	..	..	..	2,560	4	Do. ..	Do.
		Musalimadugu	..	..	..	..	9,600	15	Do, ..	Demarcated.
	Palmaner do.	Morthana	..	..	..	..	16,000	25	Do. ..	Partly demarcated.
		Peddoor	..	..	..	..	9,600	15	Do. ..	Demarcated.
		Baireddipalle	..	..	..	..	10,240	16	Do. ..	Do.
	Chittoor do. ..	Paradarami	..	..	..	..	6,400	10	Do. ..	Partly demarcated.
	Arcot do.	Palwadi	..	..	..	..	6,400	10	G.O., No. 1456, 5th Nov. 1880.	Demarcated.
		Punganúr	..	..	..	..	6,400	10	Bd.'s Pros., No. 419, 7th Feb. 1884.	Do.
	Gudiyátam do.	Ambúr drug	..	..	..	..	5,760	9	Do. ..	Not demarcated.
		Total ..	..	..	..	..	167,348	261·47		

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District.	No. I Range—Tiruvannamálai Taluk.	Tenmalai	23,040	..	..	..	23,040	..	....	
		Muthenai (partly in Salem) ..	4,000	..	..	..	4,000	..	....	Demarcated.
		Chinnasamudram	6,400	..	..	..	6,400	..	....	Surveyed.
		Peringolathur	4,800	..	..	..	4,800	..	....	
		Tiruvanámalai Kasba ..	7,510	..	..	..	7,510	..	....	Do.
		Tandramput	11,500	..	..	..	11,500	..	....	Demarcated.
		Kadambai	1,000	..	..	..	1,000	..	....	Do.
		Tippakadu	6,000	..	..	..	6,000	..	....	Do.
		Portion of Attipakam in Parikal and Panniyar Villages.	1,000	..	..	..	1,000	..	....	
		Total ..	65,250	101·95	..	..	65,250	101·95		
	No. II Range—Gingee Range.	Muttakadu	3,087	..	..	..	3,087	..	....	Surveyed.
		Kattamangalam	1,661	..	7	..	1,668	..	....	Do.
		Siruvadi	1,665	..	..	..	1,665	..	....	Do.
		Annamungalam	250	..	..	..	250	..	....	Demarcated.
		Vellam (Sevúr)	1,115	..	..	..	1,115	..	....	Do.
		Padipallam	3,735	..	..	..	3,735	..	....	Surveyed.
		Periamur, including Pakammalai.	9,026	..	..	..	9,026	..	....	Do.
		Karai	1,344	..	..	..	1,344	..	....	Do.
		Tandavasamudram	3,000	..	..	..	3,000	..	....	Demarcated.
		Mathur	540	..	..	..	540	..	....	
		Gangavaram, including Thurinjikadu.	9,844	..	..	..	9,844	..	....	Surveyed.
		Odianatham	1,000	..	..	..	1,000	..	....	Demarcated.
		Total ..	36,267	56·67	7	..	36,274	56·68		
	No. III Range—Tindivanam Taluk.	Nanjilekondam	50	..	..	..	50	..	....	Demarcated.
		Nathammangalam	30	..	..	..	30	..	....	Do.
		Villakkam	100	..	..	..	100	..	....	Do.
		Peradikuppam	1,400	..	..	..	1,400	..	....	Surveyed.
		Agar	1,500	..	..	..	1,500	..	....	Demarcated.
		Nadivanthur	2,500	..	..	..	2,500	..	....	Do.
		Bommathur	300	..	..	..	300	..	....	Do.

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
North Arcot District—(*Continued*).	Chittoor Taluk.	Iyarála	..	..	..	..	6,400	10	....	Demarcated.
		Penamore	..	..	..	..	6,400	10	....	Do.
		Chittoor	..	..	..	..	2,560	4	....	Do.
		Santhapet	..	..	..	..	2,560	4	....	Do.
		Bommasamudram	..	..	..	..	3,000	4·68	....	Do.
		Cheelapallai	..	..	..	..	1,063	1·66	....	Partly demarcated.
		Keenatipallai	..	..	..	..	2,856	4·46	....	Do.
	Gudiyátam Taluk.	Vikramasi	..	..	..	..	161	·25	....	Demarcated and fenced.
	Wálajápet do.	Gúdalúr	..	..	..	..	559	·87	....	Demarcated, surveyed and fenced.
		Kanjempet	..	..	..	..	154	·24	....	Do.
		Ammanur	..	..	..	..	210	·32	....	Do.
		Uriyúr	..	..	..	..	672	1·05	....	Do.
		Banavaram	..	..	..	..	1,071	1·67	....	Do.
		Anapauk	..	..	..	..	61	·09	....	Do.
		Thengal	..	..	..	..	120	·18	....	Do.
		Ammúr	..	..	..	..	6,018	9·4	....	Partly demarcated.
		Kolathúr	..	..	..	..	1,781	2·7	....	Partly demarcated, fenced and surveyed.
		Minnel	..	..	..	..	1,395	2·1	....	Not demarcated.
	Wandiwash do.	Ponnúr	..	..	..	..	1,676	2·61	....	Demarcated, surveyed and fenced.
		Venkundram	..	..	..	..	822	1·28	....	Do.
		Bádúr	..	..	..	..	829	1·29	....	Do.
		Nambedu	..	..	..	..	929	1·45	....	Demarcated.
		Kodiyálam	..	..	..	..	255	·39	....	Demarcated, fenced and surveyed.
		Nadugal	..	..	..	..	3,632	5·67	....	Demarcated.
		Vishamangalam	..	..	..	..	1,148	1·79	....	Do.
		Nedunconam	..	..	..	..	1,798	2·80	....	Do.
		Brama Catary	..	..	..	..	1,589	2·48	....	Do.
	Pólúr do.	Kapalúr	..	..	..	..	1,280	2	....	Not demarcated.
		Kalúr	..	..	..	..	3,068	4·79	....	Do.
		Allialamangalam	..	..	..	..	10,502	16·4	....	Do.
		Total	..	..	..	..	64,569	100·62		
		Grand Total	173,480	271·05	58·437	..	231,917	362·09		

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District—*Contd.*)	Tindivanam Taluk—(*Contd.*)	Pánchalam	1,200	..	..	..	1,200	..	....	Surveyed.
		Saram	150	..	..	..	150	..	....	Demarcated.
		Olakur	300	..	..	..	300	..	....	Do.
		Rashanai	50	..	..	..	50	..	....	Do.
		Salavadi	70	..	..	..	70	..	....	Surveyed.
		Jaggampettai	340	..	..	..	340	..	....	Do.
		Yediyalam	400	..	..	..	400	..	....	Do.
		Yerianur	50	..	45	..	95	..	....	Demarcated.
		Janakampettai	108	..	..	..	108	..	....	Do.
		Sevur	1,200	..	..	..	1,200	..	....	Do.
		Senalur	150	..	..	..	150	..	....	Do.
		Mannur	50	..	..	..	50	..	....	Do.
		Nemalai	300	..	..	..	300	..	....	Do.
		Yendur	50	..	..	..	50	..	....	Do.
		Bramhadesem	50	..	..	..	50	..	....	Do.
		Vannipper	50	..	..	..	50	..	....	Do.
		Kumilampet	1,200	..	..	..	1,200	..	....	Do.
		Madukuppam	400	..	..	..	400	..	....	Do.
		Alathur	300	..	..	..	300	..	....	Do.
		Kandadu	370	..	..	..	370	..	....	Do.
		Omeyur	20	..	..	..	20	..	....	Do.
		Attikuppam	185	..	..	..	185	..	....	Do.
		Merkanam	500	..	..	..	500	..	....	Do.
		Mylam	..	..	265	..	265	..	....	Do.
		Total	13,373	20·89	310	..	13,683	21·37		
	Villupuram Taluk.	Vainer (in two bits)	365	..	..	..	365	..	....	
		Kalikovil	200	..	..	..	200	..	....	
		Chengadu	100	..	..	..	100	..	....	
		Vakkur	200	..	..	..	200	..	....	
		Kappiamur	545¼	..	..	..	545¼	..	....	Surveyed.
		Muthampolliem	50	..	..	..	50	..	....	
		Naramalmaruthur	80	..	..	..	80	..	....	
		Alliyur	70	..	..	..	70	..	....	
		Nelianur	70	..	..	..	70	..	....	
		Agaram Gangarandipolliem	344	..	..	..	344	..	....	
		Pakkam	350	..	..	..	350	..	....	
		Sorappur	50	..	..	..	50	..	....	
		Maruthur	70	..	..	..	70	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District—(*Contd.*)	Villupuram Taluk—(*Contd.*)	Villupuram Kasba tank ..	100	..	..	..	100	..	....	
		Valuthareddi	130	..	..	..	130	..	....	
		Kandampakam	60	..	..	..	60	..	....	
		Olukkai	50	..	..	..	50	..	....	
		Kappur	50	..	..	..	50	..	....	
		Kondangi	100	..	..	..	100	..	....	
		Nannadu	100	..	..	..	100	..	....	
		Perambakam	100	..	..	..	100	..	....	
		Devenampet	100	..	..	..	100	..	....	Surveyed.
		Teruvamathur	28¼	..	..	..	28¼	..	....	
		Tennamadai	51¼	..	..	..	51¼	..	....	
		Athanur	1,449	..	..	..	1,449	..	....	
		Orathur	228¼	..	..	..	228¼	..	....	
		Thangal	57	..	..	..	57	..	....	
		Karanai	200	..	..	..	200	..	....	
		Gundalapaliyur	844	..	..	..	844	..	....	Do.
		Siruvalai (Arumbuli)	1,014¼	..	..	..	1,014¼	..	....	
		Vembi (in two bits)	256⅜	..	..	..	256⅜	..	....	
		Narasinganur	377¼	..	..	..	377¼	..	....	
		Vikravandi (in two places) ..	470	..	..	..	470	..	....	
		Melakondam	495	..	..	..	495	..	....	Do.
		Sathanur	261	..	..	..	261	..	....	
		Panampattu	250	..	..	..	250	..	....	
		Saliempolliem (two places) ..	200	..	..	..	200	..	....	
		Nemali	100	..	..	..	100	..	....	
		Dadavaram	200	..	..	..	200	..	....	
		Tiruvakkarai	1,000	..	..	..	1,000	..	....	
		Thaluvai	150	..	..	..	150	..	....	
		Total ..	10,916	17·06	..	..	10,916	17·06		
		Total of No. III Range ..	24,289	37·95	310	..	24,599	39·43		
	No. IV Range—Cuddalore Taluk.	Valicheripolliem	525	..	..	..	525	..	....	Do.
		Ramapuram	566	..	..	..	566	..	....	Do.
		Vellakarai	1,600	..	..	..	1,600	..	....	Do.
		Chellambanadampettai ..	651	..	..	..	651	..	....	Do.
		Badrakata	344	..	..	..	344	..	....	Do.
		Samatikuppam	343	..	..	..	343	..	....	Do.
		Sinnathanakuppam	3·3	..	..	..	313	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District—(*Contd.*)	Cuddalore Taluk—(*Contd.*)	Kattijagai	388	..	..	..	388	..	....	Surveyed and demarcated.
		Velanguppam	1,000	..	..	..	1,000	..	....	Demarcated.
		Kanjinippu	2,250	..	..	..	2,250	..	....	Do.
		Vadakuthu	3,400	..	..	..	3,400	..	....	Do.
		Velrampat	1,800	..	..	..	1,800	..	....	Do.
		Vellayanguppam	1,700	..	..	..	1,700	..	....	Do.
		Kaliyanguppam	150	..	..	..	150	..	....	
		Kathiampakam	100	..	..	..	100	..	....	
		Siruvathanur (two bits) ..	300	..	..	..	300	..	....	
		Total ..	15,430	24·11	..	..	15,430	24·11		
	Chidambaram Taluk.	Pichavaram	2,000	..	..	..	2,000	..	....	
		Ramapuram, hamlet of Pulienkata.	800	..	..	..	800	..	....	Do.
		Kondapuram	1,200	..	..	..	1,200	..	....	Do.
		Pananjinellore	200	..	..	..	200	..	....	
		Kallatharkurchi	350	..	..	..	350	..	....	Do.
		Misangan	800	..	..	..	800	..	....	Do.
		Adivaraganellore	1,200	..	..	..	1,200	..	....	Do.
		Kallakudi	600	..	..	..	600	..	....	Do.
		Pinnalur	400	..	..	..	400	..	....	
		Manamadevi	150	..	..	..	150	..	....	
		Viranam Tank	1,500	..	..	..	1,500	..	....	
		Total ..	9,200	14·37	..	..	9,200	14·37		
	Vriddhachallam Taluk.	Velangulam and Vennakuli ..	500	..	..	..	500	..	....	Do.
		Samakstai and Pallsapatnam ..	4,500	..	..	..	4,500	..	....	Do.
		Palleput	1,500	..	..	..	1,500	..	....	
		Erulakurchi (Nadeput) ..	300	..	..	..	300	..	....	Do.
		Melakapankalam	600	..	..	..	600	..	....	Do.
		Parur	1,200	..	1,800	..	3,000	..	....	Surveyed and demarcated.
		Niriyamadam	600	..	..	..	600	..	....	Demarcated.
		Ammeri	500	..	..	..	500	..	....	Do.
		Kupanatham	750	..	..	..	750	..	....	Do.
		Sathamangalam	200	..	..	..	200	..	....	Do.
		Arasuguli	100	..	..	..	100	..	....	Do.
		Kalapakam	600	..	..	..	600	..	....	
		Kannapuram	600	..	..	..	600	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District—(*Contd.*)	Vriddhachalam Taluk—(*Contd.*)	Karamangudi	2,000	..	..	..	2,000	..	....	Demarcated.
		Narasingamangalam	200	..	..	..	200	..	....	Do.
		Kottanur	2,700	..	..	..	2,700	..	....	Do.
		Mematur	500	..	..	..	500	..	....	Do.
		Pillur	800	..	..	..	800	..	....	
		Pulambadi	2,000	..	..	..	2,000	..	....	Do.
		Allambalam	2,000	..	..	..	2,000	..	....	
		Addiri	1,000	..	..	..	1,000	..	....	
		Kattumylur	800	..	..	..	800	..	....	
		Narriyur	3,000	..	..	..	3,000	..	....	
		Nangur	1,800	..	..	..	1,800	..	....	
		Mangalam	300	..	..	..	300	..	....	
		Aliyur	150	..	..	..	150	..	....	
		Pinjanur (Karivelam tract)	200	..	..	..	200	..	....	
		Kasba Tank	200	..	..	..	200	..	....	
		Total	30,600	47·81	1,800	..	32,400	50·81		
		Total of No. IV Range	55,230	86·29	1,800	..	57,030	89·10		
	No. V Range—Tirukoilur Taluk.	Nattamur	9,500	..	..	..	9,500	..	....	Surveyed.
		Chettamur	3,000	..	..	..	3,000	..	....	Demarcated.
		Arunavaram	2,650	..	..	..	2,650	..	....	Do.
		Odiathur	2,500	..	..	..	2,500	..	....	
		Ayandur	1,000	..	..	..	1,000	..	....	
		Virinjipuram	1,500	..	..	..	1,500	..	....	Do.
		Adukkam	1,500	..	..	..	1,500	..	....	Surveyed.
		Athipakam	2,000	..	..	..	2,000	..	....	Demarcated.
		Sadakattai	500	..	..	..	500	..	....	
		Samimalai	4,000	..	..	..	4,000	..	....	Do.
		Marathur (Kunathur Malai)	2,220	..	..	..	2,220	..	....	
		Ulundurpet (Pandur)	2,500	..	..	..	2,500	..	....	
		Yedakal	4,500	..	..	..	4,500	..	....	Do.
		Alwarmalai	6,500	..	..	..	6,500	..	....	Do.
		Siruvakam	1,200	..	..	..	1,200	..	....	
		Kutadi	2,250	..	..	..	2,250	..	....	Do.
		Sitheri	3,000	..	..	..	3,000	..	....	Do.
		Kunjaram	1,500	..	..	..	1,500	..	....	
		Kallamadu	500	..	..	..	500	..	....	Do.
		Ponnavalam	200	..	..	..	200	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other Heads.	Area on 31st March 1884.		Number and Date of Notification of Addition or Transfer.	Remarks.
			Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
South Arcot District—(*Contd.*)	Tirukoilûr Taluk—(*Contd.*)	Tiruvanellore	40	..	..	..	40	..	....	
		Yemappur	70	..	..	..	70	..	....	
		Siruvanur	50	..	..	..	50	..	....	
		Eruveliput	50	..	..	..	50	..	....	
		Melamangalam	40	..	..	..	40	..	....	
		Mamandur	50	..	..	..	50	..	....	
		Gramam	40	..	..	..	40	..	....	
		Ellandorai	40	..	..	..	40	..	....	
		Panapakam	50	..	..	..	50	..	....	
		Sethilingamadam	70	..	..	..	70	..	....	
		Maruthur tank bed	60	..	..	..	60	..	....	
		Puthupoliem	40	..	..	..	40	..	....	
		Palaya Agraram tank reserve	65	..	..	..	65	..	....	
		Total	53,185	83·10	..	..	53,185	83·10		
	No. VI Range—Kallakurchi Taluk.	Kanakadu	1,200	..	..	..	1,200	..	....	Demarcated.
		Kadambur	100	..	..	..	100	..	....	Do.
		Kaduvamur	1,500	..	..	..	1,500	..	....	Do.
		Kuttuvananjur	800	..	..	..	800	..	....	
		Chittal (Ponmodu)	1,500	..	..	..	1,500	..	....	
		Vengalam	3,000	..	..	..	3,000	..	....	
		Rishmendiem	3,000	..	..	..	3,000	..	....	Do.
		Nelamungalam	150	..	..	..	150	..	....	Do.
		Yemaputhur	1,000	..	..	..	1,000	..	....	Do.
		Kadathur	300	..	..	..	300	..	....	
		Indali	1,000	..	..	..	1,000	..	....	Do.
		Katalam	2,500	..	..	..	2,500	..	....	
		Nagalur	900	..	..	..	900	..	....	
		Purasakurchi	750	..	..	..	750	..	....	
		Varamsarum	450	..	..	..	450	..	....	
		Kutakudi	1,000	..	..	..	1,000	..	....	
		Kilineriyappanur	1,500	..	..	..	1,500	..	....	
		Vardiyappanur	500	..	..	..	500	..	....	
		Chinna Salem	200	..	..	..	200	..	....	
		Sattapadi	250	..	..	..	250	..	....	
		Total	21,600	33·75	..	..	21,600	33·75		
		Grand Total	255,821	399·69	2,117	..	257 938	403·03		

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range	Civil District or Territory	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and Date of Notification of Addition or Transfer.	Remarks.
Salem District ..	Salem District	A or Vadagampatti	..	..	..	..	1,976·28	..	....	Demarcated, surveyed fenced and authorised—G. O., No. 1172, 21st March 1877.
							799·43	..	....	Do. do
		B or Morúr	..	..	..	..	587·10	..	....	Do. dc
		C or Mallápuram	..	..	..	..	220·94	..	....	Do. do.
		D or Bargur	..	..	..	..	1,069·81	..	....	Do. do.
		E or Puthur	..	..	..	..	252·91	..	....	Do. do.
		Ammaneri	..	..	..	..	981·8	..	....	Do. do.
		Pellapolli	..	..	..	..	531·80	..	....	Do. do.
		Kariappakombai	..	..	..	..	600·	..	....	Demarcated, surveyed, fenced and authorised—G.O., No. 27, 2nd March 1880.
		Kanjeri	..	..	..	..	2,645·72	..	....	Conservator's letter, No. 517, 26th July 1880.
							837·83			Collector's order, 11th October 1879.
		Paimaicaradu	..	..	..	..	100·	..	....	
		Karuvattuparai	..	..	..	..				
		Thogarapalli	..	..	..	..	469·11	..	....	Demarcated, surveyed, fenced and authorised—*vide* G.O., No. 1172, 21st March 1877.
		Uttankarai	..	..	..	..	2,624·62			
		Singarapet	..	..	..	..	1,176·94			
		Harur	..	..	..	..	5,459·	..	....	Demarcated, surveyed, and authorised—G.O., No. 1689, 8th Nov. 1881.
		Mailgherry	..	..	..	..	743·	..	....	
		Kanavaikuttapalle	..	..	..	..	3,252·	..	....	
		Goolhatti	..	..	..	..	3,309·	..	....	
		Munchi	..	..	..	..	421	..	....	Five acres formerly a sandal plantation now closed and included as reserve —G.O., No. 190, 12th January 1880.
		Konadainagasamudram S.R. ..	..	..	..	..	40·87	..	....	Collector's letter, No. 9, 23rd January 1880.
							94 63	..	....	Collector's letter, No. 475, 11th June 1879, applied for cultivation on the Shevaroys, but was refused and reserved.
		Monkey Shola	..	..	..	..	1,719·62	..	....	
		Pattipandy	..	..	..	..	— 380·52			
		Salem Nád Reserve	..	..	..	..	29,532·89	46·14		
		Total ..	28,188·79	44·03	1,344·10	..				

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and Date of Notification of Addition or Transfer.	Remarks.
Trichinopoly District.	Trichinopoly District.	Lálápet (*a*)	106	$\frac{1}{6}$	* 107	..	213	$\frac{1}{3}$	....	* Handed over by the Public Works Department.
		Tuvagudi (*a*)	944	$1\frac{1}{2}$	..	..	944	$1\frac{1}{2}$	....	(*a*) G.O., No. 502, 21st March 1871.
		Tainimalai (*b*)	640	1	..	..	640	1	....	(*b*) G.O., No. 1457-117, 23rd November 1883.
		Minnakaradu (*b*)	1,000	$1\frac{9}{16}$	..	..	1,000	$1\frac{9}{16}$	....	These reserves are neither surveyed nor demarcated
		Punjantangi (*b*)	1,000	$1\frac{9}{16}$	..	..	1,000	$1\frac{9}{16}$	....	
		Sripurandan (*a*)	486	$\frac{3}{4}$	..	..	486	$\frac{3}{4}$	....	
		Nagamangalam	..	..	400	..	400	$\frac{5}{8}$	....	
		Pachamalais	..	..	..	..	..	..	....	
		Total ..	4,176	6·52	507	..	4,683	7·31		
Tanjore District	Tanjore Taluk	Naddur	..	..	..	..	421	·66	....	
		Eachenkattai	..	..	..	..	77	·12	....	
		Kallangarai	..	..	..	..	109	·17	....	
		Marungulam	..	..	..	..	152	·24	....	
		Karungulam Melapatti ..	..	..	..	..	389	·61	....	
		Thatchankurchi	..	..	..	..	161	·25	....	
		Pudukudivadapatti	..	..	..	..	212	·33	....	
		Kangeampatti	..	..	..	..	67	·10	....	
		Kammanthangadi, Keelayur ..	..	..	..	..	232	·36	....	
		Purathur	..	..	..	..	205	·32	....	
		Thirumangalakatti, Keelayur.	..	..	..	..	437	·68	....	
		Do. Melayur.	..	..	..	..	514	·80	....	
		Ponnappar	..	..	..	..	181	·28	....	
	Shiyáli ..	Vettangudi	..	..	..	..	1,380	2·15	....	
		Kodiakadu (Point Calmere) ..	..	..	..	..	5,710	8·92	....	
	Tiruturaipúndi	Andirkadu	..	..	..	..	64	·10	....	
		Settipalem	..	..	..	..	84	·13	....	
		Naluvedapatti	..	..	..	..	42	·06	....	
		Samudraveli	..	..	..	..	230	·36	....	
	Mannárgudi ..	Apparasampettai	..	..	..	..	76	·12	....	
	Patukóta ..	Thandalai	..	..	..	..	283	·44	....	
		Pathukudapatam	..	..	..	..	66	·10	....	
		Total ..	..	..	11,092	..	11,092	17·30		
North Coimbatore Division..	North Coimbatore Division.	I or Jadathalahallah ..	..	..	..	..	361·01	..	....	Notified under Section 25 of Forest Act V of 1882 —*vide*, G.O., No. 1462, 26th November 1883.
		II or Odiarpolliem	..	..	..	..	296·63	..	....	
		III or Bylore	..	..	..	..	1,186·39	..	....	
		IV or Guninalla	..	..	..	..	519·78	3·70	....	
		Total ..	16,118·61	25·18	..	—13,754·80	2,363·81	3·70		

Area of Reserved Forests 1883-84.—(*Continued.*)

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and Date of Notification of Addition or Transfer.	Remarks.
South Coimbatore Division.	Polláchi Taluk	Anaimalai No. I	..	..	..	..	103,680	82		Rights inquired into and declared under Section 25 of Act V of 1882.
		Do. No. II	..	..	..	..		6		
		Do. No. III	..	..	..	..		74		
	Udamalpet do.	Fuel Reserve at Elyanatham	..	..	..	..	62·84			
		Do. at Uthanthoni	..	..	..	..	60·0			
		Do. at Dhulli	..	..	..	..	484·73			
	Palladam do.	Arasur	..	..	..	..	57·97			
		Nachipolliem	..	..	..	..	63·30			
		Ammapolliem	..	..	..	..	61·34			
		Kuduvettapolliem	..	..	..	..	82·15			
		Perumanellur	..	..	..	..	81·29			
		Pudupolliem	..	..	..	..	66·49			
	Udamalpet do.	Kattaimangalam	..	..	..	..	3·0			
		Chinnimalaipolliem	..	..	..	..	9·38			
		Gudimangalam	..	..	..	..	4·78			
		Pulamkinar	..	..	..	..	3·82			
		Pukkulam	..	..	..	..	13·50			
		Pulavadi	..	..	..	..	7·64			
		Madathukalam	..	..	..	..	3·0			
	Polláchi do.	Kinnathakadam	..	..	..	..	8·0			
		Shankararayapuram	..	..	..	..	100		G. O., No. 1259, 16th Nov. 1882.	
		Muthiampolliem	..	..	..	..	4·0			
		Periakulandai	..	..	..	..	3·0	23·		Locally recognized by established custom.
		Kottampatti	..	..	..	..	6·0			
	Palladam do.	Anupatty	..	..	..	..	3·0			
		Sithambalam	..	..	..	..	3·0			
		Kathanur	..	..	..	..	3·0			
		Manikapuram	..	..	..	..	5·0			
		Tirupur	..	..	..	..	5·0			
		Vadugapolliem	..	..	..	..	8·0			
		Ganapattipolliem	..	..	..	..	5·0			
		Appenaikenpatti	..	..	..	..	9·55			
		Nilambúr	..	..	..	..	9·55			
		Silachuruchel	..	..	..	..	4·75			
		Agraraputur	..	..	..	..	5·0			
	Coimbatore ..	At the toll-gate on the road to Thadagam.	..	..	..	..	9·75		Board's Procs., 10th Feb. 1884, No. 571.	
		At the toll-gate east of Puliacolum road.	..	..	..	..	55·55			
		Sholakarai Reserve	..	..	..	..	1,292·0			
		H.K.M. Reserve at Mettupálaiyam.	..	..	..	..	12,160			
		Total ..	104,878·72	163·87	13,565·66	..	118,444·38	185		

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and Date of Notification of Addition or Transfer.	Remarks.
Madura District.	Madura District.	Vannathiparai	..	..	..	..	27,481·6	42·99	....	
		IV. Suranganar	..	..	..	..	3,616·	5·65	....	
		IX. Sengalvarayar	..	..	..	..	5,209·6	8·14	....	
		X. Pambar	..	..	..	..	4,755·2	7·43	....	G.O., No. 1681, 17th October 1878.
		XI. Poombarai and Velpatti valley.	..	..	..	..	13,587·2	21·23	....	G.O., No. 1284, 29th August 1881.
		XII. Kudniar	..	..	..	..	10,060·8	15·72	....	
		XIII. Kookkal	..	..	..	..	9,644·8	15·07	....	G.O., No. 1275, 11th October 1883.
		XIV. Maruthanadhar	..	..	..	..	6,528	10·20	....	Notification in *Fort St. George Gazette*, dated 13th November 1883.
		XV. Pambukal Ár	..	..	..	..	800	1·25	....	
		XVI. Senivathukadu	..	..	..	..	2,279·2	3·56	....	
		XVII. Kannienkadu	..	..	..	..	3,001·6	4·69	....	
		XVIII. Veimellai	..	..	..	..	4,800	7·50	....	
		XIX. Serumalai	..	..	..	..	25,529·6	39·89	....	
		XX. Mudimalai	..	..	..	..	6,086·4	9·51	....	
		XXI. Alagarmalai	..	..	..	..	13,036	20·37	....	
		XXIII. Sholas on the Lower Palnis—								
		(*a*) Perumalmalai Shola.	..	..	..	..	..	..	....	
		(*b*) Thogavadai Shola.	..	..	..	..	..	..	....	
		(*c*) Serathankánal.	..	..	..	..	..	..	....	
		(*d*) Arankanal	..	..	..	..	..	..	....	
		(*e*) Kadavu Shola	..	..	..	..	..	..	....	
		XXIV. Sholas on the Upper Palnis.	..	..	..	..	2,316	3·62	....	
		(*a*) Tiger Shola	..	..	..	..	..	..	....	
		(*b*) Parapar Shola.	..	..	..	..	..	..	....	
		(*c*) Kodaikánal	..	..	..	..	..	..	....	
		(*d*) Pannitutankánal.	..	..	..	..	..	..	....	
		(*e*) Gundan and Mannavan Shola.	..	..	..	..	..	..	....	
		(*f*) Gundar Shola	..	..	..	..	..	..	....	
		(*g*) Sandanam Shola.	..	300	..	..	..	..	....	
		(*h*) Fort, Hamilton.	..	..	..	..	..	..	....	
		(*i*) Marian Shola	..	..	..	..	..	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and date of Notification of Addition or Transfer.	Remarks.
Madura District—(*Contd.*)	Madura District—(*Cond.*)	Railway Fuel Reserve—								
		Goovanooth	..	..	..	..	1,920	..	....	G.O., No. 1284, 29th August 1881.
		Akkamakaradu	..	..	..	..	1,600	..	....	
		Kapparamakutu	..	..	..	..	2,560	..	....	
		Sundamalai	..	..	..	..	2,240	..	....	
		Thannukaradu	..	..	..	..	1,920	..	....	
		Thenikal	..	..	..	..	3,200	..	....	
		Jungle Conservancy—								
		Thenapudupatti	..	..	..	..	126·78	..	....	G.O., No. 1259, 16th November 1882.
		Sakimangalam	..	..	..	..	467·94	..	....	
		Nagamalai	..	..	..	..	2,356·	..	....	
		Muthugamalai	..	..						G.O., No. 1275, 11th October 1883.
		Vellamalai	..	..						
		Perumalmalai	..	..	..	..	2,700	..	....	Notification in *Fort St. George Gazette*, 13th November 1883.
		Pillayarnatham Hills	..							
		Kadavakurichi	..	..	..	..	5,120	..	....	
		Sengathampatti	..	..	..	..	4,480	..	....	
		Vikramangalam	..	..	..	..	10,240	..	....	
		(Fuel and Fodder Reserve—								
		Veguthamalai	..	..	..	..	4,200	..	....	Constituted a fuel and fodder reserve under Rule 8 of the rules under Section 26 of the Forest Act.
		Total	196,182·32	306·54	..	−14,319·15	181,862·22	216·82		
Tinnevelly District.	Nángunéri Taluk.	Ghât Forests—								
		Reserve No. I	..	..	..	..	31,532·80	49·27	Notification under Section 25 of Forest Act V of 1883 in the *Fort St. George Gazette*, dated 22nd Jan. 1884, and Board's Proceedings, No. 258, dated 25th Jan. 1884.	*A tract of 8·87 square miles of Saptur Zemin Forest is included within the reserved limits in the Vartirayiruppu block, but it will not be considered as included in the reserve until arrangements have been made with the Collector of Madura and the Zemindar for its reservation under Chapter IV, Board's Procs., 26th, Jan. 1884, No. 258.
	Ambásamudram Taluk.	Do. ,, II	..	..	..	..	91,008	142·20		
	Tenkasi	Do. ,, III	..	..	..	..	18,009·60	28·14		
	Sankaranainárkoil.	Do. ,, IV	..	..	..	..	19,737·60	30·84		
	Srívilliputur*	Do. ,, V	..	..	..	..	23,270·40	36·36		
		Total of Ghât Forests	..	..	..	..	183,558 40	286·81		
		Plain Forest—								
		Kottam Kulam Hills	..	..	..	..	500	·781	1878.	
	Ambása mudram.	Kalandamamalai	..	..	..	..	1,120	1·75	1878.	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and Date of Notification of Addition or Transfer.	Remarks.
Tinnevelly District—(*Contd.*)	Tinnevelly Taluk.	Plain Forest—(*Continued*).								
		Manur Kulam	..	..	..	..	1,133	1·770	1873.	
		Rusta Kulam	..	..	..	..	20	·031	,,	
		Ramasawmipuram Kulam	..	..	..	..	18	·028	,,	
		Siru Kulam	..	..	..	..	5	·008	,,	
		Kalakudi Kulam	..	..	..	..	127	·198	,,	
		Puthu Kulam	..	..	..	..	100	·156	,,	
		Seethakurchi Kulam	..	..	..	..	53	·082	,,	
		Sendamangalam Kulam	..	..	..	..	32	·05	1874.	
		Aruvan Kulam	..	..	..	..	56	·087	,,	
		Naranamalpuram Kulam	..	..	..	..	213	·332	,,	
		Rajavallipuram Kulam	..	..	..	..	255	·398	,,	
		Piran Kulam	..	..	..	..	31	·048	,,	
		Alaganeri Kulam	..	..	..	..	39	·060	,,	
		Aruvan Kulam tope	..	..	..	..	2	·003	,,	
		Ananthakristnapuram Tope	..	..	..	..	10	·015	,,	
		Thalayuthu or Pullikottai Hills	..	..	..	..	500	·781	1880.	
		Total	..	..	..	..	2,594	4·047		
	Tenkarai Taluk.	Kaliavoor Kulam	..	..	..	..	322	·500	1872.	
		Kalankarai block	..	..	..	..	187	·292	,,	
		Rajan Kulam	..	..	..	..	150	·234	,,	
		Muthur Kulam	..	..	..	..	241	·376	,,	
		Kuthukal Kulam	..	..	..	..	133	·207	,,	
		Narajiniam Kulam	..	..	..	..	106	·165	1873.	
		Kongariakurchi block	..	..	..	..	92	·143	1874.	
		Kayalpatam Undankadu	..	..	..	..	411	·642		
		Total	..	..	..	..	1,642	2·559		
	Otapidáram.	Agilandapuram Kulam	..	..	..	..	124	·193	1872.	
		Kuty Kulam	..	..	..	..	18	·028	,,	
		Parchy Kulam	..	..	..	..	105	·164	,,	
		Sengalamadayúr Kulam	..	..	..	..	45	·070	,,	
		Karisal Kulam	..	..	..	..	148	·231	,,	
		Tuticorin blocks	..	..	..	..	605	·945	1874.	
		Vyparkadu reserve	..	..	..	..	813	1·270	,,	
		Total	..	..	..	..	1,858	2·901		

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and Date of Notification of Addition or Transfer.	Remarks.
Tinnevelly District—(*Contd.*)	Sátúr ..	Plain Forest—(*Continued*).								
		Nemaneri	..	..	..	..	486	·759	1873.	Area not ascertained by survey.
		Mudithalai Kulam	..	..	..	..	200	·312	,,	
		Periapiraly	..	..	..	..	109	·170	,,	
		Chinnapiraly	..	..	..	..	40	·062	,,	
		Ondipulenaikanur	..	..	..	..	103	·169	,,	
		Puttukulam	..	..	..	..	244	·381	,,	
		Total ..	..	..	..	..	1,182	1·853		
		Total of Plain Forest ..	..	..	..	..	8,896	13·889		
		Grand Total ..	201,923·40	315·50	..	— 9,469	192,454·40	300·69		
Wynaad and Pálghat Divisions, Malabar District.	Wynaad ..	Kudracote	41,500	64·84	..	..	41,500	64·84	....	
		Padrey	22,400	35·	..	..	22,400	35·	....	
		Chedleth	52,501·24	82·03	..	..	52,501·24	82·03	....	
		Benni	30,720	48	..	..	30,720	48	....	
		Cardamom Forest	13,440	21	..	..	13,440	21	....	
		Kanoth	25,600	40	..	..	25,600	40	....	
		Total ..	186,161·24	290·87	..	..	186,161·24	290·87		
	Pálghat ..	Chenat Nair Forest	16,369	25·50	..	..	16,369	25·57	....	Surveyed but area not accurately ascertained.
		Walayár Reserve	3,017	4·79	..	..	3,017	4·71	....	
		Thampurattipottai	..	..	100	..	100			
		Tiruvazham Koonoor	..	..	1,000	..	1,000	1·95	Added in December 1883.	Area entered approximately.
		Forest land near Doni ..	..	..	150	..	150			
		Total ..	19,386	30·29	1,250	..	20,636	32·23		
Nilambúr Division, Malabar District.	Nilambúr ..	Nellicutta	..	..	..	..	1,799·38	..	....	
		Karampoya *	..	..	..	..	3,955·28	..	....	* Reserved—*vide* notification published in *Fort St. George Gazette*, dated 26th February 1884, under Section 25 of Act V of 1882.
		Packodi	..	..	..	..	761·25	..	....	
		Pannangode	..	..	..	..	462·09	..	....	
		Welluvasheny	..	..	..	..	329·74	..	....	
		Edacode	..	..	..	..	3,666·07	..	....	
		Amarapollam *	..	..	..	..	57·14	..	....	
		Arimbrakuta	..	..	..	..	299·75	..	....	
		Chathambarai	..	..	..	..	60·89	..	....	

Area of Reserved Forests, 1883-84—(*Continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	Number and Date of Notification of Addition or Transfer.	Remarks.
Nilambúr Division, Malabar District—(*Contd.*)	Nilambúr—(*Contd.*)	Kanakutha	..	..	..	..	668·61	..	....	
		Edampadam	..	..	..	..	581·26	..	....	
		Karien	..	..	..	..	950·61	..	....	
		Muriat	..	..	..	..	1,765·13	..	....	
		Total ..	20,000	31·25	..	— 4,642·80	15,357·20	24·		
South Canara District.	South Canara District.	Pillar Khan	..	..	..	..	320	·5	....	These forests have not been notified under the Act, the first is an old reserve of the Forest Departments dating since 1875, the others are jungle conservancy reserves.
		Chembuguddi	..	..	..	..	75	About 12	....	
		Kutiar	..	..	..	..	25	·04	....	
		Poitaji	..	..	..	..	87	·14	....	
		Ajjar kad	..	..	..	..	195	·30	....	
		Sabbadi	..	..	..	..	120	·19	....	
		Total ..	879	1·43	..	— 57·	822	1·29		
		Grand Total ..	1,261,003·29	1,970·28	90,871·41	—42,242·75	1,309,631·95	2,045·82		

The totals brought forward by District Forest Officers differed considerably; their figures for 31st March 1884 retained and the rest altered.

(FORM No. 60.)

APPENDIX II.

Forest Department, Southern Circle, Madras.

Area of Plantations, 1883-84.

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Chingleput District.	Meyur, Pelappúr and Mamandur	..	..	..	..	400	19,178	
	Názarethpéttah	..	..	..	..	71·54	1,359	
	Wálajábád	..	..	..	..	14·55	1,203	
	Vembákam	..	..	..	..	8·	3,336	
	Hanoomanthaputhéri					12·		
	Mélamenjur					24·		
	Kathivák	..	..	..	..	14·43	234	
	Covelong	..	..	..	..	2·	150	
	Total ..	801·44	40,075	— 254·92	14,614	546·52	25,460	
North Arcot ..	Tiruvallam	..	..	..	..	435	26,040	About 3,000 acres planted, 1,000 to an acre.
	Virinjipuram	..	..	..	..	260	18,390	About 200 acres planted, 1,000 to an acre.
	Kilminnel	..	..	..	..	150	7,577	All planted, 1,000 to an acre.
	Chayanúr	..	..	..	..	129	5,621	80 acres planted, 1,000 to an acre.
	Gazulamandam	..	..	..	..	250	3,028	44 acres planted; just felled.
	Vanavédu	..	..	..	..	30	1,956	All planted, 1,000 to an acre.
	Ammundi	..	..	..	..	160	3,664	About 50 acres planted, 1,000 to an acre.
	Arkónam Sub-Magistrate's compound ..	..	..	..	..	5	130	All planted, about 300 to an acre.
	Do. plantation	..	..	..	..	37	4,971	Do. do.
	Do. Head Assistant Collector's office.	..	..	..	..	4	151	Do. do.
	Ambúr	..	..	..	..	5	248	Do. do.
	Thándráyagunta	..	..	..	..	2	639	All planted, 1,000 to an acre—Casuarina.
	Palmanér	..	..	..	..	2	1,287	All planted, 300 to an acre—Sandalwood, &c.
	Nágamangalam	..	..	..	..	31	2,469	All planted, very poor Casuarina.
	Piduguvaripalle	..	..	..	..	20	2,933	All planted; 500 to an acre.
	Venkatagirikota	..	..	..	..	4	2,182	Do. do.
	Byreddipalle	..	..	..	..	4	5,495	Eucalyptus; very poor.
	Ammerdi	..	..	..	..	25	4,107	All planted, Cassia floridæ, Sandal, Redwood, &c.
	Total ..	1,558	86,887	— 5	4,001	1,553	90,888	

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
South Arcot ..	Chengam	..	1,226	..	32	8	1,257	
	Agaram	..	6,638	..	167	86	6,805	Markanam absorbed in this plantation.
	Atchikádu	..	1,764	..	48	24	1,812	
	Tolangada	..	6,428	..	482	110	6,910	
	Fort St. David	..	2,512	..	519	30	3,031	
	Shonangkuppam	..	7,455	..	457	120	7,912	
	Donidorai and other salt topes around ..	..	507	..	469	35	976	
	Nochikádu	..	6,715	..	513	200	7,229	
	Periyákupam	..	1,097	..	853	56	1,950	
	Add amount of land-rate paid for the above plantation.	..	..	..	313	..	313	
	Killai Plantations	..	381	..	484	25	865	
	Kolarun mouth Plantation	..	902	..	109	15	1,011	
	Malattar Bed	..	29,841	..	133	27	29,973	Ponniár anicut plantation absorbed in this plantation.
	Vélúr	..	2,563	..	..	..	2,563	Transferred to Reserve List according to Conservator's view in Inspection note of February 1882, as noted last year.
	Add pay of the Manager and his Gumastah in charge of Tirukoilúr plantations.	..	916	..	..	..	916	
	Total ..	5,600	68,945	— 4,864	4,579	736	73,523	
Salem	Salem							
	Átúr							
	Námakal							
	Tiruchengód							
	Uttankarai	5	2,644	— 5	..	..	..	The area and cost for the current year are shown in the Tope Statement.
	Tirupatúr							
	Krishnagiri							
	Dharmapuri							
	Hosúr							
Trichinopoly ..	Elamanúr	84	11,176	33	495	117	11,671	
	Kulitalai	58	9,247	3	380	61	9,627	
	Manattattai	33¼	3,647	8¾	201	42	3,848	
	Sittalavoi	107	6,940	45	209	152	7,149	
	Sekkonam	122	2,815	..	110	122	2,925	
	Kattalai	55	6,796	14	145	69	6,941	
	Púdur	100	569	41	72	141	641	

Area of Plantations, 1883-84—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Trichinopoly—(*Contd*).	Punganúr	480	373	..	53	480	426	
	Kilamánikkam	242	5,069	..	344	242	5,413	
	Arámanaikurichi	91	2,300	..	113	91	2,413	
	Karaipákkam	107	2,143	..	263	107	2,406	
	Tiruvenganúr	185	1,694	..	285	185	1,979	
	Varappakurichi	192	1,444	..	105	192	1,549	
	Sattambádi	105	2,158	..	120	105	2,278	
	Valakurichi	130	257	..	54	130	311	
	Annagarempet	92	906	..	296	92	1,202	
	Total	2,183¼	57,534	+ *144¾	3,245	2,328	60,779	* Found by actual survey.
Tanjore	Tranquebar, No. I	..	..	..	..	52	..	† The amount spent on these plantations up to 1st Apri 1883 cannot be given as there is nothing on record to show the same. The amount laid out during the year under report towards pay of maistries, gardeners and temporary coolies is Rs. 2,297.
	Do. No. II	..	..	..	..	62	..	
	Véttangudi	..	..	..	..	453	..	
	Neidavassal	..	..	..	..	51	..	
	Kodiempálaiyam	..	..	..	..	60	..	
	Kadambai	..	..	..	..	26	..	
	Total	11,254·50	7,887	— 10,550·50	— 7,886	704	† ..	
Coimbatore. North Coimbatore.	Satyamangalam and Talamalai	..	..	..	..	..	..	
	Sandalwood	80	18,515	..	48	80	18,563	
	Kollégal	97	27,903	..	776	97	28,679	
	Beilúr							
	Total	177	46,418	..	824	177	47,242	
South Coimbatore	Three plantations in Pollachi Taluk	19·50	4,402	..	..	19·50	4,402	These are the teak plantations in No. 1 Reserve on the Anamalai.
Madura	No. 1, Vannáthipárai	..	..	— 104	..	..	..	Included in the Vannáthiparai Forest Reserve.
	No. 2, Kodaikánal—							
	(*a*) Eucalyptus	..	..	..	..	14·50	3,066	G.O., No. 1275, dated 11th October 1883. Notification in *Fort St. George Gazette*, dated 13th November 1883.
	(*b*) Acacia					18·		
	No. 3, Velamkombai	..	..	..	..	54·14	976	
	Total	224·14	12,952	— 137·50	— 8,910	86·64	4,042	

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Tinnevelly	Tinnevelly	73·50	232	..	158	73·50	390	* The particulars of plantations comprised in each of the taluks is shown in the tope statement.
	Tenkarai	9,873·9	390	+ 9,469	353	19,342·9	743	
	Otapidáram	88·88	18	..	16	88·88	34	
	Sankaranainárkoil	1·0	..	..	95	1·0	95	
	Tenkási	32·10	402	..	237	32·10	639	
	Nángunéri	13·13	209	..	190	13·13	399	
	Srívilliputúr	..	..	..	..	..	..	
	Sátúr	..	..	..	..	..	..	
	Ambásamudram	..	..	..	..	..	..	
	Total	10,081·70	1,251	+ 9,469	1,049	* 19,550·70	2,300	
	Wynaad (Kanoth) Pálghat Division	..	..	+ 41·50	2,429	41·50	2,429	
Malabar District	Nilambúr Division—							
	Iravellukavu	131·56	..	..	..	131·56		
	Aruvacode	113·63	..	..	..	113·63		
	Yedacode	693·59	..	..	..	693·59		
	Ellengerry	337·81	..	..	..	337·81		
	Ramalur	21·33	..	..	..	21·33		
	Mulathimana	70·76	..	..	..	70·76		
	Pannengode	393·78	..	..	..	393·78		
	Walluwasherry	584·00	..	..	..	584·00		
	Chathamborai	498·10	..	..	..	498·10	10,77,122	
	Nellikutta	120·23	..	..	..	120·23		
	Amarapálam	† 408·77	..	..	..	408·77		
	Mangalasherry	10·74	..	..	..	10·74		† Reserved—*Vide* notification published in *Fort St. George Gazette*, dated 26th February 1884, under Section 25 of Act V of 1882.
	Ambalacandy	1·04	..	..	..	1·04		
	Chittarikal	9·55	..	..	..	9·55		
	Putalath	8·35	..	..	..	8·35		
	Mangalasherry	10·74	..	..	..	10·74		
	Arimbracutta	22·00	..	..	..	22·00		
	Total	3,435·98	4,31,892	..	6,45,230	3,435·98	‡ 10,77,122	‡ The total entered by the District Forest Officer is Rs. 11,19,039-11-5.
South Canara	Parapa, * Ullál, Honne, Thaniar Bhavi, Kugniangai and Mukkade.	687	13,687	— 687	..	..	..	Extent and other particulars are not given. In paragraph 28 of the report it is stated that owing to some mistake the old Jungle Conservancy Reserves were entered in the last Administration Report twice under the head of Reserves and under the head of Plantations. They are in no way plantations.
	Grand Total	36,027·51	7,74,574	— 6,848·67	6,59,175	29,178·84	13,88,187	

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
	Cultural Operations.	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Chingleput	..	..	..					
Arcot, North ..	..	725	1,450		*Nil.*			
Arcot, South ..	..	410	8,712					
Salem	..	2,500	15,137					
Trichinopoly ..	Yedamalaipatti	A. 4	263	..	30	4	293	
	Melúr	M. 6	34	..	20	6	54	
	Peruvali bank	.. 2½	109	..	24	2½	133	
	Kariyamanikkam	A. 10½	551	..	77	10½	628	
	Sodeiyur	.. 4½	188	..	24	4½	212	
	Coleroon Left Bank Trunk Road to Alambadi.	M. 22	1,889	..	767	22	2,656	
	Mahadanapuram	..	171	..	50	..	221	
	Ambásamudram	..	311	..	30	..	341	
	Kunnudianpatti	A. 2⅜	168	..	..	2⅜	168	
	Yesani	.. 9⅛	282	..	10	9⅛	292	
	Nandiyar Project	M. 4	2,243	..	18	4	2,261	
	Coleroon Left Bank, Sembiakudi to Vaippor.	M. 21	7,439	..	108	21	7,547	
	Ponnari Main Channel	.. 19	6,995	..	99	19	7,094	
	Do. Branch Channels	.. 16	2,199	..	..	16	2,199	
	Lower Anicut line	.. 10	3,433	..	24	10	3,457	
	Vadavar Padugais	..	..	..	3	..	3	
	Total ..	A. 29¾ M. 100½	26,275	..	1,284	A. 29¾ M. 100½	27,559	
Tanjore	Nadur	..	..	..	..	18	..	The areas noted are only approximate, none of them having been surveyed as yet.
	Fashenkottai	..	..	..	..	9	..	
	Kollangarai	..	..	..	..	20	..	
	Karangulam Melpatti	..	..	..	..	5	..	
	Marangulam	..	..	..	..	20	..	
	Natarajapuram	..	..	..	..	9	..	
	Kathicheri	..	..	..	..	15	..	
	Kalliappanellur	..	..	..	..	18	..	
	Mudicondanellur	..	..	..	..	25	..	
	Vettangudi	..	..	..	..	520	..	
	Nannilam	..	..	..	..	2	..	
	Othianthivu	..	..	..	..	20	..	
	Vedarniem (Date garden)	..	..	..	..	1	..	
	Edangankottai	..	..	..	..	7	..	
	13 Topes in Patukóta	..	..	..	..	135	..	
	Total ..	..	..	..	..	824	..	

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Coimbatore, North ..	..	71·26	24,864		*Nil.*			
Do. South ..	..	105·56	8,362					
	Jungle Conservancy Plantations—							
	Veeramadayan plantations	..	..	..	..	..	..	
	Thenaur plantations	..	..	..	..	..	..	
	Thov riman do.	..	..	..	..	..	..	
	Dindigul at the junction of Trichinopoly and Caroor roads.	..	..	..	..	..	..	
	Do. around the Race-course ..	..	..	..	..	..	..	
	Do. in front of the Dindigul Munsif's Court.	..	..	..	..	..	..	
	Kodaikánal Settlement	..	..	..	..	..	..	
	Poombarai	..	..	..	..	..	..	
	Navempatti Garden	..	..	..	..	..	..	
	Koiloor Traveller's Bungalow	..	..	..	..	..	..	
	Gúdalúr	..	..	..	..	..	..	
	Goovakapatti	..	..	..	..	..	..	
	Thamaraikulam	..	..	..	..	..	..	
Madura	Melmangolam	..	..	..	..	..	..	
	Vadipatti	..	..	..	..	..	..	
	Gangoovarpatti	..	..	..	..	..	..	
	Allinagarum	..	..	..	..	..	..	
	Virapandi	..	..	..	..	..	..	
	Muthanuthu Village	..	..	..	..	..	..	
	Verapakki Plantations	..	..	..	..	..	..	
	Sivagiripatti Plantations	..	..	..	..	..	..	
	Palkanuth Dak Bungalow	..	..	..	..	..	..	
	Tengarai Tope	..	..	..	..	..	..	
	Kottampatti Traveller's Bungalow ..	..	..	..	..	..	..	
	Meloor do.	..	..	..	..	..	..	
	Kalmalai Tope in Kodakampatti Madura Taluk.	..	..	..	..	..	..	
	Total ..	219·87	..	8·75	..	271·11	11,508	
Tinnevelly—								
	Nainarkulam Tank	5 25	59	..	..	..	59	
	Mallikulam do.	10·7	60	..	..	..	60	
	Thamaraikulum	5	60	..	..	..	60	
Tinnevelly Taluk.	Kandiaperikulam	5	60	..	..	..	60	
	Thirumalakolandapuram Pattakulam ..	5	60	..	..	..	60	
	Palnmadai Tank Bank	5	60	..	..	..	60	

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Tinnevelly Taluk —(*Continued*) ..	Madavakurichi Urani	1	12	..	..	..	12	
	Semboothoo	·22	13	..	..	..	13	
	Kattarrankulam	5	13	..	..	..	13	
	Tenkulam Sanikanúthú Uruni	·66	13	..	..	..	13	
	Sivandipatti Hanumanadi	·15	25	..	..	..	25	
	Omanallur	·15	13	..	..	..	13	
	Periyaujeri River Banks	·30	19	..	..	..	19	
	Nariyúthu	·30	19	..	..	..	19	
	Kaliyuthu Uruni	·49	13	..	..	..	13	
	Total ..	* 43·59	499	..	..	..	499	* These were shown as excluded during the year.
Tenkarai Taluk .	Nazereth	915·45	48	..	38	915·45	86	
	Kulasegarapatnam Sea Custom Office ..	† ·50	60	..	10	..	70	† Excluded during the year.
	Srivaikuntham district Munsif's Court compound	·90	59	..	49	·90	108	
	Total ..	916·85	167	..	97	916·35	264	
Otapidárum Taluk.	Otapidáram Casba	6·37	59	..	51	6·37	110	
	Tuticorin and Sivandakolam	5·07	92	..	125	5·07	217	
	Total ..	11·44	151	..	176	11·44	327	
Sátúr	Sátúr River side	..	60	..	43	..	103	
	Veppalepatti	1·45	60	..	49	1·45	109	
	Sátúr River	1·54	59	..	40	1·54	99	
	Total ..	2·99	179	..	132	2·99	311	
Srívilliputur ..	Sammandapuram	1·22	59	..	29	1·22	88	
Sankaranainárkovil.	Sankaranainárkoil Cusba	1·28	60	..	42	1·28	102	
	Vásudevanallúr	1·02	..	..	63	1·02	63	
	Puliangudi Ilandaikulam							
	Do. Channel							
	Pattakulam							
	Naranaperi							
	Vásudevannallúr	2,615·01	105	..	170	2,615·01	275	
	Naranapuram							
	Rappikulam							
	Do. Elankulam							

Area of Plantations, 1883-84.—(*Continued*).

Division.	Names of Plantation.	On 1st April 1883.		Added or excluded during 1883-84.		On 31st March 1884.		Remarks.
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
		ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Sankaranainárkoil —(*Continued*) ..	Vásudevanallúr River Bank	..	270	..	121	..	391	
	Melapuliangudi Do.							
	Mela Chintamani							
	Total ..	2,617·31	435	..	396	2,617·31	831	
Tenkási Taluk ..	Courtalam River Bank	2·	..	..	..	2·	23	
	Tenkási Do.	2·	..	..	20	2·	50	
	Puliyur Do.	2·	..	..	15	2·	15	
	Do. Channel	1·20	..	..	15	1·20	49	
	Pattakurichi River Bank	·50	..	..	20	·50	20	
	Mayamankurichi	1·50	..	..	20	1·50	50	
	Netur	4·	..	..	10	4·	61	
	Milapavoor	1·25	..	..	14	1·25	66	
	Total ..	14·45	220	..	114	14·45	334	
Ambasámudram Taluk	Kangeyan Channel Bank	5	24	..	27	5	51	
	Rangasamudram	2	..	..	..	2	..	
	Pappagudi Kurungulam	2	..	..	..	2	..	
	Ambásamudram Cusba	1	59	..	41	1	100	
	Do. Cutcherry compound ..	3	119	..	82	3	201	
	Total ..	13	202	..	150	13	352	
Nángunéri Taluk.	Valliyur market tope	5·75	47	..	52	7·75	99	
	Pannagudi	1·	22	..	..	1·	22	
	Singikulam	5·36	36	..	37	5·36	73	
	Kalacad Channel Bank	5·80	..	..	49	5·80	49	
	Nángunéri Cutcherry Compound	·47	..	..	49	·47	49	
	Do. Traveller's bungalow	1·05	60	..	..	1·5	60	
	Radhápuram market	1·30	48	..	34	1·30	82	
	Mulaikaraipatti tope	·50	36	..	27	·50	63	
	Nángunéri market	2·04	48	..	35	2·4	83	
	Thisayanvilai	2·76	45	..	35	2·76	80	
	Total ..	26·03	342	..	318	26·03	660	
	Total of all Taluks ..	3,645·88	2,245	..	1,413	3,602·79	3,670	
Malabar District, Wynaad Division ..		2·50	274	..	..	..	..	
		..	..	..	..	..	..	
South Canara District.	*Nil.*							
	Grand Total of Cultural operations ..	A 7,709·82 / M 100·50	87,319	8·75	2,697	A 4,727·65 / M 100·50	42,737	
	Grant total of Regular Plantations and Cultural operations	A 43,737·33 / M 100·50	8,61,893	— 6,839·92	6,61,872	A 33,906·49 / M 100·50	14,30,924	

Vide remark at foot of the abstract in the report.

(Form No 61.)

STATEMENT No. III.

Forest Department, Southern Circle, Madras.

Annual List of Topes.

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Chingleput ..	Madurántakam.	1	Madurántakam	Not entered	·78	21	77	
		2	Acharapákam		2·	21	106	
	Chingleput	3	Gúduváncheri		22·	60	612	
		4	Chingleput		8·	35	142	
	Saidápet ..	5	Saidápet		1·	30	423	
		6	St. Thomas' Mount		2·58	30	402	
		7	Pallávaram		1·33	30	393	
		8	Nelvoy		9·74	29	1,224	
		9	Karunguli		4·	31	926	
		10	Sothupákam		6·39	28	1,121	
		11	Sittamúr		5·26	29	779	
		12	Mámandúr		10·95	26	1,070	
		13	Pralayambákam		5·73	72	1,352	
		14	Tiruvallúr		4·70	75	2,701	
			Periyakuppum		2·81			
		15	Attúr		23·	215	1,465	
		16	Homes' Garden		20·3	80	203	
		17	Sriperumbudur		18·73	59	581	
				Total ..	149·30	871	13,577	
North Arcot.	Palmanér ..	1	Bolampet nursery garden	Mango, jack, casuarina, &c.	2·72	..	..	
		2	Reddigunta do.	Do. do.	15·00	..	..	
		3	Garden at Poiney Anicut	Do. do.	9·25	..	..	
		4	Garden at Huzur Cutcherry, Grimespet.	Trincomalai and margosa	..	..	..	
		5	Palmyra topes in the limits of Reddigunta.	Palmyra	37·32	..	..	
		6	Topes on the Chases Hill	Mango, blue-apple, &c.	60·00	..	..	
		7	Garden at Bangalore road and tope at Kothagundlaganipallai.	Trees of various kinds	23·2	..	..	
		8	Garden east of Palmanér river ..	Do. do.	2·2	..	..	
		9	Garden east of Byappagaripallai and Musalimadugu.	Do. do.	2·2	..	..	
		10	Garden near the well in the limits of Berupallai on the Gudiyátam road.	Do. do.	2·0	..	..	
	Gudiyátam.	11	Samoor	Do. do.	7·24	..	..	
			Kottitharamittor	Do. do.	13·32	..	..	
		12	Pichanúr	Do. do.	4·32	..	..	
		13	Banyan tope at Cautpadi	Do. do.	11·32	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
		14	Palmyra tope at Pichanúr	Palmyra	5·80	..	..	
		15	Deputy Tahsildar's compound at Kuppam.	Trees of various kinds	1·28	..	..	
		16	Ammerdy	Do. do.	8·00	..	..	
		17	Attúr	Do. do.	171·	..	..	
	Gudiyatam—(*Continued*).	18	Pullipat	Do. do.	4·5	..	..	
		19	Allapuram	Palmyra	7·12	..	..	
		20	Ajaramcheri	Do.	88·45	..	..	
		21	Village reserve in the limits of Nelvoy, Santhapolliem, Thepathangal, and Penatur.	Trees of various kinds	117·32	..	..	
		22	Thellay	Do. do.	101·93	..	..	
		23	Elatúr	Do. do.	7·28	..	..	
	Pólúr ..	24	Murugapadi, Papambadi, Kunutur.	Do. do.	90·	..	..	
		25	Korapet	Do. do.	10·	..	..	
		26	Thachampatti	Do. do.	4·36	..	..	
		27	Echur	Do. do.	13·9	..	..	
		28	Erumathuti and Thandalam ..	Do. do.	22·80	..	..	
		29	Thitharai	Do. do.	2·25	..	..	
		30	Themmughur	Do. do.	10·11	..	..	
North Arcot —(*Contd*).		31	Kodialam	Do. do.	7·	..	..	
	Wandiwash.	32	Kolipuliúr	Do. do.	16·3	..	..	
		33	Vellam	Do. do.	12·31	..	..	
		34	Sudathangal	Do. do.	6·2	..	..	
		35	Nemali	Do. do.	3·85	..	..	
		36	Parasoor	Do. do.	24·19	..	..	
		37	Nedangunam	Do. do.	6·60	..	..	
		38	Randam	Do. do.	11·5	..	..	
		39	Meranum	Do. do.	14·22	..	..	
		40	Seerangattoor	Do. do.	15·34	..	..	
	Arcot ..	41	Velapakam	Do. do.	3·00	..	..	
		42	Damarapauk	Do. do.	3·5	..	..	
		43	Palmyra tope at Randam	Palmyra	5·0	..	..	
		44	Anandali	Trees of various kinds	26·27	..	..	
		45	Paniyúr	Do. do.	10·	..	..	
		46	Senai	Do. do.	8·	..	..	
		47	Venkatapuram	Do. do.	8·	..	..	
	Wálajápet ..	48	Manthangal	Do. do.	25·	..	..	
		49	Topes on the hill at Ammur ..	Do. do.	18·	..	..	
		50	Maniyabut	Do. do.	16·	..	..	
		51	Banavaram	Do. do.	3·	..	..	
		52	Minnel	Do. do.	2·10	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
North Arcot.—(*cont.*)	Wálaj âpet—(*Continued*).	53	Topes on the bank of Tirucolum at Tirutani.	Trees of various kinds	1·	..	..	
		54	Vanien choultry	Do. do.	2·	..	..	
		55	Topes near Mr. Whiteside's freshwater pond at Arkónam.	Do. do.	3.	..	..	
			Topes on the bank of Mr. Robinson's gunta at Arkónam					
		56	Kondramangalam	Date..	..	..	..	
		57	Kothur	Date and tamarind	..	..	..	
		58	Kondavada	Mangoes, tamarind and cocoanut	..	..	..	
		59	Gazulamandiem	Do. do. do.	..	..	..	
		60	Natcheoor	Date..	..	..	..	
		61	Kannikapuram	Tamarind	..	..	..	
		62	Kondrapaukam	Mango	..	..	..	
		63	Thimmanayanampolliem	Woodapple	..	..	..	
		64	Ramakrishnapuram	Tamarind	..	..	..	
		65	Moomalvaripallai	Do.	..	..	..	
		66	Peroor	Date..	..	..	..	
		67	Pudupátla	Tamarind	..	..	..	
		68	Mallavaram	Date	..	..	..	
		69	Adavapallai	Do.	..	..	..	
		70	Thatimakulapallai	Date and palmyra	..	..	..	
	Chandragiri.	71	Edugapallai	Tamarind	..	..	..	
		72	Singareddipallai	Mango, tamarind, margosa, ippu, date, &c.	..	..	..	
		73	Mogarala	Date and palmyra..	..	..	..	
		74	Thoorparpallai	Date..	..	..	..	
		75	Chittoovaripallai	Do.	..	..	..	
		76	Ramapuram	Do.	..	..	..	
		77	Veerase Hipalayam..	Do.	..	..	..	
		78	Arthalavaripolliem	Do.	..	..	..	
		79	Runjiatvaripallai	Mango	..	..	..	
		80	Mungapuram	Tamarind	..	..	..	
		81	Gopalpuram	Do.	..	..	..	
		82	Chengareddi Bundagoo	Do.	..	..	..	
		83	Inkapakam	Tamarind, black plum, ippi, mango, date, &c. ..	..	..	..	
				Total ..	1,106·57	..	..	
South Arcot.	Tiruvannámalai.	1	Kunathur tope	Tamarind, eluppai and other sorts	5·49	..	..	
		2	Tamarakolum tope	Eluppai, katavalai, nagai, and other sorts	2·64	..	..	
		3	Tirukoilur road tope	Tamarind, eluppai, vembu, and other sorts	3·84	..	..	
		4	Vanathroyapolliem tope	Eluppai, katavalai, and other sorts	1·32	..	..	
		5	Melathikam tope	Tamarind, eluppai, vembu, mango, and other sorts, ..	1·84	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
South Arcot—(*Contd.*)	Tiruvannámalai—(*Continued*).	6	Saralpoondy tope	Eluppai, vembu, mango, and other sorts	3·96	..	..	
		7	Somasamudram tope	Tamarind, eluppai, vembu, nagai, and other sorts ..	1·32	..	..	
		8	Samudram Elam tope	Bilva trees, mango, and other sorts	1·32	..	..	
		9	Vengikal tope	Nagai, tamarind, eluppai, vembu, and other sorts ..	1·15	..	..	
		10	Samudram tope	Tamarind, eluppai, nagai, vembu, and other sorts ..	4·75	..	..	
		11	Kolappadi tope	Tamarind, eluppai, nagai, and other sorts	5·28	..	..	
		12	Athianthal tope	Eluppai, nagai, and other sorts..	3·5	..	..	
		13	Nadugampoondy tope	Kattuvalai, tamarind, eluppai, and other sorts ..	3·96	..	..	
		14	Pennathur tope	Eluppai, nagai, and tamarind	4·62	..	..	
		15	Kolakudi tope	Eluppai, tamarind, nagai, karivélam, vembu, and other sorts.	3·30	..	..	
		16	Mathur tope	Tamarind, eluppai, nagai, and other sorts	5·94	..	..	
		17	Konalur tope	Casuarina, nagai, tamarind, eluppai, and other sorts..	1·98	..	..	
		18	Mallavadi tope	Tamarind, eluppai, and other sorts	1·95	..	..	
		19	Soranthai tope	Tamarind, nagai, palmyra, eluppai, and other sorts ..	4·12	..	..	
		20	Norkambadi tope	Tamarind, eluppai, nagai, and other sorts	8·58	..	..	
		21	Mangalam tope	Eluppai, nagai, vembu, and other sorts	4·29	..	..	
		22	Nadalákanandal tope	Eluppai, vembu, tamarind, and other sorts	3·46	..	..	
		23	Nochimalai tope	Eluppai, tamarind, karivélam, and other sorts ..	3·54	..	..	
		24	Mudianur tope	Tamarind, eluppai, nagai, and other sorts	3·56	..	..	
		25	Nallur tope	Tamarind, eluppai, and other sorts	1·90	..	..	
		26	Keelsirupakam tope	Tamarind, eluppai, casuarina, and other sorts ..	3·28	..	..	
		27	Sellameri tope	Tamarind, eluppai, and other sorts	1·58	..	..	
		28	Tandrumpet tope	Tamarind, eluppai, and other sorts	1·98	..	..	
		29	Mekkalore tope	Casuarina, nagai, konnai, eluppai, tamarind, and other sorts.	9·24	..	..	
		30	Thachampet tope	Eluppai and mango	3·67	..	..	
		31	Eryúr tope	Mango, eluppai, and tamarind..	2·64	..	..	
		32	Muthanur tope	Tamarind, eluppai, and mango..	3·96	..	..	
		33	Trinomalai kusba nursery tope ..	Eluppai, kattuvalai, portia, and other sorts	1·32	..	..	
		34	Somasipadi tope	Eluppai, and other sorts..	3·42	..	..	
			No. II Range—Gingee.					
			Nil.					
			No. III Range.					
	Tindivanam.	1	Nathangal tope	Eluppai, katuvagai, &c., trees and sandal, &c., plants, &c.	7·26	..	..	
		2	Marichetty tope	Casuarina, ferugenia, marudai, &c.	2·64	..	..	

Annual List of Topes

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
South Arcot —(*Cont.*)	Tindivanam —(*Cont.*)	3	Kollumedu tope	Tamarind, eluppai, and other trees	1·32	..	..	
		4	Chendur tope	Tamarind, eluppai, and other trees	1·34	..	..	
		5	Devanur	Eluppai, other trees	5·28	..	..	
		6	Relief Camp tope	Vembu, red sanders, rain tree, thurinji, casuarina, velvelam, and other trees.	1·98	..	..	
	Villupuram.	7	Sathambodi	Mango, eluppai, and casuarina	14·91	..	..	
		1	Panamalai tope	Tamarind, eluppai, and other sorts	1·	..	..	
		2	Yedapolliem tope	Tamarind, eluppai, and other sorts	2·	..	..	
		3	Soshampoondy tope..	Tamarind, vembu, and katuvagai	3·	..	..	
		4	Puvarasanguppam tope	Silk cotton, tamarind, palmyra, and other sorts ..	3·	..	..	
		5	Kalliput tope	Eluppai, tamarind, nagai, &c.	1·	..	..	
		6	Sethathur tope	Mango tree, kattuvagai, and other sorts	3·	..	..	
		7	Tiruppachanur tope	Palmyra trees, tamarind, kattuvagai, and other sorts.	5·	..	..	
		8	Maharajapuram tope	Tamarind, kattuvagai, and other sorts	2·	..	..	
		9	Sathanur	Tamarind, palmyras, karuvelam, and other sorts ..	5·	..	..	
		10	Mundipakam	Palmyras, tamarind, mango, eluppai, cashew, and other sorts.	2·	..	..	
		11	Palaput	Tamarind, and other sorts	2·	..	..	
		12	Hriyúr No. 1 / Do. „ 2	Tamarind, eluppai, and other sorts	3·	..	..	
		13	Kappiamur	Tamarind, kattuvagai, and other sorts	1·	..	..	
		14	Nawáb's tope	Eluppai, young palmyras, mangoes, silk cotton, cocoanut trees, jack trees, guava, cashew, tamarind, lime, and other sorts.	44·	..	..	
			No. IV Range.					
	Cuddalore..	1	Panruti nursery tope	Tamarind, eluppai, mango, guava, casuarina, kattuvagai, nagal, and other sorts.	5·	..	..	
		2	Poongoonam tope	Mango, tamarind, nagal, portia, karuvélam, and other sorts.	7·	..	..	
	Chidambaram.	3	Kothangudi tope	Karivélam, peevélam and portia	3·	..	..	
		4	Gnanaprakasam tope	Portia, karivélam, tamarind, and other sorts.. ..	1·62	..	..	
		5	Melakondalavadi tope on the north bank of Coleroon.	Eluppai, mango, tamarind, karivélam, palmyra, and other sorts.	11·89	..	..	
		6	Melakondalavadi tope in the middle of Coleroon.	Cashew, tamarind, eluppai, silk cotton, palmyras, portia, and other sorts				
	Vridháchallum.	7	Vayalúr tope No. 1	Tamarind, palmyras, vembu, and other sorts ..	11·75	..	..	
		8	Do. „ 2	Tamarind, vembu, and other sorts				
		9	Do. „ 3	Tamarind, vembu, and other sorts				
		10	Peria Vadavadi	Tamarind, palmyra, and other sorts	10·3	..	..	
		11	Vallivalanthan	Tamarind, palmyras, karungali, and other sorts ..	6·47	..	..	
		12	Veppur	Velvél and karivél	7·49	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
South Arcot —(*Cont.*)	Vridháchalam —(*Cont.*)	13	Head Assistant Collector Bungalow tope.	Kodukkapulli, othiam, konnai, mango, banyan, and other sorts	·50	..	..	
			No. V Range.					
	Tirukoilúr..	1	Aviyur tope	Tamarind, and vembu	9·24	..	..	
		2	Manalurpet road tope	Tamarind, eluppai, mango, and other sorts	2·16	..	..	
		3	Sandapet tope	Tamarind, mango, nagai, and other sorts	·80	..	..	
		4	Pedagam	Tamarind, nagai, vembu, and other sorts	1·65	..	..	
		5	Chettikolam tope	Tamarind, eluppai, nagai, vembu, and other sorts ..	1·48	..	..	
		6	Vannánkuttai	Tamarind, eluppai, nagai, and other sorts	1·32	..	..	
		7	Mangalam road tope	Tamarind, eluppai vembu, and other sorts	·78	..	..	
		8	North side tope	Tamarind, eluppai, and other sorts	1·32	..	..	
		9	Thetha tope	Eluppai, and other sorts..	·50	..	..	
		10	Old nursery tope near the above ..	Tamarind, eluppai, nagai, and other sorts	1·24	..	..	
		11	Nandavanam tope	Eluppai, tamarind, and other sorts	·41	..	..	
		12	Vellur tope	Tamarind, nagai, and other sorts	5·95	..	..	
		13	Sirumal tope	Tamarind, eluppai, and other sorts	2·	..	..	
		14	Meyúr	Tamarind, eluppai, and other kinds	1·	..	..	
		15	Bungalow tope	Tamarind, eluppai, nagai, vembu, and other sorts ..	1·65	..	..	
		16	Jail tope	Tamarind, eluppai, nagai, vembu, casuarina, and other sorts.	·50	..	..	
		17	Kulapolliem tope	Tamarind, eluppai, nagai, vembu, and other sorts ..	·41	..	..	
			No. VI Range.					
	Kallakurchi.	1	Inthali tope	Tamarind, mango, eluppai, nagai, velvélam, karivélam, and other sorts.	11·55	..	..	
		2	Melveli tope	Mango, tamarind, vembu, velvél, cashwenut, eluppai, elanthai, and other sorts.	14·52	..	..	
		3	Payithandorai tope	Tamarind, mango, karivél, eluppai, nagal, vembu, velvél, and other sorts.	9·90	..	..	
		4	Kallakurchi tope	Mango, tamarind, velvélam, and other sorts	2·60	..	..	
		5	Kusba nursery tope	Mango, eluppai, velvélam, silk cotton, nagal, and other sorts.	1·40	..	..	
		6	Vangaram tope	Palmyras, tamarind, velvél, and eluppai	6·60	..	..	
		7	Thottiam tope	Tamarind, eluppai, and velvél	6·60	..	..	
		8	Namasivayapuram tope	Tamarind, eluppai, vembu, palmyras, velvélam, and other sorts.	6·60	..	..	
		9	Kuttakudi tope	Tamarind, and eluppai	6·60	..	..	
				Total ..	393·51	..	8,712	
Salem ..	Salem ..	1	Athanur tope..	Mango, tamarind, cocoanut, margosa, eluppai, atti, sandalwood, guava, kolingi, and other trees.	50·	42	3,994	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
		2	Kamalapuram	Mango, tamarind, margosa, naga, eluppai, manja konnai, and others.	8·	36	1,425	
		3	Bodinayakampatti	Mango, manja konnai, tamarind, margosa, athi, guava, and others.	4·	38	1,898	
		4	Sooramangalam	Mango, and nagai	6·43	82	838	
		5	Bodinayakampatti	Mango, tamarind, and margosa	8·			
		6	Longley tope	Mango, tamarind, margosa, athi, and guava	8·66	60	5,026	
		7	Attyampatti tope	Mango, tamarind, margosa, palmyra, and jack	1·	38	82	
		8	Line tope	Mango, tamarind, and margosa	1·45	38	602	
		9	Arab line tope	Mango, vagai, and other trees	2·	..	243	
		10	Karipatti	Mango, tamarind, margosa, and palmyra	4·	28	339	
		11	Pallipatti or Mettupatti	Mango, tamarind, margosa, naga, eluppai, and others.	25·	..	923	
		12	Civil Court compound	Mango, margosa, and tamarind	6·	44	1,784	
		13	Mettupatti or Kathi Veppalapatti	Mango, tamarind, athi, and margosa	25·	32	1,143	
			Valasayur	Mango, and tamarind	25·	..	1,329	
		14	Mallúr bungalow	Mango, tamarind, margosa, sandalwood, and vagai	2·	28	28	
		15	Post Office compound (at Sooramangalam)	Mango, and margosa	1·	..	448	
		16	Engine-drivers' bungalow at Sooramangalam	Margosa and others	·84	..	96	
Salem—(*Cont.*)	Salem—(*Cont.*)	17	Rasipur	Tamarind, eluppai, mango, cocoanut, margosa and naga	2·84	48	1,134	
		18	Seerapalli tope	Tamarind, athi, mango, and eluppai	2·5	21	567	
		19	Muthukalipatti	Tamarind, cocoanut, eluppai, mango, athi and margosa	3·15	84	1,030	
		20	Vellalapatti	Tamarind, cocoanut, eluppai, mango, athi and margosa	2·	21	768	
		21	Anaithattipolliem	Tamarind, cocoanut, mango, nagai, eluppai, margosa, athi, and guava.	34·69	96	2,381	
		22	Andagalur and Munchavady topes.	Tamarind, mango, naga, margosa, eluppai, vagai, and athi.	58·32	196	4,201	
		23	Vennandur	Tamarind, cocoanut, margosa, naga, mango and eluppai	10·	90	1,304	
		24	Koneripatti tope	Tamarind, mango, naga, eluppai, margosa, and athi.	30·	42	2,604	
		25	Omalúr bungalow	Mango, eluppai, tamarind, margosa, and other trees	7·72	71	1,819	
		26	Omalúr Western tope	Eluppai, naga, tamarind, margosa, and athi	7·33	50	1,001	
		27	Tharamangalam	Eluppai, tamarind, and margosa	3·	48	487	
		28	Tharamangalam Chendikesavaram tope.	Mango, eluppai, tamarind, and naga	10·	42	884	
		29	Tharamangalam Mangavally	Tamarind, and margosa	6·	42	511	
		30	Nangavally Shady	Tamarind, eluppai, and margosa	3·	..	423	
		31	Nangavally Pullikuttai Eri tope	Eluppai, naga, tamarind, and margosa	10·	..	1,517	
		32	Chinnappambatti	Tamarind, margosa, vilanathi, ichi, and ála	2·	..	387	
		33	Chikkamampatti	Mango, and tamarind	15·34	..	694	
			Thasa Samudram	Mango, and tamarind	13·73	42	1,283	
		34	Atúr Railway Station tope	Tamarind, eluppai, and margosa	3·	46	236	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
		35	Toppúr road way-side tope	Tamarind, mango, and eluppai	20·	..	856	
		36	Ayothiapatnam	Mango, cocoanut, and others	8·13	44	1,805	
		37	Sheveroy Hills (chuttram tope)	Different trees	15·87	73	1,643	
		38	Cutcherry compound tope	Different trees	3·92	44	135	
		39	Muthunayagampatti	Tamarind	3·	42	122	
		40	Pudur nursery tope	Mango, margosa, naga, eluppai, athi, palmyra, guava, jack, and other trees.	2·	44	1,311	
		41	Kadayampet	Mango, tamarind, and eluppai	10·	48	1,311	
	Salem—(*Continued*).	42	Huzur Cutcherry compound tope	Different trees	3·	111	111	
		43	Omalúr	Mango	5·73	..	156	
		44	Eastern tope	Tamarind and others	2·92	..	146	
		45	Eastern Shandy tope	Different trees	20·9	..	1,607	
		46	Eastern Fort tope	Tamarind, eluppai, vélam, and others	18·	2	1,471	
		47	Pannapatti tope	Mango, tamarind, vélam	6·	..	652	
		48	Pachanampatti	Karivélam, margosa, and others	16·	4	349	
		49	Nanganally and Míchéry	Tamarind and others	10·	..	510	
		50	Míchéry	Eluppai, tamarind, and other trees	9·	4	680	
		51	Amarakanthi	Tamarind, mango, eluppai	32·35	110	1,058	
Salem—(*Continued*).		52	Putteragoundenpolliem	Cocoanut, tamarind, eluppai, guava, woodapple, naga, athi, ála, vagai, margosa, and others.	8·50	45	694	
		53	Kattukottai tope	Cocoanut, tamarind, eluppai, naga, athi, ála, vagai, and others.	8·50	50	609	
		54	Abinaram	Cocoanut, tamarind, eluppai, athi, ála, vagai, and others.	6·41	51	542	
		55	Periakishnapuram tope	Cocoanut, tamarind, eluppai, jack, guava, naga, margosa, and others.	7·74	44	589	
		56	Ammapolliem	Cocoanut, tamarind, eluppai, jack, naga, margosa, and others.	6·	51	506	
	Átúr	57	Thedanúr	Cocoanut, tamarind, eluppai, guava, naga, athi, and other trees.	2·28	50	378	
		58	Echampatti	Cocoanut, tamarind, eluppai, and naga	2·68	51	471	
		59	Mangalapuram	Cocoanut, tamarind, eluppai, athi, and others	·96	42	386	
		60	Narasingapuram	Cocoanut, tamarind, eluppai, jack, guava, and others.	4·	44	415	
		61	Bélur	Cocoanut, tamarind, eluppai, jack, and other trees	2·	44	513	
		62	Manjeri tope	Cocoanut, eluppai, tamarind, naga, and other trees	3·39	52	749	
		63	Atúr tope	Cocoanut, tamarind, eluppai, jack, guava, woodapple, athi, and other trees.	6·51	44	698	
		64	Atúr Cutcherry tope	Cocoanut, jack, and other trees	12·3	33	406	
		65	Atúr Shandy	Cocoanut, tamarind, eluppai, woodapple, margosa, and other trees.				
	Námakal	66	Námakal Deputy Collector's office	Tamarind, and margosa	5·53	86	1,269	
		67	Námakal School tope	Mango, and vagai				

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
		68	Námakal Hospital	Tamarind and vagai	2·24	50	791	
			Námakal Travellers' Bungalow	Mango, ichi, and margosa				
		69	Námakal Cutcherry tope	Mango, cocoanut, jack, and other trees	8·85	92	1,446	
			Kamalalayam		1·2	38	38	
		70	Neechampatti tope	Tamarind, eluppai, and margosa				
		71	Anjalan	Tamarind, eluppai, margosa, and mango	2·61	72	987	
			Poolanjeri		4·23	42	527	
	Námakal—	72	Thattiangarpet	Tamarind and eluppai	·50	42	285	
	(*Cont.*)	73	Valayapatti old and new topes	Tamarind and mango	2·12	5	5	
		74	Paramatti old tope	Tamarind, margosa, vagai, cocoanut, palmyra, and others.	8·19	73	73	
		75	Nulloor	Vagai, tamarind, and margosa	·17	43	43	
		76	Paramathy Cutcherry tope	Cocoanut	6·16	31	31	
		77	Padamadipolliem	Tamarind and margosa	4·77	93	93	
			Vélur tope	Cocoanut, tamarind, mango, eluppai, and others	·60	73	73	
		78	Maniyanúr	Tamarind, mango, and margosa	2·12	26	26	
		79	Mogavaram old tope	Tamarind, margosa, and eluppai	8·19	42	42	
		80	Mogavaram new tope	Tamarind, eluppai, naga, and margosa	1·50	..	..	
		81	Thanapalli	Tamarind, eluppai, and margosa	15·93	69	364	
		82	Arumugathankottai	Mango, eluppai, tamarind, margosa, and others	5·20	27	251	
		83	Panady	Mango, eluppai, margosa, tamarind, and other trees	1·79	46	242	
Salem—		84	Periatheppakolam	Margosa, vagai, naga, tamarind, eluppai, mango, cocoanut, and other trees.	2·21	..	44	
(*Cont.*)		85	Karuveppampatti	Mango, eluppai, tamarind, naga, and other trees	2·23	39	201	
		86	Vyguntham	Mango, tamarind, eluppai, margosa, and other trees	·45	..	50	
		87	Chinnatheppakolam	Cocoanut and other trees	6·63	..	..	
		88	Kolikalnatham	Margosa and other trees	6·17	44	302	
	Tiruchengód.	89	Palbóni tope	Mango, cocoanut, tamarind, eluppai, sandalwood, jack, pomegranate, margosa, and other trees.	1·	33	254	
		90	Lutchumanatheertham	Mango, tamarind, eluppai, naga, margosa, pomegranate, and others.	..	44	292	
		91	Mathésappan	Mango, tamarind, naga, eluppai, and margosa	6·10	36	295	
		92	Sankuchakram tope	Mango, eluppai, tamarind, margosa, sandalwood, naga, and other trees.	3·92	..		
		93	Sankeri bungalow tope	Tamarind, margosa, and other trees	2·	28	184	
		94	Vellandivalarai	Margosa, woodapple, tamarind, eluppai, and other trees.	9·23	37	234	
		95	Chinna Mavali	Margosa, woodapple, vagai, tamarind, eluppai, mango, &c.	2·	28	166	
		96	Poolampatti	Mango, woodapple, eluppai, pomegranate, and others.	6·	38	285	
		97	Railway Station tope	Mango, margosa, tamarind, naga, and eluppai	11·	48	440	
		98	Hosúr Government tope	Eluppai, casuarina, margosa, bamboo, and other trees.	4·	48	221	
	Hosúr	99	Hosúr bandy-stand	Mango, eluppai, athi, tamarind, jack, margosa, woodapple, and other trees.				

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
		100	Andivady, A	Mango, eluppai, and other trees	2·52	42	508	
		101	Do. B	Mango, eluppai, athi, and others	7·91	42	367	
		102	Do. C	Mango, eluppai, athi, tamarind, Semai ávaram, and other trees.	10·12	48	367	
		103	Do. D	Mango, Semai ávaram, eluppai, and others	18·61	90	533	
		104	Do. E	Mango, eluppai, and others	2·	42	358	
		105	Kothur, A	Mango, Semai ávaram, eluppai, tamarind, athi, and other trees.	11·69	42	556	
		106	Do. B	Mango, Semai ávaram, eluppai, casuarina, sandalwood, and others.	53·67	90	882	
		107	Do. C	Mango, eluppai, and other trees	15·32	42	482	
		108	Kothagondapalli	Mango, Semai ávaram, eluppai, casuarina, and other trees.	16·97	41	574	
		109	Bommandapalli, A	Mango, eluppai, and others	11·69	48	499	
		110	Do. B	Mango, eluppai, athi, and others	12·37	42	558	
		111	Do. C	Mango and other trees	12·	42	938	
		112	Jeegúr tope	Mango, eluppai, athi, tamarind, sandalwood, and others.	7·44	42	883	
		113	Mothígiri	Mango, eluppai, and other trees	2·46	42	206	
		114	Naribalagunta	Mango, eluppai, and others	1·74	48	766	
		115	Miliginpalli	Mango, eluppai, and casuarina	15·87	..	649	
Salem—(*Cont.*)	Hosúr— (*Cont.*)	116	Huzur bungalow	Mango and other trees	3·	..	116	
		117	Saramands	Mango, athi, and other trees	2·13	11	234	
		118	Aggondapalli	Mango, eluppai, and other trees	15·51	11	1,057	
		119	Achettipalli	Mango, eluppai, tamarind, athi, and other trees	5·98	42	331	
		120	Do. B	Mango, eluppai, and other trees	4·76	42	316	
		121	Thotagiri, A	Mango, eluppai, athi, tamarind, &c.	17·62	42	933	
		122	Do. B	Tamarind, mango, Semai ávaram, and athi	32·17	90	1,782	
		123	Araconapatti	Mango, eluppai, and other trees	3·18	11	284	
		124	Samanapalli	Mango, eluppai, tamarind, and other trees	11·85	11	924	
		125	Begipalli	Mango, eluppai, athi, and other trees	6·8	11	197	
		126	Belagondapalli	Mango, Semai ávaram, and other trees	37·89	42	1,765	
		127	Jeebee	Mango, Semai ávaram, eluppai, and other trees	2·	48	284	
		128	Denkanikóta	Mango, eluppai, athi, tamarind, jack, &c.	6·82	48	844	
		129	Panchakalupuram, A	Mango, eluppai, athi, and other trees	33·28	42	1,162	
		130	Do. B	Mango, Semai ávaram, eluppai, athi, and other trees.	20·66	40	921	
		131	Kelamangalam	Mango and other trees	2·	2·	198	
		132	Mallasamudram tope	Mango, eluppai, athi, and other trees	40·35	48	482	
		133	Anegollu	Mango, eluppai, athi, and other trees	37·89	90	1,455	
		134	Thandrai	Mango, Semai ávaram, eluppai, athi, casuarina, and others.	18·26	90	1,197	
		135	Korapalli	Avarai and other trees		..	1,027	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Salem—(*Cont.*)	Dharmapuri	136	Pennagaram A	Tamarind, eluppai, mango, margosa, naga, karuvélam, casuarina, and other trees.	2·58	47	278	
		137	Do. B	Tamarind, eluppai, mango, naga, karuvélam, and other trees.	5·57			
		138	Do. C	Tamarind, eluppai, mango, and other trees	1·42	..	1,061	
		139	Do. D.	Tamarind, eluppai, mango, and other trees	2·43			
		140	Do. E.	Tamarind, mango, and other trees	8·23			
		141	Athigappudy	Tamarind, eluppai, mango, margosa, naga, karuvélam, and other trees.	10·76	85	664	
		142	Seekadi tope	Tamarind, eluppai, mango, margosa, naga, karuvélam, &c.	20·	85	871	
		143	Nallamballi A.	Tamarind, mango, and other trees	1·20	..	..	
			Do. B.	Tamarind, eluppai, mango, margosa, naga, and other trees.	3·	45	647	
		144	Thorandoddi	Tamarind, eluppai, mango, margosa, naga, karuvélam and other trees.	25·	65	959	
		145	Esagarapalli	Tamarind, eluppai, mango, margosa, naga, karuvélam, and others.	60·	85	841	
		146	Kallipuram	Tamarind, mango, naga	1·90	40	388	
		147	Sógathúr	Tamarind, eluppai, mango, margosa, naga, karuvélam, jack, and other trees.	214·37	150	1,995	
		148	Periampatti	Tamarind, mango, eluppai, margosa, naga, karuvélam, and other trees.	15·47	45	490	
		149	Krishnapuram	Tamarind, eluppai, mango, margosa, karuvélam, and others.	6·64	44	413	
		150	Nagarasampatti	Tamarind, eluppai, mango, margosa, naga, and other trees.	9·98	47	593	
		151	Muthúr	Tamarind, eluppai, mango, margosa, and karuvélam, &c.	31·31	75	923	
		152	Narasier pond	Tamarind, eluppai, mango, &c.	1·	121	399	
		153	Dharmapuri	Tamarind, eluppai, mango, margosa, and others ..	1·	..	438	
		154	Kamalapuram	Tamarind, eluppai mango, naga, karuvélam, &c. ..	25·	85	855	
		155	Karimangalam	Tamarind, eluppai, mango, &c.	6·2	47	462	
		156	Mahindramangalum	Tamarind, eluppai, mango, naga, &c.	6·	..	389	
		157	Settikardi	Tamarind, mango, margosa, karuvélam and others ..	3·	43	533	
		158	Thethiopanahalli	Tamarind, eluppai, mango, margosa, and others ..	1·	35	396	
		159	Appakathiranahalli	Tamarind, eluppai, mango, margosa, naga, and others.	20·	44	416	
		160	Local Fund Dispensary, Forest office and School compound.	Tamarind, eluppai, mango, margosa, casuarina, jack, sandalwood, &c.	6·	85	234	
	Krishnagiri.	161	Kanakamatlu A.	Tamarind, guava, mango, eluppai, margosa, wood-apple, casuarina, ácha, &c.	30·31	132	847	
		162	Do. B.	Mango, eluppai, tamarind, margosa guava, sandalwood, jack, palmyra, &c.	12·29	..	772	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Salem—(*Cont.*)	Krishnagiri —(*Cont.*)	163	Doultabad	Tamarind, jack, palmyra, pungam, &c.	2·85	88	418	
		164	Karánji	Tamarind, eluppai, pungam, and margosa	2·57		522	
		165	Thogarapalli	Tamarind, mango, eluppai, margosa, casuarina, palmyra, &c.	7·81	48	1,174	
		166	Gengaveram	Mango, eluppai, tamarind, woodapple, margosa, palmyra, &c.	11·61	90	1,155	
		167	Boganapalli	Mango, eluppai, tamarind, palmyra, kattuvagai, &c.	33·89	164	2,443	
		168	Travellers' bungalow	Mango, eluppai, tamarind, and others	10·11	..	..	
		169	Kothipalli	Tamarind, mango, eluppai, naga, margosa, and others.	30·87	180	1,716	
		170	Chendapuram	Tamarind, mango, eluppai, naga, margosa, &c. ..	3·12	42	532	
		171	Moravahalli	Mango, eluppai, naga, tamarind, margosa, athi, &c. ..	12·16	90	1,164	
		172	Mathúr	Tamarind, eluppai, margosa, naga, &c.	2·92	90	649	
		173	Manthipalli	Tamarind, eluppai, mango, athi, palmyra, and other trees.	11·62	48	934	
		174	Amballi	Eluppai, tamarind, mango, and palmyra	2·41	46	516	
		175	Gadagarampatti	Tamarind, eluppai, naga, mango, margosa, karivélam, athi, palmyra, &c.	42·38	180	2,707	
		176	Manja Médu	Tamarind, eluppai, margosa, mango, karivélam, palmyra, &c.	49·24	16	2,601	
		177	Poomalanthampatti	Mango, tamarind, eluppai, naga, palmyra, &c. ..	25·3	180	1,876	
		178	Theerthagiripalli	Eluppai, mango, tamarind, palmyra, and others ..	11·12	90	1,325	
		179	Jambukuttapatti	Tamarind, eluppai, naga, mango, athi, palmyra, woodapple, &c.	48·5	180	3,096	
		180	Kannandahalli	Tamarind, eluppai, naga, mango, athi, guava, and palmyra.	2·18	48	528	
		181	Krishnagiri School	Tamarind, woodapple, and others	4·78	90	898	
		182	Tirupatúr Camping	Tamarind, mango, eluppai, naga, &c.	11·5	83	1,404	
		183	Tirupatúr School	Tamarind, mango, eluppai, naga, margosa, and others.	5·59			
		184	Head Assistant Collector's Office compound.	Tamarind, mango, margosa, &c.	12·57	38	764	
		185	Atkinson's tope	Tamarind, mango, eluppai, casuarina, vagai, guava, and palmyra.	2·64	..	884	
		186	Jalárpet	Tamarind, mango, eluppai, margosa, and others ..	1·50	38	348	
	Tirupatúr ..	187	Koratti	Tamarind, mango, eluppai, naga, margosa, and palmyra	18·15	38	38	
		188	Jalárpet Rest-house	Tamarind, mango, eluppai, and others	4·	38	82	
		189	Tirupatúr palmyra tope	Tamarind, mango, eluppai, and margosa	15·43	38	38	
		190	Elavampatti	Tamarind, mango, eluppai, guava, athi, álai, margosa, &c.	15·43	34	162	
		191	Iruvampatti	Tamarind, mango, eluppai, and margosa	3·99	35	379	
		192	Amboorpet Cutcherry tope ..	Tamarind, mango, casuarina, cocoanut, and others ..	9·40	24	2,573	
		193	Orr's Choultry	Tamarind, mango, eluppai, and others	·71	3	328	
		194	Railway Camping tope	Tamarind, eluppai, naga, margosa, and karivélam ..	6·66	4	283	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Salem—(*Cont.*)	Tirupatúr—(*Cont.*)	195	Komárampatti	Tamarind, mango, and others	14·72	32	32	
		196	Thamaléri Muthúr	Tamarind, mango, and others	42·21	38	38	
		197	Sámalpati	Mango, eluppai, tamarind, naga, and margosa ..	5·	..	2,170	
		198	Arbuthnott tope	Mango, eluppai, guava, pomegranite, tamarind, naga, cocoanut, palmyra, and others.	42·	88	5,101	
		199	Orr's Choultry	Tamarind, margosa, and athi	1·60	28	218	
		200	LeFanu's camping ground	Mango, eluppai, tamarind, naga, and ála	3·60	20	365	
		201	Podur	Mango, eluppai, tamarind, and ála	7·24	..	738	
		202	Hanumatheertham	Mango, eluppai, guava, tamarind, and palmyra ..	11·12	..	1,222	
		203	Hanumatheertham bungalow ..	Margosa	1·	..	57	
		204	Singárapet	Eluppai, tamarind, and naga	3·	..	1,231	
		205	Majamurpatti	Eluppai, mango, guava, tamarind, cocoanut, and margosa.	5·	20	1,713	
		206	Kondampatti	Tamarind	5·86	20	426	
		207	Kathavany bungalow tope	Margosa	1·	..	163	
		208	Harur Varunatheertham	Mango, eluppai, guava, tamarind, naga, &c.	5·13	8	1,699	
		209	Mórappúr tope	Mango, guava, tamarind, and naga	3·	..	648	
		210	Mórappúr bandy-stand	Mango, eluppai, guava, tamarind, naga, and margosa.	8·	20	1,339	
		211	Poyipatti	Mango, eluppai, tamarind, naga, and margosa ..	4·	..	740	
	Utankarai ..	212	Echampady	Mango, eluppai, guava, tamarind, naga, and margosa.	6·17	20	1,372	
		213	Pallipatti	Mango, eluppai, tamarind, and margosa	6·98	20	1,290	
		214	Theerthamalai	Mango, eluppai, pomegranite, tamarind, and naga ..	7·61	25	1,599	
		215	Byranikampatti	Mango, eluppai, and tamarind	7·33	20	1,168	
		216	Kottapatti	Mango, eluppai, and tamarind	4·33	20	901	
		217	Chinthalapady	Mango, eluppai, guava, tamarind, and naga	3·28	20	872	
		218	Pulidiyur	Mango, eluppai, guava, tamarind, naga, &c.	11·7	20	668	
		219	Kowboor	Mango, eluppai, tamarind, and margosa	4·55	..	704	
		220	Kowboor bungalow	Mango, naga, and margosa	1·	30	325	
		221	Longley's camping at Mullapuram.	Eluppai, tamarind, and margosa	2·	20	567	
		222	LeFanu's camping tope at Harúr ..	Eluppai, tamarind, and margosa	3·18	20	390	
		223	Venkata Subba Row's tope ..	Mango, eluppai, guava, pomegranite, tamarind, and margosa.	3·58	40	726	
		224	Utankarai Cutcherry tope	Tamarind and margosa	·82	15	365	
		225	Harúr Cutcherry tope	Pomegranite, tamarind, cocoanut, and margosa ..	1·	..	261	
		226	Pearse's tope	....	12·72	20	652	
		227	Atkinson's tope	....	5·26	20	927	
		228	Gollanúr	....	47·54	20	20	
				Total ..	2,555·5	9,430	1,78,997	
Trichinopoly ..				*Nil.*				

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Tanjore ..	Kumbakónam.	1	Nadukávéri	Cocoanut	9	..	..	Leased out, consequently no expenditure incurred.
			Natarajapuram		2	..	..	
		2	Nannilam Village tope	Do.	7	55	2,152	
	Mannárgudi ..	3	Edangankota Melayúr	Mangoes, &c	10	44	..	
		4	Veppangulam	Do.	13	52	..	
		5	Perumagalore Vadapati	Do.	13	52	..	
		6	Kolakudi	Do.	10	44	..	
		7	Vedayathi	Do.	10	44	..	
		8	Anaikadu	Do.	10	48	..	Accounts having been destroyed, expenditure up to the year cannot be shown.
		9	Thandalai	Do.	9	44	..	
	Putukóta ..	10	Nidavassal Melpathi	Do.	10	44	..	
		11	Muthakurichi	Do.	10	..	..	
		12	Alathúr	Do.	10	44	..	
		13	Vattagudi	Do.	10	44	..	
		14	Kondikulam	Do.	10	43	..	
		15	Kannugudi Melpathi	Do.	10	14	..	
		16	Seravaruthi Thenpathi	Do.				
				Total ..	153	572	..	
North Coimbatore.	Erode ..	1	Moolaccadu tope (Uttu kuli) ..	Kattumamaram, mango trees, velvélam, poovarasam, veppam, vagai, Semai vagai, cocoanut trees, lime trees, northai, bomlimasai, orange trees, tamarind trees, woothiam, vathinarayanam, asogai trees, nagai, munthiri, nelli, pomegranite, wolagai, peamaram, Semai bilvai, woodapple trees, elanthai, woonjal, palmyra, murungai, and palamaram.	4·1	..	1,924	
		2	Pásur .. .. Poramboke punjai	Tamarind trees, elavan, nagai, woothiam, mango, nellimaram, palamaram veppam, eluppai, kadukoy, puli, cocoanut trees, and palmyras.	4·82	..	..	
		3	Unjalúr tope	Tamarind trees, mango, palamaram, columichai, eluppai, cocoanut trees, athi, nagai, punnai, and karuvélam.	10·79	..	..	
		4	Anainasavampolliem	Tamarind trees, palmyras, cocoanut trees, mango, palamaram, guava trees, seethapalai, pomegranite, veppam, and sandal.	3·38	..	1,384	
		5	Cutcherry tope	Cocoanut trees, mango trees, malaivembu, nellimaram, elavan, pomegranite, guava trees, jamnagai, columichai, codinarthai, lime trees, tamarind trees, vagai, coducapuli, nut trees, and murungai.	10·27	..	5,502	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Coimbatore —(*Cont.*)	Erode—(*Cont.*)	6	Sub-Collector's Bungalow tope ..	Cocoanut trees, vagai, mango trees, bombilimasai, álam, aranji, cork trees, murungai, vathinarayanam, and grapes.	9·85	..	1,617	
		7	Nadupathy Savady kádu	Tamarind trees, velvélam, sidusi, veppam, and karivélam.	1·76	..	138	
		8	Perumalcovil kádu	Velvélam, vanni, karivélam, sirungi, veppam, oonjal, peamaram, palmyras, pungai, and vagai..	11·50	..	..	
		9	Nadupathy Matha kádu punjai ..	Velvélam and tamarind	4·15	..	..	
		10	Do. do.	Velvélam, veppam, palmyras, karuvélam, kunni, pungai, and vagai.	6·15	..	..	
		11	Puliamadoo	Velvélam, veppam, and oonjal	3·62	..	..	
		12	Culathoovoolvoy tope	Velvélam, karivélam, kunni, veppam, vanni, oonjal, pungai, vagai, and palmyras	4·67	..	..	
		13	Vayakkadupolliem	Velvélam, pungai, veppam, palmyras, vagai, vanni, aya trees, tamarind, purasu, and oonjal.	10·2	..	..	
		14	Neerodi Poramboke	Velvélam, veppam, pungai, oonjal, palmyras, and tamarind.	3·85	..	..	
		15	Culathoovoolvoy Poramboke ..	Palmyras, veppam, karivélam, velvélam, pungai, perumaram, and vagai.	28·87	..	..	
		16	Thannugam vellodu	Palmyras	15·44	..	31	
		17	Gengapuram tope	Karivélam and palmyras	12·61	..	93	
		18	Modakurchi	Palmyras, velvélam, karivélam, elanthai, and woothiam.	4·65	..	..	
		19	Oothukkuli tope	Palmyras, velvélam, karivélam, and veppam ..	18·83	..	20	
		20	Parundurai tope	Palmyras, velvélam, karuvélam, veppam, ichi, pungai, peamaram, and oonjal.	24·93	..	61	
		21	Soorimapolliem tope	Veppam, palmyras, vagai, oonjal, karivélam, wood-apple trees, and tamarind.	11·1	..	111	
		22	Nattipolliem tope	Vallimaram, velvélam, veppam, palmyras, oonjal, karivélam, peamaram, veppam, vannimaram, velvélam, karivélam, oonjal, vagai, elanthai, purasu, pungai, ayamaram, tamarind trees, widathalam, valliyamaram, palmyras, and palai.	20·98	..	138	
		23	Valladoo tope..	Palmyras, velvélam, veppam, karivelam, pungai, vélam, vagai, eluppai, and oonjal.	66·76	..	1,399	
		24	Conjikkoil tope	Palmyras, karivélam, velvélam, veppam, and oonjal.	19·16	..	122	
		25	Nariankulam valvoy tope	Karivélam, velvélam, veppam, vagai, tamarind, ayamaram, oonjal, and palmyras.	11·18	..	..	
		26	Arasaloor tope	Palmyras, veppam, karivélam, vagai, and velvélam..	28·55	..	47	
		27	Morattupolliem tope..	Palmyras, karivélam, and veppam	213·49	..	..	
	Karúr ..	28	Karúr	Palmyras, tamarind trees, and other trees	9·	..	1,764	
		29	Pulinjoor	Palmyras, cocoanut trees, tamarind, and other trees.	8·	..	1,061	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
North Coimbatore—(*Cont.*)	Karúr—(*Cont.*)	30	Púgalur tope	Cocoanut trees, tamarind, mangos, and other trees ..	·48	..	289	
		31	Aravakurchi tope	Palmyras and tamarind	2·87	..	415	
		32	Do.	Palmyras tamarind, and other trees	7·64	..	..	
		33	Do.	Palmyras and tamarind	3·88	..	..	
		34	Do.	Palmyras, cocoanut trees, tamarind, and other trees.	3·82	..	223	
		35	Gúdalúr tope	Palmyras, tamarind, and other trees	1·91	..	238	
		36	Do.	Palmyras, cocoanut trees, tamarind, and other trees.	7·64	..	551	
		37	Do.	Palmyras, tamarind, and other trees	5·73	..	498	
		38	Do.	Palmyras, cocoanut trees, tamarind, mango, and other trees.	9·55	..	348	
		39	Do.	Palmyras, tamarind, and other trees	1·43	..	204	
		40	Nagampally tope	Palmyras, tamarind, and other trees	5·73	..	239	
		41	Venjaman, Gúdalúr tope	Palmyras, tamarind, and other trees	..	..	..	
		42	Do.	Palmyras, tamarind, cocoanut, mango, and other trees.	1·91	..	344	
		43	Sanapparathy channel tope ..	Palmyras	..	..	197	
		44	Caradiempolliem tope	Palmyras	152·85	..	719	
		45	Oppadamangalam tope	Palmyras, cocoanut trees, tamarind, and other trees.	1·83	..	472	
		46	Do.	Palmyras, cocoanut trees, tamarind, and other trees.	1·86	..	179	
		47	Do.	Palmyras	3·86	..	591	
		48	Do.	Cocoanut trees, tamarind, and other trees	2·86	..	909	
		49	Combupolliem tope	Palmyras, cocoanut trees, and other trees	2·86	..	549	
		50	Tamarind tope, Karivélam ..	Tamarind trees, karivélam, velvélam, veppam, vagai, and palmyras.	210·22	..	..	
		51	Ganapathipolliem tamarind tope ..	Tamarind trees	18·8	..	..	
		52	Sivamali palmyra tope	Palmyras, tamarind trees, and eluppai trees	..	..	..	
		53	Thombarattipolliem tamarind tope.	Tamarind trees, velvélam, karivélam, veppam, and vagai.	31 77	..	..	
		54	Maravapolliem palmyra tope ..	Palmyras, karivélam, velvélam	99·44	..	..	
		55	Do. do. ..	Tamarind trees, palmyras, and eluppai trees ..	131·23	..	..	
		56	Do. do. ..	Palmyras, tamarind trees, karivélam, velvélam, and veppam.	..	..	..	
	Dhárápuram.	57	Mamthorai palmyra tope	Palmyras and tamarind	25·69	..	..	
		58	Palmyra tope	Palmyras and tamarind trees	131·3	..	..	
		59	Do.	Palmyras and tamarind trees	219·46	..	..	
		60	Do.	Palmyras and tamarind trees	203·39	..	..	
		61	Do.	Tamarind trees, palmyras, and cocoanut trees ..	149·46	..	..	
		62	Tamarind tope	Tamarind trees, palmyras, and cocoanut trees ..	50·98	..	..	
		63	Mettupálaiyam palmyra tope ..	Palmyras and tamarind trees	..	..	..	
		64	Sanapattipolliem tamarind tope ..	Tamarind trees, palmyras, karivélam, veppam, velvélam, ichi, and cocoanut trees.	407·55	..	..	
		65	Tamarind tope	Tamarind trees and palmyras	138·48	..	..	
		66	Palmyra tope	Palmyras and tamarind trees	256·91	..	..	
		67	Do.	Palmyras, tamarind trees, karivélam, and velvélam.	210·29	..	..	
		68	Do.	Palmyras and tamarind trees	212·10	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost. During Year.	Cost. To end of Year.	Remarks.
						Rs.	Rs.	
North Coimbatore—(*Cont.*)	Dhárápuram—(*Cont.*)	69	Palmyra tope	Palmyras and tamarind trees	83·62	..	..	
		70	Do.	Palmyras and tamarind trees	319·44	..	..	
		71	Do.	Palmyras tamarind trees, karivélam, and veppam ..	6 27	..	..	
		72	Do.	Tamarind, palmyras, veppam, and karivélam ..	154·85	..	..	
		73	Do.	Tamarind trees and palmyras	48·26	..	..	
		74	Do.	Palmyras and tamarind trees	7·32	..	..	
		75	Do.	Tamarind trees, palmyras, and cocoanut trees ..	94·87	..	..	
		76	Do.	Palmyras and tamarind trees	146·27	..	..	
		77	Tamarind tope	Tamarind trees	..	..	..	
		78	Palmyra tope	Palmyra and tamarind trees	251·62	..	..	
		79	Do.	Palmyra and tamarind trees	36·68	..	..	
		80	Do.	Tamarind trees	1·16	..	..	
		81	Do.	Palmyras and tamarind trees	57·9	..	..	
		82	Do.	Palmyras	9·57	..	..	
		83	Columangali fuel reserve	Veppam, palmyras, velvélam, woodapple, banyan trees, tamarind trees, yanni trees, athi, karivélam, and perumaram.	80·48	..	..	
		84	Súriyanellore palmyra tope ..	Palmyras	11·59	..	..	
		85	Candalam, malamagam fuel reserve	Vélam, karivélam, tamarind trees, panamaram, and veppam.	85·84	..	..	
		86	Tamarind tope	Tamarind trees	4·28	..	..	
		87	Do.	Tamarind trees, karivélam, vélam, vagai, velvélam, veppam, and palmyras.	134·	..	..	
		88	Nanthavanampolliem palmyra tope.	Cocoanut trees, palmyras, veppam, woodapple, murungai, yanni tree, vagai, and karivélam.	2·47	..	..	
		89	Sadayampolliem palmyra tope ..	Tamarind trees and palmyras	108·73	..	..	
		90	Moothampatti palmyra tope ..	Palmyras and tamarind trees	637·30	..	..	
		91	Tamarind tope	Tamarind trees	20·32	..	..	
		92	Pallampatti tamarind tope ..	Tamarind trees	1·	..	..	
		93	Bommanallore tamarind tope ..	Tamarind trees	2·	..	..	
		94	Valayuthampolliem palmyra tope ..	Palmyras	·83	..	..	
		95	Kathabavoor palmyra tope ..	Palmyras, tamarind, elanthai and kunni	99·48	..	..	
		96	Thoppampatty palmyra tope ..	Palmyras, vélam, veppam, and karivélam	9·71	..	..	
		97	Sangarandompolliem palmyra tope.	Palmyras and tamarind trees	117·43	..	..	
		98	Mambady palmyra tope	Palmyras and tamarind trees	..	..	..	
		99	Paramiam tope	Palmyras	4·73	..	..	
		100	Tamarind tope	Tamarind trees	16·87	..	..	
		101	Mulayamboody palmyra tope ..	Palmyras, velvélam, oonjal, veppam, karivélam, parumaram, malangiluvai, tamarind trees, ichi, kodaichithi, viriamaram, vagai, athi, karukkottamaram, thasathooval, pungai, and woodapple trees.	534·78	..	..	
		102	Fruit Garden	Fruit trees, several other trees, vélam, sithaman, palmyras, tamarind, and veppam.	..	..	..	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost. During Year.	Cost. To end of Year.	Remarks.
						Rs.	Rs.	
North Coimbatore—(*Cont.*)	Dhárápuram—(*Cont.*)	103	Kannivadi tope	Palmyras and tamarind trees	472·62	..	..	
		104	Do.	Palmyras and tamarind trees	227·7	..	..	
		105	Do.	Tamarind trees, palmyras, and mango trees	24·56	..	..	
		106	Do.	Tamarind trees, cocoanut trees, and eluppai	..	..	..	
		107	Palmyra tope	Palmyras and tamarind trees	10·45	..	..	
		108	Do.	Palmyras, tamarind trees and kannikaradu	429·3	..	..	
		109	Do.	Palmyras, tamarind trees, velam, oonjal, and velleyam.	..	..	..	
		110	Komarapolliem palmyra tope ..	Tamarind trees, eluppai, and palmyras	258·51	..	..	
			Do. do.	Tamarind trees	47·86	..	..	
		111	Mango tope	Mango trees and palmyras	1·79	..	..	
		112	Do.	Palmyras, tamarind trees, veppam, vagai, poovarasam, vathanarayanam, úthian, ichi, karivélam, sethamaram, thasathooval, vélam, pungai, palamaram, and kunni.	..	..	..	
		113	Ponnivady palmyra tope	Palmyras, tamarind trees, vélam, velvélam, oonjal, and karivelam.	414·82	..	320	
		114	Nallampolliem tamarind trees ..	Tamarind trees, velvélam, oonjal, and karivélam ..	18·69	..	..	
		115	Kolathupollem tamarind tope ..	Tamarind trees, palmyras, veppam, vélam, peamaram, ichi, karivélam, athi, elanthai, oonjal, purasoo, othiamaram, pungai, banyan trees, kunni trees, vagai, variam, poovarasam, arasam, and pammaram.	339·23	..	..	
		116	Do. do.	Palmyras, karivélam, tamarind, banyan, poovarasam, vagai, and athi.	626·86	..	..	
		117	Sitharavathampolliem palmyra tope	Palmyras	31·41	..	..	
		118	Do. do. ..	Palmyras, tamarind trees, nagai, cocoanut trees, veppam, vélam, arasamaram, pungai, ichi, velvélam, karuvélam, and variam.	89·41	..	60	
		119	Tamarind tope	Tamarind trees, karivélam, veppam, and palmyras ..	143·94	..	..	
		120	Do.	Tamarind trees, vélam, karivélam, veppam, purasu, vagai, and palmyras.	..	..	..	
		121	Do.	Tamarind trees, palmyras, karivélam, and velvélam ..	387·94	..	..	
		122	Fruit tope	Mango trees, palmyras, eluppai, nagamaram, arasam, karivélam, cacoanut trees, and tamarind trees.	103·86	..	..	
		123	Palmyra tope	Palmyra and mango trees	33·74	..	..	
		124	Do.	Tamarind trees, velvélam, karivélam, veppam, and palmyras.	90·1	..	..	
		125	Do.	Palmyras, véiam, and veppam	161·84	..	60	
		126	Do.	Palmyras, vélam, tamarind trees, nagai, veppam, and other trees.	..	..	..	
		127	Government tope	Palmyras	396·15	..	..	
	Satyamangalam.	128	Akkara, Kodiveri tope	Palmyras and tamarind	20·79	..	874	
		129	Thadapalli channel tope	Palmyras	..	..	457	
		130	Arakankota	Palmyras	..	..	998	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
North Coimbatore—(*Cont.*)	Bhavâni ..	131	Narinjipett Government tope ..	Mango trees	3·82	..	1,402	
		132	Mathoor palmyra tope	Palmyras	16·31	..	7	
		133	Yemamangalum tope	Do.	3·27	..	..	
		134	Olacodam Ittari tope	Do.	1·9	..	32	
		135	Gathisamudram tope	Do.	7·97	..	27	
		136	Periapaliyûr tope	Do.	9·68	..	74	
		137	Kasaramungalam tope	Palmyras, veppam, tamarind, and vagai	11·18	..	21	
		138	Varathanellore tope	Palmyras	7·31	..	6	
		139	Orachali tope	Do.	10·93	..	6	
		140	Appakkodal tope	Do.	6·73	..	..	
		141	Bhavâni tope	Do.	35·24	..	135	
		142	Jamba tope	Do.	16·85	..	83	
		143	Mylambadi tope	Do.	1·24	..	7	
		144	Fuel reserve	Palmyras, vélam, and veppam	10·57	..	..	
		145	Kasaramangalam fuel reserve ..	Karivélam	2·80	..	..	
		146	Periapulinjur fuel reserve ..	Vengai, karivélam, and tamarind	45·1	..	..	
		147	Appakkodal fuel reserve	Karivélam and veppam	2·50	..	..	
		148	Appakkodal fuel reserve	Tamarind trees, veppam, peamaram, vélam, and vagai.	17·5	..	..	
		149	Bhavâni palmyra tope	Palmyras	29·20	..	..	
		150	Jambai fuel reserve	Tamarind trees, karivélam, velvélam, vagai, and veppam.	142·23	..	..	
	Kollegâl ..	151	Kollegâl kusba tope	Karivélam	100·	..	230	
		152	Kunthur reserve	Karivélam	96·6	..	146	
		153	Lutchmipuram fuel reserve ..	Kungily, hoorugal, karivélam, ando ther trees ..	100·60	..	..	
		154	Kunthur tamarind tope	Tamarind trees and other trees	5·87	..	..	
				Total ..	11,405·10	..	27,322	
South Coimbatore.	Palladam ..	1	Tope at Anonashapolliem	Palmyra trees and karivélam trees	1·91	..	2,061	
		2	Tope at Soloor	Tamarind, veppam and teak, &c., trees	1·97	..	188	
		3	Tope at Udayárpálaiyam	Karivélam and palmyra sprouts	9·82	..	238	
		4	Tope at Irugur	Palmyra sprouts, &c., trees	9·84	..	254	
		5	Tope at Avanâshi	Palmyra, tamarind, karivélam, velvélam, sandal-wood, and woodapple, &c., trees.	57·89	..	2,133	
		6	Tope at Avanasilingumpolliem ..	Palmyra, karivélam, velvélam, tamarind, and veppam trees, &c.	19·36	..	323	
				Total ..	100·79	..	5,197	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
Madura ..		1	Koilur Travellers' bungalow ..	Tamarind, margosa, eluppai, karivélam, and vagai ..	1·19	..	399	The figures in this column include the total expenditure incurred in the Jungle Conservancy Department from the commencement up to 1st April 1883 in each tope.
		2	Koilur Northern tope	Tamarind, margosa, eluppai, and palmyra	·15	..	..	
		3	Gódalúr tope	Tamarind, margosa, eluppai, karivelam, and vagai ..	1·18	..	404	
		4	Palkanooth Travellers' bungalow tope.	Tamarind, margosa, eluppai, velvélam, oosal, and konnai.	4·	..	1,212	
		5	Trichinopoly and Karúr road junction tope.	Tamarind, margosa, eluppai, karivélam, and vagai ..	1·	..	238	
		6	Tope opposite to Munsif Court, Dindigul.	Tamarind, margosa, eluppai, karivélam, and oosal ..	·59	..	515	
		7	Tope round the Race Course ground.	Tamarind, margosa, naval, eluppai, karivélam, and vagai.	4·	..	970	
		8	Navimpatti	Jack tree, tamarind, mango, eluppai, and guava tree.	12·	205	205	
		9	Tamarakulam tope	Tamarind, vembu, and eluppai	1·	..	550	
		10	Melmungalam tope	Eluppai, margosa, vagai, peenary, vembu, and moon-galpannai.	1·5	..	342	
		11	Vadipatti	Tamarind, vagai, and vembu	1·	3	598	
		12	Gangoovarpatti	Tamarind, vagai, eluppai, vembu, and naval ..	4·	3	751	
		13	Allinagaram	Eluppai, naval, vembu, and vagai	2·	40	684	
		14	Mottanooth tope	Vagai, tamarind, vembu, vélam, and kodukapuli ..	2·	..	878	
		15	Virupakshi tope	Tamarind and eluppai	7·15	49	620	
		16	Sivagiripatti tope	Tamarind, eluppai, vembu, vagai, véla, puvarasoo, marothan., and oosal.	1·15	50	408	
		17	Tengarai tope	Véla, ve.nsoo, sandal, kallathu, tamarind, naval, vembu, eluppai, vagai, arasoo, and moongal.	6	9	885	
		18	Kothampatti Travellers' bungalow.	Vagai, tamarind, margosa, and cocoanut	6	..	..	
		19	Melúr Travellers' bungalow ..	Margosa, tamarind, and vagai	5·5	..	..	
		20	Kalmalai tope Goovakapatti ..	Peramboo, vélam, palmyra, velvélam, tamarind, eluppai, and naval.	130·52	..	198	
		21	Veerapandi	Vémbu, vagai, karivelam, and aroonellikoi	2	26	626	
				Total ..	193·03	385	10,483	
				Regular Operations.				
Tinnevelly ..	Tinnevelly.	1	Singravaram in Sindupundarai ..	Mango, teak, and margosa	·72	42	112	The total of the entries under regular plantations and cultural operations are shown in the plantation statement.
		2	Sivalapuri	Babul	50·	25	55	
		3	Nursery garden near Stochanam's bridge.	Mango, tamarind, gooseberry, and palmyra ..	2·78	54	126	
		4	Huzur Cutcherry compound at Kokarakulam.	Mango, tamarind, gooseberry, and palmyra	20·	37	96	
	Tenkarai ..	5	Katchanavilai	Odai and banyan	932·50	38	82	
		6	Nalumavadi	Vagai and margosa	522·19	38	86	

Annual List of Topes—(*Con tinued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
		7	Kanam	Gallnut, naval, tamarind and vagai	474·30	38	133	
		8	Kayamoli	Banyan	240·70	..	..	
		9	Kudiramoli	Odai, banyan, gallnut, vagai, and margosa	9,469·	..	46	
	Tenkarai—(*Cont.*)	10	Semmarkolum	Odai, banyan, gallnut, vagai, and margosa	801·79	41	85	
		11	Pandrapuram	Odai and banyan	1,268·78	38	85	
		12	Nadurakurchi	Vagai and margosa	2,806·38	38	54	
		13	Arasur, Patchakadu	Banyan and casuarina	2,789·45	38	86	
		14	Sadayneríkulam	Gallnut, vagai, and odai	7·	38	86	
	Otapidáram	15	Madathur Pudukolum	Babul	88·88	16	35	
	Sankaranai-nárkoil.	16	Marathoni	Mango, eluppai, and jack	1·	95	95	
		17	Jadakal Periyakulam	Vagai, tamarind, and maruda	5·	..	23	
		18	Matalainparaikulam	Vagai and punga	1·	22	21	
		19	Maraverikulam	Vagai, tamarind, eluppai, and babul	1·25	..	30	
		20	Melapavoor Periyakulam	Vagai and tamarind	2·	22	52	
		21	Kelapavoor Periyakulam	Vagai, maradu, naval, and mango	2·	22	42	
		22	Vadagarai Melpidagai Karisalkulam	Naval, tamarind, and eluppai	1·	22	51	
		23	Vadagarai Keelpidagai Harikesava-periakulam.	.....	2·70	22	52	
		24	Sengulam	Marudu, tamarind, and eluppai	·80	21	51	
		25	Sivalperiyakulam	Marudu, tamarind, and eluppai	1·	21	23	
	Tenkási	26	Kodikurchi Rajakulam	Marudu, tamarind, and eluppai	2·5	..	52	
		27	Pattapathi Thoyarankulam	Marudu, tamarind, and eluppai	·30	..	24	
Tinnevelly—(*Cont.*)		28	Kanakupillai Valasu Kalkuttiku-lam.	Vagai, pungai, tamarind, and margosa	2·	..	24	
		29	Kunavamanallur Vettaikarankulam	Marudu, pungai, vagai, and babul	1·50	..	..	
		30	Madapulikulam	.....	1·	..	23	
		31	Netur Periyakulam	Vagai, tamarind, and babul	2·50	22	44	
		32	Papuli Periyakulam	Vagai, tamarind, babul, and eluppai	3·48	22	4	
		33	Pattakurchi Kilkulam	.....	1·	21	21	
		34	Tiruchitambalam River Bank	.....	1·	..	..	
		35	Tiruchitambalam Kulam	Marudur	1·	22	58	
	Nángunéri.	36	Vallayúr garden	Mango, eluppai, bamboo, and banyan	12·8	150	307	
		37	Radhápuram tope	Margosa, vagai, and vadamadaki	1·5	40	92	
				Total ..	19,551·18	1,004	2,256	
				Cultural Operations.				
		1	Nainarkulam Tank	Babul	..	..	60	
		2	Mallikulam Tank		..	..	60	
		3	Thamaraikulam		..	..	60	
	Tinnevelly.	4	Kandiaperikulam		..	..	60	
		5	Tirumalaikulandapuram Pattaku-lam.		..	..	60	

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost		Remarks.
						During Year.	To end of Year.	
						Rs.	Rs.	
		6	Palumadai Tank bank		..	..	60	
		7	Madavakurichi Urini		..	..	12	
		8	Semboothoo		..	..	13	
		9	Kattarankulam		..	..	13	
	Tinnevelly.	10	Tenkulam, Sanikanoothoo Urini	Babul	..	..	25	
		11	Sivandepatti Hammanedi		..	..	13	
		12	Omanallur		..	..	19	
		13	Piranjeri river bank		..	..	19	
		14	Nariyoothoo		..	..	13	
		15	Kaliyuthu Urini		..	..	86	
		16	Nazareth	Banyan and palmyra	915·45	38	70	
	Tenkarai	17	Kulasekharapatnam Sea Customs Office.	Tulip	..	10	109	
		18	Srivaikuntham District Munsif's Court compound.	Cocoanut, mango, jack, and orange	·90	49	111	
	Otapidáram.	19	Otapidáram kusba	Mango, bamboos, eluppai, and vagai	6·37	51	216	
		20	Tuticorin and Savandakulam	Jack, margosa, eluppai, and tamarind	5·7	125	103	
	Sátúr	21	Sátúr river side	Bamboos	1·45	43	109	
		22	Veppalapattai	Bamboos		49	99	
		23	Sátúr river	Naval, vagai, and tamarind	1·54	40	88	
Tinnevelly—(*Cont.*)	Srívilliputur	24	Sammandapuram	Mango and banyan	1·22	29	102	
		25	Sankaranainárkoil Kusba	Jack, orange, neem, and eluppai	1·28	42	63	
		26	Vásudevanellúr	Bamboos	1·2	63	63	
		27	Puliangudi Ilandaikulam Puliangudi channel	Naval and bamboos				
		28	Pattakulam	.....				
		29	Naranaperi	.....				
	Sankaranai-nárkoil.	30	Vásudevanellúr	.....	2,615·1	170	275	
		31	Naranapuram	.....				
		32	Rappaikulam	.....				
		33	Rappaikulam Elankulam	.....				
		34	Vásudevanellúr river bank	Mango, banyan, and bamboos	..	121	391	
		35	Melapuliangudi river bank	.....				
		36	Melachiritamani	Bamboos	2·	..	22	
		37	Courtalam river bank	Margosa, vagai, and marudu	2·	20	50	
		38	Tenkási river bank	Marudu, casuarina, and vagai	2·	15	15	
		39	Pulyur river bank	Marudu	1·20	15	49	
	Tenkási	40	Pulyur channel	Vagai, margosa, casuarina, and tamarind	·50	20	20	
		41	Pattakurchi river bank	Marudu and punnai	1·50	20	50	
		42	Mayamankurchi river bank	Marudu	4·	10	60	
		43	Nétúr river bank	Marudu	1·25	14	66	
		44	Melapavoor	Marudu				

Annual List of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Acre.	Cost During Year.	Cost To end of Year.	Remarks.
						Rs.	Rs.	
Tinnevelly—(*Cont.*)	Ambás a mudram.	45	Kangayan channel bank	Vagai, margosa, and maradu	5·	27	51	
		46	Rangasamudram	....	2·	..	..	
		47	Pappagudi Karungalam	....	2·	..	..	
		48	Ambásamudram kasba	Eluppai and tamarind	1·	41	100	
		49	Ambásamudram Cutcherry compound.	Gooseberry	3·	82	201	
	Nángunéri	50	Valliyur market tope	Vadamaduki, vagai, and banyan	5·75	52	99	
		51	Pannagudi	Margosa and vagai	1·	..	22	
		52	Singikulam	Maradu, tamarind, and margosa	5·36	37	73	
		53	Kalakkad Channel bank	Navel, mango, tamarind, maradu, and margosa ..	5·80	49	49	
		54	Nángunéri Cutcherry compound ..	Tulip and margosa	·47	49	49	
		55	Nánguneri Travellers' bungalow ..	Tamarind, margosa, and navel	1·5	..	60	
		56	Radhapuram market	Mango, eluppai, vagai, and tamarind	1·30	34	82	
		57	Mulaikkaraipatti tope	Vagai and margosa	·50	27	63	
		58	Nángunéri market	Banyan	2·4	35	83	
		59	Thisayavilai market	Banyan and tamarind	2·76	35	80	
				Total ..	3,602·79	1,412	3,669	
Malabar ..	Wynaad ..	..		*Nil.*				
	Pálghat ..	1	Puliyampally	Mango trees	3·	..	..	
		2	Mango tope	Mango trees and jack trees				
	Nilambúr ..	..		*Nil.*				
				Total ..	3·	..	..	
South Canara	Mangalore ..	1	Ullal	Casuarina	13·	107	not known.	
		2	Thannir Bhavi	Casuarina	11·	565	564	
		3	Ullal (old)	Honne	14·	19	not known.	
		4	Ullal (new)	Honne	25·	221	do.	
	Kasaragód ..	5	Parappa	Teak	109·	83	16,422	
				Total ..	172·	995	16,986	
				Grand Total ..	39,385·77	14,671	2,67,202	
				Deduct total for Tinnevelly included in the Plantation Statement	23,153·97	2,416	5,925	
				Total ..	16,231·80	12,255	2,61,277	

(Form No. 62.)

APPENDIX IV.

Forest Department, Southern Circle, Madras.

Area of Forest Tracts protected from Fire during the Dry Season of 1884, to accompany Report for 1883-84.

Division.	Forest Tracts.	Up to 15th June.		During 1883-84.				Total Cost up to the End of 1883-84.	Year when Protection commenced.	Remarks.
		Area actually protected.	Total Cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
		Acres.	Rs.	Acres.	Acres.	Acres.	Rs.	Rs.		
Chingleput District.	Kámbákam Hill	..	..	..	..	..	..	..	..	Five and-a-half miles in length and 18 yards broad of boundary and fire lines were cleared on the western and southern side of the hill for Rs. 707-2-6.
North Arcot District.	Pólúr Taluk—									
	Carnatic ghur reserve	..	609	12,800	..	12,800	85	694	1881	
	Kapalúr reserve	..	..	1,280	..	1,280	..	..	1884	
	Kalúr do.	..	..	3,068	..	3,068	..	..	..	
	Alinjólamangalam reserve ..	..	..	10,502	..	10,502	..	..	..	
	Ammerdy plantation	..	..	25	..	25	..	..	..	
	Vellore Taluk—									
	Sandalwood reserve	..	375	12,800	..	12,800	..	375	1879	
	Jávadi timber do.	..	751	19,200	..	19,200	..	751	1881	
	Naikanéri do.	..	..	6,400	..	6,400	..	..	1880	
	Thellai do.	..	1,078	12,800	..	12,800	..	1,078	1881	
	Ambúr fuel do.	..	311	3,840	..	3,840	198	509	1879	
	Ambúr plantations	..	..	5	..	5	..	..	1884	
	Chandragiri Taluk—									
	Napier reserve	..	534	8,772	..	8,772	13	665	1880	
	Mamanadúr reserve	..	719	1,776	..	1,776	156	875	1874	
	Chamala do.	..	..	9,600	300	9,300	49	49	1880	
	Panapák do.	..	..	6,400	..	6,400	28	28	1880	
	Pudibatta byle	..	..	2,560	..	2,560	25	25	1880	
	Gazalamandayam plantation ..	..	..	250	..	250	..	..	1884	
	Palmanér Taluk—									
	Musali Madugu reserve	..	..	9,600	..	9,600	..	..	..	
	Morthana reserve	..	..	16,000	..	16,000	216	216	..	
	Peddur do.	..	..	9,600	..	9,600	..	..	1880	
	Baireddipalle do.	..	..	10,240	..	10,240	..	..	1884	
	Palmanér plantation	..	..	2	..	2	..	..	..	
	Nágamangalam do.	..	..	31	..	31	..	..	..	
	Piduguvâripalle do.	..	..	20	..	20	..	..	..	
	Venkatagirikóta	..	..	4	..	4	..	..	..	
	Baireddipalli do.	..	..	4	..	4	..	..	..	
	Arcot Taluk—									
	Palamadi reserve	..	307	6,400	..	6,400	..	307	1881	
	Punganúr do.	..	..	6,400	..	6,400	68	68	1880	
	Kilminnel plantation	..	..	150	..	150	..	..	1884	
	Chittoor Taluk—									
	Paradarami reserve	..	..	6,400	..	6,400	73	73	1880	

Area of Forest Tracts protected from Fire during the Dry Season of 1884, to accompany Report for 1883-84—(*Continued*).

Division.	Forest Tracts.	Up to 15th June.		During 1883-84.				Total Cost up to the End of 1883-84.	Year when Protection commenced.	Remarks.
		Area actually protected.	Total Cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
North Arcot District—(*Continued*).	Chittoor Taluk—(*Continued*).	ACRES.	RS.	ACRES.	ACRES.	ACRES.	RS.	RS.		
	Iyrala reserve	..	..	6,400	..	6,400	..	..	..	
	Penamúr do	..	..	6,400	..	6,400	..	..	..	
	Chittoor do.	..	..	2,560	..	2,560	68	68	1882	
	Santhapet do.	..	..	2,560	..	2,560	..	..	..	
	Bommasamudram reserve ..	..	..	3,000	..	3,000	..	..	1884	
	Chílapalle	..	..	1,063	..	1,063	..	..	..	
	Keevatipalle	..	..	2,856	..	2,856	..	..	..	
	Gudiyátam Taluk—								1880	
	Ambúrdrug reserve	..	..	5,760	..	5,760	..	..	1882	
	Vikramasi do.	..	17	161	..	161	..	17	1884	
	Tiruvallam plantation ..	..	..	435	..	435	..	..	..	
	Virinjipuram do.	..	..	260	..	260	..	..	..	
	Cheyanúr do.	..	..	129	..	129	..	..	..	
	Ammundry do.	..	..	160	..	160	..	..	..	
	Thandrayagunta plantation ..	..	..	2	..	2	..	..	..	
	Wálajápet Taluk—								1880	
	Gúdalúr reserve	..	..	559	..	559	..	..	1880	
	Kanjampet do.	..	..	154	..	154	..	..	1880	
	Ammanur do.	..	..	210	..	210	..	..	1880	
	Uriyur do.	..	..	672	..	672	..	..	..	
	Banávaram do.	..	..	1,071	..	1,071	47	47	..	
	Anapák do.	..	..	61	..	61	..	..	..	
	Thengal do.	..	..	120	..	120	..	..	..	
	Ammúr do.	..	..	6,018	200	5,818	..	..	1884	
	Kolathúr do.	..	..	1,781	..	1,781	..	..	..	
	Minnel do.	..	..	1,395	..	1,395	..	..	..	
	Vanavedu do.	..	..	30	..	30	..	..	..	
	Arkónam Sub-Magistrate's compound.	..	..	5	..	5	..	..	..	
	Head Assistant Collector's compound.	..	..	4	..	4	..	..	..	
	Arkónam plantation	..	..	37	..	37	..	..	..	
	Wandiwash Taluk—								1880	
	Ponnur reserve	..	..	1,676	..	1,676	..	..	..	
	Venkundram reserve	..	..	822	..	822	..	..	..	
	Badúr do.	..	..	829	..	829	..	..	..	
	Nambedu do.	..	..	929	..	929	..	..	..	
	Kodiyalam do.	..	..	255	..	255	..	..	1883	
	Nedungal do.	..	..	3,632	..	3,632	..	..	..	
	Vishamangalam do.	..	..	1,148	..	1,148	..	..	..	
	Nedungundram do.	..	..	1,798	..	1,798	..	..	..	
	Brammacatteri do.	..	..	1,589	..	1,589	..	..	..	
	Total ..	173,525	4,701	233,470	500	232,970	1,144	5,845	..	

Area of Forest Tracts protected from Fire during the Dry Season of 1884, to accompany Report for 1883-84—(*Continued*).

Division.	Forest Tracts.	Up to 15th June.		During 1883-84.				Total Cost up to the End of 1883-84.	Year when Protection commenced.	Remarks.
		Area actually protected.	Total Cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
South Arcot District.	Tiruvannámalai Kasba—	ACRES.	RS.	ACRES.	ACRES.	ACRES.	RS.	RS.	From dry season 1878 inclusive.	The 90 acres of difference shown in this statement between area of reserves and that attempted to be protected is the land occupied by fire traces, &c., approximately.
	Anámalai section, 3,000 acres. Kavathimalai section, 7,500 acres. Chengam Sub-division, same taluk— 2. Thenmalai inclusive of Muthunai and Damaracadu 24,000. 3. Chinnasamudram 6,500 .. 4. Chockadivalasai Malai 4,000 .. 5. Perungolathúr Sami Malai 8,000. Kallakurchi Taluk— 6. Thagarai and slopes of Chinnatripatti Malai 11,000.	17,510	896	63,910	* 341	63,569	144	1,040	1877 and 1883-84. 1878	
	Vadugampatti	..	..	1,000	30	970	60	..	1866-67	
	Morur	..	..	400	30	370	21	..	..	
	Mallapuram	..	..	300	30	270	15	..	..	
	Burgur	..	..	125	..	125	7	..	..	
	Pudur	..	..	500	..	500	28	..	..	
	Amuaneri	..	..	125	30	95	10	..	1871-72	
	Pelhapalli	..	..	450	30	420	24	..	..	
	Karippa Kombi	..	..	300	30	270	15	..	..	
	Kanjeri	..	..	300	30	270	15	..	1880-81	
	Pannikaradu	..	..	1,075	60	1,015	58	..	1881-82	
	Karuvathuparai	..	..	400	30	370	21	..	..	
	Thogarapalli	..	..	75	..	75	4	..	1880-81	
	Uttankarai	..	..	250	..	250	14	..	1874-75	
	Singarapet	..	..	1,200	..	1,200	63	..	..	
	Harúr	..	..	500	..	500	28	..	..	
	Total ..	12,261·42	4,065	7,000	300	6,700	383	4,448	..	
Trichinopoly and Tanjore Districts.	....					*Nil.*				
Coimbatore District.	North Coimbatore	..	† 397			*Nil.*				
	South Coimbatore—									
	No. I reserve	..	..	..	..	..	..	..	..	
	No. II reserve	..	..	8,327	200	8,127	653	‡ 1,324	..	
	Palar reserve	..	..	..	..	..	..	..	..	
	Sholakarai reserve	..	..							
	Total ..	4,821	274	8,327	200	8,127	653	1,324	..	

* Occurred in five reserves.
† Sholakarai reserve was transferred to South Coimbatore and with it the cost, Rs. 397, which is added to the total cost of South Coimbatore.
‡ Does not include the pay of watcher for March, April, and May 1883, and February 1884.

Area of Forest Tracts protected from Fire during the Dry Season of 1884, to accompany Report for 1883-84—(*Continued*).

Division.	Forest Tracts.	Up to 15th June.		During 1883-84.				Total Cost up to the End of 1883-84.	Year when Protection commenced.	Remarks.
		Area actually protected.	Total Cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
		ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.		
Madura District.	XXI—*Alagarmalai*	3,000	2,060	12,000	..	12,000	610	2,763	1882-83	
	X—*Pambar*	..		5,120	204	4,916	179	179	1883-84	
	Total ..	3,000	2,060	17,120	204	16,916	789	2,942		
Tinnevelly District.	....					*Nil.*				
Malabar District.	Wynaad Division—Coodracote .. .. .. Padry, Chedleth, Beni and Cardamom forests.	4,480	13	4,480	2,560	1,920	142	155	1882-83	Besides, these 114 timber depôts, each 30′ square, have been fire-traced in the first four forest divisions.
						Nil.				
	Total ..	4,480	13	4,480	2,560	1,920	142	155		
	Pálghat Division—Walayar reserves	3,017	2,338	3,017	200	2,817	372	2,710	1873-74	
	Chenat Nair Forests not protected.	..	..	..	..	..	..	..		
	Nilambur Division—Nellicutta	..	..	1,799·38	..	1,799·38	..	45	1883-84	
South Canara District.	Parappa	..	..	115	..	115	..	68	1882-83	
	Pillarkan	..	..	320	..	320	89	21	1883-84	
	Total ..	..	..	435	..	435	* 89	89		
	Grand Total ..	218,614·42	14,744	339,558·38	4,305	335,253·38	3,716	18,598		

* Includes Rs. 38 spent last year; Rs. 4-12-0 were spent in protecting 162 logs lying in the forests.

(Form No. 63.)

APPENDIX V.

Statement of Prosecutions for Breaches of Forest Rules during 1883-84.

Forest Division and Civil District.	Cases pending from 1882-83.	New Cases of the Year.					Total Cases.	Disposed of during the Year.						Cases pending at close of year.	Remarks.
		Injury to Forests by Fire.	Unauthorised 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. Chingleput ..	..	..	I.P.C., 379 3 cases.	..	..	3	3	2	2	1	2	3	4	..	
2. North Arcot ..	..	1	16	..	3	20	20	12	23	8	47	20	70	..	
3. South Arcot ..	(*a*) 5	..	14	2	11	27	32	20	59	5	21	25	80	7	(*a*) Six shown last year.
4. Salem	6	29	3	1	49	82	88	58	250	20	94	78	344	10	
5. Trichinopoly ..	(*b*) 1	..	13	1	..	14	15	7	33	6	17	13	50	2	(*b*) Nothing shown last year.
6. Tanjore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
7. Coimbatore—															
North ..	..	..	..	..	40	40	40	35	79	5	35	40	114	..	
South ..	1	..	..	..	52	52	53	46	171	7	25	53	196	..	
8. Madura	..	..	51	3	9	63	63	51	183	12	92	63	275	..	
9. Tinnevelly ..	2	..	46	..	2	48	50	45	189	5	22	50	211	..	
10. Malabar—															
Wynaad and Pálghat ..	1	..	3	..	..	3	4	2	7	1	3	3	10	1	
Nilambúr ..	1	..	1	..	1	2	3	..	..	2	2	2	2	1	
11. South Canara ..	(*c*) 2	195	18	..	2	215	217	171	190	42	65	213	255	4	(*c*) One last year.
Total ..	19	225	168	7	169	569	588	449	1,186	114	425	563	1,611	25	

FORM No. 64.)

APPENDIX F.

DETAILED STATEMENT showing the Revenue of the Southern Circle for the Official Year 1883-84.

Budget Heads.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.
1	2	3	4	5	6	7	8
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Timber and other Produce removed from the Forests by Government Agency—							
(a) Timber	187 0 0	10,949 13 0	3,188 11 10	2,034 10 5	83 5 0	..	700 5 4
(b) Firewood and charcoal	..	2,631 12 6	7,938 9 8	..	413 4 11	..	..
(c) Bamboos	..	..	1 0 0	22 8 0	..	..	..
(d) Sandalwood	..	..	69 0 0	35 0 0	..	..	..
(e) Grass and other minor produce	..	108 4 0	3,564 11 8	36,027 8 11	..	..	16,636 8 6
II. Timber and other Produce removed from the Forests by Consumers or Purchasers—							2,049 0 1
(a) Timber	..	8,554 11 10	9,234 0 7	7,429 7 1	1,315 8 2	174 0 0	6,664 12 0
(b) Firewood and charcoal	7,216 9 1	24,736 5 4	5,553 9 9	18,838 11 9	5,211 0 9	3,065 9 1	3,537 8 2
(c) Bamboos	..	15,072 5 4	1,427 4 6	16,827 4 6	2,535 11 3	..	10,664 11 0
(d) Grazing and fodder grass	..	458 8 2	0 12 7	..	2,011 2 6	47 8 0	..
(e) Other minor produce	2,370 11 2	13,890 10 3	3,707 2 8	14,579 8 2	2,607 15 0	1,083 15 9	20,869 8 8
III. Confiscated drift and waifwood	37 2 6	96 9 9	63 12 6	290 6 5	8 5 3	..	128 0 6
IV. Revenue from Forests not managed by Government—							
(a) Duty on foreign timber and other forest produce	..	..	0 6 0	..	..	..	..
(b) Revenue from shared and private forests	..	..	..	..	..	..	..
V. Miscellaneous—							
(a) Fines and forfeitures	..	2 0 0	..	1 5 0	3 11 4	..	..
(b) Refunds	44 12 6	313 3 8	66 8 0	1,710 9 4	..	38 1 7	266 12 7
(c) Other sources	..	115 1 5	..	966 0 7	16 2 6	50 15 4	573 9 6
Total Receipts	9,856 3 3	76,929 5 3	34,515 9 9	98,763 0 2	14,206 2 8	4,458 1 9	62,090 12 4
Add Book Adjustment	..	..	..	..	..	..	..

Budget Heads.	South Coimbatore.	Madura.	Tinnevelly.	Wynaad and Pálghat.	Nilambúr.	South Canara.	Total.
	9	10	11	12	13	14	15
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Timber and other Produce removed from the Forests by Government Agency—							
(a) Timber	17,215 1 1	..	1,522 2 0	19,403 9 4	54,940 7 4	175 12 0	1,10,400 13 4
(b) Firewood and charcoal	..	828 1 6	..	3 0 0	153 11 4	893 7 3	12,861 15 2
(c) Bamboos	..	..	..	513 7 4	1,567 3 8	4 8 6	2,108 11 6
(d) Sandalwood	2 4 0	..	..	..	..	..	16,742 12 6
(e) Grass and other minor produce	70 0 0	..	1,774 8 8	956 12 11	..	9,961 10 11	54,512 9 2
II. Timber and other Produce removed from the Forests by Consumers or Purchasers—							
(a) Timber	7,009 10 6	5,885 13 8	8,961 9 9	..	..	1,232 3 5	56,461 13 0
(b) Firewood and charcoal	11,441 8 1	11,021 14 5	14,485 15 2	..	..	15,225 1 5	1,20,031 13 0
(c) Bamboos	9,589 3 0	2,352 7 6	474 12 8	..	..	383 5 0	59,327 0 9
(d) Grazing and fodder grass	1,565 12 0	7,621 2 0	53 4 0	..	..	..	11,758 1 3
(e) Other minor produce	10,155 9 3	8,207 9 11	7,732 6 5	..	..	14 4 0	85,219 5 3
III. Confiscated drift and waifwood	376 9 5	133 5 5	431 8 1	37 8 0	..	760 7 0	2,363 10 10
IV. Revenue from Forests not managed by Government—							
(a) Duty on foreign timber and other forest produce	..	..	..	..	..	..	0 6 0
(b) Revenue from shared and private forests	..	..	..	..	..	..	..
V. Miscellaneous—							
(a) Fines and forfeitures	11 0 0	2 0 0	25 0 0	..	..	..	45 0 4
(b) Refunds	275 4 7	185 12 3	874 3 9	941 8 6	556 1 6	468 5 0	5,741 3 3
(c) Other sources	2,121 13 6	3,439 7 10	576 12 9	17 0 0	184 8 0	21 0 6	8,082 7 11
Total Receipts	59,833 11 5	39,677 10 6	36,912 3 3	21,872 14 1	57,461 15 10	29,140 1 0	5,45,657 11 3
Add Book Adjustment	..	..	..	..	..	..	..

DETAILED STATEMENT of Expenditure under A. "Conservancy and Works" in the Southern Circle for the Official Year 1883-84.

Budget Heads.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.
1	2	3	4	5	6	7	8
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Timber and other produce removed from the Forests by Government Agency—							
(a) Timber	26 4 0	6,528 4 8	1,985 1 2	1,722 12 0	11 12 0	..	350 0 0
(b) Firewood and charcoal	..	2,333 9 8	309 15 0	..	418 2 1	..	..
(c) Bamboos	..	0 8 0	..	..	..	..	..
(d) Sandalwood	..	494 8 2	57 12 0	613 5 0	..	..	3,620 15 10
(e) Grass and other minor produce	..	305 10 5	185 9 3	1,249 8 0	51 1 4	..	1,300 0 0
II. Timber and other produce removed from the forests by consumers or purchasers	..	2,697 7 3	549 8 1	2,962 0 10	1,298 1 8	..	2,435 11 7
III. Confiscated drift and waifwood	..	0 10 0	34 0 0	19 8 5	..	..	22 3 8
IV. Revenue from Forests not managed by Government—							
(a) Duty on foreign timber and other forest produce	..	..	..	..	..	..	..
(b) Revenue from shared and private forests	..	..	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government	..	..	..	..	..	..	..
VI. Live and dead stock—							
(a) Purchase of cattle	..	..	..	..	..	23 9 3	86 15 0
(b) Feed and keep of cattle	..	..	..	..	..	16 0 0	52 14 0
(c) Plant, tools, and instruments	15 2 0	1,168 8 0	154 4 8	..	44 0 0	..	..
VII. Communications and Buildings—							
(a) Roads and bridges	..	5,568 2 1	..	848 13 2	..	..	105 0 0
(b) Buildings	..	905 14 9	68 4 0	281 5 7	..	..	..
(c) Other works	..	..	148 3 6	..	..	..	..
VIII. Demarcation, Improvement, and extension of Forests—							
(a) Demarcation	707 2 6	6,070 9 1	150 0 0	115 9 0	158 5 7	..	83 9 0
(b) Compensation for land and rights	..	10 0 0	..	..	..	..	..
(c) Surveys and working plans	..	..	56 13 6	489 0 0	..	..	..
(d) Plantations	2,858 5 3	5,056 4 9	4,578 15 10	223 10 6	3,885 2 3	5,954 14 7	746 4 0
(e) Protection from fire	..	1,143 13 0	143 12 6	1,442 14 4	..	..	..
(f) Other works	266 0 0	6,763 15 1	6,220 7 7	12,847 10 11	1,363 0 3	..	136 15 0
IX. Miscellaneous—							
(a) Refunds	34 2 9	..	60 0 0	1,866 0 7	..	3 1 1	26 15 10
(b) Law charges	..	7 0 0	..	..	..	..	..
(c) Other charges	..	65 8 0	10 6 6	105 3 4	20 0 0	..	47 14 6
Total Expenditure adjusted	3,907 0 6*	39,120 4 11	14,713 1 7	24,787 5 8	7,249 9 2	5,997 8 11	9,015 6 5
Total disallowed	345 5 4	2,195 6 2	111 6 9	2,912 0 6	902 2 7	..	564 7 9
Total Outstanding Advance	416 8 8	1,808 1 11	..	2,135 0 10	219 14 10	9 4 3	3,840 11 7
Total of A. "Conservancy and Works"	4,668 14 6	43,123 13 0	14,824 8 4	29,834 7 0	8,371 10 7	6,006 13 2	13,420 9 9

Detailed statement of Expenditure under A. "Conservancy and Works" in the Southern Circle for the Official Year 1883-84—*(Continued)*.

Budget Heads.	South Coimbatore.	Madura.	Tinnevelly.	Wynaad and Pálghat.	Nilambúr.	South Canara.	Total.
	9	10	11	12	13	14	15
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Timber and other produce removed from the Forests by Government Agency—							
(a) Timber	4,908 6 2	..	407 13 1	3,464 3 0	7,979 0 0	50 11 8	27,434 3 9
(b) Firewood and charcoal	..	498 8 11	..	..	..	20 3 1	3,580 6 9
(c) Bamboos	..	..	..	243 4 0	223 6 8	..	467 2 8
(d) Sandalwood	..	..	..	..	..	..	4,786 9 0
(e) Grass and other minor produce	24 1 0	..	752 5 10	211 9 10	..	149 2 0	4,228 15 8
II. Timber and other produce removed from the forests by consumers or purchasers	2,706 8 8	3,443 12 5	1,442 1 7	..	..	575 0 7	18,110 4 8
III. Confiscated drift and waifwood	23 8 6	8 7 4	107 1 6	..	..	..	215 7 5
IV. Revenue from Forests not managed by Government—							
(a) Duty on foreign timber	..	..	..	..	..	..	..
(b) Revenue from shared and private forests	..	..	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government	..	..	..	..	1,462 3 3	..	1,462 3 3
VI. Live and dead stock—							
(a) Purchase of cattle	..	..	..	40 0 0	..	..	40 0 0
(b) Feed and keep of cattle	58 1 6	..	..	2,155 1 8	894 13 6	..	3,218 8 11
(c) Plant, tools, and instruments	73 1 3	141 0 8	89 7 4	144 3 0	245 4 7	..	2,143 13 6
VII. Communications and Buildings—							
(a) Roads and bridges	296 1 8	..	3,923 10 0	140 8 0	31 0 0	..	10,808 2 11
(b) Buildings	370 4 3	1,084 0 0	101 0 0	8,966 0 5	194 2 0	21 4 6	12,097 3 6
(c) Other works	15 0 0	..	..	25 12 0	..	..	188 15 6
VIII. Demarcation, Improvement, and extension of Forests—							
(a) Demarcation	870 8 0	2,424 4 2	1,726 4 0	420 2 0	..	1,701 13 7	14,428 2 11
(b) Compensation for land and rights	7,927 13 9	..	371 0 0	..	..	..	8,308 13 9
(c) Surveys and working plans	83 10 0	..	220 6 0	218 12 0	..	1 7 0	1,070 0 6
(d) Plantations	..	1,131 12 5	287 5 8	817 13 3	5,672 2 7	1,088 8 0	32,301 3 1
(e) Protection from fire	541 0 0	943 8 6	..	620 11 0	729 2 0	21 2 0	5,585 15 4
(f) Other works	731 11 8	..	4,156 13 7	347 4 10	480 13 5	116 6 6	33,431 2 10
IX. Miscellaneous—							
(a) Refunds	98 4 7	188 12 3	825 4 3	831 6 2	..	157 6 8	4,091 6 2
(b) Law charges	..	..	86 4 0	..	..	..	93 4 0
(c) Other charges	82 6 8	..	73 3 8	91 8 1	120 8 0	..	616 10 9
Total Expenditure adjusted	18,810 7 8	9,864 2 8	14,570 0 6	18,738 3 3	18,032 8 0	3,903 1 7	1,88,708 12 10
Total disallowed	100 2 11	18 4 8	1,011 15 2	1,795 9 10	21 6 0	227 11 10	10,205 15 6
Total Outstanding Advance	622 1 1	456 2 3	6,900 7 8	1,019 3 3	862 13 11	6,917 8 5	25,207 14 8
Total of A. "Conservancy and Works"	19,532 11 8	10,338 9 7	22,482 7 4	21,553 0 4	18,916 11 11	11,048 5 10	2,24,122 11 0

Detailed Statement of Expenditure under A. "Conservancy and Works" and B. "Establishment" in the Southern Circle for the Official Year 1883-84.

Budget Heads.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.	South Coimbatore.
1	2	3	4	5	6	7	8	9
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Salaries—								
(a) Conservator	..	..	..	..	..	..	..	..
(b) Superior officers	1,250 0 0	4,888 11 4	9,550 0 0	8,700 0 0	5,254 13 5	..	10,049 3 2	3,490 5 2
(c) Subordinate, Forest, and Depôt establishments	939 7 4	9,136 1 11	9,034 10 3	8,387 11 6	3,182 13 10	917 13 5	4,704 8 11	8,664 5 3
(d) Office establishments	352 2 8	1,870 0 0	1,873 3 0	1,821 4 1	1,129 5 9	213 10 8	1,786 0 3	1,784 3 2
(e) Deputation and special allowances	..	5 13 11	..	400 0 0	304 12 11	..	..	436 3 4
II. Travelling Allowances—								
(a) Conservator	..	..	..	..	..	..	..	..
(b) Superior officers	611 4 0	1,746 12 4	2,640 0 0	1,833 10 3	1,174 1 3	..	1,829 7 10	1,734 3 1
(c) Subordinate, Forest, and Depôt establishments	95 5 4	2,683 5 2	1,785 13 9	1,648 6 11	1,188 0 8	279 7 7	1,336 1 4	2,473 2 0
(d) Office establishments	35 10 8	244 8 0	268 3 2	221 6 4	77 4 0	61 2 4	84 11 10	124 2 8
III. Contingencies—								
(a) Stationery	..	4 13 2	6 13 8	25 2 6	5 2 6	1 7 9	101 10 0	6 8 3
(b) Carriage of tents and records	26 11 0	200 0 0	86 15 5	218 9 4	7 13 0	59 15 1	36 0 0	130 11 0
(c) Rents, rates, and taxes	..	24 0 0	106 10 8	..	..	2 14 0	..	..
(d) Pay of Police guards	..	..	..	..	..	..	..	..
(e) Official postage	10 2 0	334 6 0	371 12 8	399 15 6	130 9 6	19 9 0	214 1 6	210 8 0
(f) Sundries	16 0 0	740 10 0	60 9 6	775 5 10	110 0 9	234 9 1	445 3 6	361 13 3
Total of B. "Establishments"	3,336 11 0	21,879 1 10	25,784 12 1	24,431 8 3	12,564 13 7	1,790 8 11	20,587 0 4	19,416 1 2
Total of A. "Conservancy and Works"	4,668 14 6	43,123 13 0	14,824 8 4	29,834 7 0	8,371 10 7	6,006 13 2	13,420 9 9	19,532 11 8
Grand Total of all Expenditure	8,005 9 6	65,002 14 10	40,609 4 5	54,265 15 3	20,936 8 2	7,797 6 1	34,007 10 1	38,948 12 10

Budget Heads.	Madura.	Tinnevelly.	Wynaad and Pálghat.	Nilambúr.	South Canara.	Central Office.	Total.
	10	11	12	13	14	15	16
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Salaries—						15,122 9 3	15,122 9 3
(a) Conservator	..	..	..	..	..	13,600 0 0	81,826 9 3
(b) Superior officers	3,850 0 0	7,800 0 0	6,599 15 5	5,954 13 5	838 11 4	60 0 0	69,039 4 4
(c) Subordinate, Forest, and Depôt establishments	5,905 2 1	5,720 14 0	5,867 7 0	1,755 7 4	4,762 13 6	11,137 4 6	29,578 11 2
(d) Office establishments	1,248 7 8	1,718 5 6	2,095 1 7	1,265 0 11	1,284 9 5	..	1,562 1 9
(e) Deputation and special allowances	50 0 0	..	365 3 7	..	..	2,663 7 6	2,663 7 6
II. Travelling Allowances—						2,270 0 0	20,719 1 10
(a) Conservator	..	..	..	..	..	107 14 0	17,579 4 8
(b) Superior officers	1,938 6 10	1,368 9 0	1,649 8 3	1,648 13 0	274 6 0	831 7 7	2,737 7 8
(c) Subordinate, Forest, and Depôt establishments	1,562 1 9	1,298 10 3	1,412 12 0	431 3 5	1,277 0 6	..	216 15 1
(d) Office establishments	264 8 2	170 5 7	134 5 8	28 6 0	191 5 8	30 3 3	1,645 5 6
III. Contingencies—						448 15 1	1,213 6 1
(a) Stationery	..	4 13 0	15 14 6	14 6 6	..	900 0 0	..
(b) Carriage of tents and records	86 8 0	61 11 6	109 1 9	..	172 6 4	..	3,482 13 1
(c) Rents, rates, and taxes	..	..	179 13 5	..	..	..	6,953 15 10
(d) Pay of Police guards	..	..	..	..	..	605 11 11	2,54,341 1 0
(e) Official postage	271 9 6	430 5 0	145 12 6	50 5 0	288 1 0	2,756 13 11	2,24,122 11 0
(f) Sundries	103 4 6	511 4 3	545 0 4	29 10 3	263 10 8	..	
Total of B. "Establishments"	15,280 0 6	19,084 14 1	19,120 0 0	11,178 1 10	9,353 0 5	50,534 7 0	4,78,463 12 0
Total of A. "Conservancy and Works"	10,338 9 7	22,482 7 4	21,553 0 4	18,916 11 11	11,048 5 10	..	
Grand Total of all Expenditure	25,618 10 1	41,567 5 5	40,673 0 4	30,094 13 9	20,401 6 3	50,534 7 0	

(From No. 69.)

Forest Department, Southern Circle, Madras.

Statement of Timber and other Produce cut and collected by Government Agency during 1883-84.

District.	Range Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of Year		Collected during the Year.		Total.		Disposed of during Year.			Balance at end of Year.		Remarks.
			Number.	Cubic feet.	Number.	Cubic feet.	Number.	Cubic feet.	How disposed of	Number.	Cubic feet.	Number.	Cubic feet.	
Chingleput ..	..	Casuarina poles ..	..	..	120	..	120	..	Taken to Sale Depôt ..	120	..	..	..	
North Arcot..	Forest. ..	Redwood	..	..	..	Tons 775	..	Tons 775	Removed to the Sale Depôt.	..	Tons 775	..	..	
		Sandalwood ..	..	..	..	Mds. 679	..	Mds. 679	Do.	..	Mds. 679	..	..	
		Casuarina posts..	..	..	1,047	..	1,047	..	Do.	1,047	..	..	..	
		Fuel	..	..	..	Tons 339	..	Tons 339	Do.	..	Tons 339	..	..	
		Forest produce ..	..	..	..	Mds. 700	..	Mds. 700	Do.	..	Mds. 700	..	..	
South Arcot ..	Forsct Depôt.	Teak..	..	..	..	176	..	176	..	..	..	..	176	
	Forest ..	Miscellaneous logs.	552	1,321	2,866	7,014	3,418	8,335	Sold	712	1,717	1,210	2,555	
									Removed to Sale Depôt.	1496	4,063			
		Sandalwood.. ..	..	..	Mds. 150	..	Mds. 150	..	Do.	Mds. 150	..	..	..	
		Total Timber	552	1,321	2866 / Mds. 150	7,190	3,418 / Mds. 150	C. ft. 8,511	..	C. ft. 2208 / Mds. 150	5,780	1,210	2,731	
	Forest ..	Firewood and Charcoal	..	..	Tons 2,470	..	Tons 2,470	..	Removed to Sale Depôt.	Tons 2,470	..	..	..	
		Bamboos	..	..	Cart-lds 2	..	Cart-lds 2	..	Do.	Cart-lds 2	..	..	..	
	Grass and other Produce.	..	..	..	Mds. 40,514	..	Mds. 40,514	..	Do.	Mds.40,514	..	..	..	
Salem.. ..	Forest ..	Junglewood post..	..	..	75	..	75	..	Removed to Sale Depôt.	75	..	..	..	
		Miscellaneous logs.	..	..	..	1,779	..	1,779	Do.	..	1,779	..	..	
		Sandalwood ..	..	..	Mds. 172	..	Mds. 172	..	Do.	Mds. 17.	..	..	..	
		Bamboos	..	..	No. 200	..	No. 200	..	Do.	No. 200	..	..	..	
		Forest produce ..	..	..	Mds. 5,691	..	Mds 5,691	..	Do.	Mds.5,691	..	..	..	
Trichinopoly..	Forest ..	Junglewood ..	..	..	169	Not given.	169	..	Sold	169	..	..	..	
		Firewood.. ..	Tons 202	..	Tons 669	..	Tons. 871	..	Sold	Tons 193	..	Tons. 678	..	
Tanjore ..			..	..	..	..	..	*Nil.*	..	..	..	..		
Coimbatore. North Coimbatore Division.	Forests ..	Teak	..	..	115	700	..	..	Removed to Sale Depôt.	115	700	..	..	
		Sandalwood ..	..	..	Mds. 5,287	..	..	..	Do.	5,287	..	..	..	
		Forest produce ..	..	..	2,728	..	..	..	Do.	2,728	..	..	..	

Statement of Timber and other Produce cut and collected by Government Agency during 1883-84—*(Continued)*.

District.	Range Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of Year.		Collected during the Year.		Total.		Disposed of during Year.			Balance at end of Year.		Remarks.
			Number.	Cubic feet.	Number.	Cubic feet.	Number.	Cubic feet.	How disposed of.	Number.	Cubic feet	Number.	Cubic feet.	
Coimbatore—*(Contd.)* South Coimbatore Division.	Forest	Teak	1,850	28,749	..	..	1,850	28,749	Taken to Sale Depôt ..	743	10,943	1,107	17,806	
		Blackwood ..	147	2,592	..	..	149	2,660	Do.	13	229	136	2,431	
	Bólumputty & Méttupál a i-yam.	..	2 / 149	67 / 2660	..	..	..	..	..	..	..	..	..	
		Junglewood ..	56	1,312	..	..	58	1,426	Taken to Sale Depôt..	..	..	58	1,426	
	Bólumputty & Méttupál a i-yam.	..	2 / 58	114 / 1426	..	..	..	..	..	..	..	..	..	
Madura ..	Kodaikánal ..	Firewood ..	..	..	Tons 241	..	Tons 241	..	Removed to Sale Depôt.	Tons 241	..	..	..	
Tinnevelly ..	Forest ..	Junglewood ..	..	..	196	302	196	302	Removed to Sale Depôt.	196	302	..	..	
			..	..	..	Mds. 191	..	Mds. 191	Do.	..	Mds. 191	..	..	
		Forest Produce	..	..	..	Meas. 14	..	Meas. 14	..	..	Meas. 14	..	..	
			..	..	..	1,444 Cottalis	..	1,444 Cottalis	..	..	1,444 Cottalis	..	..	
Malabar. Wynaad ..	Forest ..	Teak	..	24,620	Pieces 17	21,743	17	46,363	Sold	No. 17	21,226	..	25,137	
		Blackwood ..	..	1,788	..	12,946	..	14,734	,, ...	..	6,596	..	8,138	
		Other Junglewood	..	2,171	..	2,325	..	4,496	,, ...	..	1,841	..	2,655	
		Bamboos	..	..	27,207	..	27,207	..	,, ...	27,207	..	..	..	
Pálghát ..	Forest ..	Blackwood ..	..	43	..	..	..	43	..	..	..	..	43	
		Junglewood ..	..	3,070	..	1,657	..	4,727	Sold	..	1,313	..	1,540	
		Teak	..	..	..	27	..	27	Removed to Sale Depôt.	..	1,874	..	27	
		Bamboos	..	..	400	..	400	..	Do.	150	..	..	..	
									Sold	250				
		Firewood.. ..	..	..	Cartld 3	..	Cartld 3	..	,, ...	Cartload 3	..	..	..	
		Forest produce ..	..	..	No. 500 Rattan.	..	No. 500	..	,, ...	No. 500	..	..	..	
Nilambúr.	Nellakóta ..	Teak	..	..	378	15,545	378	15,545	Removed to Sale Depôt.	378	15,545	..	..	
		Junglewood ..	..	..	738	34,435	738	34,435	Do.	738	34,435	..	..	
		Saplings	..	..	63,712	..	63,712	..	Do.	63,712	..	..	..	
		Bamboos	..	..	20,134	..	20,134	..	Do.	20,134	..	..	..	
South Canara..	Forest ..	Blackwood ..	..	..	60	1,355	60	1,355	..	..	..	60	1,355	
		Junglewood ..	..	..	102	2,391	102	2,391	..	..	..	102	2,391	
		Firewood	..	..	Tons 207	..	Tons 207	..	Removed to Sale Depôt.	Tons 207	..	..	..	
		Forest produce ..	..	..	Mds. 8,086	..	Mds. 8,086	..	Do.	Mds. 8,086	..	..	..	

(FORM No. 70.)

Forest Department, Southern Circle, Madras.

Receipts and Issues of Timber and other Produce in Sale Depôts during the Year 1883-84.

District.	Name of Depôt.	Description of Timber and other Produce.	On hand, 1st April 1883.		Received during the Year.			Total.		Disposed of during the Year.			Balance on 31st March 1884.		Remarks.
			Number or Quantity.	Cubic Feet.	Whence received.	Number or Quantity.	Cubic Feet.	Number or Quantity.	Cubic Feet.	How disposed of.	Number or Quantity.	Cubic Feet.	Number or Quantity.	Cubic Feet.	
Chingleput ..	..	Casuarina poles ..	..	..	Sale depôt.	No. 120	..	120	..	Supplied to Telegraph Department.	120	..	..	..	
North Arcot..	Sale depôt	Redwood	Tons. 225	..	Sale depôt.	Tons. 775	..	Tons. 1,000	..	Sold ..	Tons. 628	..	Tons. 372	..	
		Sandalwood ..	Mds. 408	..	..	Mds. 679	..	Mds. 1,087	..	..	..	..	Mds. 1,087	..	
		Casuarina posts ..	..	..	..	No. 1,047	..	No. 1,047	..	Supplied to Telegraph Department.	No. 1,047	..	..	..	
		Fuel	Tons. 33	..	..	Tons. 339	..	Tons. 372	..	Supplied to Central Jail and sold.	Tons. 343	..	Tons. 29	..	
		Forest produce ..	..	..	..	Mds. 700	..	Mds. 700	..	Sold ..	Mds. 700	..	..	..	
South Arcot..	Sale depôt	Miscellaneous logs.	140	359	Forest depôt.	1,496	4,063	1,636	4,422	Sold ..	1,572	4,239	64	183	
		Sandalwood ..	Mds. 800	..	..	Mds. 150	..	Mds. 950	..	..	Mds. 12	..	938	..	
		Firewood.. ..	..	..	..	Tons. 2,470	..	Tons. 2,470	..	..	Tons. 2,470	..	..	..	
		Charcoal	..	..	..	$\frac{1}{10}$	..	$\frac{1}{10}$	..	..	$\frac{1}{10}$	..	..	..	
		Bamboos	..	..	..	Cart-loads. 2	Cart-loads. 2	Cart-loads. 2	Cart-loads. 2	..	Cart-loads. 2	Cart-loads. 2	..	..	
		Forest produce ..	Mds. 398	..	..	Mds. 40,514	..	Mds. 40,912	..	..	Mds. 40,897	..	Mds. 15	..	
Salem.. ..	Sale depôt	Miscellaneous logs.	..	767	Sale depôt.	..	1,779	..	2,546	Sold ..	..	1,275	..	475	
		Junglewood posts.	..	..	..	No. 75	..	..	..	Supplied to other departments.	No. 75	796	..		
		Sandalwood ..	Mds. 2,794 + 337 (a)	..	..	Mds. 172	..	Mds. 3,303	..	Sold ..	Mds. 8	..	3,295	..	(a) Omitted in the last account.

Receipts and Issues of Timber and other Produce in Sale Depôts during the Year 1883-84—(*Continued*).

District.	Name of Depôt.	Description of Timber and other Produce.	On hand, 1st April 1883.		Received during the Year.			Total.		Disposed of during the Year.			Balance on 31st March 1884.		Remarks.
			Number or Quantity.	Cubic Feet.	Whence received.	Number or Quantity.	Cubic Feet.	Number or Quantity.	Cubic Feet.	How disposed of.	Number or Quantity.	Cubic Feet.	Number or Quantity.	Cubic Feet.	
Salem—(*Contd*).	Sale depôt	Bamboos	..	..	..	No. 200	..	No. 200	..	Supplied to other departments.	200	..	..	..	
		Forest produce ..	Mds. (a) 86	..	..	Mds. 5,778	..	5,864	..	Sold ..	5,825	..	39	..	(a) Omitted in the last account.
Trichinopoly ..								*Nil.*							
Tanjore ..								*Nil.*							
Coimbatore. North Coimbatore Division.	Sale depôt	Teak	..	..	Forest ..	115	700	115	700	Sold ..	115	700	..	..	
		Sandalwood ..	..	..	..	..	Mds. 5,287	..	Mds. 5,287	Sold ..	..	Mds. 5,287	..	..	
		Forest produce ..	..	..	..	..	Mds. 2,728	..	Mds. 2,728	Sold ..	..	Mds. 2,728	..	..	
		Teak	937 + 91	13,674 2,098	..	..	..	..	..	Sold ..	903	11,929	..	..	
										Supplied to Central Jail, Coimbatore.	3	100	..	..	
										Used by the department.	8	218	..	..	† Stock, Bólumputty and Méttupálaiyam transferred to South Coimbatore.
										Transferred to jungle wood.	1	19	..	..	
			1,028	15,772	Forest ..	743	10,943	1,771	26,715	..	915	12,266	856	14,449	
South Coimbatore Division.	Sale depôt	Blackwood ..	575	9,545	..	..	..	..	..	..	..	..	..	..	‡ Increase found on remeasurement.
		..	..	‡ 3	..	..	..	..	..	..	..	..	..	..	
		..	107	2,812	..	..	..	..	..	..	..	..	..	..	
			682	12,360	..	13	229	695	12,589	Sold ..	377	7,443	318	5,146	
		Junglewood ..	22	232	..	..	..	..	..	Sold ..	40	623	..	..	
		..	55	1,317	..	..	..	..	..	Used by the Department.	36	906	..	..	
			77	1,549	Teak used as 'junglewood.	1	19	78	1,568	..	76	1,529	2	39	
		Sandalwood ..	..	..	..	lbs. 9	..	lbs. 9	..	..	lbs. 9	..	..	..	

Receipts and Issues of Timber and other Produce in Sale Depôts during the Year 1883-84—(*Continued*).

District.	Name of Depôt.	Description of Timber and other Produce.	On hand, 1st April 1883. Number or Quantity.	On hand, 1st April 1883. Cubic Feet.	Received during the Year. Whence received.	Received during the Year. Number or Quantity.	Received during the Year. Cubic Feet.	Total. Number or Quantity.	Total. Cubic Feet.	Disposed of during the Year. How disposed of.	Disposed of during the Year. Number or Quantity.	Disposed of during the Year. Cubic Feet.	Balance on 31st March 1884. Number or Quantity.	Balance on 31st March 1884. Cubic Feet.	Remarks.
Madura ..	Sale depôt ..	Firewood	Tons. 9	..	Sale depôt.	Tons. 241	..	Tons. 250	..	Sold ..	173	..	77	..	
Tinnevelly ..	Sale depôt	Teak	91	350	..	..	..	91	350	Sold ..	91	350	..	..	
		Teak materials ..	..	132	..	..	..	..	132	..	..	132	..	..	
		Other junglewood.	239 Cart-loads.	1,456	Sale depôt.	196	302	435	1,758 Cart-loads.	..	435	1,758	..	..	
		Bamboos ..	2	..	..	..	..	..	2	Wastage ..	..	..	..	..	* The District Forest Officer shows only 11 maunds and 13 measures.
		Forest produce ..	Mds. *35	..	..	Mds. 191	..	Mds. 226	Mds. 226	Sold ..	Mds. 188	..	38	..	
						M. 14	..	M. 14	M. 14		M. 14				
						C. 1,444	..	C. 1,444	C. 1,444		C. 1,444	..	..	..	
Malabar. Wynaad ..	Sale depôt	Teakwood ..	..	1,312	..	..	..	..	1,312	..	..	..	..	1,312	
		Blackwood ..	..	7	..	..	..	..	7	..	..	..	..	7	
		Other junglewood	..	1,505	..	..	..	..	1,505	..	..	..	..	1,505	
		Forest produce ..	Mds. 3	..	Forest ..	Mds. 6	..	Mds. 9	..	Sold ..	Mds. 9	..	..	..	
Pálghat ..	Sale depôt	Other junglewood	..	255	..	..	1,874	..	2,129	..	..	1,633	..	496	
		Bamboos	..	..	..	No. 150	..	..	150	Sold ..	No. 150	..	..	..	
Nilambúr ..	Sale depôt	Teak	545	17,321	Sale depôt.	378	15,545	923	32,866	Sold ..	545	17,321	378	15,545	
		Saplings	44,165	..	..	63,712	..	1,07,877	..	..	39,719	..	68,158	..	
		Blackwood ..	..	805	..	..	..	..	805	..	..	685	..	120	
		Junglewood ..	..	28,906	..	..	34,435	..	63,341	..	..	27,130	..	36,211	
		Firewood ..	..	..	..	Tons. 34	..	34	..	Sold ..	..	34	..	..	
		Bamboos ..	..	..	..	20,134	..	20,134	..	..	27,827	..	..	..	
		..	..	..	..	† 7,693	..	7,693	..	..	..	..	..	..	† Omitted by District Forest Officer.
South Canara ..	Sale depôt	Firewood ..	..	..	..	Tons. 207	..	Tons. 207	..	Sold ..	..	Tons. 207	..	..	Do.
		Forest produce ..	..	..	..	Mds. 8,086	..	Mds. 8,086	..	..	..	Mds. 8,086	..	..	Do.

FORM No. 71.

Forest Department, Southern Circle, Madras.

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84.

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
							RS. A P.	RS. A. P.			
Chingleput ..	Locally ..	I (*a*)	Casuarina ..	No. 120	..		187 8 0	187 8 0	..	..	
North Arcot ..	Mámandúr Depôt	I (*a*)	Redwood ..	Tons 628	..		9,150 0 0	9,150 0 0	..	..	
	Vellore and Karkambady.	..	Posts	No. 1,047	..		1,799 13 0	1,799 13 0	..	..	
						Not given ..	10,949 13 0	10,949 13 0	..	..	
	Vellore Depôt	I (*b*)	Fuel	Tons 343	..		2,631 12 6	2,631 12 6	..	..	
		I (*c*) ..	Soapnut ..	Mds. 400	..		70 12 0	70 12 0	..	..	
			Tamarind ..	,, 300	..		37 8 0	37 8 0	..	..	
							108 4 0	108 4 0			
						Grand Total ..	13,689 13 6	13,689 13 6			
South Arcot ..	Forest Depôt ..	I (*a*)	Junglewood ..	..	1,717		688 7 7	688 7 7	..	..	
		I (*a*)	Junglewood ..	..	4,239		2,500 4 3	2,500 4 3	..	..	
							3,188 11 10	3,188 11 10			
		I (*b*)	Firewood ..	Tons 2,200	..		7,630 5 8	7,630 5 8	..	..	
			Áváram sticks.	,, 270	..		307 14 0	307 14 0	..	..	
			Charcoal ..	Cwt. 2	..		0 6 0	0 6 0	..	..	
							7,938 9 8	7,938 9 8			
		I (*c*)	Bamboos ..	Cart-lds. 2	..		1 0 0	1 0 0	..	..	
	Sale Depôt ..	I (*d*)	Sandalwood ..	Mds. 12	..	Not given ..	69 0 0	69 0 0	..	..	
			Gallnuts ..	,, 1,440	..		120 0 0	120 0 0	..	..	
			Tamarind ..	,, 1,418	..		393 3 2	393 3 2	..	..	
			Fruits, &c. ..	.. ..	..		310 9 6	310 9 6	..	..	
			Manure leaves.	Cart-lds. 676	..		342 11 3	342 11 3	..	..	
			Palmyra leaves.	,, 9	..		6 7 6	6 7 6	..	..	
		I (*e*)	Seeds	Mds. 335	..		175 14 0	175 14 0	..	..	
			Seedlings ..	,, 2	..		3 12 0	3 12 0	..	..	
			Áváram bark ..	,, 8,946	..		2,060 7 9	2,060 7 9	..	..	
			Velvélam bark ..	,, 400	..		44 0 0	44 0 0	..	..	
			Silk cotton ..	,, 280	..		10 12 0	10 12 0	..	..	
			Thorns	Cart-lds. 10	..		5 4 9	5 4 9	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
							RS. A. P.	RS. A. P.			
South Arcot—(*Continued*).	Sale Depôt—(*Contd.*)		Date and palmyra juice.	..	..	Not given.	22 14 9	22 14 9	..	..	
			Honey	Mds. 5 1/4	..		41 3 0	41 3 0	..	..	
			Wax	,, 1/20	..		12 0 0	12 0 0	..	..	
			Grass	,, 268	..		15 8 0	15 8 0	..	..	
							3,564 11 8	3,564 11 8			
						Grand Total ..	14,762 1 2	14,762 1 2			
	Sale Depôt ..	I (*a*)	Áchá	..	386		459 6 3	459 6 3	..	..	
			Vóngai	..	13		15 12 6	15 12 6	..	..	
			Junglewood ..	..	241		326 5 9	326 5 9	..	..	Supplied to Revenue Department.
	Salem Depôt ..	..	..	Posts 75	..		582 10 10	582 10 10	..	..	
	Denkanikóta ..	..	..	..	625		14 0 0	14 0 0	..	..	Supplied to Central Jail.
	Salem	..	..	..	158		537 11 5	537 11 5	..	..	Supplied to Remount Depôt.
	..						98 11 8	98 11 8	..	..	Supplied to Salem Taluk.
							2,034 10 5	2,034 10 5			
Salem		I (*c*)	Bamboos ..	No. 200	..	Not given.	22 8 0	22 8 0	..	..	
		I (*d*)	Sandalwood ..	Mds. 8	..		35 0 0	35 0 0	..	..	
	Denkanikóta ..		Gallnuts ..	,, 1,121	..		780 0 0	780 0 0	..	..	
			Wax ..	,, 8/25	..		4 0 0	4 0 0	..	..	
		I (*e*)	Soapnut ..	,, 87	..		22 0 0	22 0 0	..	..	
			Tamarind ..	,, 4,617	..		2,061 0 0	2,061 0 0	..	..	
			Tree rents ..	..	..		33,160 8 11	33,160 8 11	..	..	
							36,027 8 11	36,027 8 11			
						Grand Total ..	38,119 11 4	38,119 11 4			
Trichinopoly ..	Locally ..	I (*a*)	Timber	No. 169	..	Not given ..	83 5 0	83 5 0	..	..	
		I (*b*)	Firewood ..	Tons 193	..		413 4 11	413 4 11	..	..	
						Grand Total ..	496 9 11	496 9 11			
Tanjore			*Nil.*								

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
							RS. A. P.	RS. A. P.			
Coimbatore.	North Coimbatore Division.	Sale epôt .. I (*a*)	Teak ..	115	700	Not given.	700 5 4	700 5 4	..	..	
		I (*d*)	Sandalwood ..	Mds. 5,287	..		16,636 8 6	16,636 8 6	..	..	
		I (*e*)	Deer-horns ..	,, 14	..		61 1 1	61 1 1	..	..	
			Bees-wax ..	,, 8	..		101 7 10	101 7 10	..	..	
			Honey	,, 5 1/2	..		14 7 0	14 7 0	..	..	
			Gallnuts ..	,, 2,700 1/2	..		1,872 0 2	1,872 0 2	..	..	
							2,049 0 1	2,049 0 1			
						Total ..	19,385 13 11	19,385 13 11			
	South Coimbatore Division.	Sale Depôt .. I (*a*)	Teak ..	,, 903	11,929	Not given.	12,377 11 7	12,377 11 7	..	..	Supplied to Central Jail, Coimbatore.
				.. ..	100		180 12 2	180 12 2	..	..	
				,, 8	* 218		..	..	..	..	* Used for the construction of the Irulapolliem Bungalow and office furniture.
				,, 1	† 19		..	..	..	..	† Transferred to jungle woods.
					12,266		12,558 7 9	12,558 7 9			
			Blackwood ..	,, 377	7,443		4,446 9 11	4,446 9 11			
			Junglewood ..	,, 40	623		209 15 5	209 15 5	..	..	
				,, 36	* 906		..	..	..		
		I (*d*)	Sandalwood billets.	..	..		2 4 0	2 4 0	..	..	
		I (*e*)	Forest produce.	..	..		70 0 0	70 0 0	..	..	
						Total ..	17,287 5 1	17,287 5 1			
Madura ..	Kodaikánal ..	I (*b*)	Firewood ..	Tons 173	..		828 1 6	828 1 6			
Tinnevelly ..	Sale Depôt ..	I (*a*)	Teakwood ..	..	350		217 0 3	217 0 3	..	..	
			Teak materials	..	132		109 4 1	109 4 1	..	..	
			Kongu ..	..	302		321 7 8	321 7 8	..	..	
			Véngai ..	..	823		504 2 2	504 2 2	..	..	
			Junglewood ..	..	633		370 3 10	370 3 10	..	..	
							1,522 2 0	1,522 2 0			

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
							RS. A. P.	RS. A. P.			
Tinnevelly—(*Continued*).	Sale Depôt—(*Continued*).	I (*e*)	Cardamom ..	Mds. 46	..	Not given.	1,626 2 11	1,626 2 11	..	..	
		I (*c*)	Gallnuts ..	,, 99	..		60 1 7	60 1 7	..	..	
			Dammer ..	,, 6	..		13 13 11	13 13 11	..	..	
		I (*e*)	Wax	,, $1\frac{12}{25}$	..		22 14 6	22 14 6	..	..	
			Honey	Meas. $20\frac{3}{4}$	..		20 12 0	20 12 0	..	..	
			Tamarind ..	1,444	..		19 5 9	19 5 9	..	..	
			Mango seeds ..	196	..		11 6 0	11 6 0	..	..	
							1,774 8 8	1,774 8 8			
						Grand Total ..	3,296 10 8	3,296 10 8			
			Teak	..	21,226 Pieces 17	Not given.	4,690 6 11	4,690 6 11	..	..	
			Blackwood ..	..	6,596		5,362 8 0	5,362 8 0	..	..	
			Mutty	..	$28\frac{1}{2}$		7 1 8	7 1 8	..	..	
		I (*a*)	Benteak ..	..	99		24 12 2	24 12 2	..	..	
			Homay ..	..	1,487		590 10 10	590 10 10	..	..	
			Junglewood ..	..	$51\frac{1}{2}$		12 14 0	12 14 0	..	..	
			Mutty stump fee.	..	175		19 6 6	19 6 6	..	..	
				..	..		128 2 0	128 2 0	..	..	
	Locally ..					Add amount of advance paid for Teak, &c.	5,063 9 5	5,063 9 5	..	..	
							15,899 7 6	15,899 7 6			
Malabar. Wynaad ..		I (*c*)	Bamboos ..	No. 27,207	..	Not given.	416 15 4	416 15 4	..	..	
	Sale Depôt ..	I (*e*) ..	Honey	Botls. 28	..		841 12 11	841 12 11	..	..	
			Cardamom ..	Mds. $7\frac{1}{8}$							
						Total ..	17,158 3 9	17,158 3 9			
	Pálghat ..		Teak Saplings ..	Cart-ld. $\frac{1}{4}$	..	Not given.	4 0 0	4 0 0	..	..	
	Locally ..	I (*e*)	Junglewood ..	..	1,313		360 13 8	360 13 8	..	..	
	Sale Depôt ..	..	..	..	3,333		1,139 4 2	1,139 4 2	..	..	
							1,504 1 10	1,504 1 10			
						Security for purchase of Teak, &c.	2,000 0 0	2,000 0 0			
						Total ..	3,504 1 10	3,504 1 10			

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
							RS. A. P.	RS. A. P.			
Malabar—(*Continued*).	Pálghat—(*Cont*).	I (*b*)	Firewood ..	Ton $1\frac{1}{2}$	..	Not given.	3 0 0	3 0 0	..	..	
	Locally ..	I (*c*)	Bamboos ..	No. 250	..		81 8 0	81 8 0	..	..	
	Sale Depôt ..	..	..	,, 150	..		15 0 0	15 0 0	..	..	
							96 8 0	96 8 0			
	Locally ..	I (*e*)	Forest products, rattan.	No. 500	..		115 0 0	115 0 0	..	..	
						Total ..	3,718 9 10	3,718 9 10			
	Nilambúr .	I (*a*)	Teak	..	17,321	Not given.	13,856 14 8	54,940 7 4	Not given.	Not given.	* Supplied to Bombay Marine Department.
			Teak crooks ..	No. 34	..		* 1,111 6 11				
			Teak saplings ..	,, 39,719	..		41,901 9 3				
			Blackwood ..	..	685		500 10 6				
			Benteak ..	..	18,445		4,354 10 4				
			Karumarid ..	..	4,334		975 1 2				
			Poomarid ..	..	1,644		284 9 1				
			Erul	..	2,707		562 4 7				
							63,547 2 6	..			
		I (*b*)	Firewood ..	Tons 34	..		153 11 4	153 11 4	..	..	
		I (*c*)	Bamboos ..	No. 27,827	..		1,567 3 8	1,567 3 8	..	..	
						Grand Total ..	65,268 1 6	56,661 6 4			
South Canara.	....	I (*a*)	Teak saplings.	Not known ..	..	Not given.	7 13 0	7 13 0	..	..	
				No. 200	..		5 0 0	5 0 0	..	..	
			Junglewood ..	,, 107	..		85 4 0	85 4 0	..	..	
			Timber ..	Not known ..	..		77 11 0	77 11 0	..	..	
							175 12 0	175 12 0			
	Sale Depôt ..	I (*b*)	Firewood ..	Tons 207	..		828 15 0	828 15 0	..	..	
			Sale of Casuarina loppings.	..	..		63 13 3	63 13 3	..	..	
			Charcoal ..	..	..		0 11 0	0 11 0	..	..	
							893 7 3	893 7 3			

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Districts.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cubic feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces, &c., removed.	Number Sold but remaining unremoved.	Remarks.
							Rs. A. P. 4 8 6	Rs. A. P. 4 8 6	..	..	
South Canara—(*Continued.*)	Sale Depôt (*Continued.*)	I. (*e*)	Bamboos ..	..	..	Not given.	2,566 1 2	2,566 1 2	..	..	
			Sikay	Mds. 5,455	..	,,	122 8 0	122 8 0	..	..	
			Bark	,, 2,416	..	,,	111 4 1	111 4 1	..	..	
			Cardamom ..	,, 2	..	,,	5 5 0	5 5 0	..	..	
			Honey	Meas. 4	..	,,	118 11 0	118 11 0	..	..	
			Wax	Mds. 10	..	,,	32 5 6	32 5 6	..	..	
			Myrabolan ..	,, 75	..	,,	140 6 5	140 6 5	..	..	
			Cinnamon flowers.	,, 99	..	,,	12 12 0	12 12 0	..	..	
			Nux vomica ..	25	..	,,	6,852 5 9	6,852 5 9	..	..	
						Sale-proceeds of Catechu, &c..	9,961 10 11	9,961 10 11			
						Grand Total ..	11,035 6 8	11,035 6 8			

ABSTRACT.

Districts.	I (*a*).	I (*b*).	I (*c*).	I (*d*).	I (*e*).	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Chingleput	187	..	..	..	..	187
North Arcot	10,950	2,632	..	..	108	13,690
South Arcot	3,189	7,939	1	69	3,565	14,763
Salem	2,035	.. 413	22	35	36,028	38,120
Trichinopoly	84	..	..	..	..	497
Tanjore		Nil.				
North Coimbatore ..	700	..	..	16,637	2,049	19,386
South Coimbatore ..	17,215	.. 828	..	2	70	17,287
Madura	..	..	..	..	..	828
Tinnevelly	1,522	.. 3	513	..	1,775	3,297
Wynaad and Pálghat ..	19,404	154	1,567	..	957	20,877
Nilambúr	54,940	893	5	..	..	56,661
South Canara	176			..	9,962	11,036
Total ..	1,10,402	12,862	2,108	10,743	54,514	1,96,629

(Form No. 72.)

Forest Department, Southern Circle, Madras.

Timber and other Produce cut, collected and removed from the Forests by Consumers or Purchasers including Pasture during the Year 1883-84.

Districts.	Produce removed. Description.	Number or Quantity.	Amount of Revenue.	Amount actually realized during the year.	Remarks.
			Rs.	Rs.	
Chingleput ..	Firewood .. .. .. Tons.	10,308½	7,217	7,217	II (*b*).
	Ávaram bark, &c. .. .. Mds.	18,960	2,371	2,371	II (*c*).
	Total of the District ..	..	9,588	9,588	
North Arcot ..	Timber .. .. Cubic feet.	1,00,315	8,555	8,555	II (*a*).
	Timber .. .. Tons.	11,965	24,736	24,736	II (*b*).
	Firewood .. .. .. ,,	1,573			
	Charcoal .. .. .. Cart loads.	9,930	15,072	15,072	II (*c*).
	Bamboos	..	459	459	II (*d*).
	Grazing and fodder grass	..	12,510	12,510	II (*e*).
	Other minor produce	..	1,381	1,381	
	Amount erroneously credited to Land Revenue, but since transferred to Forest as per Accountant-General's orders.				
	Total of II (*e*) ..	..	13,891	13,891	
	Grand Total of the District ..	..	62,713	62,713	
	Satin and Karungáli .. .. Cubic feet.	121	23	23	II (*a*).
	Junglewood, rough .. .. ,,	22,111	1,149	1,149	II (*a*).
	Do. squared up .. ,,	1,224	128	128	
	Do. worked up .. ,,	20	4	4	
	Velvélam trees .. .. ,,	11,800	529	* 529	II (*a*).
	Particulars not given .. .. ,,	..	2,442	2,442	
	Timber .. .. No.	96,020	4,804	4,804	II (*a*).
	Palmirahs	207	155	155	II (*a*).
	Total of II (*a*) .. No.	1,31,296	9,234	9,234	
		207	..	..	
	Firewood .. .. .. Tons.	5,347	5,147	5,147	II (*b*).
	Charcoal .. .. .. ,,	11	30	30	II (*b*).
	Ávaram bark sticks .. .. Head load.	71	64	64	II (*b*).
	Melár (loppings)	398	12	12	II (*b*).
	Total of II (*b*) ..	5,429	5,253	5,253	
	Head load.	398	..	..	
South Arcot ..	Bamboos .. .. .. Cart load.	1,794	1,427	1,427	II (*c*).
	Grazing 157 cattle	..	1	1	II (*d*).
	Ávaram bark .. .. .. Mds.	33,000	1,739	1,739	II (*e*).
	Velvélam .. .. .. ,,	40	3	3	II (*e*).
	Thorns .. .. Cart loads.	447	58	58	II (*e*).
	Leaves .. .. ,,	1,972	283	283	II (*e*).
	Green grass .. .. .. Mds.	8	3	3	II (*e*).
	Seeds, &c. .. .. .. ,,	6	1	1	II (*e*).
	Gallnuts	886	74	74	
	Tagarai seeds	..	27	27	
	Tamarind, Eluppai, &c., crop	..	134	134	
	Tree rents	..	1,380	1,380	
	Lease of Wood-apple	..	6	6	
	Total of II (*e*) ..	..	3,708	3,708	
	Total of the District ..	..	19,623	19,623	
Salem	First, Second and Third class Timber. Cubic feet.	99,884	7,429	7,429	II (*a*).
	Firewood .. .. .. Tons.	5,982	13,401	13,401	II (*b*).
	Charcoal .. .. .. ,,	1,709	5,438	5,438	
	Total of II (*b*) ..	..	18,839	18,839	
	Bamboos .. .. .. Bandy load.	21,984	16,827	16,827	II (*c*).
	Ávaram bark .. .. .. Mds.	70,605	3,154	3,154	II (*e*).
	Tree rents .. .. .. ,,	..	11,298	11,298	
	Surul bark .. .. .. ,,	448	44	44	

* Cut and removed by the Department Public Works.

Timber and other Produce cut, collected and removed from the Forests, &c.—(*Continued*).

Districts.	Produce removed. Description.	Number or Quantity.	Amount of Revenue.	Amount actually realized during the year.	Remarks.
			Rs.	Rs.	
Salem—(*Contd.*)	Sómboo bark .. .. .. Mds.	807	76	76	II (*e*).
	Pisagoo ,, ... ,,	90	8	8	
	Total of II (*e*) ..	71,950	14,580	14,580	
	Total of the District ..	..	57,675	57,675	
Trichinopoly ..	Timber .. .. No.	12	20	20	II (*a*).
	Timber for which particulars not given .. .. ,,	..	1,296	1,296	
	Total of II (*a*) ..	..	1,316	1,316	
	Fuel .. .. Tons.	386	576	576	II (*b*).
	Particulars not given	..	4,635	4,635	
	Total of II (*b*) ..	..	5,211	5,211	
	Bamboos .. .. No.	487	72	72	II (*c*).
	Particulars not given	..	2,464	2,464	
	Total of II (*c*) ..	..	2,536	2,536	
	Grazing and fodder grass	..	2,011	2,011	II (*d*).
	Minor produce .. .. .. Mds.	181½	2,608	2,608	II (*e*).
	Total of the District ..	..	13,682	13,682	
Tanjore ..	Casuarina poles .. .. .. No.	174	174	174	II (*a*).
	Do. stumps, loppings, &c. .. Tons.	954	2,024	2,024	II (*b*).
	Firewood .. .. ,,	1,099	1,026	1,026	
	Charcoal .. ..Cart load.	8	14	14	
		..	3,064	3,064	
	Grazing and fodder grass	..	47	47	II (*d*).
	Other minor produce	..	1,084	1,084	II (*e*).
	Total of the District ..	..	4,369	4,369	
North Coimbatore Division.	Reserved.. First-class timber.. Cubic feet.	7,520	2,932	2,932	II (*a*).
	Reserved.. Second-class do. .. ,,	14,640	2,553	2,553	
	Reserved.. Third-class do. .. ,,	940	130	130	
	Unreserved timber .. .. ,,	16,616	1,049	1,049	
	Total of II (*a*) ..	39,716	6,664	6,664	
	Firewood .. .. Tons.	3,512	3,457	*3,457	II (*b*).
	Charcoal .. .. ,,	27	81	81	
	Total of II (*b*) ..	..	3,538	3,538	
	Bamboos .. .. Cart load.	9,667	10,665	10,665	II (*c*).
	Gallnuts, &c. .. .. .. ,,	Not given.	4,308	4,308	II (*e*).
	Barks, &c. .. .. .. ,,	Do.	1,813	1,813	
	Rent of topes, &c. .. .. ,,	..	14,748	14,748	
	Total of II (*e*) ..	..	20,869	20,869	
	Total of the District ..	..	41,736	41,736	
South Coimbatore Division.	Teak heads and butts .. .. Cubic feet.	7,800	4,011	4,011	II (*a*).
	First-class timber .. .. ,,	1,420	503	503	
	Second-class do. .. .. ,,	980	220	220	
	Third-class do. .. .. ,,	2,040	301	301	
	Unreserved timber .. .. ,,	23,206	1,730	1,730	
	Sale of trees in Government Topes ,,	Not given.	245	245	
	Total of II (*a*) ..	35,446	7,010	7,010	
	Firewood .. .. Tons.	10,162	10,154	10,154	II (*b*).
	Sale of poramboke trees .. .. ,,	..	521	521	
	Charcoal .. .. ,,	247½	766	766	
	Total of II (*b*) ..	..	11,441	11,441	

* Includes sale-proceeds of poramboke trees.

Timber and other Produce cut, collected and removed from the Forests, &c.—(*Continued*).

Districts.	Produce removed. Description.	Number or Quantity.	Amount of Revenue.	Amount actually realized during the year.	Remarks.
			Rs.	Rs.	
Coimbatore—(*Contd.*) South Coimbatore Division—(*Continued*).	Bamboos .. .. .. Cart load.	8,742	9,589	9,589	II (*c*).
	Grazing and fodder grass ..	..	1,566	1,566	II (*d*).
	Other minor produce ..	..	7,259	7,259	II (*e*).
	Rent of Forest trees ..	..	2,897	2,897	
	Total of II (*e*) ..	..	10,156	10,156	
	Total of the District ..	..	39,762	39,762	
Madura ..	First-class timber .. .. Cubic feet.	7,140	2,141	2,141	II (*a*).
	Second do. do. .. .. ,,	674	135	135	
	Third do. do. .. .. ,,	436	85	85	
	Fourth do. do. .. .. ,,	1,210	172	172	
	Junglewood .. .. .. ,,	41,531	3,353	3,353	
	Total of II (*a*) ..	50,991	5,886	5,886	
	Firewood .. .. Tons.	11,817	10,186	10,186	II (*b*).
	Charcoal .. .. ,,	231	836	836	
	Total of II (*b*) ..	12,048	11,022	11,022	
	Bamboos .. .. .. Cart load.	2,248	2,352	2,352	II (*c*).
	Grazing and fodder grass	..	7,621	7,621	II (*d*).
	Rattan .. .. .. Mds.	40	2	2	II (*e*).
	Áváram bark .. .. Cart load.	19	38	38	
	Vembadam bark .. .. ,,	1	7	7	
	Nellikay .. .. .. ,,	4 7/10	2	2	
	Kayam leaves .. .. ,,	6 2/10	10	10	
	Fibre .. .. ,,	5 3/10	6	6	
	Mangoe	1/10	1	1	
	Tree rents	..	8,142	8,142	
	Total of II (*e*) ..	..	8,208	8,208	
	Total of the District ..	..	35,089	35,089	
Tinnevelly ..	Reserved timber .. .. Cubic feet.	10,488	3,475	3,475	II (*a*).
	Unreserved { Teak materials ,,	10,506	1,922	1,922	
	Unreserved { Other Junglewood ,,	34,198	3,565	3,565	
	Total of II (*a*) ..	55,192	8,962	8,962	
	Firewood .. .. Tons.	5,936	11,940	11,940	II (*b*).
	Charcoal .. .. ,,	758	2,546	2,546	
	Total of II (*b*) ..	6,694	14,486	14,486	
	Bamboos .. .. .. Cart load.	149	321	321	II (*c*).
	Eracully .. .. .. ,,	160	154	154	
	Total of II (*c*) ..	309	475	475	
	Grazing and fodder grass	..	53	53	II (*d*).
	Rattan .. .. .. Cart load.	50	44	44	II (*e*).
	Other produce	..	7,688	7,688	
	Total of II (*e*) ..	..	7,732	7,732	
	Total of the District ..	..	31,708	31,708	
Malabar. Wynaad and Pálghat ..		*Nil.*	*Nil.*		
Nilambúr ..		*Nil.*	*Nil.*		
	Reserved timber .. .. Cubic feet.	968	520	520	II (*a*).
	Junglewood .. .. .. ,,	1,986	712	712	
	Total of II (*a*) ..	2,954	1,232	1,232	
South Canara	Firewood .. .. Tons.	5,566	4,175	4,175	II (*b*).
	Do. for Sandal stills as per contract .. .. Mooras.	..	11,000	11,000	
	Charcoal	2,021	50	50	
	Total of II (*b*) ..	..	15,225	15,225	

Timber and other Produce cut, collected and removed from the Forests, &c.—(*Continued*).

Districts.	Produce removed. Description.	Number or Quantity.	Amount of Revenue.	Amount actually realized during the year.	Remarks.
South Canara—(*Continued*).	Bamboos .. .. No.	23,850	Rs. 383	Rs. 383	II (*c*).
	Reeds .. .. .. Cart Loads.	8,802	14	14	II (*e*).
	Total of the District ..	..	16,854	16,854	

	Districts.	II (*a*).	II (*b*).	II (*c*).	II (*d*).	II (*e*).	Total of the Amount under II.
							Rs.
Coimbatore.	Chingleput	..	7,217	..	..	2,371	9,588
	North Arcot	8,555	24,736	15,072	459	13,891	62,713
	South Arcot	9,234	5,253	1,427	1	3,708	19,623
	Salem	7,429	18,839	16,827	..	14,580	57,675
	Trichinopoly	1,316	5,211	2,536	2,011	2,608	13,682
	Tanjore	174	3,064	..	47	1,084	4,369
	North Coimbatore Division ..	6,664	3,538	10,665	..	20,869	41,736
	South Coimbatore do. ..	7,010	11,441	9,589	1,566	10,156	39,762
Malabar.	Madura	5,886	11,022	2,352	7,621	8,208	35,089
	Tinnevelly	8,962	14,486	475	53	7,732	31,708
	Wynaad and Pálghat	..	..	..	..	..	..
	Nilambúr	..	..	..	..	..	..
	South Canara	1,232	15,225	383	..	14	16,854
	Total ..	56,462	1,20,032	59,326	11,758	85,221	3,32,799

(Form No 73.)

Forest Department, Southern Circle, Madras.

Abstract showing the Value of Timber and other Produce at Sale Depôt for the Year 1883-84.

Description of Timber and other Produce.	On hand at the commencement of the Year. Number.	C. Feet.	Value.	On hand at the close of the Year. Number.	C. Feet.	Value.	Difference in Value. In favor of the Year.	Against the Year.	Remarks.
Timber.									
Chingleput	..	..	Rs. ..	Nil.	..	Rs. ..	..	..	
North Arcot—									
Redwood .. Tons.	225	..	2,700	372	..	4,464			
Sandalwood .. Mds.	408	..	408	1,087	..	1,087			
Total ..	..	..	3,108	..	..	5,551	2,443	..	
South Arcot—									
Junglewood	140	359	208	64	183	100			
Sandalwood .. Mds.	800	..	2,120	938	..	2,439			
Total ..	140 Mds. 800	359	2,328	64 Mds. 938	183	2,539	211	..	
Salem—									
Junglewood	..	767	672	..	475	419			
Sandalwood .. Mds.	3,130	..	13,592	3,232	..	14,327			
Total ..	3,130	767	14,264	3,232	475	14,746	482	..	
Trichinopoly	..	..	..	Nil.	..	..			
Tanjore	..	..	..	Nil.	..	..			
Coimbatore. North Coimbatore Division, South Coimbatore Division—	..	..	..	Nil.	..	..			
Teak ..	937	13,674	11,852	856	14,449	10,765			
	+ 91	2,098	1,054						
Blackwood ..	575	9,545	6,229	318	5,146	3,099			
	+ 107	2,815	1,461						
Junglewood	22	232	87	2	39	27			
	+ 55	1,317	332						
Total ..	1,787	29,681	21,015	1,176	19,634	13,891	..	7,124	

Abstract showing the Value of Timber and other Produce at Sale Depôt for the Year 1883-84—(*Continued*).

Description of Timber and other Produce.	On hand at the commencement of the Year. Number.	C. Feet.	Value.	On hand at the close of the Year. Number.	C. Feet.	Value.	Difference in Value. In favor of the Year.	Against the Year.	Remarks.
			Rs.			Rs.			
Madura	..	..	..	Nil.	..	..	..	..	
Tinnevelly—									
Teak	91	482	325	..	..	..			
Véngai	192	823	567	..	..	..			
Shenbagapálai ..	17	60	42	..	..	..			
Milai	30	159	109	..	..	..			
Junglewood	..	414	209	..	..	..			
Total ..	330	1,938	1,252	..	..	..	..	1,252	
Malabar. Wynád Forest Division—									
Teak	..	1,312	1,167	..	1,312	1,167			
Blackwood ..	..	7	4	..	7	4			
Mutty ..	..	125	63	..	125	63			
Benteak ..	..	23	9	..	23	9			
Hommay ..	..	1,357	844	..	1,357	844			
Total ..	..	2,824	2,087	..	2,824	2,087	..	..	
Pálghát Division—									
Junglewood ..	..	255	71	..	496	186	115	..	
Nilambúr—									
Teak	545	17,321	12,991	378	15,545	11,659			
Blackwood ..	..	805	604	..	120	90			
Benteak ..	487	18,681	4,670	573	24,985	6,187			
Korrinarid ..	119	4,492	967	165	9,844	1,816			
Poonarid ..	63	2,324	363	..	680	106			
Erul	136	3,409	533	..	702	110			
				68,158	..	25,000			
Saplings ..	44,165	..	37,330	70†	..	+ 31,798* 5†			* Added for saplings omitted by District Forest Officer † Rejected saplings to be sold as firewood.
Total ..	45,542	47,032	57,458	69,344	51,876	44,973	..	12,485	
South Canara	..	..	..	Nil.	..	..	..	..	
Firewood.									
North Arcot .. Tons.	33	..	75	29	..	66	..	9	
Madura .. ,,	9	..	41	77	..	218	177	..	
Bamboos.									
Tinnevelly Cart-load.	2	..	8	..	..	..	..	8	
Minor Produce.									
South Arcot .. Mds.	398	..	135	Mds. 15	..	150			
Salem .. .. ,,	86	..	38	,, 39	..	12			
Tinnevelly .. ,,	12	..	121	,, 38	..	9			
	Meas. 13								
Wynád .. Bottles	28	..	52	..	..	..			
Mds	1								
Total ..	..	..	346	..	..	171	..	165	

PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE NORTHERN CIRCLE, MADRAS,

FOR THE YEAR 1883-84.

READ—the following letter from J. S. GAMBLE, Esq., Conservator of Forests, Northern Circle, to the Secretary to the Board of Revenue, dated Camp Horsleykonda, 18th July 1884, No. 36-C :—

I have the honor to submit the Annual Report on Forest Operations for the Northern Circle for 1883-84, and to request the favor of your permitting the proofs to be sent to me for correction as usual. I regret that the report should be late: the lateness is due to my absence in camp since 30th June.

2. Two maps are under preparation by the Survey Department and will be ready by the 1st September. I also hope to be able to add an Appendix II giving the list of trees of the Northern Circars compiled by me on my recent tour, and this will follow.

CHAPTER I.

INTRODUCTORY REMARKS.

The work of the year has been the steady progress of re-organization and the selection of reserves. The principal works of forest inspection have been—

1. *Ganjam District.*—Detailed inspection by the Conservator in Goomsur and Suradá, with visits to the Mohiri hills and Chicacole.
2. *Vizagapatam District.*—Inspection of the Pálkonda Forests by the Conservator.
3. *Kistna District.*—Full inspection of the proposed reserves and the plantations by the District Forest Officer, Mr. Boileau.
4. *Nellore District.*—Inspection of the coast forests and plantations by the Conservator and District Forest Officer Mr. Vincent, and of the Veligonda forests by the Acting District Forest Officer Somasundram Mudali.
5. *Cuddapah District.*—Inspection by the District Forest Officer Mr. Higgens, C.S., of the forests of the sub-division taluks and of those of the Nallamalai and Lankamalai hills.
6. *Kurnool District.*—Inspection by the District Forest Officer Mr. Sim, C.S., of the northern and eastern portions of the Nallamalai hills and the Kurnool Veligondas.
7. *Bellary District.*—Inspection by the District Forest Officer Mr. Hooper in the Hospet, Kudligi, Adóni and Alúr Taluks.
8. *Anantapur District.*—Inspection by the District Forest Officer Mr. Brougham of the forests of the Penukonda and Hindupur Taluks.
9. *Nílgiris.*—Examination of the sholas of the Coonoor and Ootacamund settlements by the Conservator as well as selection of reserves in the Barliyár valley.

2. In all cases almost, these works of inspection have led to the submission of notifications proposing forest reserves under Section 4 of the Act; the most important additions to the proposed reserves being those (1) for the Goomsur Taluk of Ganjam, (2) for the Kistna forests, (3) for the Srîharikót forests of Nellore, (4) for the rest of the proposed reserves in Cuddapah excluding those of the Jammalamadugu Taluk, and (5) for the Eastern Nallamalais and Veligonda hills of Kurnool.

3. The following extract from the Conservator's report to the Collector describes the reserved forests which it is proposed to constitute in Ganjam, for the locality of which the sketch map accompanying this report may be consulted:—

Forests Nos. 1 and 2 consists of the *Kaliamba* and *Teleki forests* and the hills between these villages and the cultivated country near the Russellkonda-Aska road. A belt of forest will be left on the side towards the villages for management under Section 26 of the Act This part of the forests has already been much cut about and carelessly cut; while, in spite of the prohibition of cutting Sál, of which no notice whatever seems to have been taken, trees quite newly felled may be seen all about usually cut at 3-4 feet from the ground and producing only crooked pole and short instead of straight poles likely to grow up into trees. Indeed, in all the forests, and with all sizes of tree, this practice of cutting at a height above the ground has done very great damage, to which the only remedy is to cut again and then flush into the ground. The hills in these blocks are fairly well clothed with mixed forest, and in the valleys there is good Sál, usually about three parts grown. On the south-west these forests adjoin those of Suradá, to be referred to later on. As the timber grows larger and communications are open, their position close to the main road will render them very valuable. There are several small villages inside, all of them already demarcated and mapped by the Survey Department and thus easily defined. The boundaries will have to be marked more conspicuously, but this will not take long.

Forest No. 3, the *Baibali forest*, is one of the important areas, as in the level lands between Birkót and Khalogam there is a large area of what was a short while ago a very fine Sál forest. Its present condition is best described by the result of two small valuation surveys which gave per acre, respectively, five and ten trees over 4 feet 6 inches in girth, or an average of about seven trees fit to cut in the next twenty years. The results of the first and chief survey may usefully be thus recorded:—

—	Under 1 Cubit.	1-2 Cubits.	2-3 Cubits.	3 4 Cubits.	Total.
Sál	122	37	17	5	181
Saj	30	2	...	...	32
Ebony	22	2	...	...	24
Other trees of all sizes ...	...	.	...	...	142
Total ...	174	41	17	5	379

The southern half of this forest adjoins the land claimed by the Korada Zemindar (see my note 3-C, of 7th January 1884). His contractors are fast getting rid of every tree fit to give one broad gauge sleeper, and, if not stopped at once, will leave the forests bare of all trees fit to cut within the next forty years. It seems best to settle this boundary question during the forest settlement, and I believe you agree with me in this. Towards the west the forests run up to the top of the ghâts, where is the boundary of the Maliah country. These hills are full of fine timber of large sizes, but large Sál is found only on the flats in the valleys and for a short distance up some of the slopes, especially those with eastern aspect. The villages inside the forest are not surveyed or demarcated, but I do not think their demarcation will present any difficulty, though some of the isolated pieces of dry cultivation about Khalogam, Tilki and Baibali might usefully be taken and, if necessary, other land given instead.

No. 4, the *Darpangia forest*, is one of the most valuable of the blocks in Goomsur. The lower part is nearly all Sál forest of good quality, and though it has been much cut and wastefully treated, there is still a fair amount of mature timber. A rough valuation gave 167 Sál trees above 18 inches in girth to the acre, and about sixteen of these were over 4½ feet. But this was not in the best locality. The following measurements of a tree just felled will give an idea of the timber of the Goomsur forests. It was 75 years old and had a girth of 6 feet 6 inches at the base. Omitting bark it therefore gave a mean growth of seven rings per inch of radius. It gave besides branches and top four logs of 10 feet long each, their contents being 24, 20, 17 and 15 cubic feet, respectively; total 76 cubic feet, equivalent to 95 cubic feet cylindrical measurement. The hill part of the forest occupies the west side of the Kalingia ghât and has some large timber of good kinds notably Urjono (*Terminalia Arjuna*) and Dhaw (*Anogeissus latifolia*), while a few good

Toon (*Cedrela Toona*) and Tangani (*Xylia dolabriformis*) can be obtained. These forests will present no difficulty in demarcation, though the boundaries of several villages will have to be demarcated round.

No. 5, the *Ramba forest*, lies east of the Kalingia ghât and between it and the valley of the Gullery river as far down as the road from Gullery to Kharriguda. It is chiefly hilly country with good Sál in the valleys, and especially about Valiki, where a sample area of half acre was carefully marked off and the trees measured. The result was—

	Under 1 Cubit.	1-2 Cubits.	2-3 Cubits.	3-4 Cubits.	4-5 Cubits.	5-6 Cubits.
Sál	86	59	20	4	1	1
Other trees	27	8	1	2	. .	...
Total ...	113	67	21	6	1	1=209

or 418 trees per acre, of which four immediately marketable and twelve fit to cut within the next twenty years. They were all well grown, strait and good, but the forest being somewhat difficult to reach with carts, cuttings had not been made.

South of No. 5, and stretching down to near Russellkonda between the Loharkhandi and Gullery rivers is the *Gullery forest*. This forest, as may be imagined, has been much cut, but there is still a considerable amount of good timber and a very large quantity of dry wood fit for conversion into sleepers or other pieces. There are also good stretches of mixed forest, while towards Russellkonda the pole forest of Sál show every chance of growing up well. A valuation line was taken across one portion of this block at random, and happened to cross a part where the soil and the forest growth were both poor. The results were:—

	Under 1 Cubit.	1-2 Cubits.	2-3 Cubits.	3-4 Cubits.	4-5 Cubits.	Total.
Shorea robusta (Sál)	172	76	23	8	1	280
Terminalia tomentosa (Sajo)	22	7	...	1	...	30
Diospyros Melanoxylon (Ebony)	59	3	1	...	...	63
Pterocarpus Marsupium (Piasal)	1	1	...	...	...	2
Dalbergia latifolia (Blackwood)	3	...	...	...	...	3
Soymida febrifuga (Sohaw)	2	3	1	...	...	6
Ougeinia dalbergioides (Bandhono)	...	...	1	...	...	1
Bassia latifolia (Mahna)	3	...	...	...	...	3
Others of various sizes	...	...	...	...	...	264
Total ...	262	90	26	9	1	652

on an area of three acres. This is a valuation which may almost be adopted *as an average* for the whole of the low level country of the Goomsur forests. Much of the area traversed was of the description of forest I have called "Sohaw forest," from the fact that the Sohaw (*Soymida febrifuga*) is the chief important tree. Sál and other trees abound, but they are badly grown and the soil is very poor. This kind of forest alternates with Sál in such a way that they are very difficult to separate, and it will be important to carefully preserve these areas or otherwise they will degenerate into bare stretches of ground covered with kunkur nodules and cut about by small ravines into little hills and valleys. In the Gullery forest the area of "Sohaw" is not very great, however, and what there is, is only in patches.

Adjoining the Gullery forest is the isolated range which forms No. 7, the *Koolada forest*. It has little Sál timber, but the hills yield fuel trees and bamboo which will be useful for the supply of Russellkonda, from which it is only about two miles distant.

No. 8, the *Dimrijoli forest*, is a small area between two branches of the Gullery river. It contains some very good forest, especially round Dimrijoli, a village whose recent fellings of large Sál trees should not be allowed to proceed further. The northern boundary of this forest is the Muttah of Chokapad, which, being a scheduled district, was not examined.

No. 9, the *Ambazara block*, consists of the hill range of that name north of a line from near Kukuluba, west to the Gullery valley. The forest is mostly hill country, but with good Sál in the valleys. It is not so important as the *Chondorgiri forest*, No. 11, which adjoins it on the south, and is perhaps the most valuable area in the whole of the forests. The large Sál forest which occupies the country south Chondorgiri contained a few years ago a splendid crop of large

Sál. I regret to say that wasteful and careless fellings, induced by the system of selling Sál by permits for the bandy-load, has resulted in the greater part of the old trees now being found lying on the ground with one 10-foot piece cut out of them and no more. The remainder is now being removed to depôt as fast as it can, but still the waste has been very great. The stock left, however, is very valuable, and the *Chondorgiri block* should prove a very valuable reserve and should be put under working systematically as one of the first after we have disposed of the dry wood. The hills behind the village of Chondorgiri (where, too, the further cutting of large Sál for cultivation should be prevented) contain chiefly bamboo, but with a good deal of big Dhaw (*Anogeissus latifolia*) and other kinds, while in the valley between them are some of the largest Sál I have seen in Goomsur.

West of the Chondorgiri forest lies a smallforest, No. 10, *Chodiapali*, in the valley of the Bodangi river. It consists of several isolated hills with good forest between them, and should, I think, be reserved or the forest will soon disappear and the rocky hills become denuded of vegetation.

No. 12, the *Gunduribadi forest*, resembles the Ambazara hills which it adjoins. I have not seen very much of this forest, which, however, should be reserved as it includes the hills up to the Bengal frontier (Daspala State).

No. 13 is the Gogodo forest occupying the north-eastern corner of the district in the angle between the States of Daspala and Nyagarh. It has been usually supposed to contain very valuable forest, and this was probably true some years ago; but the small patches of cultivation made by the villagers of Gogodo and neighbouring places have greatly spoilt the large Sál, and though we have still some good Sál forest and a beautiful piece of large mixed forest on the frontier still left, yet the whole of the southern part consists of the kind I have called "Sohaw forest," with patches of good Sál only along rivers. It should, however, be reserved, and if in this and neighbouring blocks the revenue demarcation of villages could be made at the same time as the forest settlement, I feel sure it will be well.

South of the Gogodo block and adjoining the Nyagarh frontier is No. 14, the Paichalai block, which consists of a hill range with a little Sál only on the level portion to the west, and especially about Tanjore and Nundropodor, where it is pretty good, though in places somewhat damaged by patches of cultivation in the middle of the best parts. Similar in character is the *Brahmanosai forest*, No. 15, which lies to the west towards the Kukuluba river.

No. 16 is the *Jaganathprásad forest*, a large area extending from near Koolada away to the frontier and containing moderately good forest, which, however, to the south has in places suffered considerably from careless felling. This forest will require some alterations, probably on the south, as I am of impression that on a small length of proposed boundary I was unable personally to visit, and the description of which was taken from the Tahsildar's map, some changes may be necessary to include the Jadabuni hill. But this the District Forest Officer can do at any time, or the hill may be afterwards proposed as a separate block.

No. 17, the *Panchbuthi forest*, is an area near the Nyagarh frontier, consisting partly of the hills on that frontier and partly of forest in the plains, partly Sál and partly of mixed trees. The portion of this forest about Korasingh is very good, and contains especially a good supply of Satinwood with other good trees. The Sál has been so much cut that only half-grown and young trees are found. The boundaries of this forest are already demarcated on the village maps and by the usual stones set up as village boundaries.

No. 18, the *Kurcholi forest*, consists of the range of hills west of Kurcholi, and contains principally mixed trees of fair growth, while No. 19, the *Kriyamba forest*, is the large area which comprises the high hills on the Bengal frontier and the valleys within them. This forest has some very good Sál, and though there is little of very large size, yet the quality is very good and the areas compact. It will be a most valuable reserve, as it is so near the plains country and has good carting from it towards Aska and Berhampore. There is also a fine growth of trees of other kinds, such as Sahajo, Ebony and Satinwood, and there is a large supply of bamboo of the best quality. It is one of the best forests in Goomsur, and will be capable of giving a large revenue.

Nos. 20 and 21, the *Sandusalya* and *Bodochendana forests*, are isolated hills on the Atagadá Zemindari boundary, and No. 22, the *Vishnuchakram forest*, contains the great isolated hills east of the road from Bullipadra to Bellugunta. They have been all a good deal cut; but the growth is capable of improvement, and I am of opinion that they should be treated as reserves and care taken to prevent their denudation.

Nos. 23 to 31 are the forests of the Suradá Taluk, and contains some very promising forest-growth, though at present, owing probably to their having the Rushikulya river, the best for floating, passing through them, they have been more cut than those of Goomsur. No. 23, the *Rogada forest*, contains a large area of valuable Sál forest, and in places the growth of other good trees, especially Satinwood, is remarkable. But careless fellings have filled the forests with badly-shaped trees, and they must consequently undergo improvement fellings before the regular working scheme can be made.

No. 24, the *Bondagocha forest*, continues the Rogada block on to the boundary of the Pandakol mittah (scheduled district) with forest of similar quality, while No. 30, the *Vinjagheri forest*, really continues the Rogada forests on to the banks of the Rushikulya, but the growth is not so good, as the neighbourhood of the river and of the Aska road have caused it to be more frequently cut for fuel.

No. 25, the *Dhougam forest*, is a small piece in the Pipalapanka mittah containing a hill which is surrounded by good Sál forest, with a number of trees of large size. There were many such lately evidently in the forest, but heavy and careless fellings about a year ago much reduced the number of mature trees and left a quantity of wood on the ground. No. 26, the *Pipalapanka forest*, also contains good Sál towards the hills, and near the road good pole forest. It requires, however, an improvement cutting to remove badly-shaped trees.

Nos. 27, 28 and 29, the *Hukuma* (or Baliapada), *Moondapitta* and *Rayigoda forests* lie south of the Suradá-Aska and Suradá-Pipalapanka road. They are chiefly hilly tracts with comparatively little Sál, but good general growth. They have been worked for the Aska fuel rather indiscriminately, and if so worked again, it should be, as you suggested, by compartments.

No. 31, the *Malati forest*, is the hill range between Aska and Gangapur, which has also been very much cut, and its reservation is necessary and important owing to its position near the chief road of the Goomsur country.

The forests of Goomsur are, with few exceptions, as good Sál forests as the Conservator has in his experience in other provinces met with. When permanently demarcated, supplied with an efficient staff and placed under a working scheme drawn up so as to ensure the maximum yield, at the same time as a steady improvement, they will, in the Conservator's opinion, give a large revenue to Government. The reproduction is very good, and the present state of the forests in mature timber is, taking previous treatment into consideration, much better than he expected. Fire-protection will really be easy, for there is little long grass, and, in respect to means of transport, the rivers and roads leading to the sea will, when supplemented by forest export roads, allow of easy carriage.

4. After leaving the Goomsur hills, the Conservator inspected the forests of the Mohiri hills in the Berhampore Taluk. These hills contain some young growth, especially of Tangani (*Xylia dolabriformis*) capable of improvement, but they have naturally been overworked, and the selection of reserves will, in view of the number of hill villages, prove difficult. After leaving the Mohiri hills the Conservator visited the forests of the States of Mandasa (Mahendragiri hills) and Parlákimedi, the proposed fuel and fodder reserves of Chicacole, and then proceeded to the Pálkonda hills of Vizagapatam now managed by Messrs. Arbuthnot and Co., the renters of the estate.

5. In the Pálkonda hills some good areas of Sál were found as well as a large extent of scrub forest containing very numerous seedlings of *Xylia dolabriformis*, *Chloroxylon Swietenia*, and other good trees, and capable of making a fine reserve, which, he hopes, it will ere long become.

6. The account of the hill ranges and forests of the Kurnool District by Mr. Sim, C. S., given below as extracted from his annual report will be found interesting:—

"The district of Kurnool is divided into three parts, the partitions being the three hill ranges known as the Yerramalai on the west, the Veligondas on the east, and the Nallamalai in the centre, and it is on these three ranges, or round their base, that the forests of the district lie.

"The *Yerramalais* are a series of low red cliff-scarped, plateau-topped hills, that straggle across, in a broad belt of hill and date fields and waste lands, from Gooty up to the Tungabhadra, east of Kurnool; they are not of much account so far as timber goes, being now for the most part bare, and, with their caps of hard sand-stone, never likely to be very much else; but there are patches of a fair scrub growth on them in places, and for firewood, for rafters and small poles, for barks, and, seeing how they stand across the path of the monsoons and how dry the surrounding country is, for climatic reasons are not unimportant.

"The *Veligondas* are the narrow peaked range that separates Kurnool from Nellore, radiating out into three arms—North, North-west and South—from a centre near Konapalli; though greener than the Yerramalais, they are not well wooded, nor are the trees on them of much value, being mainly *Nemmi*, *Alli*, *Bira* and others, more useful for fruit than for timber. Still at Konapalli, the centre of the star, the hills open out a little, and here and there is a more promising growth, *Chiriman*, *Yegi*, and much cut-up Red Sanders; like the Yerramalai, therefore, these hills are important only for small timber and for climatic reasons.

"The *Nallamalais* are the chief range of the district; starting from the Cuddapah frontier, they run in a wide belt of thickly-wooded peaks and ravines, plateaux and valleys, broad basins and mountain masses due north to the Kistna; beginning with a width of some ten miles, the lef

broadens out as it runs northwards until at the Mantrala Kanama it has reached to thirty; thence it swings east and west like the two arms of a great T with its western arm flanking the Kistna for fifty miles of its length, and with its eastern bounding the district up to the north-easternmost point of Márkápur—a wild, unhealthy, hardly known tract and yet studded with the ruins of walled cities, tanks and temples. It is this that is usually meant by the Kurnool forests, these 2,000 square miles of continuous forest; it is from them that all our good timber comes, and it is here that we must look for our most important reserves.

"This work of reservation is now in progress, and though no reserves have as yet been finally proclaimed, it is possible to say with a certain amount of certainty what they will be; they will be all the hill country of the Veligondas, with part perhaps of the outcrop of scrub that skirts its base towards the south; they will be the whole range of the Nallamalais, excluding perhaps a portion on the eastern side and including a considerable portion of the rich "terai" on the west; and they will be a few tracts on the Yerramalai and, except such rights as may be given to the Chentsus, the rights of a few temples, and a few rights of way across some of the smaller passes, they will, I think, be absolutely reserved."

7. The only districts or areas now remaining for thorough inspection are (1) the Godávari District, (2) the southern taluks of Vizagapatam, (3) the Agency Tracts of Ganjam, and (4) the slopes and valleys of the Nílgiris, and these the Conservator hopes to complete within the present year.

Forest Rules.

8. Rules under Section 26 of the Forest Act have been drawn up under the supervision of the Board of Revenue and came into force on 1st January 1884. Rules for the transit of timber between the Kurnool District and the Territories of His Highness the Nizam were also passed.

CHAPTER II.

Areas and Boundaries.

9. The return of area of Reserved Forests *under the Act* has still to be submitted blank, for, although the Forest Settlement in some of the forests of the Cuddapah District was completed during the year, final notifications were not published till after its close. The list of forests reserved under previous orders (Return No. 1) remains unchanged, except that the "village forests" of last year in Cuddapah have been transferred to this form, and the area of the Malpangudi forest in Bellary has been rectified, the total for the circle now standing at 527,360 acres, or 824 square miles.

The District Forest Officer in Cuddapah has explained that the so-called village forests are exactly on the same footing as other previously-reserved areas of the Jungle Conservancy Department, and that it was the custom in the two taluks of Jammala-madugu and Proddutur to call them village forests instead of reserved forests. The return of village forests is therefore omitted, the areas so given being now entered as Reserves.

10. In last year's report, paragraph 31, the submission of three draft notifications for Reserved Forests was recorded; during the year under review others have also been submitted and most of them published. They are the following:—

4. Nellore District ...	Udayagiri	Notification No. 185 of 13th October 1883.	
	Chimakurthi		
5. Do. do. ...	Sríharikót	Notification No. 186 of 13th October 1883.	
	Reddipalem		
	Pernadu		
	Atakanitippa		
	Venad		
	Irakam		
6. Kurnool District ...	Cumbum	Notification No. 198 of 17th November 1883.	
	Márkápur		
7. Do. do. ...	North Veligondas	Notification No. 199 of 17th November 1883.	
	South do.		
	West do.		
8. Bellary District ...	Bandri	Notification No. 197 of 17th November 1883.	
	Gound		
	Hospet		
	Jog		
	Oblagudi		

9. Nellore District ...	Dugarázpatnam	Notification No. 205 of 17th November 1883.	
	Kottapatam		
	Tamminapatnam		
	Utukur-Varini		
	Iskapalle		
	Tummalapenta		
	Ramapatam		
	Pakala-Binginipalle ...		
	Kottapatam		
	Kanuparthi		
	Ongole		
	Kanigiri		
10. Anantapur District...	Anantapur, North	Notification No. 214 of 7th December 1883.	
	Do. South		
	Gooty		
11. Nílgiri District ...	Benné	Notification No. 219 of 7th December 1883.	
12. Do. do. ...	Coonoor Reserves—	Notification No. 13 of 19th December 1883.	
	Ghât reserve		
	Sim's Park, No. 1 ...		
	Do. No. 2 ...		
	Spring field		
	Bleak-house		
	Bandy shola		
	Coonoor peak		
	Brooklands		
	Lamb's rock		
	Tiger hill		
	Blackbridge		
	River reserve		
	Town shola		
13. Do. do. ...	Ootacamund Reserves—	Notification No. 14 of 11th January 1884.	
	Snowdon		
	Dodabetta Block, No. 1 ...		
	Do. No. 2 ...		
	Kótagiri Trace, Shola No. 1.		
	Kótagiri Trace, Shola No. 2.		
	Craigmore		
	Elk hill		
	Lovedale, East		
	Do. West		
	Munjinikorai		
	Bathri shola		
	Therma tope		
	Marliamund shola ...		
14. Bellary District ...	Bellary	Notification No. 51 of 12th March 1884.	
	Mincheri		
15. Cuddapah District ...	Kavalakuntla	Notification No. 54 of 14th March 1884.	
	Ganugapenta		
	Gopavaram		
	Ramapuram		
	Malliamkonda		
	Konarazupalle		
	Vontimitta		
	Kanakalakonda		
	Patur		
	Kanamalapalle		
	Lankamalai		
	Kottakota		
	Dassapalle		
	Kanchalamoram		
	Sibyala		
	Tsundupalle		
	Madhavaram		
	Vandadi hill		

15. Cuddapah District—(*Continued*).	Urukonda	Notification No. 54 of 14th March 1884.
	Rekkalakonda	
	Yellutla	
	Gajjbuchikona	
	Yerramorallajedu	
	Ankalammakonda	
	Nurukupalakonda	
	Tavalam	
	Madhanikonda	
	Pentzupád	
	Avalakonda	
	Mudimadugu	
	Horsleykonda	
	Mothugamala	
	Mallaiakonda	
	Nallakonda	
	Kotammakonda	
	Errakasikonda	
	Tshvaramala	
	Kokanti	
	Kadiri	
	Vellichellamala	
	Thirumaladevarakonda ...	
	Nigadi	
	Gorivikanama	
	Dorigallu	
	Kukarazukonda	
	Tumala	
	Malakavemala	
	Tummalamala	
	Kondagamerla	
	Somarazumala (East) ...	

The progress of forest reserve selection, demarcation and settlement may be best recorded district by district.

11. *Ganjam District.*—As explained in paragraph 3 the selection of Reserved Forests in Goomsur was made by the Conservator during the year. On the 25th March he submitted to the Board draft notification countersigned by the Collector with proposals regarding thirty-one blocks of forest, which the Board have approved. Demarcation was at once commenced and will, the Conservator hopes, be nearly completed before the Forest Settlement Officer is appointed. In this way his work will be greatly facilitated, and it is not anticipated that he will make many alterations of importance.

12. *Vizagapatam District.*—The selection of forest reserves was commenced during the Conservator's visit in March 1884 to the Pálkonda hills and will, he hopes, be permitted to extend to those of the Golgonda hills and the Sarvasiddhi Taluk. In the latter some useful areas may, it is hoped, be secured, which, though now in bad condition, may be gradually improved and placed under the Forest Act. In the other taluks, good forests do exist, but they will probably have to be reserved under some other Act, or at any rate generally under order of Government as the taluks are scheduled districts.

13. *Godávari District.*—Remarks on this district must be postponed till next year; the reserves in Bhadráchalam and Rékapalle Taluks remain as before.

14. *Kistna District.*—The selection of reserves in this district, started by the Conservator when on tour in August 1883, has been nearly completed, and a notification prepared proposing twenty-five blocks for reservation. In that notification were included most of the areas likely to be proposed for reservation, and only the plantations, the coast forests, and some small additional pieces possibly will remain to be added. The demarcation will be commenced at once.

15. *Nellore District.*—Three notifications covering the Srísharikót forests and islands, the casuarina plantations, and the isolated blocks of Chimakurthi, Kanigiri, Udayagiri and Ongole were published during the year, and drafts were also submitted for the forests of the eastern slopes of the Veligonda range. These drafts still await

orders of Government which has called for some information regarding them, which information is being collected. On the subject of the demarcation and settlement, the District Forest Officer writes:—

"Srísharikót, Dugarázpatnam, Kottapatam and Taminapatnam were demarcated before the close of the year, and the settlement of the first-named would probably have been completed by the 25th May if the Forest Settlement Officer had not been suddenly removed on 9th May, the day that the three months allowed for presenting claims expired, and just as orders on them were going to be passed."

No change has taken place in regard to the other areas, but the selection of reserves will, it is hoped, be done during the current year.

16. *Cuddapah District.*—The District Forest Officer thus writes:—

"Two schedules of proposed reserves were prepared and notified by Government under Section 4 of Forest Act:—(*a*) seventeen reserves on 4th June 1883, (*b*) fifty reserves on 31st March 1884. Kódúr plantation and Thunakonda reserve were settled and declared reserved forests from 1st May 1884. Pullampet plantation and Mittamidapalle plantation have been settled and notification under Section 16 sent up. Settigunta reserve has been settled, but the period for appeal has not yet elapsed. The Forest Settlement Officer has also made some progress towards the settlement of the following blocks:—Shesachelam Reserve, Reddipalle Plantation, Camalapuram Plantation."

Demarcation has not progressed in Cuddapah as fast as it might have done, but the Settlement Officer will, it is hoped, speedily push on the forest settlement, so that by next year we may have a good list of permanently-notified reserves to show in Return No. 1. The Sketch Map No. 2 annexed to this report shows the areas selected up to date.

17. *Kurnool District.*—The whole of the selection of Reserved Forests for the Nallamalai hills has been completed, and the settlement is now in progress. The greater part of the western boundary has been demarcated in spite of many difficulties in obtaining labor. The selection of reserves in the Veligonda Hills has also been made, and work will shortly be started in the Yerramalais.

18. *Bellary District.*—Two notifications were submitted and approved and published by Government during the year; the first relating to five blocks adjoining the Sandúr forests in the Hospet and Kudligi Taluks, the latter to two blocks in the Bellary, Hospet and Ráyadrug Taluks. Further notifications are under preparation, but no demarcation has yet been completed.

19. *Anantapur District.*—In this district, notification regarding the Gooty and Anantapur plantations has alone been published as yet, but reserves have been selected in Penukonda and Hindupur, as well as Muchukota, and will shortly appear, it is hoped. In this district as well as in Bellary the condition of the reserves is poor at present.

20. *Nilgiris.*—The first notification alluded to last year's report proposed some of the Ootacamund settlement and Tódanád plantations for reservation. Since then notifications regarding a further series of reserves in Ootacamund settlement, the whole of the proposed reserves in the Coonoor settlement, and the Benné teak forest have issued and more are under preparation. The want of good maps is much felt in the selection of these reserves; the available maps being either small scale maps showing no hills, or village maps on large scale giving but very small idea of the ground. The work of selection, which here has to be made in much greater detail than elsewhere, is progressing slowly, but still satisfactorily. All the Coonoor reserves were permanently demarcated during the year, the rest temporarily, a sum of Rs. 1,734 having been spent. The distance cleared was about 62½ miles, while 1,095 permanent pillars were erected.

21. Considerable progress has thus been made during the year in the selection of reserves. Demarcation work, however, in some districts is not being sufficiently pushed on, while in one or two, and especially in the Nílgiris, the settlement work would seem to be also proceeding unnecessarily slowly. The necessity for, and the immense value in protection afforded by, a properly demarcated boundary cannot be really explained except by actual experience, and the Conservator hopes that Collectors will endeavour to get their District Forest Officers to thoroughly understand the necessity for urging on demarcation work in the future as fast as possible. When it is remembered that the sanctioned estimate for the year provided Rs. 9,890 and the revised estimate Rs. 15,500, while only Rs. 3,547 were actually spent, it may be realized how

common is the mistake of providing funds and then neglecting or making excuses for not carrying out the work. It is not only in *demarcation*, but under many other heads that estimated works are postponed till too late, as an examination of the actual figures of the estimates will show, and while every possible clamour is raised for larger forest staffs, more peons, more office writers or more temporary establishments, our surplus revenue was this year, I regret to say, only just made by important works which had been budgeted for, being omitted or postponed under some more or less valid excuse. In Cuddapah, Kurnool and Nílgiris only was any attempt made to utilize the budget provision for demarcation, while in the two latter only would it appear that any demarcation work of value was completed.

Leased Forests.

22. The lease of the Sandúr forests in Bellary has been finally concluded in a Convention signed on the 18th March 1884 (Appendix A). No timber was cut, but 41,137 bamboos were sold at Re. 1 per 100. The tracts were closed against grazing, and the collection of minor produce begun. The revenue of the leased forests was Rs. 509, the expenditure Rs. 11,315, including rent Rs. 10,000; some minor produce still remaining unsold.

23. In the Mudumalai Forest in Nílgiris, 12,300 cubic feet of teak were brought to depôt and 6,084 cubic feet taken to Ootacamund.

Fuel and Fodder Reserves.

24. In the Berhampore Taluk of Ganjam some good areas have been selected by the Senior Assistant Collector and will probably be notified shortly by the Collector under the rules. The selection of areas in Chicacole Taluk is also under discussion In the Vizagapatam District proposals were submitted by the Acting Principal Assistant Collector Mr. Welsh for the formation of fuel and fodder reserves in Sarvasiddhi Taluk, and his report is shortly expected. In Kurnool the reservation of lands for grazing and fodder reserves is being made in the dry country west of the Yerramalais. No report on the matter was received from other districts, but now that the selection of Reserved Forests is progressing and the Forest Rules are published, action cannot be much longer delayed.

CHAPTER III.

Surveys, Working Plans, and Annual Plans of Operations.

(1).—*Surveys.*

25. It may be useful here to record the maps which are available for use in the forest and the probable requirements in the future.

26. *Ganjam.*—Taluk maps on the scale of 1 inch = 1 mile are available for the Berhampore and Chicacole Taluks as well as for the Zemindari estates of Parlákimedi, Tarlá, Mandasa, Tekkali, Chíkati, Aska. But the Berhampore Taluk map unfortunately omits the Mohiri hills, so that a map of that forest country will now be urgently required. For the whole of the Agency Tracts and the northern half of Goomsur, the sheets of the "Ganjam and Orissa Survey," 1 inch = 1 mile, supply all that is necessary, and the sketch map which accompanies this report shows the proposed forest reserves. For the southern part of Goomsur and the neighbouring Zemindaris only the Atlas sheet 4 miles = 1 inch, is available, but for recent roads and the divisions of the district the "Manual" map, 1 inch = 8 miles, is very useful.

27. *Vizagapatam.*—No taluk maps have yet been published, though, as survey operations are now going on, we may hope before long to have maps of the Pálkonda, Sarvasiddhi and Golgonda Taluks, and it is to be hoped that the former will include the Palkonda hills. For the Agency Tracts the sheets of the Vizagapatam and Central Provinces Survey, 1 inch = 1 mile, are available, but for the rest of the district, the Atlas sheet, 4 miles = 1 inch, is our only resource.

28. *Godávari.*—Taluk maps on 1 inch = 1 mile are available for all the taluks as well as the estates of Cocanada, Coringa and Pithápuram. For the Agency Tracts the sheets of the "Vizagapatam and Central Provinces Survey" again come in, and for the Bhadráchalam and Rékapalle taluks we have the sheets of the "Survey of the Godávari taluk," 1 inch = 1 mile, Nos. 11 to 18. The Atlas sheets are of course available as well as the "Manual Map," 8 miles = 1 inch.

29. *Kistna and Nellore.*—Separate maps are available on 1 inch = 1 mile for all the taluks, and the district map on 1 mile = 2 inches is also very useful. There are small "Manual" maps on 1 inch = 2 miles.

30. *Cuddapah.*—Taluk maps on 1 inch = 1 mile are available for all taluks except Madanapalle, Kadiri and Váyalpád. For these, the taluks of the sub-division, there is only the Atlas sheet. The small 'Manual' map, copy of which, colored to show the forests, accompanies this report, is also useful. Special maps of the old reserves and plantations are available, scale 4 inches = 1 mile; but these will have to be revised after the present forest settlement is completed.

31. *Kurnool.*—The best map is the district map on 2 inches = 1 mile, as this is the only one which properly shows the Nallamalai Hills. There are separate maps for all taluks on 1 inch = 1 mile, but the Nallamalai Hills are excluded from them. Topographical sheets, Nos. 109 to 111, show portions of Rámallakót and Pattikonda taluks on 1 inch = mile.

32. *Bellary and Anantapur.*—In these districts we are very badly off for maps, there being none for the taluks, and besides the Atlas sheets, the Local Fund maps which are only sketches and sheets 109, 110 and 111 of the topographical survey which give parts of the Adóni taluk on 1 inch = 1 mile, there is no good map available, and this is a source of great inconvenience. A special map has however been made for the Sandúr forests, and this must later on be supplemented by the addition of the Government Forest Reserves adjoining that territory.

33. *Nilgiris.*—There are many maps of the Nílgiri district, namely:—

District.—"Manual" map 1 inch = 2 miles.
District map 1 inch = 1 mile.

Amsham.—Tódanád, Merkunád, Munanad, Cherankod, Nambolukod and Ouchterlony Valley, 4 inches = 1 mile, but no hill shading. A map of Paranginád is much wanted.

Settlement.—Ootacamund { 6 inches = 1 mile / 8 " = 1 " } with contoured hills.
" 24 inches = 1 mile, with no hill shading.
Coonoor 8 inches = 1 mile, with shaded hills.
" 24 inches = 1 mile, with no hill shading.
Wellington 24 inches = 1 mile do.
Kotagiri 6 inches = 1 mile, with contoured hills.
" 24 inches = 1 mile, with no hill shading.

Village.—Maps in sheets on the scale of 16 inches = 1 mile for many villages.

Plantations.—Special maps without shading for most of the old plantations. A new map is, it is understood, in course of publication, in sheets, showing the hills; and this, it is expected, will be by far the most useful for forest purposes. These maps are useful enough for boundary demarcation purposes, but we shall require to have special maps made for the Reserved Forests after they are finally settled, and those not merely skeleton sheets with a boundary line and no other information, outside or in, as hitherto, but useful maps showing the lay of the ground, the roads, streams, forest blocks and compartments and all such information as may make them useful and capable of being added to as work goes on.

34. Thus it will be seen that we have fairly good maps for all districts except Vizagapatam, Bellary and Anantapur, and that besides these the ones most urgently required are those of the taluks of Goomsur in Ganjam; Madanapalle, Váyalpád, Kadiri in Cuddapah; and Paranginád in Nílgiris.

35. In the matter of forest survey nothing has been done departmentally except the maps by Mr. Brougham of the Gooty and Anantapur plantations in the Anantapur district, and by Mr. Lodge of the Dugarázpatnam and Taminapatnam plantations in Nellore.

(2).—*Working Plans.*

36. The only working plans so far made are the preliminary schemes for the Nílgiri plantations, viz. :—

1. "Old forest," Coonoor.
2. "Aramby," Ootacamund.
3. "Governor's" Shola, Ootacamund.
4. Bathri, Ootacamund.

and the preliminary working scheme of the Ballipalle forests in Cuddapah.

37. The "Old forest" is a plantation of 200 acres of blue-gum on the hills between Coonoor and Kodamalai. It has been divided into ten compartments of an average of 20 acres each and these again into two sub-compartments. Two sub-compartments have been set apart for the working of each year of the ten years from 1883-84 to 1892-93. For 1883-84, compartments 3 (*a*) and 8 (*a*) were marked for cutting, but owing to want of demand the former only was cleared. The yield was 1,275 tons, 988 bullock loads and 8,544 head loads of fuel. Assuming bullock loads to be 300 and head loads 70 lb., the amount was about 1,700 tons, or for 8½ acres 200 tons per acre, which is considerably in excess of the estimate of Mr. Hutchins, which, at 12 tons per acre on 8½ acres, 11 years old, would give 1,222 tons only. Three sub-compartments will, it is hoped, be worked this year if purchasers can be obtained. The reproduction in coppice has been excellent, leaving nothing to be desired.

38. The "Aramby" working circle consists of the plantations of "Aramby" and "Koolie," together about 120 acres. They have been divided into ten compartments, two half compartments being annually worked. During the year under review 2 (*a*) (from 1882-83), 4 (*a*) and 1 (*a*) (from 1883-84) were cleared, the results being—

—	Tons.	Head Loads.	Tons.	Add estimate of belt trees.	Total.
				TONS.	TONS.
2 (*a*)	604	721	32	48	684
4 (*a*)	541	1,323	59	120	720
1 (*a*)	460	1,522	68	75	603
Total ..	1,605	3,566	159	243	2,007

The areas are not yet very satisfactorily settled, owing to the roughness of the maps; but the three sub-compartments give probably about 18 acres, the yield therefore being 111·5 tons per year less by about one half than Mr. Hutchins' estimate (12 tons per acre for twenty years on 18 acres = 4,320 tons). Next year better information regarding areas will probably be obtainable and the calculation be revised.

39. The working scheme for the Governor's shola plantations covers the areas known as Baikie, Sheffield, Cally, Chowghat Cally, Governor's shola I and II, Arnikal, Andy and Huppatti; total 195 acres. These have been divided into eighteen compartments and a scheme drawn up after careful examination, under which about 20 acres will be cut yearly in a rotation of ten years. The scheme begins in 1884-85, in which year compartment 1 in Baikie and 1 in Governor's shola will be cleared. A similar scheme has been made for the Bathri plantation.

40. Careful records of all the works will now be kept, and, as soon as better maps and more reliable area statistics are available, we shall see better how the results compare with Mr. Hutchins' forecast. Working schemes will also now be made for the Nílgiri sholas, many of which stand very greatly in need of working to improve their condition and growth as well as to supply material. There is no doubt in the Conservator's mind but that those of the Nílgiri sholas which are at moderate elevations will as well repay working as do the coppice forests of Europe.

41. In the Ballipalle evergreen forests in Cuddapah, covering about 1,500 acres fit for working in coppice, a preliminary scheme was drawn up, under which compartments 2 *b* and 5 *b* were cut during the year, though, as the whole material was not removed to depôt before its close, exact statistics cannot yet be given. The area to be cut over yearly is about 50 acres.

The Conservator hopes soon to be able to frame a preliminary working scheme for the Gumsoor sál forests. The revision of the working proposals for the Nellore plantations is now under consideration, and the results will be reported next year. The revision of that in force in Sriharikót must await the final notification of the reserves.

(3).—*Plans of Operations.*

42. These have not been regularly started yet, matters being so far not in a good condition for them. The all-important work at present is the selection and demarcation of reserves and the improvement of the revenue collections, and, though other works are not being lost sight of, yet much cannot be done till these preliminaries are finished.

CHAPTER IV.

PROTECTION AND IMPROVEMENT.

43 In this chapter it is not yet possible to separate the reserved forests from others as yet, the remarks therefore must be taken as applying to all.

(*a*) *Establishments, Ranges and Beats.*

1.—*Superior Staff.*

44. The superior staff at the close of the year consisted of—

One Conservator, Mr. J. S. Gamble.

Six Deputy Conservators, Messrs. Higgens, C.S., Sim, C.S., Vincent, Hooper, Lieutenant-Colonel Jago, and Mr. Boileau.

Four Assistant Conservators, Messrs. Brougham, Lushington, Homfray and Lodge.

all, except Messrs. Homfray and Lodge, being in charge of forest divisions. Mr. F. A. Lodge joined the department as a trained officer, appointed by Her Majesty's Secretary of State, on 21st December 1883, and was posted to Nellore.

45. During the year, Mr. E. H. Boileau was promoted from Assistant Conservator, First Grade, to Deputy Conservator, Fourth Grade, and Mr. J. H. B. Brougham from Assistant Conservator, Second, to Assistant Conservator, First Grade.

46. Of the four Sub-Assistant Conservators, the Conservator is sorry to report the death during the year of Messrs. E. Dampier and T. A. Newman. Of the other two, Mr. Stafford continued in charge of the Godávari district and Somasundram Mudaliar was posted as District Forest Officer to Vizagapatam.

2.—*Subordinate Staff.*

47. The Subordinate staff continued nearly the same as reported in paragraph 19 of last year's report, but proposals for a greater equalization of the staff of the districts have been submitted and are now under the consideration of Government. The actual staff at the close of the year was as follows :—

District.	Office Establishment.	Forest Establishment.			Total.
		Sub-Assistant Conservators.	Forest Rangers.	Foresters and Forest-guards.	
	RS.	RS.	RS.	RS.	RS.
Conservator's Office	316	..	..	..	316
Ganjam	39	..	..	176	215
Vizagapatam	..	150	..	22	172
Godávari	58	150	150	114	472
Kistna	97	..	..	590	687
Nellore	128	..	..	439	567
Cuddapah	147	..	280	594	1,021
Kurnool	129	..	100	278	507
Bellary	36	..	50	73	159
Anantapur	46	..	..	142	188
Nilgiris	134	..	..	251	385
Total ..	1,130	300	580	2,679	4,689
Balance saved ..	84	400	745	593	1,822
Grand total sanctioned ..	1,214	700	1,325	3,272	6,511

Ranges and Beats.

48. In the *Ganjam District* five ranges have been constituted, viz. :—

1. Suradá.
2. Mojagodo.
3. Kukuluba.
4. Kurchóly.
5. Berhampore.

and officers posted. Eventually one more must be made in Gumsoor, but for the present the division as proposed will suffice.

49. In *Vizagapatam* two ranges have been formed, viz., Pálkonda and Golgonda, another will probably be required in Sarvasiddhi.

50. In the *Godávari District* except the Bhadráchalam range, none are yet permanently settled. They will be properly started this year.

51. In the *Kistna District*, seven ranges have been constituted consisting of taluks or groups of taluks :—

1. Bandar (Bandar and Gudiváda).
2. Bápatla (Bápatla and Répalle).
3. Bezváda (Bezváda and Nandigáma).
4. Guntúr (Guntúr and Narsaraopet).
5. Vinukonda (Vinukonda).
6. Pálnad (Pálnad, part).
7. Krósúr (parts of Narsaraopet, Pálnad and Sattenapalle).

52. In *Nellore* nine ranges were at work during the year, they were :—

1. Sriharikót.
2. Plantations.
3. Gúdúr.
4. Rápúr.
5. Udayagiri.
6. Nellore.
7. Kanigiri.
8. Ongole.
9. Madras depôt.

but the re-organization of these has been proposed.

53. In the *Cuddapah District* there are ten ranges, viz. :—

1. Kodúr	}	Pullampet Taluk.
2. Rajampet		
3. Cuddapah		Cuddapah do.
4. Siddhavattam		Siddhavattam do.
5. Badvél		Badvél do.
6. Proddutur		Proddutur and Jammalmadugu Taluks.
7. Ráyachóti		Ráyachóti Taluk.
8. Váyalpád		Váyalpád do.
9. Madanapalle		Madanapalle Taluk.
10. Kadiri		Kadiri Taluk.

54. In *Kurnool* eight ranges have been constituted, viz. :—

1. Yerramalais.
2. Sirvél.
3. Nandyál.
4. Velgode.
5. Nandikótkur.
6. Cumbum.
7. Kristnamchettypalle.
8. Márkápur.

It has been found necessary, owing to the distance through the hills, to have the division line in the centre on the taluk boundaries and the range head-quarters on either side.

55. In *Bellary* at the close of the year there were only two ranges, but it is now proposed to make five, viz., Sandúr, Hadgalli, Bellary, Hospet and Adóni.

56. In *Anantapur* three ranges were at work during the year in Muchukota, Penukonda and Hindupúr. Two more may be required at Anantapur and Gooty.

57. In the *Nílgiris* at present there are five ranges, viz., Ootacamund, Coonoor, Kótagiri, Mudumalai and Sígúr, but this number, for forests which require so much more detailed supervision, is quite inadequate; and it is proposed eventually to make more, viz., Kullar, Mailur, Naduvatam and South-East Wynaad. When this is done and the number of forest guards increased, work will go on better and protection be more certain.

58. The *Beats* in the different ranges will, it is hoped, be definitely marked out and settled during the year.

(b) General Protection and Breaches of Forest Laws.

59. Form No. 4 shows the number of cases of the year to have been 567, which, together with 39 pending from last year, makes 606; in 425 of which convictions were obtained, 96 representing acquittals and 86 cases pending at the end of the year. Most of these latter were in Nellore. The largest number of cases were in Nellore, Cuddapah and Kurnool, while there were few in Ganjam, Kistna and Nílgiris. Out of 521 cases tried, 425 or 82 per cent. resulted in conviction. It will be noted that in last year's report 30 cases only were given as pending at the close of the year, while it is now reported that there were also 8 in Ganjam and 1 in Bellary. This will account for the number at the beginning of the year under review being given as 39.

60 The small number of cases in Ganjam is reported due to the Forest Guards not having, till the end of the year, been employed on their proper duties. The District Forest Officer of Kistna reports that "in accordance with a recent Government Order on the subject no register is kept, consequently I have only been supplied with a list of those tried previous to January 1, 1884." The Government Order merely prescribed the discontinuance of returns direct to Government but did not in any way countermand the record of cases, and the matter is here alluded to in order that it may be everywhere understood that District Forest Officers are expected to keep a permanent record of forest cases. From Nellore no explanation of the number of cases is given.

61. All the cases in Bellary were from Sandúr, where lately the penal clauses of the Forest Act have been applied to the leased forests.

62. The District Forest Officer of Kurnool has submitted a very interesting account of the work of the year under this head, parts of which are here reproduced :—

"Our police arrangements during the year have also been changed for the better, a regular system of straightforward inquiry, report and prosecution having been laid down in the place of the haphazard delays and roundabout routine of former times; reports are now sent at once and simultaneously to myself and to the Sub-Magistrate; the District Magistrate's sanction, if necessary, is aked for direct by the Sub-Magistrate himself; and where formerly six or seven months did not suffice for the trial of a case, as many days are sufficient now.

A few specimen cases may not be uninteresting, as showing some of the 'tricks of the trade.' I select three from Atmakúr; the first in point of time was as follows :—On the 5th December 1882, Deputy Tahsildar Cuppuswami Mudali had gone to Venkatapuram to cart some confiscated timber out to Atmakúr for sale, but though waiting for a very long time, he could get no carts; at length his suspicions were aroused, and he came back to the depôts near Kristnapuram, determined to be on the watch for the running of smuggled timber, which he suspected was the matter in hand; night came on and watch was kept up but to no purpose, and on the morning, therefore, the Deputy Tahsildar started out into the forests to hunt things out for himself: some distance out, he came on the timber lying by itself and consisting of yagi beams and posts to the value of Rs. 340, dragged away to one side of the path and there dropped and hidden among the trees and bushes; these he confiscated, and following up the track—for it had been raining—left by the carts, eventually came up with them, standing with the mud still fresh on their wheels, in the village of Venkatapuram; the cartmen admitted their share in the transaction, pleading that it had been done under the orders of Comati Venkayya, one of the large timber merchants of Kristnapuram; sanction for his prosecution was obtained, the case was tried in the year now under report, and the merchant was sentenced by Tahsildar Narayanasawmy Naidu to four months' simple imprisonment and a fine of Rs. 100."

The two other cases were similar and were detected by Forester Mr. Payrie and Police Constable Rejayana, respectively. Mr. Sim goes on to say :—

"Three things are noteworthy in these cases, (1) that the main smuggling is done by the big timber merchants; (2) that with their depôts so close to the forests and regular accounts not enforceable, such smuggling is particularly easy; and (3) that a reward system to induce informers is the only way to effectively cope with it.

The ryots do not cheat as much, I think; a few poles and a few cart-loads of firewood being the limit of their requirements, the chief offenders are the merchants mentioned above; then come the Zemindars and Inamdars of the Cumbum side with their cheap permits satisfied from *our* forests, and in many cases fraudulent passes issued and antedated to tide a detected offender over conviction; and finally come, or rather came—for our import rules have put a stop to them—the Lambádies and Lugálies, who, under pretence of importing timber from the Hyderabad side and under the cover of Hyderabad permits, cut and sold from our own."

63. The assistance given by the Revenue and Police authorities is again most satisfactory; but it must be noted that other districts are not so fortunate in this respect

as Kurnool, and if in Ganjam and Kistna, particularly, more assistance were thus given, forest offences would more speedily be put a stop to and the number of cases recorded in the returns diminish in a real and legitimate manner. The Collector of Bellary has specially mentioned M. V. Chellapathi Naidu, Tahsildar of Hadgalli, and A. Akhilandum Mudali, Acting Tahsildar of Adóni, as having given much intelligent assistance in forest protection, demarcation and other works.

(c) *Forest Fires and Fire Protection.*

64. From Ganjam very little is reported about fires, save that on all the hills fires have occurred. In the sál tracts in the plains, however, little damage has been done. Next year a commencement will be made to make specially protected areas, and the same steps should be taken in the Pálkonda hills of *Vizagapatam*. In the *Godávari* District, most of the reserves appear to have had fire in them, those of Peddanallapalli, Tunikicheruvu and parts of Arlagudiem, Tarival, Bunderas and Pocharum having only escaped.

65. In the *Kistna* District a small attempt at protection of some of the forests was made, and up to the end of the year comparatively few fires had occurred. The Kondapalli reserve was the only one which could be said to have been specially protected, and in this three square miles were burnt, including a small garden planted by the Jungle Conservancy Department. The District Forest Officer should have taken every precaution to save this. In the Bollapalle reserve two fires occurred, but both were extinguished before they had gone very far. Two bad fires occurred in the Palnád taluk, and one in the Arisepalli plantation near Masulipatam, but other plantations escaped.

66. In *Nellore* no special measure were undertaken. Fires are rare in the plantations and plain forests, and it is only in the Veligondas that they occur. The Conservator had recommended a special area to be selected for protection in the Veligonda hills, but nothing was done. It is worth noticing that in their reports the Nellore authorities always complain that the fires in the forests come from Cuddapah and the Cuddapah authorities the reverse. The Conservator is inclined to think that neither is really the case, but that fires are lit by herdsmen on the hills and travel towards Nellore or Cuddapah according to the direction of the wind at the time.

67. In *Cuddapah* a few definite blocks in each range were selected for special protection, and the result is given in Form 3. The specially protected areas were—

		Failures.
Ballipalle, East	6,306	1,400
Do. West	4,480	2,200
Kódúr Hill	4,686	400
Yerraguntlakota	3,487	360
Thanakonda	1,047	15
Nigadi	19,000	...
Malakavemala	5,500	500
Nurukupalakonda, I	900	...
Do. II	3,700	...
Ankalammakonda	3,500	...
Mamillapalli	3,000	...
Horsleykonda	4,980	...
Guvalacheruvu	7,600	...
Gadikota	12,000	...
Srirangarazupolliem	4,800	...
Arepoyakanama	9,000	...
Muddureddipalle	8,400	240
Total ...	102,386	5,115

the failures being only $5\frac{1}{4}$ per cent. of the area attempted. The return, however, only gives results up to the date of submission of the report, for the fire-season was not then over, nor, indeed, is it yet over now (July 15) in some ranges.* It is to be regretted that the chief failures were in Kódúr range, but the result on the whole is satisfactory as is the result in the whole district, for fires have been comparatively few and been quickly extinguished, chiefly, as the District Forest Officer reports, by the timely assistance of village officials. In some of the specially protected areas, it is

* It may perhaps be said to have ended on August 3rd.

believed that small fires have occurred quite recently, and it may here be mentioned that the Conservator intends to submit proposals for altering the date of final report on fire protection, the fire-season lasting for different periods in different districts, and in some being often not over even in the middle or end of July.

In *Kurnool* an area of two square miles was set apart near Velgode for special protection, but half of it was unfortunately burnt. The District Forest Officer has, however, made such arrangements that next year much more serious endeavours will be made. Mr. Sim does not think that the fires this year covered more than one-half of the Nallamalais.

68. In *Bellary*, the protection of the Sandúr forests continues. The following interesting report by Mr. Hooper is here reproduced *in extenso*:—

"During the previous year operations had been conducted for the first time in the Rámandrug Range of the Leased Forests and in the small Malpanagudi block to the south of the Copper Hills.

"We had then to record a fire which burnt 1,200 acres in the Kanavihalli and Gurga blocks of Rámandrug and the saving of 13,800 acres at a cost of Rs. 1,250.* The protection from fire of Malpanagudi was not mentioned in the Circle Report; it cost in that year Rs. 95. In the year under report, which is thus our second fire season, we protected the same areas and a portion of British forest adjoining the Rámandrug leased blocks on their western side, thereby altering the block areas as given in last year's account. In this way we have included in one protected range nearly 19,000 acres, or an increase over last season of about 4,000 acres. Comparing the cost during each season, we find that the whole expenditure under this head during 1883-84 was Rs. 1,150, of which Rs. 330 were debitable to the work of the previous dry season. The cost of the work from November to April has therefore amounted to Rs. 820, expended as follows: Rámandrug range Rs. 752, Malpanagudi block Rs. 70. The accounts for 1884-85 contain charges on the season's account amounting to Rs. 412, work being kept open from want of rain until the 7th day of July.

	Rs.
* Accounts, 1882-83	920
Do. 1883-84	330
	1,250

"This charge was expended as follows:—

	Rs.
Rámandrug Range	399.
Malpanagudi Block	14.

"The total cost of the season has therefore been as follows:—

The protection of 19,000 acres.

"Rámandrug Rs. 1,150 as against the actual protection in the previous season of 13,800 acres at a cost of Rs. 1,250 out of an attempted total area of 15,000 acres. In the margin the detail of the season changes will be found. We had no fires that reached the protected area beyond two slight ones which spread from the line burning, and were put out before they spread. In this way we lost about 200 acres in all. In Malpanagudi an area of under 50 acres was burnt from fire lighted by some one unknown, the total cost being Rs. 83-8-0.

"On the whole the work was a success, yet the season was the driest and the longest I have ever known. The work was carried on slowly in my absence in other parts of the district up to March and the Ranger was new to it all. In future we should not have all these difficulties to contend with in one season and we may fairly consider the work of fire-protection to be successfully established.

"I would mention that about 8,000 acres of the North-eastern Range have also been saved owing to the vigilance of the establishment in detecting fire cases and the prompt extinction of the fires that did occur.

"The details of the cost according to blocks are as follows:—

—	Sandur Acres 2,750.	Hospett Acres 1,050.	Venkatagiri Acres 1,150.	Gound Acres 5,050.	Gurga Acres 2,430.	Kanavihalli Acres 4,160.	Dhurmapur Acres 2,150.	Total Acres 18,750.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Exterior lines	50	31	19	18	70	72	35	295
Interior lines	30	16	...	...	...	...	...	46
Exterior lines	33	[illegible]	35	11	24	11	20	154
Interior lines	41	[illegible]	...	...	...	...	...	69
Watching	67	93	80	86	93	48	63	530
General charges	8	3	3	17	8	12	6	57
Total ...	229	191	137	132	195	143	124	1,151

or per acre less than one anna."

69. In *Anantapur* special protection works were quite successful; the District Forest Officer reports as follows:—

"It is satisfactory to be able to report that two blocks comprising an area of 7,040 acres in the Muchukota jungles were completely protected from fire during the year at a cost of Rs. 325-8-0 as per annexed table:—

Particulars—Muchukota.	Amount.			Total Cost.		
	RS.	A.	P.	RS.	A.	P.
Fire-paths including exterior and interior lines	97	6	6			
Cutting and spreading grass	137	12	0			
Do. and clearing trees on fire lines ...	41	4	6			
Carriage of do. from do. ...	20	10	0			
Fire-patrols	20	7	0			
Sheds for fire-patrols	8	0	0			
				325	8	0

"Two other tracts (*a*) Kottakota 3,840 acres, (*b*) Amagondapaliem 2,560 acres, situated in the southern taluks, viz., Penukonda and Hindupúr, have been partially protected by the employment of a staff of fire-patrols to guard against incendiarism; and in these only one or two small fires have occurred."

Mr. Brougham talks of increasing the specially protected area next year, but such an increase, if any, can only be very small; for it is better to make sure of a small area than to "chance" a large one. The protection from fire of the Muchukota Reserve has proved most useful; for during July, when fodder for cattle was very scarce in the district and cattle dying, the reserve was opened to grass-cutters, and the inhabitants of the neighbouring villages and away as far as Tádpatri on one, and Anantapur on the other side, flocked to the reserve and carried away the grass. The District Forest Officer has brought to notice the conduct of the headman of Muchukota (Narsa Reddi) who has used his endeavours and his influence over the villagers to explain to them the mistake of burning the forest.

70. Fires on the grass lands of the Nílgiris were very bad this year, and some of the sholas were badly scorched along the edges. The plantations, however, except Sígúr, escaped, and the ghât forests suffered comparatively little. The fire in the Sígúr sandalwood plantation was due to the negligence of the fire-patrols who failed to watch a fire that came from hills about Northern Hay.

71. The whole area attempted to be protected was 237,042 acres, and of this only 18,877 acres or about 8 per cent. was burnt. The cost of protection was Rs. 5,371 or less than 5 pies per acre. The Conservator has been unable to give the usual table showing the expenses incurred in the previous and current year and their connection with the figures here given. The amount spent during the year under sub-head A VIII*e* was Rs. 5,636 of which Rs. 1,565 were on account of 1882-83.

(*d*) *Grazing.*

72. Very little information on this subject is available from the reports submitted this year. In future years it will be specially treated and the arrangements for grazing grounds which have been made under the rules will be duly reported.

(*e*) *Natural Reproduction.*

73. This subject has not been specially treated in the reports sent in from the districts, as it was not referred to in previous years. It is, however, very important, and in future years will receive full consideration.

74. Reproduction in the sál forests of Gumsoor is everywhere most favorable, and it is especially noticeable that coppice reproduction is far better on lands that have been cleared for "kumri" and then left than on lands on which villagers have cut produce. The system of cutting which villagers employ in all districts is most wasteful, rarely is a tree cut at less than three feet from the ground, so much good wood being consequently wasted, while instead of sending up good coppice shoots from the base capable of forming trees, pollard shoots are sent out which as they grow older envelope

the old stool and leave a hollow rotten centre which quite prohibits the lower part of the tree being ever utilized for timber. District Forest Officers everywhere should endeavour to get all cuttings made close to the ground, both in the reserves and by license-holders.

75. In the coast hills of Ganjam and Vizagapatam the reproduction partly by coppice, partly by seedlings, of *Xylia dolabriformis* and *Chloroxylon Swietenia* is remarkable. A good example, however, of the evil of cutting trees too high is to be seen in the so-called topes of Voni and Lakshmipuram in the Pálkonda Hills, where more than half the trees are cripples, so to speak, and the growth in spite of protection is really no better than that of the adjacent forest and not so likely to be valuable in the future. At the time of the Conservator's visit the men in charge of the topes were occupied in sweeping together and burning the dead leaves, so leaving the ground hard and bare and in fact doing exactly the opposite to what they should have done.

76. In *Nellore* district, the pollard reproduction of trees at Sriharikóta is very good, the growth of Neredu (*Eugenia Jambolana*) being especially noticeable, but seed reproduction will not be really good until cattle and goats are excluded.

77. The reproduction of coppice in the *Nílgiri* Eucalyptus plantations has been most satisfactory, and that of the sholas shows every sign of being good where cattle can be kept out. In almost all the sholas there are numbers of young trees ready to take the place of old ones, and those who think that shola reproduction is not safe should visit a small piece of the old great Kotah forest near Coonoor (now "Old Forest Plantation") where the growth of ten-year coppice shoots is so dense as to be almost impenetrable. The same dense growth may be seen in sholas at Naduvatam and in a small way in various places near Ootacamund.

78. The experience of natural reproduction, however, which it is most important for us to gain is how it will succeed on the hills of Cuddapah, Kistna, Bellary and Anantapur when the reserved forests are formed and the goats can be controlled, The Conservator is of opinion that natural reproduction will in a few years be very good indeed in such localities, if protection against goats and fire can be assured. Future district reports should record the results of protection in all forests.

In Cuddapah the Pálkonda hills seem to show an improvement in the amount of seedlings of red sanders while the better growth in the Nigadi, Horsleykonda and other old protected blocks in the sub-division is noticeable. The Muchukota forest in Anantapur shows that seedlings and *C. Hardwickia* are beginning to appear in vacant places.

(*f*) *Artificial Reproduction.*

79. In the Ganjam District the only plantation is that near Mojagodo, where a number of teak trees were planted, tope fashion, in 1869. The trees are doing well, the measurements of some of the largest, taken by the Conservator in January 1884, showing a girth of 20 to 28 inches, with a height of 42 to 50 feet. The plantation has been recorded under the head of "Cultural operations," as it is experimental only to replant a small blank in a good forest of sál poles. It will not be extended, but the Conservator hopes before long to use the experience gained in the growing of teak and its reproduction (for it is coming up self-sown all about the plantation) in acclimatizing it on some of the hills where sál does not grow.

80. *Vizagapatam District.*—The so-called "topes" of Voni and Lakshmipuram have now been placed also under "Cultural operations." They are not really plantations but pieces of the natural forest on which a number of sál poles have been retained, almost all other vegetation being cleared and kept regularly away. The trees are not remarkably good, and the Conservator would wish to see them included in a reserved forest with as large an area of the surrounding forest which abounds in trees of good kinds, and the whole allowed to grow together, with merely an occasional thinning of climbers and bad kinds. The closer the growth can be kept while young the better the moisture in the soil will be preserved, and it is quite a mistake to commence thinnings too soon as has been done in the "topes," or to clear the ground of dead leaves. Some planting works have been carried out, so the areas are included under "Cultural operations."

81. From *Godávari* the District Forest Officer reports that he has not yet visited the plantations which were made by the late Jungle Conservancy Fund.

82. The plantations in the *Kistna district* were all visited and reported on by the District Forest Officer, and some of them by the Conservator during the year. Many of them have been found to be worthless and not fit for retention, and the following list therefore is made, showing those which it is proposed to sell with the sanction of the Board :—

Taluk.			A.
Nandigáma	...	Kanchikicherla	14
Bezváda	...	Kondapalli	10
Gudiváda	...	Guraza	20
		Allinagaram	7
		Kanukollu	5
Bandar	...	Gundupalem	13
		Chinnapuram	29
		Kona	30
		Masulipatam	2
Répalle	...	Iskapalle	2
		Peteru	5
Bápatla	...	Appicatla	7
		Bethapudi	7
		Ipurpalem	14
		Perali	15
		Ravurpeta	10
		Kadavakudhuru	18
		Chebrolu	20
		Total ...	228

83. The condition of these plantations is very wretched. Some of the others are not very good, but every endeavour will be made to improve them, and in some cases several of them will be joined together into one for easier management and less cost of protection. The chief tree is *Casuarina*, but there is a good deal of palmyra, which should not again be planted unless other trees do not grow, and *Albizzia*, *Melia* and other trees make up the rest.

84. The casuarina plantations in the *Nellore district* were visited by the Conservator during the year, and in forwarding the results of Mr. Hutchins' work to Government he reported on them and their probable yield. His opinion on the previous system of planting was then sent to the Board, and he can now do no better than reproduce the Collector's remarks in the Nellore Annual Report :—

"The number of plantations remains the same as last year, except that Pullanilapalli has now been excluded; it was cleared in the famine, and not having been replanted has no right to be called a plantation. The total area of the plantations given in Form No. 5 is 1,846 acres, the total cost up to March 1884 being Rs. 2,19,000. All are planted with casuarinas, except a 20-acre cocoanut plantation at Kothapatam. The average cost per acre is Rs. 118, as compared with Rs. 127 last year. I regret, however, to report that the areas given are not to be trusted, as in the two plantations surveyed by Mr. Lodge, Dugarázpatam and Taminapatnam, the following large differences occur :—

Correct Areas.

Dugarázpatnam—40 acres less than given in form No. 5.
Taminapatnam —60 „ do. do. do. do. 5.
The corrected areas are not shown in Form No. 5, as the survey of the other plantations is not completed.

The following new extensions were made during the year, the total area planted being 188 acres :—

	ACRES.
Dugarázpatnam...	75
Kothapatam	38
Taminapatnam	75

In making these fresh extensions, the work has been confined to the low-land within a quarter mile of the sea, experience having conclusively shown that vigorous growth ceases beyond that distance and that the trees die out rapidly when much exposed to the land wind and away from the sea breeze. It is unfortunate that this was not found out earlier. At Dugarázpatnam part of the sandy flat between the backwater and the sea has been planted.

At Kothapatam, some low-land to the north-east of the existing plantations was selected.

At Taminapatnam some sandy land near the sea, including some bad hills of drifting sand near the sea has been planted. This work will be rather expensive, but it is some advantage to fix the sand. The total cost of these extensions has been Rs. 717 or about Rs. 3-13-0 an acre, from November 15th, the date of planting out, to March 31st; with economy it is hoped that the entire cost of those plantations will not be over Rs. 40 an acre.

The expenditure of the year amounted to Rs. 10,633, which compares favorably with that of last year, Rs. 16,649.

The want of care and system displayed in the earlier plantations is now beginning to make itself shown by heavy mortality. In some plantations half the trees have already died, whilst the rest are sickly and dying off so rapidly, that one plantation (at Dugarázpatam) it was thought better to clear entirely. The causes of this mortality are probably want of care in selecting the soil, and (chiefly) planting carelessly and too close. On digging up the trees which have thus died off, most of the roots are found tied in a knot and to have been planted in any but the right way, so that, except under the most exceptional circumstances, not even a casuarina could be expected to live long.

Since 1880, the planting has been done more carefully, but the appearance of the plantations of that year and of 1881 is in many places spoilt by patches of careless work, the full effects of which are not noticeable until the watering is stopped, when the trees are 3 or 4 years old.

Planting in the Chingleput District and in Nellore are two very different things, the soil here is very much poorer, the water level is deeper, the rainfall is less, the land winds are very trying, and consequently the sea breeze, on which the casuarina seem to thrive, is felt less. If the casuarina is to succeed in Nellore, it is evident that the planting must be done more carefully and by giving greater attention to the roots, that they should be induced to go down deeper for moisture. Mr. Vincent has consequently abolished the Madras style of transplanting, roots being shoved in anyhow with the finger and thumb, after the manner of ragi seedlings. The seedlings are now carefully pricked out into lines when they are three months old; six weeks before planting out, the plants are transferred to palmyra baskets eight inches deep, and five inches broad; the baskets are then stood in lines on the ground and kept well watered. The plants soon take root, and when the time for transplanting comes, the baskets are put into the ground without disturbing their contents. The result is that the plants begin their growth immediately; the roots at once force their way through the basket, and instead of being weakly plants when the hot weather comes on, they are in full vigour of growth.

The cost of the baskets is one pie each or under 3 rupees an acre, and the present condition of the plants put out in baskets in the most unfavorable position, compared with others planted simultaneously without baskets in lower ground, shows that the money was well laid out. The basket plants having better roots require less water, and in planting the hills of drift sand at Taminapatnam, when, as in this year, the long shore winds have been bad, the baskets have saved us the usual mortality of 75 per cent."

The remarks on the revised working scheme are deferred until correct area statements are available.

85. In the *Cuddapah District* no additions were made during the year, but the gardeners in charge have been employed in the filling of blanks by sowing seeds, the result of which is not yet known. The sample area in Kódúr Red Sanders plantation was measured on the 1st April again showing the increase of growth that was to be expected. About 100 mahogany plants were planted at Arimanabundur, where they are doing well and growing fast.

86. In *Kurnool* two small areas have been set apart as experimental grounds for cultural operations; they are Orwakul on red soil and Mandlam on black cotton, the results will be reported next year.

87. No planting work was undertaken in *Bellary* during the year; the two babul plantations referred to last year were not visited, but are quite unimportant. Neither was there any planting work in *Anantapur* except some small experiments in growth of babul from broad-cast sowing, which were not successful.

88. *Nilgiris.*—The results of the felling operations have been recorded in paragraphs 37 and 38. It was noticed that the reproduction had been very successful.

89. *Ootacamund Plantations.*—In the *Aramby* plantation 3,000 Eucalyptus were planted, a good many of which were damaged by frost. The nurseries in the Koolie section were kept up and we have now a large collection of conifers including pinaster, larch, *Pinus longifolia*, Spruce fir, Scotch fir, *Callitris rhomboidea* and *Cryptomeria japonica*. The two latter especially have done well; the *Callitris* will be used to make boundary fences, while we shall, it is hoped, have some 36,000 good plants of *Crypto-*

meria ready to plant out in 1885. The Pinaster and *Pinus longifolia* have also done very well. A large quantity of Eucalyptus were also grown for the planting of 1884.

90. In the *Bathri* plantations (Cairn Hill Reserve) 70 acres were planted, but the Conservator regrets to report that about half of them succumbed to an exceptionally severe winter. The vacancies will be refilled this year and greater care exercised in the choice of well-grown transplants. The Bathri nurseries were also maintained and in them also we have a small stock of conifers among which are Pinaster, Weymouth pine, larch and *Abies Pinsapo*, with some good plants of *Callitris*, which are being put out along the boundaries of the reserve in the hope of forming a thick hedge.

91. The *Governor's Shola* plantations (Nanjanad Forest Reserve) have very little to record. At Baikie 12 acres were planted with Eucalyptus and a few *Acacia decurrens*, but, as at Bathri, a very large percentage were destroyed by frost. At Madana also, close by, the frost destroyed many plants of larger size, up to 6 feet high even.

92. In *Marliamund* 2,000 vacancies were replaced and at *Muthanad* 7,000; the *Norwood* plantation was thinned out.

93. *Coonoor Plantations.*—The fences of the "old forest" plantation were repaired and compartment lines cleared. In *Bandy Shola* the reproduction by seed of the *Acacia Melanoxylon* is very good. This plantation will very soon be put under a working scheme. A small plantation of *Acacia decurrens* was formed in Coonoor Peak Forest.

94. The following return contains that given in paragraph 103 of last year's report :—

Name of Plantation.	Area stocked up to 31st March 1884.	Receipts. From the commencement up to the end of 1876-77 (estimate).	Receipts. 1877—1883.	Receipts. 1883-84.	Receipts. Total up to the end of 3 st March 1884.	Cost. From the commencement up to the end of 1876-77 (estimate).	Cost. 1877—1883.	Cost. 1883-84.	Cost. Total up to the end of 31st March 1884.	Surplus or deficit up to date.
		Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Arnakal ..	8	..	..	182	182	150	160	10	320	— 138
Governor's Sholah.	55	3,866	2,995	303	7,164	1,040	271	9	1,320	+ 5,844
Hoopatti ..	12	..	260	65	325	224	138	15	377	— 52
Andy	60	..	363	..	363	1,111	161	23	1,295	— 932
Sheffield ..	23	1,626	2,266	31	3,923	427	146	8	581	+ 3,342
Cally	17	1,206	2,843	..	4,049	316	245	12	573	+ 3,476
Choughat cally ..	26	..	3,200	..	3,200	485	295	14	794	+ 2,406
Baikie	46	..	740	38	778	611	2,312	483	3,406	— 2,628
Madana ..	18	..	1,354	..	1,354	150	796	149	1,095	+ 259
Chanengoolie ..	33	..	..	..	..	..	3,845	16	3,861	— 3,861
Muthanad ..	95	..	69	..	69	..	6,271	383	6,654	— 6,585
Brooklands ..	10	366	376	..	742	187	130	11	328	+ 414
Aramby ..	58	..	1,074	4,919	5,990	1,075	1,270	151	2,496	+ 3,494
Koolie	58	..	..	..	..	1,075	2,513	476	4,064	— 4,064
Marliamund ..	11	..	78	..	78	205	531	94	830	— 752
Norwood ..	26	..	185	156	341	485	201	8	694	— 353
Snowdon ..	7	506	350	..	856	130	80	4	214	+ 642
Bathri	60	..	..	..	..	..	3,902	2,282	6,184	— 6,184
Deva Sholah ..	14	..	..	..	..	..	1,629	8	1,637	— 1,637
Black Bridge ..	48	..	..	..	..	890	484	143	1,517	— 1,517
Rock	8	..	..	..	..	150	161	8	319	— 319
Bleakhouse ..	235	16,466	3,380	393	20,239	4,350	67	8	4,425	+ 15,814
Old Forest ..	200	..	5,421	3,474	8,895	3,635	423	319	4,377	+ 4,518
Tippakutchi ..	35	..	18	3	21	650	121	12	783	— 762
Rallia	60	..	9	18	27	1,115	183	21	1,319	— 1,292
Little Rallia ..	10	..	..	..	..	..	501	14	515	— 515
Newman ..	35	..	802	..	802	650	71	16	737	+ 65
Total ..	..	24,036	25,780	9,582	59,398	19,111	26,907	4,697	50,715	+ 8,631

95. The Conservator regrets to report that fire got into the Sigúr Sandalwood Plantation and did some damage. Otherwise there is nothing to record regarding this and the Mudumalai Plantations.

Topes.

96. In the *Ganjam District* the Tonnarada tope was visited by the Conservator. It contains chiefly mango trees of good growth with a small experimental plot of divi-divi. The area will be this year extended by the addition of part of the Sál scrub adjoining. The Conservator also visited the topes at Chatrapur and Calingapatam.

He also visited the Tumarada tope at Pálkonda in Vizagapatam which is doing well under the careful supervision of the Deputy Collector and Tahsildar. From *Godávari* eight topes are reported. In the *Kistna District* ten topes are recorded in correction of the returns of last year.

97. In regard to the *Nellore* topes the District Forest Officer reports :—

"In last year's return Penubarthi was omitted and this brings the total number to 111 The difference between these and the figures alluded to by the Conservator in paragraph 110 of last year's report cannot be traced, although some time was spent in drawing up classified lists of all the topes. No new topes have been made during the year, but the District Forest Officer has endeavoured to get better results by working in fewer places and only on those topes which were most promising, and which were in the most useful situations.

"The gardeners have been carefully looked after, and, in consequence, growth has been much better than before, although most disappointing."

98. In *Cuddapah* there have been no additions; but one, that at Pedda Cheppalli, was abandoned as unfit for further expenditure and sold for Rs. 115. The Casuarina topes at Appiapalle have not done well. The cost of the topes was Rs. 6,578, an amount which must be very considerably reduced in future. The *Kurnool* topes were all inspected by the District Forest Officer and are reported in fair order.

99. The District Forest Officer writes as follows regarding the topes in *Bellary* :—

"Fisher's tope, Bellary taluk, was sold by auction realising Rs. 185. It contained small babúl trees planted thirteen years previously but of stunted unpromising growth owing partly to bad drainage and also to insufficient protection, the watcher in charge doing nothing to prevent the camp followers in the Bellary cantonment cutting as they liked.

"The casuarina trees at Taginaboodhial were also inspected. They are on the banks of the Huggri river, 8 miles from Bellary below and above the railway bridge. The trees are badly grown, much twisted and evidently under conditions unsuitable to their development. Many dry up each year and during the twelve months a number of dead trees were auctioned, leaving only 36 in Taginaboodhial out of 882 hitherto recorded. No expenditure was incurred on their up-keep.

"The tope recorded last year as No. 33, Bellary, comprises the trees in the compound of the Collector's office. The Forest Department has had no concern with them during the year, and as the trees are merely ornamental their entry is now omitted.

"In Hadagalli the Kotnacal tope was reported as worthless by the Head Assistant Collector and the watcher withdrawn, the tope being placed in the charge of the village officers, pending an inspection by the Forest Officer.

"In *Adóni* the mango grove in Emniganur has been left to the care of the Magistrate's establishment, being situated in the office compound. The trees are not healthy nor of a good variety and not worth our incurring expenditure upon their protection.

"*Kullobhavi.*—The only good tope in the district the Forest Officer has yet seen is situated near the Adóni railway station. Some dry badly-grown trees have been cut out. The expenditure on the tope has been Rs. 48 during the year. There appear to be no records concerning its past history."

while from *Anantapur* it is reported that the returns have now been revised and that care has been taken to properly dispose of the produce, chiefly babúl pods. The revenue received thus amounted to Rs. 3,434. It is doubtful whether in future years the babúl forests should be classified as topes, but this will be settled shortly.

100. The total number of topes maintained is 364, which are thus distributed :—

Ganjam	7
Vizagapatam	2
Godávari	8
Kistna	10
Nellore	111
Cuddapah	70
Kurnool	27
Bellary	31
Anantapur	98
Nílgiris	...
	364

There are none given for the Nílgiris though possibly the two or three in Coonoor ought to have been entered.

(g) Works of Improvement.

101. Under this head very little has been done during the year. The cutting of creepers in the Nílgiri sholas, where they do very great damage, has been commenced and similar work will have to be soon started in Kurnool and Ganjam, and in the evergreen forests of Cuddapah and Nellore.

102. At Striharikota, in Nellore, a long strip of from 1200 to 1500 acres was fenced in in the hope of natural reproduction being permitted, and at the same time seeds of the best forest trees were sown. A large number germinated, though from lateness of sowing many afterwards died down. They may, however, it is hoped, recover in the rains. The fence was over 8 miles long and cost Rs. 98, which is cheap for an impenetrable thorn hedge 6 feet high. The low cost is due to the employment of Yanadis. A further area of 4,000 acres will be similarly treated this year and a large number of seedlings planted out. The growth at Striharikota is much in need of improvement and the filling of blanks, and by gradually working in this way we may hope before long to see a much better stock.

103. In the *Kistna District* plots of vacant land in the forests were also sown with varying success. The chief forests so treated were Kondapalli, Bezváda, Mutukur, Ballapalle and Muttayyapalem. In the two first, the seeds came up well, the results in the others were not known at the date of report. A similar plan to that adopted in Nellore should be tried this year in Bellary where early steps to improve the growth on the hills are urgently required.

(h) Experiments and Exotic Trees.

104. There is not much to record which has not already been referred to under "Plantations." Mahogany plants (100) were planted in the Cuddapah forests and have done well. Divi-divi has been planted or sown in Ganjam, Bellary, Kistna and Nellore, but with only partial success. In the Nílgiris many coniferous trees have been successfully reared and *Acacia decurrens* has been planted both at Ootacamund and Coonoor. This is the wattle which gives the best bark for tanning.

105. Little in the way of experiment can really be done until the selection, demarcation and settlement of the reserves is completed, and it will be better in most cases to wait and make well-prepared and arranged experiments than to do them roughly and with little supervision at present with a much smaller chance of success.

(i) Communications and Buildings.

106. The following roads have been made in the *Cuddapah District*:—

	RS.
(1) Cart track into Pálkonda reserve, 2½ miles ...	100
(2) Ballapalle west road	170

Both are useful roads for export purposes and the work of constructing more will now be pushed on.

107. In *Kurnool* the following roads were cleared:—

(1) The forest roads in Atmakúr from Nagaluti to Pecheruvu, from Bainuti to Mokotta and from Rollapenta to Pecheruvu;

(2) Path from the Adutla rest-house in the Velgode Pass to the Yerragalya house in the Gundla Brumeshwar Pass—

and others will be pushed on. The District Forest Officer is using every endeavour to make paths through the forests from north and south to supplement the existing east to west tracts and to facilitate inspection and protection.

108. In the *Nílgiri District* the roads from Mudumalai to Benné, from Tippakadu to Mudumalai, with branches, were, as well as the bridges on them, repaired during the year. The Aramby road was repaired but will be altered this year to a new and better alignment; inspection roads were cleared through Cally and Choughat Cally plantations. The road to the "Old Forest" plantation at Coonoor was mended but will now have to be put into permanent good order.

109. With these exceptions nothing has been done, but the Conservator hopes that next year will record the commencement of road work in Ganjam and Anantapur and its greater extension in Cuddapah and Kurnool.

Buildings.

110. In *Ganjam* the divisional head-quarters house at Russellkondah was repaired during the year as well as the inspection bungalow at Surada. Five other small rough inspection huts were erected at Khalogam, Birkút, Darpangia, Barúda and Gullery ghât, at a cost of Rs. 237-8-0, and another was commenced at Pipalapanka. A ranger's house was begun at Mojagodo. The beginning thus made is good and it will be a great thing if in a few years' time we have houses or huts at all important points so that District Forest Officer and Range Officers may be able to inspect their forests in the rice season, the time when the rivers are full and roads are almost impassable and the carriage of tents almost impossible.

111. In the *Godávari District* the forest office at Wudigudiem was repaired. In the *Kistna District* a Forester's house was commenced at Vinukonda.

112. In *Cuddapah* the Kódúr bungalow was repaired, the out-houses restored and a Ranger's house rebuilt at a cost of Rs. 410. The Sanipoya bungalow was also restored at a cost of Rs. 425. Negotiations were in progress during the year for the purchase of the bungalow on Horsleykonda and since its close they have been completed and the bungalow taken charge of.

113. In *Kurnool* three good rest-houses have been built inside the Nallamalais at Bainuti, Rollapenta and Adutla, the two former on the Mantralakanama, the last on the Velgode Pass, at a cost of Rs. 850 each for the first two and Rs. 910 for the third. Each consists of a large room with verandah and is built of stone with a concrete roof, and there are proper out-houses adjoining. The spots have been chosen where good water from a perennial stream is at hand, and their construction reflects great credit on Mr. Sim. A fourth house at a cost of Rs. 190 was built at Bundlapenta near where the chief felling works are going on. Two huts for forest guards and two for tannah peons were also built. It is intended to continue the erection of these most valuable buildings year by year until we have such a series that the whole of the Nallamalais can be constantly visited without the enormous cost of carriage and difficulty of procuring coolies which at present prevails, and with comparative immunity from sickness. The head-quarters bungalow at Nandyál was, at the end of the year, with the approval of Government, transferred on payment to the authorities of the Bellary-Kistna State Railway. A more convenient and less expensive house will now be built for the Forest Officer while the value of the present house to the Railway Department during the construction of the line will probably be great.

114. In the *Nílgiri District* the huts were repaired. It will now be necessary to construct two or three cheap rest-houses in different places, to enable inspection to be better carried on and with less danger to health than hitherto during the monsoon. Better buildings are more especially necessary in the Mudumalai and Benné forests, and in some localities in the Kundahs not easily reached from the present Local Fund house at Avalanché. A rest-house in the Coonoor valley is also required, as well as one on the slopes below Kótagiri.

CHAPTER V.

Yield and Working.

(1). Departmental Work.

115. In form No. 7, the number of trees felled by Government agency is represented by 440 casuarina converted into telegraph posts in Nellore. A large number of Eucalyptus trees was felled in the Nílgiri plantations and converted into fuel, but the actual number has not been ascertained and it is really sufficient to enter the works in form 8. So, too, in other districts, as in Godávari and Cuddapah, trees have been felled for fuel but not reported in form 7. Another year, it is hoped that more accurately kept statistics will enable this form to be more fully filled in. It has been found quite impossible to obtain proper statistics of the number of Sál trees felled in Ganjam and even of the number of logs brought out prior to the date of the Conservator's visit and his establishment of proper depôt books at Russellkondah. But it was intended that no trees should be knowingly felled by the department during the year, and that all

logs brought out should be from dry wood. Trees were, however, felled by the cartmen; for the Conservator found several such freshly cut in the forest. Such things will not be allowed again to occur, it is hoped.

116. Form No. 8 shows the timber and other produce cut in the forests by departmental agency.and how it was disposed of. Passing over the return from Ganjam, which is doubtfully correct, as well as minor items of small consequence, it will be seen that the collections of wood in Nellore amounted to 960,687 pieces and 200,064 bundles or faggots. It would have been very useful if these could have been given in tons, at any rate by means of a factor of conversion, and this should be done next year, and it would simplify account very greatly if sales could be permanently made by weight, or, still better, by cubic foot of stacked wood. Of this and what was on stock previously 615,705 pieces and 248,304 bundles were taken to the Madras depôt. At the same time a large quantity of minor produce was also collected in the Nellore forest and taken to depôt for sale.

117. In Cuddapah 2,095 tons of red sanders roots were collected and sent to depôt, and a small amount of produce was collected in Anantapur. In the Nílgiris the large stock of old dry and refuse teak in the Mudumalai and Sigúr forests was either taken to depôt or sold off, while 2,577 tons of fuel were cut in the plantations, of which 1,295 departmentally. The work in Nílgiris also included 800 maunds of sandalwood roots from Sigúr and a large quantity of minor produce.

118. Form No. 9 shows the depôt transactions of the year. In Ganjam a large number of dry logs, the number of which is not ascertainable with exactitude, were collected in the forest, taken to the Russellkondah depôt and sawn up into broad-guage sleepers, while in Cuddapah, Nellore and Nílgiris the usual depôt sales of red sanders wood, fuel and teakwood were made.

119. The following amount was received in depôt.

Timber.

		Number.	Contents. Cubic feet.
Ganjam ..	Sál logs...	5,719	51,105
	Sál sleepers	7,684	26,680
	Other pieces	6,731	...
Cuddapah.	Casuarina poles	...38	...
Anantapur.	Teak pieces	72	10
Nilgiris ...	Teak logs	252	6,084
	Total ...	20,496	83,879

Red Sanders.

Cuddapah	2,095	tons.

Fuel.

Nellore ...	Casuarina	448	tons.
	Jungle-wood	615,705	pieces.
	Do.	66,286	bundles.
Anantapur.	Do.	200	maunds.
Nilgiris ..	Do.	425	tons.

Minor Produce.

Nellore ...	Nux vomica	1,223	maunds.
	Chay root	921	,,
	Surati chekka	65	,,
	Honey	29	,,
	Wax	5	,,
	Orchella	16	,,
	Soapnuts	1,385	,,
	Tamarinds	610	,,
	Cashewnuts	181	,,
	Rattans	198	bundles.
Kurnool ...	Myrabolams	45	maunds.
Cuddapah.	Honey	25	,,
	Wax	6	viss.

120. Form No. 10 shows the sales made (1) from depôt, (2) locally in the forest, with the prices realised. The difference in systems of measurement prevents any abstract of value being made. After the Forest Code has been passed and promulgated and the accounts of all districts put on a proper footing, the returns will be kept in a uniform manner, and though it is not always easy to adopt a uniform standard of weights and measures for sales purposes, for returns purposes the results of the divisions will be reduced to one so that the outturn of the year may be calculated in one figure. It is to be regretted that the totals of the amounts received do not tally with the figures given by the office of audit as actuals for the year. The Conservator has made every endeavour to explain the discrepancy which is probably due to the wrong apportionment of certain sums among heads of service. The chief discrepancy is in Nellore but the District Forest Officer reports that though the figures of his return are correct, he cannot show the reasons why they differ from those of the audit. The only districts whose figures properly agree are Anantapur and Nílgiris, while from Kistna no return has been given or explanation afforded of the Rs. 1,094 received under head I. In Cuddapah the receipts under timber, I *a* agree, but it would seem that in the beginning of the year some revenue properly belonging to II was wrongly credited under I *b* (fuel) and I.*e* (minor produce). The following abstract shows the discrepancies referred to :—

Abstract Receipts.

District.	Depôt.		Local.		Total.		According to audit I.
	Due.	Received.	Due.	Received.	Due.	Received.	
							Rs.
Ganjam	13,421	13,421	..	..	13,421	13,421	14,663
Godávari	..	..	647	..	647	..	..
Kistna	..	..	..	..	..	..	1,094
Nellore	51,224	48,552	1,472	472	52,716	49,024	60,613
Cuddapah	29,402	16,443	..	..	29,402	16,443	20,576
Anantapur	5	..	47	.. 47	52	47	47
Nilgiris	8,312	8,312	19,724	16,745	28,036	25,057	25,057

121. Form No. 12 shows the difference between the value of stock on hand at the beginning and end of the year, as follows :—

District.	On hand at the commencement of the Year.	On hand at the close of the Year.	Difference in Value.
	Rs.	Rs.	Rs.
Ganjam	723	8,660	+7,937
Nellore	2,670	2,304	— 366
Cuddapah	102	8	— 94
Kurnool	309	309	...
Nílgiris	979	4,967	+3,988
Total ...	4,783	16,248	11,465

122. In regard to the question of the financial results of the works in Ganjam, such as were considered in paragraph 120 of last year's Report, the Conservator's experience during the year of the value of the statistics kept up hitherto has led him to defer making any further comparison this year for Ganjam for it would only lead to statistics likely to mislead.

123. In Cuddapah 2,095 tons of red wood were received at a cost of Rs. 15,235, and 2119 tons were sold for Rs. 30,316, equivalent to Rs. 7-3-11 for cost and Rs. 14-4-11 for receipts per ton. This gives a surplus per ton of Rs. 7-1-0 only as against an average of Rs. 9-11-7 for the four previous years. The falling off is principally due to the non-success of the arrangement made during the year whereby the wood was sold in two classes, "picked" and "ordinary," instead of in one class as heretofore. The previous sale of picked wood had the result of inducing a low price for the ordinary kind.

124. As regards the fuel works in Nellore the District Forest Officer writes as follows:—

"In the report of last year it was not possible to analyse the results of departmental fire-wood operations, so it may be interesting to give some particulars of the cost of working.

"From Striharikóta, green jungle-wood, withered or dry wood, jungle products and rattans are sold; from the Casuarina plantation, casuarina wood. The following are the average charges paid on cutting and carrying to sale depôt most of these forest products. The charges on some of the articles of minor produce are difficult to estimate as the collection is paid for in kind:—

——	Cutting.	Carting	Boat hire to Madras.	Depôt expenses.	Total cost in depôt.	Selling prices.	Profit.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Green wood Rasi per 1,000	1 4 0	1 4 0	1 6 4	0 1 8	4 0 0	13 12 0	9 12 0
Sannam per 1000	0 10 0	0 10 0	0 8 8	0 1 4	1 14 0	5 0 0	3 2 0
Thopudu per 1000	0 5 0	0 5 0	0 4 4	0 0 8	0 15 0	2 8 0	1 9 0
Salli bundles per 100	4 0 0	4 0 0	9 14 4	0 4 8	18 3 0	25 0 0	6 13 0
Casuarina wood per ton	0 15 0	0 11 0	2 0 0	0 2 0	3 12 0	8 0 0	4 4 0
Dry wood average of all kinds per 1,000	2 8 0	5 0 0	3 8 0	0 2 0	11 2 0	20 0 0	8 14 0
Nux vomica per candy of 500 lb. ..	2 14 0	0 4 0	0 3 6	0 1 0	3 6 6	10 0 0	6 9 6
Soapnuts per candy	1 10 0	0 4 0	0 1 3	0 0 9	2 0 0	6 8 0	4 8 0
Chey root per candy	20 0 0	..	0 8 0	..	20 8 0	84 0 0	63 8 0
Rattans per bundle	1 0 0	..	0 1 6	..	1 1 6	6 0 0	5 14 6

"To the cost of collection, &c., has to be added that of establishment and of depôt expenses. These do not amount to more than 2 per cent. altogether, and probably not as much; but allowing for these, it will be seen how profitable departmental work is if carefully managed. The selling prices have been taken at their lowest the *average of the past year* having been *20 per cent. over that assumed*.

"The rates for cutting and carting at Sriharikota are very low, and although the charge there is rather complicated, small 'customary' allowances being made for cutting or carting in certain places, they are much lower than in any other part of the district.

"The boat hire charges on the other hand are very high and might be reduced one half if Government had boats of its own, which it is hoped may be the case before very long. The boatmen give great trouble and the demand for boats in the canal is so great that large advances have to be given, which are often not cleared off for years."

(2).—*Removal by Purchasers.*

125. Form No. 11 gives the amount of material removed under license. It has had to be prepared somewhat roughly and may not be strictly accurate, and the figures of the actuals under II have been taken in the "value" column. The results as compared with the last two years are as follows:—

Districts.	1881-82.	1882-83.	1883-84.
	RS.	RS.	RS.
Ganjam	39,974	17,178	4,013
Vizagapatam	1,063	1,454	1,690
Godávari	19,990	12,166	37,062
Kistna	12,407	93,280	50,965
Nellore	67,319	9,805	11,369
Cuddapah	62,526	65,118	67,317
Kurnool	29,255	33,339	56,427
Bellary	2,592	7,039	9,738
Anantapur		13,175	9,275
Nigiris	8,037	11,914	18,608
Total ...	2,43,163	2,64,468	2,66,464

So that the figures for the year show a small increase. The decrease in Ganjam is due to the stoppage of the sale of Sál on permit; the increase in Godávari is said to be due to greater demand. The collections were best in the Bhadráchalam and Rékapalle Agency taluks and in Rajahmundry.

126. In Kistna there is a considerable falling off chiefly due to the grazing in the proposed reserves not having been sold as in other forest lands and as was formerly done. In Nellore there is a slight increase on last year, the system of collection having been carefully revised and there having been considerable sales for the Sangam works.

127. In Cuddapah the figures show a slight increase.

Arrangements were made to sell the dead and dry wood from the reserves and the results are as follows:—

——	Rate.	No. of Bandies.	Sum realised.
	RS. A. P.		RS.
Balapalle, East	1 0 0	1,250	1,250
Do. West	1 0 0	1,050	1,050
Kódúr Hill	0 9 0	1,803	1,014
Yerraguntlakota	0 9 0	1,425	802
Vagetekona	0 8 0	1,050	525
Gathala	0 6 0	709	266
Total ...	..	7,287	4,907

This wood was all taken by the purchasers for sale in Madras. The results have been good and not the least result will be the clearance from the forest of a large amount of easily inflammable material.

128. *Cuddapah Railway Engine Fuel.*—The revenue from fuel supplied to the Madras Railway from the Cuddapah forests amounted to Rs. 16,973 for 7,545 tons at Rs. 2-3-9 per ton, as compared with a revenue of Rs. 20,051 in the previous year derived from 8,345 tons collected in the ordinary way at Rs. 2-3-9 per ton, and 512 tons at Rs. 2-8-0 per ton collected from the cuttings made in Balapalle West Reserve.

The decrease is believed to be due to the failure of the Railway Company to maintain a sufficient number of contractors, or to their having allowed their existing contractors to decrease their supplies.

Cuttings were commenced in two compartments in Balapalle West Reserve within the year for the supply of fuel to the railway, but no wood was delivered.

129. In Bellary, there is a good increase, about 3,778 tons of fuel were removed from waste lands as well as about 880 tons of Tangedu bark for which Rs. 3,510 was received. In Anantapúr there has been a decrease, partly due to its having been found necessary to stop the sale of bamboos as there was danger of their being exterminated. It is hoped that bamboo purchasers may be induced to go to the forests of Kurnool instead, as on the Nallamalai hills there is an almost unlimited supply.

130. The increased sales in the Nílgiris are due to a better sale of timber from the Mudumalai forests and larger issue of firewood passes at Ootacamund.

131. During the year revised scales of rates were called for from all districts and these are now under consideration.

(3).—*Drift and Waif.*

132. In the Godávari District a large quantity of drift timber, chiefly teak, was collected and sent for sale to Rajahmundry. In Ganjam a considerable number of waif logs found about the edges of the forests are being collected, and, after due notice to claimants, will be sold. In other districts and especially in Kurnool and Cuddapah a considerable sum was received by the sale of timber confiscated.

CHAPTER VI.

Financial Results.

133. In Form No. 14 is given the Summary of Revenue and Expenditure of the year.

The total results were:—

		RS.
Revenue		4,13,333
Expenditure	A. 1,27,322 / B. 1,75,130	3,02,452
	Surplus ...	1,10,881

the net revenue being thus about 26 per cent. of the *gross* revenue. There is an increase on 1882-83 both in revenue and expenditure, and had it not been that some large items in the Cuddapah district on account of sales of redwood were received a day or two too late for the year in which the real transactions took place the proportional increase would have been more regular.

134. The revenue and expenditure with corresponding "surplus" and "deficit" were as follows for the different districts compared with 1882-83 :—

Districts.	1882-83.			1883-84.		
	Revenue.	Expenditure.	Surplus or Deficit.	Revenue.	Expenditure.	Surplus or Deficit.
	RS.	RS.	RS.	RS.	RS.	RS.
Direction	...	12,485	— 12,485	...	35,071	— 35,071
Ganjam	37,105	20,301	+ 16,804	19,084	15,581	+ 3,503
Vizagapatam ...	1,454	169	+ 1,285	1,690	399	+ 1,291
Godávari	22,991	11,224	+ 11,767	44,471	8,571	+ 35,900
Kistna	93,989	21,735	+ 72,254	52,995	22,921	+ 30,074
Nellore	54,223	69,991	— 15,768	72,119	47,128	+ 24,991
Cuddapah	98,924	46,705	+ 52,219	89,289	60,681	+ 28,618
Kurnool	36,556	16,492	+ 20,064	70,649	30,864	+ 39,785
Bellary	7,137	15,556	— 8,419	9,750	28,659	— 18,909
Anantapur	8,281	970	+ 7,311	9,562	9,663	— 101
Nilgiris	28,452	35,695	— 7,243	43,724	42,914	+ 810
Total ...	3,89,112	2,51,323	+1,37,789	4,13,333	3,02,452	+1,10,881

The improvement of revenue in Godávari, Kurnool, Nellore and Nílgiris and more especially in Kurnool is the great feature of these figures. The deficits in Bellary and Anantapur were expected. The falling off in Ganjam is due to the temporary stoppage of the sale of sál on permit, a measure which was rendered necessary by the waste and loss that was going on.

135. The division of the figures under the three great heads of "Departmental Timber Works", "Other Revenue" and "Improvement of Forests" gives the following results, the division having been made in the same way as last year, except that the ratio has been altered for Kistna, Nellore, Nilgiris to 4—and for Bellary to 2—thirtieths :—

District.	Departmental Timber Works.		Other Revenue.		Formation, Improvement and Protection of Forest 3. Charges.	Total.	
	Receipts.	Charges.	Receipts.	Charges.		Receipts.	Charges.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjam	15,056	14,078	4,028	2,218	2,792	19,084	19,088
Vizagapatam	..	..	1,690	785	784	1,690	1,569
Godávari	..	..	37,302	4,041	3,884	44,471	10,909
Kistna	7,169	2,984	52,001	11,176	16,416	52,995	27,597
Nellore	994	5	11,506	7,424	20,924	72,119	51,804
Cuddapah	60,613	23,456	67,468	15,796	26,515	89,289	65,357
Kurnool	21,821	23,046	70,649	23,397	12,140	70,649	35,540
Bellary	..	3	9,738	9,493	21,431	9,750	30,997
Anantapur	12	73	9,515	5,530	6,423	9,562	12,001
Nilgiris	47	48	18,667	9,052	22,272	43,724	47,590
Total ..	25,057	16,266	2,82,564	88,912	1,33,581	4,13,333	3,02,452
	1,30,769	79,959					

The surplus from timber works is Rs. 50,810, chiefly in Nellore, but it would have been Rs. 65,000 at least if all revenue of the year had been duly received before its close. Rs. 13,959 for red sanders in Cuddapah were thus outstanding, as well as some smaller sums in Nellore, chiefly on sales of minor produce.

136. Form No 13 is the return showing livestock, buildings, stores, tools and plant, and their value at the beginning and end of the year. It will be seen that the difference of value is against the year by Rs. 4,635, due to the sale of the Nandyál bungalow.

CHAPTER VII.

General Remarks.

137. During the year His Excellency the Governor visited the forests of the Nallamalai Hills in Kurnool and of Sriharikóta in Nellore.

Tours.

138. The Conservator visited during the year the districts of Nellore, Kistna, Ganjam, Vizagapatam and Nílgiris. He spent 156 days on tour, but a considerable time was also devoted during his stay on the hills to work in the Nílgiri forest and plantations.

139. The following schedule shows the tours made by the district forest officers during the year, which will show that Messrs. Sim, Higgens, Boileau, Brougham and Hooper all spent a considerable time in camp. Time spent in camp is not necessarily always a correct gauge of useful inspection work, but the Conservator is satisfied that good work has been done in most districts, and especially by the officers mentioned in paragraph 140 :—

1883-84.

Division.	Name and Rank of Divisional Officer.	Number of Days.	
		In Charge.	On Tour.
Ganjam ..	Mr. E. Dampier, Sub-Assistant Conservator ..	309	145
	„ A. W. Lushington, Assistant Conservator ..	57	42
Vizagapatam ..	The Collector	355	...
	Somasundra Mudali, Sub-Assistant Conservator..	11	...
Godávari ..	Mr. H. Stafford, Sub-Assistant Conservator ..	310	174
	„ H. H. Ward, Forest Ranger	56	18
Kistna	„ E. H. Boileau, Deputy Conservator	366	214
Nellore ..	„ F. D. A. Vincent, Deputy Conservator ..	255	150
	Somasundra Mudali, Sub-Assistant Conservator ..	111	75
Cuddapah ..	Mr. A. W. B. Higgens, C.S., Deputy Conservator.	361	216
	„ G. Homfray, Assistant Conservator	5	...
Kurnool ..	„ H. A. Sim, C.S., Deputy Conservator ..	366	266
Bellary ..	„ E. D. M. Hooper, Deputy Conservator ..	276	209
	„ J. H. B. Brougham, Assistant Conservator ..	91	...
Anantapur ..	Do. do.	366	212
Nílgiris ..	Mr. H. A. Gass, Deputy Conservator	94	32
	Lieut.-Colonel R. S. Jago, Deputy Conservator ..	272	132

Officers' Services.

140. The Conservator is glad to record his appreciation of the work done by Mr. Higgens, C. S., in Cuddapah, and by Mr. Sim, C. S., in Kurnool. The latter has, in spite of constant attacks of fever, done very good work in the improvement of the revenue collections, the stoppage of timber smuggling, the construction of forest houses and the selection of reserves, while the former has kept up good arrangements for works in Cuddapah, and continued the work of reserved forests selection and settlement. Mr. Vincent has worked hard to bring the fuel forests and plantations on the Nellore coast into good working order and to improve the establishments and the system of export. Mr. Hooper, Lieutenant-Colonel Jago, and Mr. Brougham have all worked to the Conservator's satisfaction. Mr. Boileau has also worked hard in the Kistna district, but a little more firmness and attention to matters of greater importance would be useful.

141. Messrs. Lushington and Homfray were both unsuccessful in their language examinations, but both have had hard work to do, and in the case of the former especially, his non-success may have been somewhat due to his transfer to a distant district just before the time for examination came on. He was posted to Ganjam towards the end of the year.

142. Of the Sub-Assistant Conservators, the Conservator has to report the deaths during the year of Messrs. E. Dampier and T. M. Newman, both from illness contracted on forest work. He has been satisfied with the work of Somasundram Mudali but regrets he is unable to say the same regarding that of Mr. Stafford though he has reason to think that his work will improve after he has personally inspected his division.

143. *Health.*—The health of the establishment has not been good. The deaths of Messrs. Dampier and Newman have been already referred to, while others have suffered much from fever and from diseases due to exposure and bad water, such as forest officers have only too often to put up with.

144. The Forest Code was completed in draft during the year and submitted to the Board soon after its close. The forms of the new code have to a great extent been used in this report, but they have naturally not been easy of preparation at first.

145. Large collections of forest products were sent to the Calcutta International Exhibition and Medals were awarded to Messrs. Higgens, Lushington, Hooper and Stafford for various articles of forest produce. A small but good collection was also made and sent to the Edinburgh Forestry Exhibition.

APPENDICES.

APPENDICES.

Form No. 1.

Forest Department, Northern Circle, Madras.

Area of Reserved Forests, 1883-84.

District.	Taluk.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the Year. Acres.	Excluded or Transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	District Totals, Square Miles.
Godávari ..	Bhadráchalam.	Pedda Nallapalli ..	640	1	..	..	640	1	
		Arlagudiem ..	1,920	3	..	..	1,920	3	
		Tunikicheruvu ..	2,560	4	..	..	2,560	4	
	Rékapalle ..	Bundereo ..	4,160	6½	..	..	4,160	6½	
		Erguratpalli ..	960	1½	..	..	960	1½	
		Sarival	3,840	6	..	..	3,840	6	
		Rapaka	5,120	8	..	..	5,120	8	
		Gamallakota ..	640	1	..	..	640	1	
		Ghandigudiem ..	1,920	3	..	..	1,920	3	
		Marsameddi ..	7,040	11	..	..	7,040	11	
		Sokanapalli ..	1,920	3	..	..	1,920	3	
		Bocharam ..	12,800	20	..	..	12,800	20	
							8,320	13	68
Kistna ..	Bezváda ..	Kondapalli ..	8,320	13	..	..	1,070	1⅔	
	Bápatla ..	Muthayyapalem ..	1,070	1⅔	..	..	23,680	37	
	Palnád ..	Shrigiripadu ..	23,680	37	..	..	27,520	43	
		Motukur	27,520	43	..	..	6,826	10⅔	
		Madhinapadu ..	6,826	10⅔	..	..	32,234	50½	
	Vinukonda ..	Bollapalli ..	32,234	50½	..	..			156
Nellore ..	Gúdúr ..	Sriharikót ..	46,402	72½	..	..	46,402	72½	
	Nellore, &c. ..	Nellore	46,862	73	..	..	46,862	73	*
	Kandukúr ..	Ramapatam ..	22,880	36	..	..	22,880	36	
	Rápúr, Atmakúr, &c.	Veligondas ..	23,360	36½	..	..	23,360	36½	218
							4,484	7	
Cuddapah ..		Ballipalle, East ..	4,484	7	..	..	6,307	10	
		Do. West ..	6,307	10	..	..	4,687	7⅓	
		Kodur Hill ..	4,687	7⅓	..	..	3,595	5⅔	
		Vagetikona ..	3,595	5⅔	..	..	1,048	1⅔	
		Thanakonda ..	1,048	1⅔	..	..	3,487	5⅓	
		Yerraguntlakota ..	3,487	5⅓	..	..	1,565	2⅓	
	Pullampet ..	Rallakonda ..	1,565	2⅓	..	..	9,682	15	
		Gathala	9,682	15	..	..	5,424	8½	
		Rolamadugu ..	5,424	8½	..	..	7,680	12	
		Sullavendra ..	7,680	12	..	..	108	..	
		Uparapalle ..	108	..	..	..	50	..	
		Kodur	50	..	..	..	924	1⅓	
		Reddipalle ..	924	1⅓	..	..	328	½	
		Pullampet ..	328	½	..	..	263	½	
	Cuddapah ..	Kamalapuram ..	263	½	..	..	14,720	23	
	Cuddapah and Ráyachóti.	Guvalacheruvu ..	14,720	23	..	..	21,120	33	
		Wongimalla ..	21,120	33	..	..	4,480	7	
	Ráyachóti ..	Gadikota	4,480	7	..	..	8,960	14	
	Ráyachóti and Pullampet.	Mudampad ..	8,960	14	..	..	15,360	24	
	Badvél ..	Nainapalle ..	15,360	24	..	..	91	..	*
	Proddutur ..	Ramesvaram ..	..	..	153	..	153	¼	
		Thullamapuram ..	..	..	258	..	258	½	
		Vellala	..	..	197	..	197	½	
		Alladapalle ..	..	..	99	..	99	..	
		Paydala	..	..	696	..	696	1	†
		Nedujuvi ..	..	..	120	..	120	⅕	
		Kathapalli ..	..	..	430	..	430	½	
		Kalamalla ..	..	..	86	..	86	..	
		Modumidapalle ..	..	..	138	..	138	⅕	
		Anantapuram ..	..	..	160	..	160	⅕	
		Vallur	..	..	858	..	858	1	
	Jammalamadugu.	Kondasankesala ..	..	..	372	..	372	½	
		Gondikota ..	..	..	300	..	300	½	
		Kosinipalle ..	..	..	200	..	200	⅓	
		Yamaveram ..	..	..	589	..	589	1	
		Dhodiem	..	..	756	..	756	1	
		Morupandi ..	..	..	787	..	787	1	
		Molamidakambola-dinna.	..	..					

* In several blocks.

† These were last year given as village forests by error, and are now brought on the list here.

Area of Reserved Forests, 1883-84—(*Continued*).

District.	Taluk.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the Year. Acres.	Excluded or Transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	District Totals, Square Miles.
Cuddapah—(*Continued*).	Jammalamadugu—(*Continued*).	Kódúr	..	..	579	..	579	1	
		Aravetipalle ..	..	..	200	..	200	⅓	
		Devepalli ..	..	..	350	..	350	½	
		Pedda Dudiala ..	..	..	300	..	300	½	
	Kadiri ..	Nigadi	19,000	30	..	..	19,000	30	
		Malakavemula ..	5,500	8½	..	..	5,500	8½	
		Kondagamerla ..	2,700	4	..	..	2,700	4	
		Tummala ..	2,500	4	..	..	2,500	4	
		Kokanti	2,000	3	..	..	2,000	3	
		Gorivikanama ..	18,000	28	..	..	18,000	28	
	Madanapalle ..	Rekkalakonda ..	1,200	2	..	..	1,200	2	
		Mallayakonda ..	2,200	3½	..	..	2,200	3½	
		Kosuvaripalle ..	1,400	2	..	..	1,400	2	
		Sompalle	800	1½	..	..	800	1½	
		Horsleykonda ..	9,630	15	..	..	9,630	15	
	Váyalpád ..	Yellutla	3,500	5½	..	..	3,500	5½	
		Nadimcherla ..	2,000	3	..	..	2,000	3	
		Váyalpád ..	3,700	5½	..	..	3,700	5½	
		Ankalammakonda .	2,800	4	..	..	2,800	4	
		Gorantlapalle ..	4,000	6	..	..	4,000	6	
Bellary ..	Bellary ..	Malpangudi ..	1,000	1½	..	300*	700	1	316½
Anantapur ..	Gooty ..	Gooty	331	½	..	..	331	½	1
	Anantapur and Tadpatri.	Muchukota ..	2,994	5	..	..	2,994	5	5½
Nilgiris ..	Munanad ..	Benne	10,880	17	..	..	10,880	17	
	Tódanád ..	Sigur	25,600	40	..	..	25,600	40	
	Tódanád and Merkunád.	Ootacamund Plantations.	629	1	..	..	629	1	
	Paranginád ..	Coonoor Plantations.	631	1	..	..	631	1	59
		Grand Total ..	519,941	812	7,719	300	527,360	824	824

* Reduced according to survey made by Survey Department.

Form No. 2.

Forest Department, Northern Circle, Madras.

Area of Leased Forests, 1883-84.

District.	Taluk.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in Square Miles.	Added during the Year. Acres.	Eluded or Transferred to other Heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in Square Miles.	District Totals, Square Miles.
Bellary ..	....	Sandur	40,000	62½	..	..	40,000	62½	62½
Nilgiris ..	....	Mudamalai ..	128,000	200	..	..	128,000	200	200
			168,000	262½	..	..	168,000	262½	262½

FORM NO. 3.

Forest Department, Northern Circle, Madras.

Area of Forest Tracts protected from Fire during the Dry Season of 1883 to accompany Report for 1883-84.

District.	Forest Tracts.	Up to end of Dry Season of 1883.		During Dry Season of 1883-84.				Total cost up to end of Dry Season of 1884.	Year in which protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected.	Amount expended.			
		ACRES.	RS.	ACRES.	ACRES.	ACRES	RS.	RS.		
Kistna ..	Kondapalli	..	..	8,320	1,920	6,400	27	27	..	
	Other small expenses	..	..	..	..	..	9	9	..	
	Total ..	..	..	8,320	1,920	6,400	36	36	..	
Nellore ..	.....	..	..	..	..	..	..	..	..	
Cuddapah ..	Pullampet Taluk. Ballipalle, West	6,306	451	6,306	1,400	4,906	287	738	1867 ..	Specially protected.
	Do. East	4,484	492	4,480	2,200	2,280	263	755	1871 ..	Do.
	Kodur Hill	3,187	263	4,686	400	4,286	235	498	1871—1874 ..	Do.
	Vagetikona	1,595	138	3,594	1,200	2,394	145	283	1874 ..	Protected with ordinary staff.
	Yerraguntlakota	3,487	176	3,487	360	3,127	203	379	1873 ..	Specially protected.
	Rallakonda	1,065	124	1,565	..	1,565	48	172	1879 ..	Protected with ordinary staff.
	Gathala	6,682	188	9,682	1,000	8,682	96	284	1874 ..	Do.
	Rollamadugu	5,424	60	5,424	2,200	3,224	47	107	1878 ..	Do.
	Thanakonda	548	132	1,047	15	1,032	74	206	1874 ..	Specially protected.
	Uparapalle Plantation ..	..	..	108	..	108	..	..	1884 ..	Protected by Plantation establishment.
	Kadiri Range. Kodur do. ..	..	..	37	..	37	..	..	..	Do.
	Reddipalle do. ..	..	..	925	..	925	..	..	..	Do.
	Pullampet do. ..	..	..	426	..	426	..	..	..	Do.
	Nigadi	70,300	150	19,000	..	19,000	82	232	1880-81 ..	Specially protected.
	Malakavemala		75	5,500	500	5,000	40	115	Do. ..	Do.
	Kondagamarla		52	2,700	..	2,700	70	122	Do. ..	Protected with ordinary staff.
	Thummala		52	2,500	300	2,200	52	104	Do. ..	Do.
	Kokanti		52	2,000	250	1,750	40	92	Do. ..	Do.
	Gorivikanama		125	18,000	250	17,750	40	165	Do. ..	Do.
	Madanapalle Range. Rekkalakonda	900	50	1,200	..	1,200	68	118	Do. ..	Protected with ordinary staff.
	Mallayakonda	..	74	3,000	..	3,000	53	127	Do.	
	Nurukuppalakonda	..	..	900	..	900	58	58	Do. ..	Specially protected.
	Kosuvaripalle	2,000	50	1,400	..	1,400	35	85	Do. ..	Protected with ordinary staff.
	Sompalle	500	25	800	..	800	53	78	Do. ..	Do.
	Horsleykonda	4,980	125	8,000	..	8,000	53	178	Do. ..	Do.
	Vâyalpâd Range. Yellutla		100	5,000	..	5,000	45	145	Do. ..	Do.
	Nadimcherla		75	5,000	..	5,000	40	115	Do. ..	Do.
	Nurukuppalakonda	21,990	50	3,700	..	3,700	27	77	Do. ..	Specially protected.
	Ankalammakonda ..		75	3,500	..	3,500	40	115	Do. ..	Do.
	Gorantlapalle		76	5,000	..	5,000	33	109	Do. ..	Protected with ordinary staff.

Area of Forest Tracts protected from Fire during the Dry Season of 1883 to accompany Report for 1883-84—(*Continued*).

District.	Forest Tracts.	Up to end of Dry Season of 1883.		During Dry Season of 1883-84.				Total cost up to end of Dry Season of 1884.	Year in which protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected.	Amount expended.			
		ACRES.	RS.	ACRES.	ACRES.	ACRES.	RS.	RS.		
Cuddapah—(*Cont.*)	Cuddapah Range. Mamillapalle Block. ..	..	..	3,000	..	3,000	46	46	1883 ..	Specially protected.
	Ráyachóti Range. Guvalacheruvu ..	..	..	7,600	..	7,600	32	32	Do. ..	Do.
	Gadikota ..	..	..	12,000	..	12,000	69	69	1884 ..	Do.
	Rájampet .. Srirangarazupoliem	..	..	4,800	..	4,800	47	47	Do. ..	Do.
	Siddhavattam .. Arepoyakanama ..	..	..	9,000	..	9,000	16	16	Do. ..	Do.
	Proddutur Range. Muddureddipalle	..	..	8,400	240	8,160	44	44	Do. ..	Do.
	Rameswaram	91	15	91	..	91	10	25	1880-81 ..	Protected with ordinary staff.
	Thallamapuram	153	15	153	..	153	15	30	Do. ..	Do.
	Vellala	258	16	258	..	258	14	30	Do. ..	Do.
	Alladapalle	197	15	197	..	197	14	29	Do. ..	Do.
	Payadala	99	15	99	..	99	..	15	Do. ..	Do.
	Nidijuru	696	35	696	..	696	14	49	Do. ..	Do.
	Kottapalle	120	15	120	..	120	..	15	Do. ..	Do.
	Kolamalla	430	30	430	..	430	16	46	Do. ..	Do.
	Modanuthapalle	86	15	86	..	86	..	15	Do. ..	Do.
	Anantapuram	138	15	138	..	138	..	15	Do. ..	Do.
	Kallur	160	15	160	..	160	..	15	Do. ..	Do.
	Jammalamadugu Range. Kondasankesala	858	19	858	..	858	16	35	Do. ..	Do.
	Gandikóta	192	18	372	..	372	18	36	Do. ..	Do.
	Kosinepalle	300	18	300	..	300	16	34	Do. ..	Do.
	Yamavaram	200	19	300	..	300	16	35	Do. ..	Do.
	Dhodiem	589	9	589	..	589	18	27	Do. ..	Do.
	Morupaudi	756	10	756	..	756	12	22	Do. ..	Do.
	Molamidukumbolathum ..	787	19	787	..	787	13	32	Do. ..	Do.
	Kodur	579	19	579	..	579	16	35	Do. ..	Do.
	Aravetipalle	200	6	200	..	200	5	11	Do. ..	Do.
	Denapalle	350	7	350	..	350	6	13	Do. ..	Do.
	Pedda Dudiala	300	7	300	..	300	5	12	Do. ..	Do.
	Total ..	140,987	3,582	181,586	10,315	171,271	2,705	6,287		
Kurnool ..	Velgode	..	..	12,800	6,400	6,400	200	200	1883-84.	
Bellary ..	Rámandrug Range. Sandúr Block	3,000	505	2,750	40	2,710	229	734	1882-83.	
	Dhermapur	1,500	90	2,150	50	2,100	124	214	..	
	Gound	3,500	65	5,050	..	5,050	132	197	..	
	Gurga	1,300	143	2,430	100	2,330	195	338	..	
	Kanavihalli	1,000	130	4,160	..	4,160	143	273	..	
	Hospet	3,500	317	1,050	..	1,050	191	508	..	
	Venkatigiri	..	..	1,150	..	1,150	137	137	..	
	Malpangudi	..	..	700	40	660	71	71	..	
	Total ..	13,800	1,250	19,440	230	19,210	1,222	2,472		

Area of Forest Tracts protected from Fire during the Dry Season of 1883 to accompany Report for 1883-84—(*Continued*).

District.	Forest Tracts.	Up to end of Dry Season of 1883.	During Dry Season of 1883-84.				Total cost up to end of Dry Season of 1884.	Year in which protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected.	Amount expended.		
		Acres.	Rs.	Acres.	Acres.	Acres.	Rs.		
Anantapur ..	Muchukota	..	..	7,040	..	7,040	325	1883-84.	
	Kottakota	..	..	3,840	..	3,840	8	..	
	Amagundapalliem	..	..	2,560	..	2,560		..	
	Total ..	..	..	13,440	..	13,440	333		
Nilgiris ..	Mudumalai Plantation ..	101	129	101	..	101	363	..	
	Beurie do. ..	..	..	..	..	..		..	
	Sigûr do. ..	23	93	23	12	11	204	..	
	Ootacamund do. ..	572	185	701	..	701	482	..	
	Coonoor do. ..	388	70	631	..	631	303	..	
	Total ..	1,084	477	1,456	12	1,444	1,352		
	Grand Total ..	155,371	5,309 *	237,042	18,877	218,165	10,680		

* This amount is less than that given last year by Rs. 50, which it was found had been erroneously added in the Cuddapah District.

Form No. 4.

Forest Department, Northern Circle, Madras.

Prosecutions for breach of Forest Rules during 1883-84.

District.	Cases pending from 1882-83.	New cases of the year.					Total number of cases.	Disposed of during the year.						Cases pending at the close of 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 number of cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Ganjam ..	8	..	..	..	3	3	11	2	65	8	12	10	77	1
Vizagapatam ..	..	..	12	..	4	16	16	11	57	3	17	14	74	2
Godâvari ..	..	1	17	..	..	18	18	18	34	..	11	18	45	..
Kistna ..	..	..	9	..	7	16	16	13	55	4	7	17	62	..
Nellore ..	21	..	139	..	10	149	170	98	225	13	37	111	262	59
Cuddapah ..	2	12	116	32	7	167	169	141	486	19	121	160	607	9
Kurnool ..	7	..	124	..	..	124	131	88	202	42	84	130	286	1
Bellary ..	1	2	12	23	..	37	38	33	84	2	7	35	91	3
Anantapur ..	..	..	20	..	6	26	26	11	21	4	14	15	35	11
Nilgiris ..	..	..	11	..	..	11	11	10	41	1	1	11	42	..
Total ..	*39	15	460	55	37	567	606	425	1,270	96	311	521	1,581	86

* For explanation of the difference between this number and the closing balance of last year, see para 59.

FORM No. 5.

Forest Department, Northern Circle, Madras.

Area of Plantations, 1883-84.

District.	Taluk.	Name of Plantation.	Description of Tree.	On 1st April 1883.		Added during 1883-84.		On 31st March 1884.		Remarks.
				Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
			PLANTATIONS.							
				ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Godávari ..	Narsápur	Rustumbadu	Casuarina	24	4,153	..	..	24	4,153	Formed in 1866-67.
		Sitarampuram ..	Do.	26		..	..	26		
	Amalápuram ..	Bendemurlanka ..	Do.	27	2,014	..	..	27	2,014	Do. 1875-76.
		Do. ..	Do.	20	516	..	176	20	692	Do. 1882-83.
			Total ..	97	6,683	..	176	97	6,859	
Kistna ..	Bandar	Karrimid	Casuarina and Palmyra ..	20	..	..	133	20	133	
		Mugudhuru	Casuarina and Inga ..	15½	..	..	122	15½	122	
		Arisepalli	Casuarina and Palmyra ..	25	..	..	169	25	169	
		Gundupalem	Do. do. ..	30	..	..	..	30	..	
		Chinnapuram ..	Casuarina, Palmyra and Babul.	25	..	..	..	25	..	
		Kodur	Palmyra	38	..	..	54	38	54	
	Gudiváda	Guraza	Palmyra and Casuarina, &c.	22	..	..	..	22	..	
		Kankollu	Do. do. &c.	17	..	..	556	17	556	
		Allinagaram	Do. do. &c.	126	..	— 1	173	125	173	1 acre excluded as re-measurement.
		Dakaram	Casuarina	25	..	..	..	25	..	
		Konkolu	Casuarina and Palmyra, &c.	15	..	..	..	15	..	
		Karamenapudi ..	Do. do. ..	39	..	..	..	39	..	
		Korlapadu	Do. do. ..	20	..	..	63	20	63	
		Mandaralli	Do. do. ..	20	..	..	..	20	..	
		Iyawar Rudraveram ..	Palmyra	20	..	..	63	20	63	
		Bomminampadu ..	Casuarina and Palmyra ..	16	..	10	102	26	102	
		Venarrapadu	Do. do. ..	16	..	..	101	16	101	
		Venudhuru	Do. do. ..	29	..	35	104	64	104	
	Bezváda	Bezváda	Babul, &c.	25	..	..	..	25	..	
		Ibrampatam	Do.	24	..	..	62	24	62	
	Nandigáma ..	Nandigáma	Casuarina and Margosa ..	20	..	..	..	20	..	
		Gannavaram	Palmyra and Babul ..	39	..	..	60	39	60	
		Kanchikicherla ..	Do. do. ..	24	..	..	..	24	..	
	Palnád	Thumerikodu ..	Palmyra	21	..	..	227	21	227	
	Narsaraopet ..	Narsaraopet	Babul, &c.	15	..	..	..	15	..	
	Rópalle	Peteru	Casuarina	5	..	..	..	5	..	
		Iskapalle	Do.	2	..	..	..	2	..	
	Bápatla	Chebrolu	Palmyra	20½	..	..	..	20½	..	
		Bápatla	Casuarina	21	239	..	95	21	334	

Area of Plantations, 1883-84—(*Continued*).

District.	Taluk.	Name of Plantation.	Description of Tree.	On 1st April 1883.		Added during 1883-84.		On 31st March 1884.		Remarks.
				Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
				ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Kistna—(*Cont*)...	Bápatla—(*Continued*).	Appicatla	Casuarina	7	..	..	..	7	..	
		Karlapalem	Casuarina, &c.	236	3,273	..	258	236	3,531	
		Vedhullapalle ..	Casuarina	20	149	..	73	20	222	
		Ipurpalem	Do.	14	..	..	..	14	..	
		Bethapudi	Do.	7	..	..	..	7	..	
		Perali	Do.	15	..	..	..	15	..	
		Chirala	Do.	17	1,080	..	64	17	1,144	
		Wardarevu	Do.	23	3,205	..	138	23	3,343	
		Arumülapeta ..	Do.	26	1,505	..	105	26	1,610	
		Nayanipalli	Do.	17	801	..	72	17	873	
		Ravurpeta	Do.	10	..	..	..	10	..	
		Pandhillapalli ..	Do.	49	143	..	73	49	216	
		Kadavakuduru ..	Do.	18	..	..	..	18	..	
			Total ..	1,194	10,395	44	2,867	1,238	13,262	
Nellore ..	Gúdúr	Dugarázpatnam ..	Do.	290	27,433	75	1,866	365	29,299	Commenced 1873.
		Kothapatnam ..	Do.	280	22,978	38	1,526	318	24,504	
		Tamminapatnam ..	Do.	370	34,692	75	2,635	445	37,327	Do.
	Nellore	Allipuram	Do.	39	8,649	..	423	39	9,072	Do.
		Utukur	Do.	180	11,936	..	1,794	180	13,730	Do. 1875.
		Varani	Do.	290	30,908	..	1,590	290	32,498	Do. 1874.
		Iskapalli	Do.	19½	847	..	48	19½	895	
	Kávali	Pullamellapalli ..	Do.	1	795	— 1	— 795	..	..	Wrongly included last year.
	Atmakúr	Mamudur	Do.	9	1,345	..	64	9	1,409	
	Kávali	Tummalapenta ..	Do.	54	18,386	..	186	54	18,572	Commenced 1873.
	Kandukúr ..	Binginipalli	Do.	12½	308	..	40	12½	348	Do. 1871.
		Ramayapatnam ..	Do.	40	19,264	..	146	40	19,410	Do. 1873.
	Ongole	Kottapatnam ..	Do.	35	14,457	..	113	35	14,570	Do. 1874.
		Kanuparthi	Do.	20½	16,200	..	202	20½	16,402	Do. 1873.
	Gúdúr	Kothapatnam ..	Cocoanut	20	493	..	554	20	1,047	Do. 1883.
			Total ..	1,660½	2,08,691	187	10,392	1,847½	2,19,083	
Cuddapah ..	Pullampet	Kodur	Red Sanders	37	6,601	..	124	37	6,725	Do. 1865.
		Uparapalle	Mixed	108	8,034	..	77	108	8,111	Do. 1868-69.
		Reddipalle	Do.	925	12,939	..	77	925	13,016	Do. 1869-70.
		Pullampet	Do.	426	7,675	..	66	426	7,741	Do. 1871.
	Cuddapah	Camalapuram ..	Do.	332	9,874	..	72	332	9,946	Do. 1869.
		Aremanabunda ..	Mahogany Plants ..	..	..	..	173	..	173	Do. 1883-84.
			Total ..	1,828	45,123	..	589	1,828	45,712	

Area of Plantations, 1883-84—(*Continued*).

District.	Taluk.	Name of Plantation.	Description of Tree.	On 1st April 1883.		Added during 1883-84.		On 31st March 1884.		Remarks.
				Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
				ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Anantapur ..	Gooty	Gooty	Babul and Palmyra ..	197	..	— 197	..	..	..	Excluded, as on investigation they proved to be natural-grown areas.
	Tadpatri	Sixteen Plantations ..	Babul	40	..	— 40	..	..	..	
	Dharmavaram ..	Twenty-one Plantations.	Do.	1,041	536	—1,041	— 536	..	..	
	Gooty	Gooty	Do.	1,483		—1,483				
				..	..	331	48	331	48	Brought on list properly.
			Total ..	2,761*	536	—2,430	— 488	331	48	* In last year's report "2524" should have been "2761."
Nilgiri ..	Nambolukod ..	Mudumalai	Teak	101	27,182	..	58	101	27,314	
	Munanád	Benne	Do.				75			
		Sigór	Sandalwood	23	9,938	..	112	23	10,050	
		Arnakal	Eucalyptus	8	310	..	10	8	320	Commenced 1873.
		Governor's Sholah ..	Eucalyptus and Acacia ..	55	1,311	..	9	55	1,320	Do. 1863.
		Hoopatti	Eucalyptus	12	362	..	15	12	377	Do. 1873.
		Andy	Eucalyptus and Acacia ..	60	1,272	..	23	60	1,295	Do. 1873.
		Sheffield	Acacia	23	573	..	8	23	581	Do. 1862.
		Cally	Do.	17	561	..	12	17	573	Do. 1870.
		Chougat Cally ..	Eucalyptus	26	780	..	14	26	794	Do. 1871.
		Baikie	Do.	46	2,923	12	483	58	3,406	Do. 1874.
		Madana	Acacia Melanoxylon ..	18	946	..	149	18	1,095	Do. 1882 addition Eucalyptus.
	Tódanád ..	Chemenguli	Eucalyptus	33	3,845	..	16	33	3,861	Do. 1879.
		Muttinad	Do.	95	6,271	..	383	95	6,654	Do. 1880.
		Brooklands	Eucalyptus and Acacia dealbata.	10	317	..	11	10	328	Do. 1862.
		Aramby	Eucalyptus	58	2,345	3	151	61	2,496	Do. 1863.
		Koolie	Do.	58	3,588	..	476	58	4,064	Do. 1875.
		Marlimund	Eucalyptus and Acacia ..	11	736	..	94	11	830	Do. 1860.
		Norwood	Eucalyptus	26	686	..	8	26	694	Do. 1872.
		Snowdon	Acacia dealbata	7	210	..	4	7	214	Do. 1860.
		Bathri	Eucalyptus	60	3,902	70	2,282	130	6,184	Do. 1877.
		Deva Shola	Do.	14	1,629	..	8	14	1,637	Do. 1880.
		Black Bridge	Do.	48	1,374	..	143	48	1,517	Do. 1874.
		Rock	Do.	8	311	..	8	8	319	Do. 1875.
		Bleak House ..	Acacias	235	4,417	..	8	235	4,425	Do. 1857.
		Bandy Shola ..								
	Paranginád ..	Old Forest ..	Eucalyptus	200	4,058	..	319	200	4,377	Do. 1872.
			Acacia decurrens	..	..	..	26	..	26	Do. 1882.
		Tippakutchi	Eucalyptus	35	771	..	12	35	783	Do. 1875.
		Rallia	Eucalyptus and Acacia Melanoxylon.	60	1,298	..	21	60	1,319	Do. 1872.

Area of Plantations, 1883-84—(*Continued*).

District.	Taluk.	Name of Plantation.	Description of Tree.	On 1st April 1883.		Added during 1883-84.		On 31st March 1884.		Remarks.
				Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
				ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	
Nilgiri—(*Continued*).	Paranginád—(*Contd.*)	Little Rallia	Eucalyptus	10	501	..	14	10	515	Commenced 1877.
		Newman	Do.	35	721	..	16	35	737	Do. 1870.
			Total ..	1,392	83,138	85	4,968	1,477	88,105	
			CULTURAL OPERATIONS.							
Ganjam ..	Goomsur	Mojagodo	Teak	3½	504	..	36	3½	540	Formed in 1869-70.
			Total ..	3½	504	..	36	3½	540	
Vizagapatam ..	Pálkonda ..	Voni	Sál ete	25	137	..	314	25	451	Transferred from "topes." "Guggilam" was last year erroneously called *Boswellia*, it really is *Shorea robusta*.
		Lakshmipuram ..	Do.	26	41	..	314	26	355	
			Total ..	51	178	..	628	51	806	
Kurnool	Nandyál	Orwakul	Yepi	..	..	46	20	46	20	Commenced 1883-84.
	Nandikótkur	Mandlam	Babul	..	..	10	10	10	10	Do. do.
			Total ..	..	..	56	30	56	30	
Bellary ..	Hospet ..	Gundlavathigiri ..	Babul	4	..	..	..	4	..	
		Nayanahalli	Do.	10	..	..	..	10	..	
			Total ..	14	..	..	..	14	..	
			Grand Total ..	9,001	3,55,070	— 2,058	18,567	6,943	3,73,606	

Form No. 6.

Forest Department, Northern Circle, Madras.

Register of Topes.

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Area.	Cost		Remarks.
						During Year.	To end of Year.	
					Acs.	Rs.	Rs.	
Ganjam.	Berhampore ..	1	Chatrapur ..	Casuarina ..	6	..	Not reported.	
		2	Lord Napier's Garden	Cashew, Mango ..	5	..		
		3	Mr Knox' Garden ..	Casuarina, Mango.	2	..		
	Goomsur ..	4	Tonnarada ..	Mango ..	27	105		
	Chicacole ..	5	Calingapatam ..	Cashew, Margosa.	4	..		
		6	Púndi	Do. do.	½	..		
		7	Bananapád ..	Margosa and *Cordia myxa.*	½	..		
				Total ..	45	105	..	
Vizagapatam.	Pálkonda ..	1	Tumarada ..	Teak, Mango, Maddi, &c.	16	..	4	
		2	Chinnamangalapuram	Jachi, Teak, Maddi, Mango, &c.	40	..	4	
				Total ..	56	..	8	
Godávari.	Rámachandrapuram.	1	Gollapolliem ..	Palmyra ..	2	..	Not reported.	
		2	Tapaswaram ..	Palmyra & Mango.	1	..		
		3	Mundapeta ..	Do. ..	2	..		
		4	Yedidi	Do. ..	8	..		
		5	Do.	Do. ..	6	..		
		6	Do.	Do. ..	6	..		
		7	Vakatippa ..	Do. ..	2	..		
		8	Amzur	Rauvi	3	..		
				Tamarind ..	30	..	..	
				Total ..				
Kistna.	Bandar ..	1	Bombay near Basin, Masulipatam.	Casuarinas ..	7	..	..	
	Gudiváda ..	2	Gudiváda ..	Mango, &c. ..	5	66	66	Figures for previous years not traceable except for Bápatla.
	Bezváda ..	3	Ellore Road ..	....	5	86	86	
	Nandigáma ..	4	Vidiyadharapuram ..	Yapi, &c. ..	4	45	45	
		5	Nandigáma ..	Margosa, Tamarind.	11	81	81	
	Vinukonda ..	6	Vinukonda ..	Margosa, &c. ..	6	71	71	
	Narsaraopet ..	7	Narsaraopet ..	Palmyras, Babul, &c.	7	37	37	
	Sattenapalle ..	8	Krossur	Mango, &c. ..	6	..	..	
	Bápatla ..	9	Bápatla	Do. ..	2	10	1,132	
	Répalle ..	10	Tsandole	Casuarina ..	1	..	..	
				Total ..	54	396	1,518	
Nellore.	Gúdúr ..	1	Ojili	Margosa, Tamarind and Neredu.	2	..	378	
		2	Gúdúr ..	Do. ..	10	72	1,149	
		3	Do.	Do. ..	3	..	468	
		4	Do.	Do. ..	12	..	33	
		5	Dugarázpatnam ..	Palmyra ..	5	47	557	Area extended from 3 to 5 acres.
		6	Chilamathur ..	Margosa, Tamarind and Neredu.	2	..	14	
		7	Gunapadu ..	Palmyra ..	6	..	55	
		8	Kottapatnam ..	Do. ..	37	..	200	
		9	Kommalapudi ..	Do. ..	16	..	100	
		10	Jottakanduru ..	Do. ..	16	..	70	
		11	Kanupur	Do. ..	15	..	20	
		12	Inkurthi	Do. ..	½	..	20	
		13	Adurupalle ..	Margosa, Tamarind and Neredu.	5	..	883	
		14	Rápúr	Do. ..	10	85	1,217	
		15	Dachur	Do. ..	4	..	1,173	
		16	Puligelapadu ..	Do. ..	½	..	310	
		17	Gottapalam ..	Do. ..	4	32	1,027	
		18	Marupur	Do. ..	4	..	903	
	Rápúr ..	19	Althurthy ..	Do. ..	4	48	954	
		20	Penubarthi ..	Do. ..	4	48	259	
		21	Deveravenuru ..	Do. ..	129	..	150	
		22	Veligonu	Palmyra ..	4	..	8	
		23	Sydapuram ..	Do. ..	4	..	310	
		24	Rápúr	Margosa, Tamarind and Neredu.	4	48	363	
		25	Chaganam ..	Do. ..	4	..	713	
		26	Gonupalle ..	Do. ..	2	..	170	

Register of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Area.	Cost		Remarks.
						During Year.	To end of Year.	
					Acs.	Rs.	Rs.	
Nellore—(*Continued*).	Nellore ..	27	Ambapuram ..	Margosa, Tamarind and Neredu.	6	36	873	
		28	Amancherla ..	Do. ..	6	37	778	
		29	Chinachankur ..	Do. ..	½	..	81	
		30	Varigonda ..	Do. ..	½	..	310	
		31	Razupalem ..	Do. ..	4	37	629	
		32	Vidavalur ..	Do. ..	1½	..	180	
		33	Vutukur ..	Do. ..	½	..	109	
		34	Minagallu ..	Do. ..	½	..	160	
		35	Kodavalur ..	Do. ..	½	..	60	
		36	Veguru	Do. ..	½	..	40	
		37	Naidupalem ..	Do. ..	1	..	200	
		38	Maridigunta or Dandigunta.	Do. ..	½	..	20	
		39	Gandavaram ..	Do. ..	1½	..	266	
		40	Gundalummapalem ..	Do. ..	½	..	125	
		41	Badduvaripalem ..	Do. ..	½	..	395	
		42	Siddhipuram ..	Do. ..	3	..	658	
		43	Varilla	Do. ..	½	..	100	
		44	Gogulapalle ..	Do. ..	½	..	100	
		45	Ponnur	Palmyra ..	6	..	20	
		46	Kodur	Do. ..	1½	..	36	
		47	Rámachandrapuram.	Do. ..	50	..	280	
		48	Allipuram ..	Do. ..	1	..	2	
		49	Gudipallipadu ..	Do. ..	4	..	7	
		50	Kakupalli ..	Do. ..	12	..	65	
		51	Bodduvaripalem ..	Do. ..	28	..	185	
		52	Inthupur ..	Do. ..	10	..	10	
		53	Allur	Do. ..	18	..	Not known.	
		54	Thaguthurty ..	Do. ..	9	..	40	
		55	Kodavaluru ..	Do. ..	53	..	150	
		56	Mareguntapadu ..	Do. ..	20	..	50	
		57	Dampur	Do. ..	6	..	15	
		58	North Mopur ..	Do. ..	17	48	275	
		59	Kodur	Do. ..	116	48	298	
	Venkatagiri ..	60	Chutti	Margosa, Tamarind and Neredu.	4	48	1,586	
		61	Akkampett ..	Do. ..	4	48	1,334	
		62	Chereddipalle ..	Do. ..	4	48	1,426	
	Atmakúr ..	63	Nellorepalem ..	Do. ..	2	40	709	
		64	Yadavalli ..	Do. ..	2	40	402	
		65	Pramana ..	Do. ..	4	..	694	
		66	Atmakúr	Do. ..	2½	48	604	
		67	Inugaluru ..	Palmyra ..	15	..	20	
		68	Mahimaluru ..	Do. ..	15	..	36	
		69	Razavalu	Do. ..	11	..	25	
		70	Mahamadapuram ..	Do. ..	4½	..	28	
		71	Kalurayi	Do. ..	74	..	200	
	Kávali ..	72	Chinakraka ..	Margosa, Tamarind and Neredu.	2	40	1,061	
		73	Kávali	Do. ..	2	..	395	Transferred to Local Fund Department.
		74	Tummalapenta ..	Palmyra ..	10	..	62	
		75	Thullapalem ..	Do. ..	64	..	359	
		76	Reedrakota ..	Do. ..	18	..	70	
		77	Chinnayapalem ..	Do. ..	90	..	420	
		78	Moosoonoor ..	Do. ..	21	..	150	
		79	Kávali	Do. ..	88	..	345	
		80	Munganoor ..	Do. ..	18	..	70	
		81	Jallathankay ..	Do. ..	140	..	615	
		82	Bramanakruka ..	Do. ..	100	..	212	
		83	Siddanakonduru ..	Do. ..	17	..	50	
		84	Vemulapadu ..	Do. ..	47	..	119	
		85	Thimasamudram ..	Do. ..	72	..	150	
		86	Kaligiri	Do. ..	21	..	40	
		87	Beedamagunta ..	Do. ..	4	..	20	
		88	Chinna Annalur ..	Do. ..	28	..	19	
		89	Nandavaram ..	Margosa, Tamarind and Neredu.	16	54	1,120	
	Udayagiri ..	90	Marripadu ..	Do. ..	6	54	557	
		91	Duttalur	Do. ..	3	49	768	
		92	Chintagunta ..	Do. ..	4	49	120	
	Kandukúr ..	93	Chagola	Do. ..	3	..	120	
		94	Kuridu	Do. ..	1	..	250	
		95	Pakala	Do. ..	½	..	157	
		96	Somarazupalli ..	Do. ..	4	42	443	
		97	Kamunalla ..	Do. ..	4	43	628	
		98	Ponnalur	Do. ..	½	..	190	

Register of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Area.	Cost During Year.	Cost To end of Year.	Remarks.
					ACS.	RS.	RS.	
Nellore—(*Continued*).	Kanigiri ..	99	Kanigiri	Margosa, Tamarind and Neredu.	2	48	212	
		100	Kanchulapadu ..	Do. ..	5	40	125	
		101	Hanumanthapadu ..	Do. ..	4	40	536	
		102	Thimmareddipalle ..	Do. ..	4	..	400	
		103	Nanchanamarella ..	Do. ..	4	..	60	
	Ongole ..	104	Ongole	Do. ..	5	63	527	
		105	Nidamalur ..	Do. ..	2	..	78	
		106	Padarthy	Palmyra ..	50	..	236	
		107	Alluru	Do.	50	..	338	
	Podili Division.	108	Talamalla ..	Margosa, Tamarind and Neredu.	4	..	100	
		109	Gosukondavari Agraharam.	Do. ..	1	..	415	
		110	China Arikatla ..	Do. ..	4	..	400	
		111	Nagellamudupu ..	Do. ..	4	..	250	
				Total ..	1,752	1,380	37,272	
Cuddapah.	Pullampet ..	1	Pullampet ..	Mango, Albizzia,&c.	2	91	383	1879
		2	Utukur	Mango, Margosa ..	15	91	1,385	1879
		3	Chinna Orampad ..	Mango, &c. ..	8	91	600	1879
		4	Anantampalle ..	Mango & Albizzia.	6	91	442	1880
		5	Rajampet	Mango & Tamarind.	5	91	523	1880
		6	Kodur	Do. ..	7	92	1,119	1880
		7	Najireddipalli ..	Palmyra	19	92	202	1881
	Siddhavattam ..	8	Kondur	Albizzia, &c. ..	11	100	2,702	1873
		9	Siddhavattam ..	Mango, &c. ..	9	80	2,321	1873
		10	Rajupolliem ..	Eugenia, &c. ..	8	100	1,161	1873
		11	Obalam	Tamarind, &c. ..	12	101	1,380	1873
	Badvél ..	12	Payalakunta ..	Margosa, &c. ..	2	67	401	
		13	Badvél	Do. ..	13	67	372	
		14	Tanjanarajapalle ..	Do. ..	12	67	447	
		15	Venkatapuram ..	Tamarind, &c. ..	12	67	263	
		16	Porumanilla ..	Do. ..	11	67	275	
		17	Wottimadugu ..	Do. ..	13	66	260	
	Proddutur ..	18	Chintakunta ..	Mango & Margosa.	25	166	166	1836
		19	Mydukur	Tamarind & Mango.	7	156	156	1835
		20	Digavapatnam ..	....	11	48	1,564	1866
		21	Moodanur ..	....	5	63	519	1879
		22	Vemaguntlapalle ..	....	2	46	287	1879
		23	Ponnathota ..	....	2	67	390	1879
	Jammalamadugu.	24	Thalla Proddutur ..	....	86	63	1,912	1866
		25	Kodur	....	21	67	2,019	1866
		26	Pattipaud ..	....	99	67	405	1880
		27	Kondapuram ..	....	25	123	1,048	1879
		28	Gandlur	....	38 / 20	125	3,457	1864
	Pulivendla ..	29	dupalapoya ..	....	517	118	1,095	1783
		30	Pulivendla ..	Palmyra	32	69	435	1863
		31	Abbireddipalle ..	....	16	32	32	1878
		32	Vempalle	....	15	60	240	1863
		33	Thellur	....	6	72	762	1879
		34	Velpula	....	4	65	571	1877
		35	Mallila	....	6	60	317	1879
		36	Nidenagola ..	....	15	33	96	1878
		37	Kasnoor	....	7	36	121	1878
		38	Balapanur ..	....	20	36	133	1878
	Cuddapah ..	39	Bhakarapet ..	....	7	39	125	
		40	Ootukur	....	2	38	236	
		41	Lingala	....	10	59	219	
		42	Kokatam	....	12	95	609	1880
		43	Peddacheppalli ..	....	23	39	64	Sold.
		44	Yerraguntla ..	....	5	64	863	1880
		45	Kondur	....	19	38	137	
		46	Pushpagiri ..	....	7	38	189	
		47	Appiapalli ..	....	80 / 13	623 / 71	1,959 / 331	1880
		48	Isadam	....	10	78	156	1877
		49	Vadulapalle ..	....	12	78	156	1877
		50	Sydapuram ..	....	5	78	373	1879
	Kadiri	51	Kadiri	....	5	78	360	1879
		52	Obaladeveracheruvu.	....	12	78	216	1877
		53	Gunjapalle ..	....	8	78	144	1877
		54	Dhanayanicharu ..	....	8	77	149	1877
		55	Kurli	....	13	77	215	1877
	Madanapalle ..	56	Basinikonda ..	....	16	72	1,766	1874
		57	Madavapalle ..	Casuarina ..	25	72	2,239	1874

Register of Topes—(*Continued*).

District.	Taluk.	No	Name of Tope.	Chief Trees.	Area.	Cost During Year.	Cost To end of Year.	Remarks.
					ACS.	RS.	RS.	
Cuddapah—(*Continued*).	Madanapalle—(*Continued*).	58	Madanapalle New Tope.	....	3	73	210	1881.
		59	Do. near Taluk Cutcherry.	....	3	..	..	1881.
		60	Bathalamithyeddu ..	....	2	78 / 73	557 / 625	
		61	Vempalle ..	....	10	..	..	
		62	Thettu	....	6	..	..	
		63	Guvalacheruvu ..	Margosa & Tamarind.	14	69	273	
	Ráyachóti ..	64	Sambapalle ..	....	15	68	200	
		65	Chittoor	....	17	68	331	
		66	Hasnapuram ..	Palmyra ..	44	68	398	
		67	Galivedu	....	5	68	134	
		68	Kalikiri	....	13	72	1,138	1876.
	Váyalpád ..	69	Kalakada	....	9	72	1,156	1876.
		70	Vílér	....	8	72	826	1876.
	Pullampet ..	..	Scattered trees	....	359	..	..	In 89 villages.
	Siddhavattam ..	..	Do.	....	190	..	..	In 72 do.
	Badvél ..	..	Do.	....	413	..	..	In 52 do.
	Proddutur ..	..	Do.	....	1,122	..	..	In 15 do.
	Jammalamadugu..	..	Do.	....	1,943	..	..	In 16 do.
	Pulivendla ..	..	Do.	....	756	..	..	In 35 do.
	Cuddapah ..	..	Do.	....	981	..	..	In 38 do.
				Total ..	7,349	5,644	46,315	317
Kurnool.	Rámallakót ..	1	China Tikur ..	Tamarind, Mango, &c.	7	48	144	Commenced 1872.
		2	Ulindakonda ..	Do. ..	7	48	144	Do. 1871.
		3	Veldurti and Bramagoondan.	Do. ..	24	48	144	Do. 1869.
		4	Udumalapad ..	Do. ..	5	48	144	Do. 1872.
		5	Kothapalli ..	Do. ..	6	52	148	Do. 1871.
		6	Pyalakurthi ..	Do. ..	6	..	..	Do. 1875.
		7	Koorva Uzalavaram.	Do. ..	11	..	..	Do. 1870.
	Pattikonda ..	8	Kodanur	Do. ..	3	..	..	
		9	Karvemula ..	Do. ..	6	48	509	
		10	Billakallu ..	Do. ..	5	48	542	Do. 1870.
		11	Vanugamarri ..	Do. ..	6	48	438	
		12	Chentzu Yerragudi ..	Do. ..	9	..	348	
	Koilkuntla ..	13	Kristopad ..	Do. ..	3	47	586	Do. 1871.
		14	Alavakonda ..	Do. ..	2	..	1,013	Do. 1872.
		15	Tumaladinna ..	Do. ..	3	..	1,106	Do. 1872.
		16	Rupanagudi ..	Do. ..	1	..	884	Do. 1873.
	Nandikótkóur ..	17	Vipanaguntla ..	Do. ..	2	46	94	Do. 1870.
	Nandyál ..	18	Tammarazpalli ..	Do. ..	4	46	133	Do. 1871.
		19	Kakanur	Do. ..	25	96	283	Commenced in 1871. To these may be added the topeat Nandyál and Wonkarum.
		20	Ayalur		4	48	334	
	Sirvél ..	21	Nallaguntla ..	Do. ..	6	48	51	
	Cumbum ..	22	Govindampalli ..	Do. ..	10	48	59	
		23	Soorapalli ..	Do. ..	4	..	2	Commenced in 1868.
		24	Bestwarapet ..	Do. ..	9	..	20	
	Márkápur ..	25	Márkápur ..	Do. ..	a	..	97	Do. 1868.
		26	Doopand	Do. ..	4	48	144	Do. 1869.
		27	Ramachendrakota ..		2	..	..	Do. 1873.
				Total ..	182	815	7,367	
Bellary.	Bellary ..	1	Thuginaboothalall ..	Casuarina ..	29	..	..	32 trees left.
		2	Paramadavanihalli ..	Do. ..	31	..	..	440 do.
		3	Koodoothini ..	Tamarind, Margosa.	3	..	..	90 do.
		4	Kodagal ..	Tamarind	5	..	..	166 do.
		5	Rupanagudi ..	Tamarind and Margosa.	13	..	..	239 do.
		6	Kuggal	Tamarind, &c. ..	5	..	..	165 do.
	Kúdligi ..	7	Cooppanakai ..	Mango, &c. ..	5	..	..	203 do.
		8	Bundri	Do. ..	3	..	..	124 do.
		9	Ramadurgam ..	Do. ..	1	..	..	45 do.
		10	Hosakeri ..	Do. ..	..	..	..	11 do.
	Hadagalli ..	11	Kotnakal ..	Tamarind and Margosa.	9	41	..	404 do.
		12	Hadagalli ..	Margosa ..	2	..	..	85 do.
	Harpanahalli ..	13	Kuravurti ..	Figs	1	..	..	15 do.
		14	Talighi	Tamarind, Mango.	2	..	..	81 do.
	Alúr ..	15	Lingathahalli ..	Do. ..	16	..	..	487 do.

Register of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Area.	Cost		Remarks.
						During Year.	To end of Year.	
					ACS.	RS.	RS.	
Bellary—(*Continued*).	Alúr—(*Cont.*) ..	16	Alúr	Tamarind, Ippa ..	20	..	..	721 trees left.
		17	Aspary	Do. ..	8	..	..	307 do.
		18	Kokkarachadu ..	Tamarind ..	1	..	..	116 do.
		19	Narainiki ..	Do. ..	5	..	..	172 do.
		20	Sobavayi	Do. ..	12	..	..	23 do.
		21	Kurukundi ..	Do. ..	10	..	..	18 do.
		22	Toranacallu ..	Do. ..	2	..	..	14 do.
		23	Chippigiri ..	Do. ..	19	..	..	14 do.
		24	Banigara ..	Do. ..	7	..	..	2 do.
		25	Hanigara ..	Do. ..	1	..	..	11 do.
	Adóni ..	26	Kallabhari ..	Casuarina, &c. ..	8	..	..	1,601 do.
		27	Yemmiganur ..	Mango ..	5	40	..	220 do.
		28	Raidrug	Various kinds ..	3	..	..	70 do.
	Râyadrug ..	29	Somalapuram ..	Tamarind, Margosa.	4	..	..	154 do.
		30	Malapuram ..	Tamarind ..	5	..	..	188 do.
		31	Udagalam ..	Tamarind, Margosa	5	..	..	185 do.
				Total ..	240	81	..	
Anantapur.	Anantapur ..	1	Casuarina Tope ..	Casuarina ..	42	96	96	Two watchers at Rs. 4 each per mensem.
		2	Mango do. ..	Mango and other trees.	9			
		3	Somanthoddy ..	Palmyra ..	30	..	..	
		4	Koodair	Do. ..	50	..	..	
		5	Maliavantham ..	Do. ..	15	..	..	
		6	Kurugunta ..	Do. ..	8	..	..	
		7	Tope on tank bund ..	Babul, Margosa ..	25	..	..	
		8	Huzur Cutcherry Tope.	Mango, Tamarind, Neem, Ippi, &c.	2	48	48	One watcher at Rs. 4 per mensem.
		9	Dispensary Compound Tope.	Do. do. Neredu.	2			
	Gooty ..	10	Gundacul	Tamarind, Margosa.	21	..	..	
		11	Jakalchervoo ..	Palmyra ..	4	..	..	
		12	Thunniala ..	Babul, &c. ..	40	..	..	
		13	Karoor	Do. ..	20	..	..	
		14	Pathacottuchervoo ..	Do. ..	40	..	..	
		15	Gundacul ..	Do. ..	50	..	..	
		16	Tadpatri Tope ..	Neem ..	1	48	48	One watcher at Rs. 4 per mensem.
		17	Do. ..	Casuarina ..	11	..	..	
		18	Hussainpuram ..	Tuma	34	..	..	
		19	Muchukota ..	Do.	80	..	..	
		20	Yellanoor ..	Do.	80	..	..	
		21	Senegalgoodur ..	Do.	51	..	..	
		22	Poottoor	Do.	50	..	..	
		23	Thadithota ..	Do.	80	..	..	
		24	Amalladinna ..	Do.	40	..	..	
		25	Chippaloor ..	Do.	40	..	..	
	Tadpatri ..	26	Rayalchervoo ..	Do.	40	..	..	
		27	Nittoor	Do.	80	..	..	
		28	Bogasamudram ..	Do.	50	..	..	
		29	Yadiki	Do.	80	..	..	
		30	Jootoor	Do.	80	..	..	
		31	Peddapapoor ..	Do.	40	..	..	
		32	Nagaroor	Do.	80	..	..	
		33	Thavinapalapadu ..	Do.	40	..	..	
		34	Tadpatri	Palmyra ..	20	..	..	
		35	Chinna Aloor ..	Do. ..	15	..	..	
		36	Yellaloor	Do. ..	15	..	..	
		37	Dharmavaram ..	Tuma	63			
		38	Pothukunta ..	Do.	62			
		39	Gollapalli ..	Do.	11			
		40	Aparacherla ..	Do.	40			
		41	Dadaloor	Do.	80			
		42	Chennacottapalli ..	Do.	80			
		43	Thimajipalli ..	Do.	40			
		44	Kamyonpalli ..	Do.	80			
	Dharmavaram ..	45	Sanapa	Do.	40	1,200	1,200	Twenty-five watchers at 4 Rs. each per mensem.
		46	Ganginapalli ..	Do.	80			
		47	Thopudurty ..	Do.	80			
		48	Thogarukunta ..	Do.	80			
		49	Thoomacherla ..	Do.	30			
		50	Thippapalli ..	Do.	80			
		51	Noothunadagu ..	Do.	40			
		52	Rollagiri	Do.	50			
		53	Nasanakota ..	Do.	40			
		54	Golla	Do.	72			
		55	Peroora	Do.				

Register of Topes—(*Continued*).

District.	Taluk.	No.	Name of Tope.	Chief Trees.	Area.	Cost		Remarks.
						During Year.	To end of Year.	
					ACS.	RS.	RS.	
Anantapur—(*Continued*).	Dharmavaram—(*Cont.*)	56	Cumbadore ..	Tuma	80	1,200	1,200	Twenty-five watchers at 4 Rs. each per mensem.
		57	Mikanoor	Do.	40			
		58	Palavaye	Do.	40			
		59	Kalliandrug ..	Do.	80			
		60	Chintherlapalli ..	Palmyra and Babul.	51			
		61	Lutchmipalli ..	Do. ..	50			
		62	Nagavalli ..	Do. ..	50	..	..	
		63	Moolakaladu ..	Do. ..	40	..	..	
		64	Pothulanagapalli ..	Palmyra ..	20	..	..	
		65	Yemmuladodi ..	Do. ..	16	..	..	
	Hindupur ..	66	Kodihalli	Babul	6	..	..	
		67	Hindupur ..	Mango, &c. ..	3	90	90	Three watchers at Rs. 2-8-0 each per mensem.
		68	Kodikonda ..	Ippi, Mango ..	4			
		69	Somaghatta ..	Ippi, Neradi, Neem.	6	..	..	
		70	Palasamudram ..	Tamarind and Tuma.	8	..	..	
		71	Pooliar	Tamarind, Ippi, Mango.	9	..	..	
		72	Vadigapalli ..	Neem, Tamarind, Neradi.	6	..	..	
		73	Kodihalli ..	Yapa, Mango, Tamarind, Wood-apple, &c.	6	..	..	
		74	Kagull	Tamarind, Ippi, Banyan, Yapa.	12	..	..	
		75	Kondur	Mango, Tuma, Tamarind.	6	..	..	
		76	Karikera	Neem, Mango, Tamarind, &c.	5	..	..	
		77	Bavinahalli ..	Tamarind, Ippa, Neradi, &c.	6	..	..	
		78	Sasanakota ..	Tamarind, Yapa ..	4	..	..	
		79	Hindupuram ..	Tamarind, Mango.	12	..	..	
		80	Parighi	Do. do.	8	..	..	
		81	Paideti	Palmyra ..	20	..	..	
		82	Yerragunta ..	Neradi, Neem ..	6	..	..	
		83	Mangala Madaka ..	Palmyra ..	20	..	..	
		84	Roddum	Do. ..	20	..	..	
		85	Kogira	Babul	14	..	..	
		86	Mulkalchervoo ..	Do.	9	..	..	
		87	Chollawari ..	Do.	10	..	..	
	Penukonda ..	88	Cherukuru ..	Do.	6	..	..	
		89	Thalamerla ..	Do.	109	..	..	
		90	Kuppalabunda ..	Do.	50	..	..	
		91	Makkajipalli ..	Do.	10	..	..	
		92	Guttur	Do.	50	..	..	
		93	Pedapalli	Do.	5	..	..	
		94	Reddipalium ..	Ippa, Mango, Neradi, Neem, &c.	5	..	..	
		95	Kotta Tope ..	Do. ..	11	..	..	
	Madakasíra ..	96	Tirumaladeverpalli ..	Do. ..	4	..	..	
		97	Anantapuram ..	Ippi, Mango, Tamarind, &c.	4	36	36	One watcher at Rs. 3 per mensem.
		98	Agrampalli ..	Do. ..	2	..	..	
				Total ..	3,406	1,518	1,518	
				Grand Total ..	13,114	9,939	93,998	

FORM No. 7.

Forest Department, Northern Circle, Madras.

Trees felled by Government Agency during the year 1883-84 (Selection Fellings).

Forest Division.	Range Forest or Working Circle.	Description of Trees.	Number of Trees					Remarks.
			On hand at commencement of the year.	Felled during the year.	Total.	Disposed of during the year.		Balance at end of the year.	
						How disposed of.	Number.	Total.	
Nellore.	Tamminapatnam.	Casuarina ..	..	440	440	Converted into Telegraph poles.	440	440	..

FORM NO 8.

Forest Department, Northern Circle, Madras.

Statement of Timber and other Produce cut and collected by Government Agency during the Year 1883-84.

Forest Division.	Forest Range, Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of Year.		Collected during Year.		Total.		Disposed of during Year.			Balance at end of Year.	
			Number.	C. ft.	Number.	C. ft.	Number.	C. ft.	How disposed of.	Number.	C. ft.	Number.	C. ft.
Ganjam.	Goomsur	Dry Sál Logs	..	..	5,719	51,105	5,719	51,105	Taken to Russellkonda Depôt.	5,719	51,105	..	..
		Sál Poles	..	..	25	..	25	..	Do. ..	25	..	..	..
		Total, Timber ..	..	..	5,744	51,105	5,744	51,105	....	5,744	51,105	..	..
Godávari.	Bhadráchalam.	Firewood	..	..	1,500 c. yds.	..	1,500 c. yds.	..	Sold to Public Works Department.	1,138 c. yds.	..	362 c. yds.	..
		Total, Fuel ..	..	..	1,500 c. yds.	..	1,500 c. yds.	..	....	1,138 c. yds.	..	362 c. yds.	..
		Country Iron ..	..	..	80 lb.	..	80 lb.	..	Sold to Public Works Department.	80 lb.	..	..	..
		Total, Minor Produce ..	..	..	80 lb.	..	80 lb.	..	....	80 lb.	..	..	..
Nellore.	South Plantations.	Casuarina Poles ..	..	..	440	..	440	..	Sold to Telegraph Department.	440	..	..	..
		Pegs and Stakes ..	..	..	25,218 pcs.	..	25,218 pcs.	..	Sold to Salt Department.	25,218 pcs.	..	..	..
		Total, Timber ..	..	..	440 25,218 pcs.	..	440 25,218 pcs.	..	....	440 25,218 pcs.	..	..	..
	North Plantations.	Casuarina Billets, Roots, &c.	30 tons.	..	464 tons.	..	494 tons.	..	Taken to Madras Depôt.	428 tons.	..	55 tons.	..
									Do. to Nellore do. ..	11 tons.	..		
		Do. do. ..	..	..	4	..	4	..	Do. to Ongole do. ..	3	..	1	..
	Sríharikót	Junglewood, green ..	3,338 pcs.	..	934,512 pcs.	..	937,850 pcs.	..	Do. to Madras do. ..	567,850 pcs.	..	370,000 pcs.	..
		Do. do. ..	65,949 bdls.	..	200,064 bdls.	..	266,013 bdls.	..	Do. to do. do. ..	248,304 bdls.	..	17,709 bdls.	..
		Do. Fuel, dry ..	28,680 pcs.	..	26,175 pcs.	..	54,855 pcs.	..	Do. to do. do. ..	47,855 pcs.	..	7,000 pcs.	..
		Do. do. ..	..	..	6 tons.	..	6 tons.	..	Sold locally	6 tons.	..	..	..
		Total, Fuel ..	30 tons. 32,018 pcs. 65,949 bdls.	..	474 tons. 960,687 pcs 200,064 bdls.	..	504 tons. 992,705 pcs. 266,013 bdls.	..	....	448 tons. 615,705 pcs. 248,304 bdls.	..	56 tons. 377,000 pcs. 17,709 bdls.	..

Statement of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Forest Division.	Forest Range, Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of Year.		Collected during Year.		Total.		Disposed of during Year.			Balance at end of Year.	
			Number.	C. ft.	Number.	C. ft.	Number.	C. ft.	How disposed of.	Number.	C. ft.	Number.	C. ft.
Nellore—(*Continued*).	Sríharikót—(*cont.*)	Nux Vomica seed ..	262 mds.	..	961 mds.	..	1,223 mds.	..	Taken to Madras Depôt..	1,223 mds.	..	..	..
		Chay Root	610 ,,	..	311 ,,	..	921 ,,	..	Do. do. do. ..	921 ,,	..	..	..
		Surati Chekka ..	57 ,,	..	8 ,,	..	65 ,,	..	Do. do. do. ..	65 ,,	..	..	..
		Honey	23 ,,	..	6 ,,	..	29 ,,	..	Do. do. do. ..	29 ,,	..	..	..
		Wax	3 ,,	..	2 ,,	..	5 ,,	..	Do. do. do. ..	5 ,,	..	..	..
		Orchella	11 ,,	..	5 ,,	..	16 ,,	..	Do. do. do. ..	16 ,,	..	..	..
		Soapnuts	..	..	1,385 ,,	..	1,385 ,,	..	Do. do. do. ..	1,385 ,,	..	..	..
		Tamarind	..	..	1,210 ,,	..	1,210 ,,	..	Do. do. do. ..	610 ,,	..	..	..
									Sold locally	600 ,,			
		Cashew-nuts	..	..	181 ,,	..	181 ,,	..	Taken to Madras Depôt..	181 ,,	..	..	..
		Rattans	19 bdls.	..	233 bdls.	..	252 bdls.	..	Do. do. do. ..	198 bdls.	..	..	..
									Sold locally	54 ,,			
		Total, Minor Produce	966 mds. 19 bdls.	..	4,069 mds. 233 bdls.	..	5,035 mds. 252 bdls.	..	....	5,035 mds. 252 bdls.	..	..	..
Cuddapah.	Cuddapah Range.	Casuarina Poles ..	..	..	38	..	38	..	Taken to Cuddapah Depôt.	38	..	..	..
		Red Sanders ..	..	..	2,095 tons.	..	2,095 tons.	..	Do. to Sale Depôts ..	2,095 tons.	..	..	..
	Kódur Range.	Total Timber and Wood.	..	..	38 2,095 tons.	..	38 2,095 tons.	..	....	38 2,095 tons.	..	..	..
		Honey	..	..	25 meas.	..	25 meas.	..	Taken to Sale Depôt ..	25 meas.	..	..	..
		Wax	..	..	6 viss.	..	6 viss.	..	Do. do. do. ..	6 viss.	..	..	..
		Total, Minor Produce ..	..	..	25 meas. 6 viss.	..	25 meas. 6 viss.	..	....	25 meas. 6 viss.	..	..	..
Anantapur.	Penukonda ..	Teakwood pieces ..	..	..	72	10	72	10	Taken to Anantapur Depôt	72	10	..	..
		Total, Timber ..	..	..	72	10	72	10	....	72	10	..	..
		Firewood	..	..	200 mds.	..	200 mds.	..	Taken to Anantapur Depôt.	200 mds.	..	..	..
		Total, Fuel ..	..	..	200 mds.	..	200 mds.	..	....	200 mds.	..	..	..
		Gallnuts	..	..	48 mds.	..	48 mds.	..	Sold in Forest ..	48 mds.	..	..	..
		Honey	..	..	342 seers.	..	342 seers.	..	Do.	342 seers.	..	..	..
		Wax	..	..	45 ,,	..	45 ,,	..	Do.	45 ,,	..	..	..
		Total, Minor Produce ..	..	..	48 mds. 387 seers.	..	48 mds. 387 seers.	..	....	48 mds. 387 seers.	..	..	..

Statement of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Forest Division.	Forest Range, Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of Year.		Collected during Year.		Total.		Disposed of during Year.			Balance at end of Year.	
			Number.	C. ft.	Number.	C. ft.	Number.	C. ft.	How disposed of.	Number.	C. ft.	Number.	C. ft.
Nilgiris.	Mudumalai ..	Teak dry logs ..	359	8,914	..	..	359	8,914	Sent to Ootacamund Depôt.	252	6,084	25	548
									Sold in the Forest Depôt.	82	2,282		
		Teak refuse ..	1,000	13,348	..	..	1,000	13,348	Sold	1,000	13,348	..	..
		Do. do. ..	745	7,401	..	..	745	7,401	Sold	745	7,401	..	..
	Masnacoil.	Vengai	..	500	..	..	..	500	....	..	..	..	500
		Blackwood	..	200	..	..	..	200	....	..	..	..	200
		Total, Timber ..	2,104	30,363	..	..	2,104	30,363	....	2,079	29,115	25	1,248
	Aramby ..	Firewood	99 tons.	..	468 tons.	..	567 tons.	..	Taken to Ootacamund Depot ...	425 tons.	..	42 tons.	..
									Sold at auction ..	100 ,,	..		
	Coonoor Peak ..	Do.	..	..	827	..	827	..	Sold at auction ..	509 ,,	..	169 ,,	..
									Dryage	149	..		
		Total, Fuel ..	99	..	1,295	..	1,394	..	....	1,183	..	211	..
	Sigúr ..	Sandalwood Roots ..	73 mds.	..	800 mds.	..	873 mds.	..	Sold in Forest ..	873 mds.	..	..	..
		Total, Sandalwood ..	73 mds.	..	800 mds.	..	873 mds.	..	....	873 mds.	..	..	..
	Benne ..	Myrabolams	240 mds.	..	960 mds.	..	1,200 mds.	..	Sold in Forest ..	1,200 mds.	..	..	..
		Do.	..	..	50	..	50	..	Do. ..	50	..	..	..
	Sigúr ..	Tamarind	12	..	40	..	52	..	Do. ..	52	..	..	..
		Sheakoy	6	..	5	..	11	..	Do. ..	11	..	..	..
		Total, Minor Produce ..	258	..	1,055	..	1,313	..	....	1,313	..	..	..

Form No. 9.

Forest Department, Northern Circle, Madras.

Receipts and Issues of Timber and other Produce in Sale Depôts during the Year 1883-84.

Division.	Name of Depôt.	Description of Timber and other Produce.	On hand 1st April 1883.		Received during the Year.			Total.		Disposed of during the Year.			Balance on 31st March 1884.	
			No. or Quantity.	Cubic Feet.	Whence received.	No. or Quantity.	Cubic Feet.	No. or Quantity.	Cubic Feet.	How disposed of.	No. or Quantity.	Cubic Feet.	No. or Quantity.	Cubic Feet.
Ganjam.	Russell-konda.	Sál logs	..	..	Forests ..	5,719*	51,105	5,719	51,105	Cut into sleepers	5,338	47,478	367	3,486
										Sold ..	14	141		
		Do. b. g. sleepers ..	..	..	Conversion ..	7,684	26,680	7,684	26,680	Do. ..	4,849	16,837	2,835	9,843
		Do. slabs	..	..	Do. ..	4,556	..	5,556	..	Do. ..	2,990	..	1,007	..
										Used by dept...	559			
		Do. ends	..	..	Do. ..	750	..	750	..	Sold ..	750	..	..	..
		Do. side pieces ..	..	..	Do. ..	1,400	..	1,400	..	Do. ..	1,400	..	..	..
		Do. poles	..	..	Forests ..	25	..	25	..	....	..	..	25	..
		Total ..	..	..	....	20,134	77,785	20,134	77,785	....	15,900	64,456	4,234	13,329
Nellore.	Nellore ..	Casuarina firewood ..	..	..	Taminapatam.	11 tons.	..	11 tons.	..	Sold ..	11 tons.	..	..	..
	Ongole ..	Do. do. ..	..	..	Kottapatam ..	3 ,,	..	3 ,,	..	Do. ..	3	..	..	..
		Do. do. ..	277 tons.	..	S. plantations.	428 ,,	..	711 ,,	..	Do. ..	634	..	77 tons.	..
					Found excess.	6 ,,								
		Green junglewood ..	1,548,670 pcs.	..	Sríharikót ..	567,850 pcs.	..	2,116,520 pcs.	..	Do. ..	1,993,300 pcs.	..	111,950 pcs.	..
										Wastage ..	11,270 ,,	..		
		Do. do. ..	25,522 bdls.	..	Do. ..	66,286 bdls.	..	91,808 bdls.	..	Sold ..	90,275 bdls.	..	1,533 bdls.	..
		Dry do. ..	150,345 pcs.	..	Do. ..	47,855 pcs.	..	198,200 pis.	..	Do. ..	193,835 pcs.	..	4,365 pcs.	..
		Total, Fuel ..	277 tons.	..	....	448 tons.	..	725 tons.	..	....	648 tons.	..	77 tons.	..
			1,699,015 pcs.			615,705 pcs.		2,314,720 pcs.			2,198,405 pcs.		116,315 pcs.	
			25,522 bdls.			66,286 bdls.		91,808 bdls.			90,275 bdls.		1,533 bdls.	
	Madras ..	Nux Vomica	..	..	Sríharikót ..	1,223 mds.	..	1,223 mds.	..	Sold ..	1,223 mds.	..	..	..
		Chay-root	..	..	Do. ..	921 ,,	..	921 ,,	..	Do. ..	921 ,,	..	..	..
		Surati chekka ..	..	..	Do. ..	65 ,,	..	65 ,,	..	Do. ..	65 ,,	..	..	..
		Honey	..	..	Do. ..	29 ,,	..	29 ,,	..	Do. ..	29 ,,	..	..	..
		Wax	..	..	Do. ..	5 ,,	..	5 ,,	..	Do. ..	5 ,,	..	..	..
		Orchella	..	..	Do. ..	16 ,,	..	16 ,,	..	Do. ..	16 ,,	..	..	..
		Soapnuts	..	..	Do. ..	1,385 ,,	..	1,385 ,,	..	Do. ..	1,385 ,,	..	..	..
		Tamarind	..	..	Do. ..	610 ,,	..	610 ,,	..	Do. ..	610 ,,	..	..	..
		Cashewnuts ..	..	..	Taminapatam.	181 ,,	..	181 ,,	..	Do. ..	181 ,,	..	..	..
		Rattans	..	..	Sríharikót ..	198 bdls.	..	198 bdls.	..	Do. ..	137 bdls.	..	61 bdls.	..
		Total, Minor Produce.	..	..	....	4,435 mds.	..	4,435 mds.	..	....	4,435 mds.	..	61 bdls.	..
						198 bdls.		198 bdls.			137 bdls.			

* A larger number was really brought out and cut into sleepers, but there is no sufficient record.

Receipts and Issues of Timber and other Produce in Sale Depôts during the Year 1883-84—(*Continued*).

Division.	Name of Depôt.	Description of Timber and other Produce.	On hand 1st April 1883. No. or Quantity.	On hand 1st April 1883. Cubic Feet.	Received during the Year. Whence received.	Received during the Year. No. or Quantity.	Received during the Year. Cubic Feet.	Total. No. or Quantity.	Total. Cubic Feet.	Disposed of during the Year. How disposed of.	Disposed of during the Year. No. or Quantity.	Disposed of during the Year. Cubic Feet.	Balance on 31st March 1884. No. or Quantity.	Balance on 31st March 1884. Cubic Feet.
Cuddapah	Cuddapah ..	Casuarina poles ..	..	..	Kamalápuram ..	38	..	38	..	Sold	38	..	..	..
	Orampad ..	Redwood	8 tons.	..	Forests ..	40 tons.	..	48 tons.	..	Sold	48 tons.	..	..	..
	Reddipalle ..	Do.	..	..	Do.	130	..	130	..	Do.	130	..	..	..
	Nandalúr ..	Do.	..	..	Do.	372	..	372	..	Do.	372	..	..	..
		Do.	..	..	Do.	1,553	..	1,553	..	Do.	1,553	..	..	..
	Kódúr ..	Total, Redwood ..	8 tons.	..	.....	2,095 tons.	..	2,103 tons.	..	.....	2,103 tons.	..	..	..
		Honey	..	..	Veligondas ..	25 mes.	..	25 mes.	..	Sold	25 mes.	..	..	..
		Wax	..	..	Pullampet ..	6 viss.	..	6 viss.	..	....	..	..	6 viss.	..
Kurnool ..	Atmakúr ..	Myrabolams ..	573 mds.	..	Remeasurement ..	45 mds.	..	618 mds.	..	.....	..	..	618 mds.	..
Anan apur ..	Anantapur ..	Teakwood pieces ..	..	..	Penukónda ..	72	10	72	10	Sold	72	10	..	..
		Total, Timber ..	..	..	.....	72	10	72	10	.....	72	10	..	..
		Firewood	..	..	....	200 mds.	..	200 mds.	..	....	200 mds.	..	..	..
		Total, Fuel ..	..	..	.....	200 mds.	..	200 mds.	..	.....	200 mds.	..	..	..
Nilgiris ..	Ootacamund ..	Teak logs	..	..	Mudumalai ..	252	C. ft. 6,084	252	6,084	Sold	110	2,839	142	3,245
		Total, Timber ..	..	..	.....	252	6,084	252	6,084	.....	110	2,839	142	3,245
		Firewood	133 tons.	..	Aramby ..	425 tons.	..	558 tons.	..	Sold .. .. / Dryage ..	498 tons. / 7	.. / ..	53 tons.	..
		Total, Fuel ..	133 tons.	..	.....	425 tons.	..	558 tons.	..	.....	505 tons.	..	53 tons.	..

Form No. 10.

Forest Department, Northern Circle, Madras.

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84.

Division.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cub. feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces removed.	Number Sold but remaining unremoved.
			Sold from Depôt.				Rs.	Rs.		
Ganjam ..	Russellkonda ..	I (*a*)	Sál logs	14	141	10 annas.	88	88	14	..
			Sál b. g. sleepers	4,849	..	Auction.	12,940	12,940	4,849	..
			Sál slabs	2,990	..	Do.	349	349	2,990	..
			Sál ends	750	..	..	7	7	750	..
			Sál side-pieces	1,400	..	..	27	27	1,400	..
			Sál chips	..	..	..	10	10	..	..
			Total, Timber ..	10,003	..	..	13,421	13,421	10,003	..
Nellore ..	Nellore, Ongole and Madras.	I (*b*)	Casuarina firewood .. .. Tons	648	..	Rs. 6-4—11-4	6,321	6,321	..	..
			Green jungle firewood .. .. Pieces	1,993,300	..	,, 0-4—1-9 per 100.	13,319	13,319	1,993,300	..
	Madras		Do. do. do. .. .. Bundles	90,275	..	,, 0-4—0-7	27,352	27,352	90,275	..
			Dry do. do. .. .. Pieces	193,835	..	,, 0-9—3-6 per 100.	3,926	3,926	193,835	..
			Chips	..	..	..	5	5	..	..
			Total, Fuel ..	Pieces 2,187,135 / Bdls. 90,275	..	..	44,602	44,602	Pieces 2,187,135 / Bdls. 90,275	..
	Madras	I (*c*)	Nux Vomica seed .. .. Maunds	1,223	..	Rs. 9 Candy.	551	551	Mds. 1,223	..
			Chay root .. .. .. ,,	921	..	,, 83-6	3,839	1,417	340	581
			Surati chekka .. .. .. ,,	65	..	,, 90-0	295	295	65	..
			Honey .. .. .. ,,	29	..	,, 40-0	58	..	..	29
			Wax .. .. .. ,,	5	..	,, 85-0	22	22	5	..
			Orchella .. .. .. ,,	16	..	,, 25-4	21	21	16	..
			Soap-nuts .. .. .. ,,	[illegible]	..	,, 7-2	494	302	847	538
			Tamarind .. .. .. ,,	610	..	,, 15-0	457	457	410	200
			Cashew-nuts .. .. .. ,,	181	..	,, 7-0	63	63	181	..
			Rattans .. .. .. Bundles	137	..	,, 6-0	822	822	137	..
			Total, Minor Produce ..	Mds. 4,435 / Bdls. 137	..	..	6,622	3,950	Mds. 3,087 / Bdls. 137	Mds. 1,348

Sales of Timber and otner Produce cut and collected oy Government Agency during the Year 1883-84—(*Continued*).

Division.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cub. feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces removed.	Number Sold but remaining unremoved.
							Rs.	Rs.		
Cuddapah ..	Cuddapah, Kódúr, and others.	I (a)	Casuarina poles	38	..	Rs. 1-8—2-4	59	59	38	..
			Red Sanders wood .. .. Tons	113*	..	,, 21	2,373	2,373	97	16
				932		,, 15	13,984	13,984	932	..
			Red Sanders roots .. .. ,,	1,074	..	,, 13	13,959	..	..	1,074
			Total, Wood ..	No. 38 Tons 2,119	..	..	30,375	16,416	38 1,067	1,090
	Kódúr	I (e)	Honey .. .. Measures	25	..	..	27	27	25	..
			Total, Minor Produce ..	25	..	..	27	27	25	..
Anantapur ..	Anantapur ..	I (a)	Teak pieces	72	10	..	2	..	72	..
			Total, Timber ..	72	10	..	2	..	72	..
		I (b)	Firewood .. .. .. Maunds	200	..	Rs. 1-8 per 100.	3	..	200	..
			Total, Fuel ..	200	..	..	3	..	200	..
Nilgiris ..	Ootacamund ..	I (a)	Teak logs	..	2,839	Rs. 1-8 to 2-0	4,964	4,964	C. ft. 2,839	..
			Total, Timber ..	..	2,839	..	4,964	4,964	C. ft. 2,839	..
		I (b)	Firewood .. .. .. Tons	498	..	..	3,348	3,348	Tons 498	..
			Total, Fuel ..	498	..	..	3,348	3,348	Tons 498	..
			Sold Locally.							
Godávari ..	Bhadráchalam ..	I (b)	Firewood .. .. Cub. yds.	1,138	..	9 annas.	640	..	..	..
			Total, Fuel ..	1,138	..	..	640	..	..	..
		I (e)	Country Iron .. .. .. Lb.	80	..	..	7	..	..	..
			Total, Minor Produce ..	80	..	..	7	..	..	..
Nellore ..	S. Plantations ..	I (a)	Casuarina poles	440	..	Rs. 1-12	770	..	440	..
			Pegs and stakes	25,218	..	,, 4-0 per 1,000	100	..	25,218	..
			Total, Timber ..	25,658	..	..	870	..	25,658	..

* The 16 tons remained to be delivered at the close of the year, payment having been received in advance.

Sales of Timber and other Produce cut and collected by Government Agency during the Year 1883-84—(*Continued*).

Division.	Depôt or Locality.	Budget Sub-head.	Description of Timber and other Produce.	Number or Quantity.	Cub. feet.	Rate.	Total Amount of Sale.	Amount actually paid.	Number of Logs and Pieces removed.	Number Sold but remaining unremoved.
							Rs.	Rs.		
			Sold Locally—(Continued).							
Nellore—(*Continued*).	Sríharikót ..	I (b)	Firewood, dry .. .. Tons	6	..	Rs. 8-12—11-0	61	61	Tons 6	..
			Total, Fuel ..	6	..	..	61	61	6	..
		I (e)	Tamarind .. .. .. Maunds	600	..	Rs. 12-2-6 candy.	364	214	Mds. 600	..
			Rattans .. .. .. Bundles	54	..	About Rs. 4.	197	197	Bdls. 54	..
			Total, Minor Produce ..	..	..	..	561	411	..	..
Anantapur ..	Penukonda	I (e)	Myrabolams .. .. .. Maunds	48	..	..	25	25	Mds. 48	..
			Honey .. .. .. Seers	342	..	..	9	9	Seers 342	..
			Wax .. .. .. ,,	45	..	..	13	13	,, 45	..
			Total, Minor Produce ..	Mds. 48 Seers. 387	..	..	47	47	Mds. 48 Seers 387	..
Nilgiris ..	Mudumalai ..	I (a)	Teak, dry logs	..	2,282	Rs. 0-14	1,996	1,996	C. ft. 2,282	..
	Do. ..		Teak, refuse	..	13,348	,, 0-6-6	5,422	5,422	,, 13,348	..
	Sígúr		Do. do.	..	7,401	,, 0-5-6	2,544	2,544	,, 7,401	..
			Total, Timber ..	..	23,031	..	9,962	9,962	C. ft. 23,031	..
	Aramby	I (b)	Firewood, Eucalyptus .. .. Tons	1,188	..	..	3,326	347	Tons 1,188	..
	Coonoor Peak ..		Do. do. .. .. ,,	866	..	..	1,710	1,710	,, 866	..
			Total, Fuel ..	2,054	..	..	5,036	2,057	Tons 2,054	..
	Masnacoil	I (d)	Sandalwood roots .. .. Maunds	873	..	Rs. 4-8	4,013	4,013	Mds. 873	..
			Total, Sandalwood ..	873	..	..	4,013	4,013	Mds. 873	..
	Sígúr, &c.	I (e)	Myrabolams .. .. .. Maunds	1,250	..	Rs. 0-8	625	625	Mds. 1,250	..
	Do.		Tamarinds .. .. .. ,,	52	..	..	21	21	,, 52	..
			Sheakai .. .. .. ,,	11	..	..	4	4	,, 11	..
	Ootacamund ..		Eucalyptus seed .. .. Lb.	1	..	..	8	8	..	..
	Do. ..		Acacia decurrens seed	..	..	..	55	55	..	..
			Total, Minor Produce ..	Mds. 1,313 Lb. 1	..	..	713	713	Mds. 1,313	..

FORM No. 11.

Forest Department, Northern Circle, Madras.

STATEMENT showing the Quantity and Value of Timber and other Produce removed under the License System during the Year 1883-84.

Districts.	Timber.		Fuel.		Minor Produce.		Bamboos.		Grazing and Fodder Grass.	Total Value.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.		
		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.
Ganjam ..	Cubic feet .. 25,480	3,249	Firewood .. 2,123 tons	7,695	Unspecified	31	Cart-loads .. 158	47	..	4,013
		633	Charcoal .. 185 cavady-loads.					686		
		193	Firewood .. 753 tons				Tons .. 669	468	3	1,690
Vizagapatam ..	Cart-loads .. 217	354	Charcoal .. 137 ,,		....	39	....			
			.. 214 ,,		Maunds ..	43	Number .. 269,812			
Godávari ..	Pieces .. 23,344	23,345	Firewood .. 196 cart-loads		Number ..	470	Cart-loads .. 5,687	7,695	921	37,062
			.. 32 c. yards		Cavady-loads ..	57	Head-loads .. 7,154			
			.. 25 cart-loads		Komthams ..	652	Bullock-loads .. 943			
			Charcoal .. 1,183 cavady do.		Putti ..	53				
			.. ..		....			1,520	26,262	50,965
Kistna ..	....	4,928	.. ..		Palmyras, Tangedu bark, &c.		Cart-loads .. 33	17	..	11,369
Nellore ..	Trees 77 and c. ft. 1,760	1,080	3,000			7,581				
						1,351				
Cuddapah ..	Tons .. 2,999	12,810	Firewood .. 17,761 tons		Tons .. 749	16,849	Do. .. 3,316	3,543	487	67,317
			Charcoal .. 252 ,,							
Kurnool ..	Cubic feet .. 202,605	36,223	Firewood .. 3,383 ,,		Maunds .. 48,800	1,838	Do. .. 12,088	11,937	659	66,427
			Charcoal .. 764 ,,							
Bellary ..	Not given	198	Firewood .. 3,550 ,,		Number .. 41,730	5,940		417	22	9,738
			Charcoal .. 50 ,,							
Anantapur ..	Cart-loads .. 133	267	Firewood .. 3,236 cart-loads		Tons .. 880	7,701	Cart-loads .. 11	7	26	9,275
			Charcoal .. 60 ,,		Cart-loads .. 2,185					
	Timber.	7,945	.. ..				Do. .. 238	300	..	18,608
Nilgiris ..	Cart-loads .. 1,502	250	Firewood .. 38,775 head-loads		Head-loads .. 1,511	101	Head-loads .. 769	61	..	..
	Posts .. 353	48	Charcoal .. 18,027 bullock-loads.		Bullock-loads .. 15	4	Bullock-loads .. 6	1	..	..
	Saplings .. 280	..	Other items .. 29 head-loads		....	..	Other items	20	..	..
	Other items	..	.. ..		....	..	....	..	..	..
	....				....		....			
	Total ..	90,703	Total ..		Total ..	41,925	Total ..	26,033	28,380	2,66,464

FORM No. 12.

Forest Department, Northern Circle, Madras.

Abstract showing the Value of Timber and other Produce at Sale Depôts for the year 1883-84.

District.	Description of Timber and other Produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.	
				Rs.			Rs.	Rs.	Rs.	
Ganjam ..	Sál logs ..	..	*2,344	*723	367	3,486	2,200	7,857	..	* These figures do not agree with those of Form 9, but are here given as they are those of last year's closing balance.
	Sleepers ..				2,835	9,843	6,380			
	Slabs	..	..	..	1,007	..	80	80	..	
	Total ..	..	2,344	723	4,209	13,329	8,660	7,937	..	
Nellore ..	Green wood ..	..	..	1,914	111,950 Pieces.		728	24	..	Figures of last year's return have been adopted for those of the "commencement of year."
					1,533 Bundles.		431			
	Dry wood ..				4,365 Pieces.		106			
					77 Tons.		673			
	Jungle Produce.	..	..	756	..	61	..	..	756	
		..	..	..	..	..	366	366	..	
	Total ..	..	..	2,670	..	..	2,304	..	390	
Cuddapah.	Redwood roots ..	8	Tons.	102	..	6	Viss.	8	..	102
	Wax	..	..	..	..	..	..	..	8	..
	Total ..	..	..	102	..	..	8	..	94	
Kurnool ..	Minor Produce ..	573	Maunds.	309	618	Maunds.	309	..	..	
Nilgiris ..	Teak	..	..	..	142	3,201	4,801	4,801	..	
	Other kinds ..	..	3,147	405	..	..	..	..	405	
	Sandalwood roots.	73	Maunds.	364	..	..	..	..	364	
	Firewood ..	460	Tons.	210	53	Tons.	166	..	44	
	Total ..	..	..	979	..	..	4,967	3,988	..	
	Grand Total ..	..	..	4,783	..	..	1,6243	11,441	..	

Form No. 13.

Forest Department, Northern Circle, Madras.

Return Showing Live Stock, Buildings, Stores, Tools and Plant during the year 1883-84.

Description.	On hand at commencement of the year.		On hand at close of the year.		Difference in Value.		Remarks.
	No.	Value.	No.	Value.	In favor of the year.	Against the year.	
		Rs.		Rs.	Rs.	Rs.	
Direction.							
Mathematical Instruments ..	..	..	7	78	..	..	
Furniture	41	435	41	435	..	..	
Total ..	41	435	48	513	78	..	
Ganjam.							
Bungalow, Head-quarters ..	1	1,000	1	1,200	..	..	Russellkonda.
Do. Inspection ..	1	200	1	200	..	..	Suradá.
Inspection huts	..	..	5	200	..	..	
Furniture	..	..	..	..	..	..	No. and value not reported.
Total ..	2	1,200	7	1,600	400	..	
Vizagapatam.							
Sheds	1	10	2	45	..	..	
Tools	8	4	5	2	..	..	
Total ..	9	14	7	47	33	..	
Godávari.							
Shed	1	10	1	10	..	..	
Surveying Instruments	..	..	3	27	..	..	
Total ..	1	10	4	37	27	..	
Kistna.							
Mathematical Instruments ..	11	..	11	..	..	..	Value not reported.
Tools	472	..	492	..	..	..	
Total ..	483	..	503	..	..	..	
Nellore.							
Cash Safes	3	195	3	195	..	..	
Scales and Weights (sets) ..	3	119	3	109	..	..	
Furniture	41	252	42	236	..	..	
Boxes	15	48	17	53	..	..	
Tools	464	288	476	301	..	..	
Miscellaneous	14	12	16	13	..	..	
Total ..	540	914	557	907	..	7	
Cuddapah.							
Bungalows, Inspection ..	2	4,275	2	5,000	..	..	Kódúr and Sanipaya.
Ranger's house	1	20	1	120	..	..	Kódúr.
Office house	1	200	1	200	..	..	Do.
Sheds	17	159	17	246	..	..	
Surveying Instruments	..	..	10	102	..	..	
Tools	29	118	29	118	..	..	
Furniture	20	125	45	306	..	..	
Total ..	70	4,897	105	6,092	1,195	..	
Kurnool.							
Bungalows, Head-quarters ..	1	9,700	..	..	..	..	Nandyál.
Do. Inspection	..	..	4	2,700	..	..	Bainuti, Rollapenta, Adutta and Mantikonda.
Furniture	13	50	28	146	..	..	
Tools	..	..	68	55	..	..	
urveying Instruments, &c. ..	2	70	12	187	..	..	
Total ..	16	9,825	112	3,088	..	6,737	

Return Showing Live Stock, Buildings, Stores, Tools and Plant, during the year 1883-84—*(Continued)*.

Description.	On hand at commencement of the year.		On hand at close of the year.		Difference in Value.		Remarks.
	No.	Value.	No.	Value.	In favor of the year.	Against the year.	
		Rs.		Rs.	Rs.	Rs.	
Bellary.							
Furniture	12	155	12	140	..	..	
....	..	..	..	..	..	..	
....	..	..	..	..	..	..	
Total ..	12	155	12	140	..	15	
Anantapur.							
Sheds	15	19	15	19	..	..	
Surveying Instruments	4	52	4	52	..	..	
Total ..	19	71	19	71	..	..	
Nilgiris.							
Sheds	9	135	9	135	..	..	
Surveying Instruments ..	1	9	1	9	..	..	
Furniture	12	175	27	276	..	..	
Tools	92	416	198	416	..	..	
Elephants	2	3,000	2	3,000	..	..	
Total ..	116	3,445	237	3,836	391	..	
Grand Total ..	1,309	20,966	1,611	16,331	..	4,635	

FORM NO. 14.

Forest Department, Northern Circle, Madras.

Detailed Statement showing the Revenue of the Northern Circle for the Official Year 1883-84.

Budget Heads.	Ganjam.	Vizagapatam.	Godávari.	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nilgiris.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Timber and other Produce removed from the Forests by Government Agency—											
(a) Timber	14,659	..	..	124	55	16,415	..	..	..	14,927	46,180
(b) Firewood and charcoal	..	..	..	18	54,558	507	..	..	..	5,405	60,488
(c) Bamboos	..	..	..	70	1	..	..	..	..	..	71
(d) Sandalwood	..	..	..	..	..	..	..	..	..	4,013	4,013
(e) Grass and other minor produce	4	..	..	882	5,999	3,654	..	12	47	712	11,310
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—											
(a) Timber	3,249	..	23,345	4,928	1,080	12,810	36,223	198	267	8,249	90,349
(b) Firewood and charcoal	686	1,180	4,611	10,674	8,921	33,628	5,770	3,161	1,274	9,872	79,777
(c) Bamboos	47	468	7,695	1,520	17	3,543	11,937	417	7	382	26,033
(d) Grazing and fodder grass	..	3	921	26,262	..	487	659	22	26	..	28,380
(e) Other minor produce	31	39	490	7,581	1,351	16,849	1,838	5,940	7,701	105	41,925
III.—Confiscated drift and waif wood	393	..	7,169	227	135	1,245	2,631	..	216	2	12,018
IV.—Revenue from Forests not managed by Government—											
(a) Duty on foreign timber and other forest produce	..	..	..	..	..	..	..	..	..	..	..
(b) Revenue from shared and private forests	..	..	..	..	..	..	..	..	..	..	..
V.—Miscellaneous—											6
(a) Fines and forfeitures	..	..	4	..	2	..	..	..	..	..	703
(b) Refunds	..	..	83	523	..	16	..	..	24	57	12,080
(c) Other sources	15	..	153	186	..	135	11,591	..	..	..	
Total Receipts ..	19,084	1,690	44,471	52,995	72,119	89,289	70,649	9,750	9,562	43,724	413,333

FORM NO. 14.

Forest Department, Northern Circle, Madras.

DETAILED statement of Expenditure under A "Conservancy and Works" in the Northern Circle for the Official Year 1883-84.

Budget Heads.	Ganjam.	Vizagapatam.	Godávari.	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nilgiris.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Timber and other produce removed by Government Agency—											
(a) Timber	9,616	..	..	..	15	15,576	2	..	17	3,503	28,729
(b) Firewood and charcoal	..	..	515	..	13,922	..	..	..	3	2,575	17,015
(c) Bamboos	..	..	..	5	..	..	..	..	..	..	5
(d) Sandalwood	..	..	..	..	..	..	..	..	..	1,386	1,386
(e) Grass and other minor produce	4	..	..	..	2,067	28	1	73	28	509	2,710
II.—Timber and other produce removed by consumers, &c.	..	..	158	..	..	1,550	3,217	9	..	2,320	7,254
III.—Confiscated drift and waif wood	78	..	521	21	..	105	620	16	..	..	1,361
IV.—Revenue from Forest not managed by Government—											
(a) Duty on foreign timber and other forest produce.	..	..	..	..	..	..	..	..	..	..	..
(b) Revenue from shared and private forests	..	..	..	..	..	..	..	..	..	..	..
V.—Rent of leased forests and payments to shareholders, &c.	..	..	..	..	..	..	..	14,167	..	3,500	17,667
VI.—Live Stock, Stores, Tools, and Plant—											
(a) Purchase of cattle	..	..	..	..	..	..	..	..	..	..	..
(b) Feed and keep of cattle	41	..	..	..	..	..	..	..	..	907	948
(c) Stores, tools, and plant	1	..	27	15	13	109	174	..	49	308	696
VII.—Communications and Buildings—											
(a) Roads and bridges	..	..	..	..	..	250	175	..	..	350	775
(b) Buildings	107	..	9	..	104	1,011	517	..	..	148	1,896
(c) Other works	..	..	..	..	..	..	..	..	..	..	..
VIII.—Demarcation, Improvement, and Extension of Forests—											
(a) Demarcation	2	..	..	..	18	516	1,045	13	..	1,953	3,547
(b) Compensation for land and rights	..	..	..	..	..	..	..	..	..	57	57
(c) Surveys and working plans	13	..	..	217	1	4	..	..	..	..	235
(d) Plantations	60	..	..	4,515	13,372	6,282	841	266	631	7,057	33,024
(e) Protection from fire	355	..	1	36	..	2,933	200	1,145	259	707	5,636
(f) Other works	78	..	..	283	107	2,103	22	768	..	..	3,361
IX.—Miscellaneous—											
(a) Refunds	..	..	..	209	1	..	..	275	4	1	490
(b) Law charges	..	..	..	..	..	..	..	..	..	..	..
(c) Other charges	87	..	..	..	..	322	54	24	..	43	530
Total, A "Conservancy and Works" ..	10,442	..	1,231	5,301	29,620	30,789	6,868	16,756	991	25,324	1,27,322

FORM No. 14.

Forest Department, Northern Circle, Madras.

DETAILED statement of Expenditure under A "Conservancy and Works" and B "Establishments" in the Northern Circle for the Official Year 1883-84.

Budget Heads.	Direction.	Ganjam.	Vizagapatam.	Godávari.	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nilgiris.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Salaries—												
(*a*) Conservator	12,100	..	..	..	..	..	..	..	..	..	..	12,100
(*b*) Superior Officers	7,392	720	..	..	6,441	5,625	12,868	13,369	8,638	4,603	8,563	68,219
(*c*) Subordinate Forest and Depôt Establishments.	..	3,268	399	5,013	7,555	9,215	8,773	4,399	908	1,870	4,143	45,543
(*d*) Office Establishments	7,393	468	..	783	788	666	1,880	1,426	395	571	1,694	16,064
(*e*) Deputation and Special Allowances ..	..	..	..	..	..	..	215	..	..	..	..	215
II.—Travelling Allowances—												
(*a*) Conservator	2,655	..	..	..	..	..	..	..	..	..	..	2,655
(*b*) Superior Officers	1,107	240	..	..	1,636	1,010	3,000	3,317	1,648	1,358	1,740	15,056
(*c*) Subordinate Forest and Depôt Establishments.	..	349	..	844	593	525	2,029	546	63	..	441	5,390
(*d*) Office Establishments	648	16	..	224	133	73	208	540	4	120	32	1,998
III.—Office Contingencies—												
(*a*) Stationery	10	..	..	..	9	..	6	..	22	..	..	47
(*b*) Carriage of Tents and Records ..	93	..	..	194	109	..	44	104	43	31	..	618
(*c*) Rents, Rates, and Taxes	600	..	..	60	..	..	180	48	53	..	360	1,301
(*d*) Pay of Police Guards	..	..	..	..	..	..	..	..	..	..	..	..
(*e*) Official Postage	518	50	..	85	146	179	458	146	92	53	104	1,831
(*f*) Sundries	2,555	28	..	137	210	215	231	101	37	66	513	4,093
Total of B "Establishments" ..	35,071	5,139	399	7,340	17,620	17,508	29,892	23,996	11,903	8,672	17,590	1,75,130
Total of A "Conservancy and Works" ..	..	10,442	..	1,231	5,301	29,620	30,789	6,868	16,756	991	25,324	1,27,322
Grant Total of all Expenditure ..	35,071	15,581	399	8,571	22,921	47,128	60,681	30,864	28,659	9,663	42,914	3,02,452

APPENDIX I.

CONVENTION.

Article 1. The Raja of Sandúr for himself, his heirs and successors hereby grants to the Secretary of State for India in Council, for the term of twenty-five years, all the forests in his State of Sandúr, as shown on the accompanying plans (marked A, B, &c.,) and containing about 40,000 acres, more or less, in consideration of the payment by the Secretary of State to him, through the Collector of Bellary, of the sum of Rs. 2,500 paid quarterly and in arrear.

Article 2. The Raja of Sandúr for himself, his heirs and successors agrees to renew the said grant, on the same terms, for a further term of twenty-five years, should the Secretary of State, on the expiry of the said term, desire such renewal, and similarly to renew the grant at the expiry of each successive term of twenty-five years.

Article 3. The plateau of Rámandrug and the village of Ramanamalai, with the forest adjoining it on the south and containing about 485 acres, more or less, are not included in this grant.

Article 4. The Raja of Sandúr for himself, his heirs and successors hereby agrees to consider the penal clauses of the Madras Forest Act No. V of 1882, or any subsisting statutory modification thereof as in force in his territory, in respect of the forests hereby granted, and to enforce them in cases of complaints lodged before his agent against persons committing offences in the said forests during the term of this grant.

Article 5. The Raja of Sandúr hereby binds himself, his heirs and successors not to levy any toll or tax on any of the produce of the said forests hereby granted which may be carried over the road between Rámandrug and Yetinhatti, or over the road between Rámandrug and Hospet.

Article 6. The Secretary of State on his part agrees to pay the stipulated rent regularly and to restore the forests in as good condition as they were in when granted to him.

रामचंद्रविठलरावघोरपडे.

SANDUR,
17th March 1884.

(Signed) J. MACARTNEY,
Agent to the Raja of Sandúr.

(Signed) H. ST. A. GOODRICH,
Ag. Collector of Bellary and
Political Agent for Sandúr.

APPENDIX II.

Preliminary List of the Trees and Shrubs of the Northern Circars recorded on tour in 1883-84.

DICOTYLEDONS.

I.—Dilleniaceæ.

1. Dillenia pentagyna, Roxb. Vernacular—*Rai*, Uriya, Khond.
   Tree. Common in sál and mixed forests.

II.—Anonaceæ.

1. Polyalthia suberosa, Bth. and H. f. Vernacular—*Kuradia*, Uriya.
   Small tree. River banks, especially in Goomsur along the Mahanadi.
2. Polyalthia cerasoides, Bth. and H. f.
   Shrub. Ravines in the hills.
3. Saccopetalum tomentosum, H. f. and T. Vernacular—*Gonda palaso*, Uriya.
   Tree. Sál forests, not uncommon.
4. Miliusa velutina, H. f. and Th.
   Tree. Kurcholy forests: scarce: one or two other species also occur, which are not yet determined.
5. Anona squamosa, L. The Custard Apple.
6. Anona reticulata, L. The Bullock's heart.
   Cultivated. The former is often found run wild on dry isolated hills.

Several species of Menispermaceous climbers occur, but none of any great importance. They belong to the genera *Stephania*, *Cocculus*, *Pachygone*, and *Tinospora* chiefly.

III.—Capparideæ.

1. Capparis zeylanica, L.
   Shrub. Coast scrub forests: common.
2. Capparis olacifolia, H. f. and Th.
   Shrub. Mahendragiri sholas.
3. Capparis horrida, Linn.
   Climber. Coast scrub.

IV.—Bixineæ.

1. Cochlospermum Gossypium, D.C. Vernacular—*Bendia murdoni, popso koniari*, Uriya; *Onkúr*, Saora.
   Tree. Rocky hills: common.
2. Flacourtia Ramontchi, L'Hér. Vernacular—*Potwa, boincho*, Uriya; *Sapka*, Khond; *Mulu anam*, Pálkonda.
   Tree. Sál and mixed forests: common.
3. Flacourtia sepiaria. Roxb.
   Thorny shrub. Coast scrub forests.
4. Xylosma longifolium, Clos.
   Small tree. Mahendragiri and Pálkonda hills: scarce.

V.—Pittosporeæ.

1. Pittosporum tetraspermum, W. and A.
   Small tree. Mahendragiri sholas: above 4,000 feet.

VII.—Guttiferæ.

1. Garcinia Xanthochymus, H. f.
   Tree. Mahendragiri sholas, about 4,000 feet.
2. Calophyllum inophyllum, L.
   Tree. Planted near the coast.

VIII.—Dipterocarpeæ.

1. Shorea robusta, Gaertn. The Sál. Vernacular—*Salwa*, Uriya; *Jargi*, Khond; *Guggilapu*, Pálkonda.
   Large tree. The chief tree of the Goomsur forests, extending southwards to the Pálkonda and Jeypore hills.

IX.—Malvaceæ.

1. Thespesia populnea, Corr.
   Tree. Planted near the coast.
2. Thespesia Lampas, Dalz. and Gibson.
   Common shrub of the undergrowth of sál and hill forests.
3. Kydia calycina, Roxb. Vernacular—*Kopásia*, Uriya; *Wala*, Khond.
   Tree. Common.
4. Bombax malabaricum, D.C. The silk-cotton tree. Vernacular—*Buroh, bouro*, Uriya; *Kamba*, Khond; *Buroh*, Saora; *Wuraga*, Pálkonda.
   Large tree. Not uncommon, especially on the hills.

X.—Sterculiaceæ.

1. Sterculia urens, Roxb. Vernacular—*Kodaro*, Uriya; *Genduli*, Khond.
   Tree. Common on dry rocky hills.
2. Sterculia villosa, Roxb.
   Tree. Rather scarce.
3. Sterculia colorata, Roxb.
   Tree. Scarce.
4. Helicteres Isora, Linn. Vernacular—*Ovla*, Uriya; *Kapeli*, Khond.
   Shrub. Common in forest undergrowth.
5. Pterospermum suberifolium, Lam. Vernacular—*Bailo, Bayalo*, Uriya; *Baili*, Khond.
   Tree. Common, especially on outer hills.
6. Eriolæna Hookeriana, W. and A. Vernacular—*Bona* [illegible], Uriya.
   Tree. Scarce.

XI.—Tiliaceæ.

1. Grewia tiliæfolia, Vahl. Vernacular—*Dhamono*, Uriya; *Kehel nohru*, Khond; *Tara*, Pálkonda.
   Tree. Common in sál and mixed forests.
2. Grewia salvifolia, Heyne. Vernacular—*Kulo*, Uriya.
   Shrub. Forest undergrowth.
3. Grewia pilosa, Lawk. Vernacular—*Kulo*, Uriya.
   Shrub. Coast scrub forests.
4. Grewia sclerophylla, Roxb.
   Shrub. Hill dry slopes; scarce.
5. Grewia lævigata, Vahl. Vernacular—*Kolakadi*, Khond.
   Small tree. Ravines in the hills.
6. Grewia bracteata, Roth.
   Small tree. Pálkonda hills.

XII.—Malpighiaceæ.

1. Hiptage Madablota, Gaertn.
   Large. Climber: common.
2. Aspidopterys Roxburghiana, Juss.
   Climber. Rather scarce: found near Vishnuchakram.

XIII.—Geraniaceæ.

1. Averrhoa Carambola, L.
   Tree. Cultivated.

XIV.—Rutaceæ.

1. Zanthoxylon alatum, Roxb.
   Shrub. Mahendragiri sholas, above 4,000 feet.
2. Toddalia aculeata, Pers. Vernacular—*Han mochu*, Uriya.
   Climber. Common in scrub forests.
3. Clausena Willdenovii, W. and A.
   Small tree. Mahendragiri sholas, above 3,000 feet.
4. Glycosmis pentaphylla, Correa. Vernacular—*Haumircho*, Uriya.
   Shrub. Common in two varieties, but not in high forest.
5. Murraya exotica, L.
   Small tree. Hill forests.
6. Murraya Königii, Spr.
   Small tree. Mahendragiri and Pálkonda hills.
7. Limonia acidissima, L. Vernacular—*Bhenta*, Uriya; *Toli elaga*, Pálkonda.
   Tree. Common throughout, and often of large size.
8. Atalantia monophylla, Correa. Vernacular—*Kata narunga*, Uriya; *Motameri*, Pálkonda.
   Small tree. Coast scrub chiefly; also in Kurcholy.
9. Citrus medica, L. The lemon.
   Shrub. Cultivated and run wild.
10. Citrus Aurantium, L. The orange.
    Shrub. Cultivated and often seemingly wild, as in Suradá.
11. Citrus decumana, Willd. The pumelo.
    Shrub. Cultivated.
12. Feronia Elephantum, Correa. The woodapple. Vernacular—*Koito*, Uriya.
    Tree. Commonly planted.

13. Ægle Marmelos, Correa. The bael. Vernacular—*Baelo*, Uriya; *Belana*, Khond; *Marudu*, Pálkonda.
Tree. Common, both wild and planted: always the glabrous form.

XV.—Simarubeæ.

1. Ailanthus excelsa, DC. Vernacular—*Gormi kawat*, Mahanim, Uriya; *Pedda mandu*, Pálkonda.
Large tree. Fairly common and often planted.
2. Balanites Roxburghii, Planch. Vernacular—*Gara*, Pálkonda.
Tree. Pálkonda: scarce.

XVI.—Ochnaceæ.

1. Ochna squarrosa, L. Vernacular—*Koniari, nobunisero*, Uriya.
Small tree. Not uncommon.

XVII.—Burseraceæ.

1. Bursera serrata, Colebr. Vernacular—*Sorupotri moi*, Uriya; *Saradi*, Khond.
Large tree. Valleys in the hills and along streams.
2. Garuga pinnata, Roxb. Vernacular—*Sompotri*, Uriya; *Sorupotri dopé*, Khond.
Large tree. Common.

XVIII.—Meliaceæ.

1. Melia Azadirachta, L. The margosa.
Large tree. Planted.
2. Melia azedarach, L. The Indian lilac.
Tree. Planted.
3. Cipadessa fruticosa, Bl. Vernacular—*Ranabili*, Uriya; *Kiner*, Khond.
Shrub. Common everywhere.
4. Walsura ternata, Roxb.
Tree. Pálkonda hills.
5. Soymida febrifuga, Adr. Juss. Vernacular—*Sohan*, Uriya; *Somengi*, Khond; *Soymide*, Pálkonda.
Large tree. Common and of large size, especially on kunkur soils. Considered unlucky by natives and therefore rarely cut.
6. Chloroxylon Swietenia, DC. Vernacular—*Bheru*, Uriya; *Bella*, Pálkonda.
Large tree. Common especially on outer ranges as in the Kurcholy, Suradá, Mohiri and Pálkonda hills.
7. Cedrela Toona, Roxb. Vernacular—*Mahalimbu*, Uriya; *Grawa*, Khond; *Mahalimo*, Saora.
Large tree. Inner ranges and slopes of the Maliah hills.

XIX.—Olacineæ.

1. Olax scandens, Roxb. Vernacular—*Boderia*, Uriya; *Madalkura*, Khond.
Climber. Common in sál forests.
2. Opilia amentacea, Roxb.
Climber. Pálkonda forests.
3. Cansjera Rheedii, Gmelin. Vernacular—*Pita bodalya*, Uriya.
Climbing shrub. Scarce.
4. Natsiatum herpeticum, Ham.
Climber: Mahendragiri hills.

XX.—Celastrineæ.

1. Celastrus paniculata, Willd. Vernacular—*Korsano, noi bada*, Uriya.
Large climber. Common.
2. Celastrus emarginata, W. and A. Vernacular—*Gouro kosai*, Uriya; *Sinni*, Pálkonda.
Tree. Coast scrub forests.
3. Celastrus rufa, Wall.
Small tree. Mahendragiri, about 4,000 feet.
4. Celastrus Oxyphylla, Wall.
Small tree. Mahendragiri, about 4,000 feet.
5. Elæodendron glaucum, Pero.
Tree. Not uncommon.
6. Salacia prinoides, DC.
Small tree. Pálkonda hills.

XXI.—Rhamneæ.

1. Zizyphus Jujuba, Lam. Vernacular—*Boro kuli*, Uriya; *Boré*, Khond.
Tree. Cultivated and run wild.
2. Zizyphus Œnoplia, Mill. Vernacular—*Kontai kuli*, Uriya.
Thorny climber. Very common.
3. Zizyphus xylopyra, Willd. Vernacular—*Goto*, Uriya; *Kotori*, Khond; *Goté*, Pálkonda.
Tree. Common.
4. Zizyphus horrida, Roth.
Shrub. Only once seen in Goomsur.
5. Zizyphus rugosa, Lam. Vernacular—*Chunu koli*, Uriya; *Sana gadu*, Khond.
Straggling small tree. Not uncommon in sál forests.
6. Ventilago maderaspatana, Gaertn. Vernacular—*Sajumalo*, Khond.
Climber. Common.

7. Rhamnus Wightii, W. and A.
Small tree. Mahendragiri, about 4,500 feet.
8. Sageretia oppositifolia, Brongn.
Shrub. Mahendragiri, about 4,000 feet.

XXII.—Ampelideæ.

1. Leea umbraculifera, Clarke.
Small tree. Mahendragiri and Pálkonda hills.
Several species of vine occur. *Vitis quadrangularis* is common on dry lands near the coast, and other species are found in the Sál forests.

XXIII.—Sapindaceæ.

1. Hemigyrosa canescens, Thw. Vernacular—*Eskombo*, Khond.
Tree. Coast forests; scarce.
2. Erioglossum edule, Bl.
Tree. Pálkonda hills.
3. Schleichera trijuga, Willd. Vernacular—*Kusumo*, Uriya; *Kosengi*, Pálkonda.
Large tree. Common and large.
4. Sapindus emarginatus, Vahl.
Tree. Coast forests and cultivated.
5. Dodonœa viscosa, Linn.
Shrub. Coast forests and on hills like Mahendragiri.

XXIV.—Anacardiaceæ.

1. Mangifera indica, L. The mango. Vernacular—*Ambo*, Uriya; *Maha*, Khond.
Large tree. Cultivated and everywhere self-sown in the forests.
2. Anacardium occidentale, L. The cashew.
Small tree. Cultivated.
3. Buchanania latifolia, Roxb. Vernacular—*Charo*, Uriya; *Jaru mamidi*, Pálkonda.
Tree. Common.
4. Odina Wodier, Roxb. Vernacular—*Gangara moi*, Uriya; *Dopé*, Khond; *Gumpeni*, Pálkonda.
Large tree. Common.
5. Semecarpus Anacardium, Linn. f. The marking nut. Vernacular—*Bhalia*, Uriya; *Shidi*, Pálkonda.
Large tree. Common.
6. Nothopegia Colebrookiana, Bl.
Tree. Common in the Mahendragiri and Pálkonda hills.
7. Spondias mangifera, Pers. The hog plum. Vernacular—*Ambota*, Uriya; *Ambeti, lima*, Khond.
Tree. Not common; occasional in Goomsúr.

XXV.—Moringeæ.

1. Moringa pterygosperma, Gaertn. The horse-radish tree.
Tree. Cultivated.

XXVI.—Leguminosæ (Papilionaceæ).

1. Indigofera pulchella, Roxb. Vernacular—*Vréda*, Khond.
Common shrub.
2. Millettia auriculata, Baker. Vernacular—*Rekorlo*, Uriya; *Kissi*, Khond.
Common climber.
3. Millettia racemosa, Bth.
Climber. Scarce: found on Nyagarh frontier.
4. Ougeinia dalbergioides, Bth. Vernacular—*Bandhono*, Uriya; *Jaru*, Khond.
Tree. Common tree of sál and hill forests.
5. Abrus precatorius, Linn.
Common small climber. Noticeable for its red and black seeds.
6. Mucuna pruriens, DC. The Cowhage.
Common climber. Remarkable for the stinging hairs on its pod.
7. Erythrina indica, Lamk.
Tree. Rather scarce in forests: often planted.
8. Erythrina suberosa, Roxb. Vernacular—*Paldua, Chaldua*, Uriya; *Muskamba*, Khond.
Tree. Scarce in forest: sometimes planted.
9. Spatholobus Roxburghii, Bth. Vernacular—*Poraso*, Uriya.
Large climber. Common.
10. Butea frondosa, Roxb. Vernacular—*Polásu*, Uriya.
Tree. Rather scarce.
11. Butea superba, Roxb. Vernacular—*Modugo*, Pálkonda.
Climber. Coast forests: Parlákimedi and Pálkonda.
12. Pueraria tuberosa, DC.
Climber. Pálkonda hills.
13. Cajanus indicus, Spr.
Shrub. Mahendragiri: apparently wild.
14. Flemingia congesta, Roxb.
Common shrub in forest undergrowth; often with red glands on flowers and fruit.

15. Flemingia Chappar, Ham.
Shrub. Rather scarce and local.
16. Flemingia stricta, W. and A.
Shrub. Scarce: Goomsur and Pálkonda.
Several species of *Desmodium* occur, especially *D. gyrans*, DC., in the undergrowth of sál forests, *D. gangeticum* and *D. latifolium* on hill slopes, *D. Cephalotes*, Wall; and *D. triquetrum*, DC., in mixed forest.
17. Dalbergia latifolia, Roxb. Blackwood. Vernacular—*Sissua*, Uriya; *Iridi*, Pálkonda.
Tree. Not common; more abundant to south.
18. Dalbergia lanceolaria, Linn.
Tree. Scarce.
19. Dalbergia paniculata, Roxb. Vernacular—*Dhupi*, Uriya.
Tree. Common everywhere in the forests.
20. Dalbergia volubilis, Roxb. Vernacular—*Bamba*, Khond.
Climber. Common.
21. Pterocarpus Marsupium, Roxb. Vernacular—*Piasál*, Uriya; *Vengis*, Khond; *Amé*, Saora; *Yegisha*, Pálkonda.
Large tree. Not uncommon in parts of Goomsur: more scarce elsewhere.
22. Pongamia glabra, Vent. Vernacular—*Koronjo*, Uriya; *Karandjé*, Khond.
Tree. Common along streams.
23. Derris scandens, Bth.
Climber. Scarce.
24. Cæsalpinia sepiaria, Roxb. Mysore thorn. Vernacular—*Gilo*, Uriya.
Thorny shrub. Hedges and thickets in the cultivated country.
25. Parkinsonia aculeata, Linn.
Small tree. Planted and run wild in the rice country.
26. Cassia Fistula, L. Vernacular—*Sunari*, Uriya; *Pundali*, Khond; *Rela*, Pálkonda.
Large tree. Common in the forests everywhere.
27. Cassia siamea, Lamb.
Tree. Planted in Russellkonda and elsewhere and along roads.
28. Cassia auriculata, L. Vernacular—*Merika Tungaru*, Pálkonda.
Shrub. Scrub land, especially about Chicacole and Pálkonda, but not very common.
29. Bauhinia malabarica, Roxb.
Small tree. Sál and mixed forests in Goomsur, not common.
30. Bauhinia racemosa, Lamb. Vernacular—*Ambata*, Uriya; *Choveri*, Khond.
Small tree. Kimedi and Mahendragiri, also Pálkonda, not so common in Goomsur.
31. Bauhinia purpurea, Linn. Vernacular—*Choveri*, Khond.
Tree. Common in Goomsur, chiefly along watercourses.
32. Bauhinia variegata, Linn. Vernacular—*Borara*, Uriya; *Kopu*, Khond; *Boda*, Pálkonda.
Tree. Dry rocky hillsides: common.
33. Bauhinia retusa, Ham. Vernacular—*Aré*, Pálkonda; *Makarokranda*, Khond.
Tree. Scarce: only found on the slopes of the ghâts as at Katingia.
34. Bauhinia Vahlii, W. and A. Vernacular—*Shiali*, Uriya; *Pairmal*, Khond.
Large climber. Common everywhere in forests.
35. Tamarindus indica, Linn. The tamarind. Vernacular—*Koya*, Uriya; *Neddi*, Khond; *Shenta*, Pálkonda.
Large tree. Commonly planted: also found commonly run wild throughout the forests, especially in Goomsur and Suradá.
36. Saraca indica, Linn. Vernacular—*Oshoko*, Uriya.
Tree. Pálkonda hills, along streams: common.
37. Entada scandens, Bth.
Climber. Scarce.
38. Adenanthera pavonina, Linn.
Tree. Planted only.
39. Dichrostachys cinerea, W. and A.
Small tree. Common in coast forests, chiefly in small scrub.
40. Mimosa rubicaulis, Lamk. Vernacular—*Tsikeri*, Khond.
Common thorny undershrub.
41. Xylia dolabriformis, Bth. The ironwood. Vernacular—*Tangani, malimo*, Uriya; *Orjori*, Khond; *Tangani*, Saora; *Tangudu*, Pálkonda.
Large tree. Common in the coast forests from the Mohiri hills through Mahendragiri, Kimedi and the Pálkondas, in all of which it is the chief tree.
42. Acacia Farnesiana, Willd.
Small tree. Commonly planted and often run wild.
43. Acacia arabica, Willd. The babúl.
Tree. Commonly planted and self-sown in the rice country.
44. Acacia leucophlœa, Willd. Vernacular—*Gwaria*, Uriya; *Goiri*, Khond; *Tella tumma*, Pálkonda.
Tree. Goomsur forests and southwards; sometimes of large size.
45. Acacia ferruginea, DC. Vernacular—*Woni*, Pálkonda.
Tree. Forests of Suradá.
46. Acacia Catechu, Willd. Vernacular—*Khoiro*, Uriya.
Tree. Rather scarce.
47. Acacia Suma, Buch. Vernacular—*Gonharea*, Uriya.
Tree. Common in Goomsur.
48. Acacia Intsia, Willd. Vernacular—*Tsikeri*, Khond.
Thorny climber. Common.

49. Acacia pennata, Willd.
Thorny climber. Chiefly in hill forests and valleys.
50. Albizzia Lebbek, Bth. Vernacular—*Sirsi*, Uriya; *Sirisemu*, Pálkonda.
Large tree. Rather scarce in Sál forests: more common in open country and planted.
51. Albizzia odoratissima, Bth. Vernacular—*Sirsi tentura*, Uriya, Khond.
Large tree. Common in the forests.
52. Albizzia procera, Bth. Vernacular—*Sirsi*, Uriya; *Gura nanja*, Khond.
Large tree. Rather scarce: chiefly along streams.
53. Albizzia stipulata, Boivin. Vernacular—*Goiri*, Khond.
Tree. Slopes of Eastern Ghâts, chiefly above 1,000 feet.
54. Albizzia amara, Boivin.
Tree. Coast scrub lands, in Chicacole and Vizagapatam.
55. Pithecolobium dulce, Bth.
Small tree. Planted; Berhampore, Russellkonda and elsewhere.
56. Leucœna glauca, Bth.
Small tree. Sometimes planted.

XXVII.—Rosaceæ.

1. Rubus ellipticus, Sm.
2. Do. lasiocarpus, Sm.

} higher hills as at Mahendragiri: thorny straggling shrubs.

XXVIII.—Rhizophoreæ.

1. Carallia integerrima, DC.
Tree. Along water-courses, chiefly about Kurcholy.

XXIX.—Combretaceæ.

1. Terminalia belerica, Roxb. Vernacular—*Bahara*, Uriya; *Bahré*, Khond; *Tadé*, Pálkonda.
Large tree. Common everywhere in the forests.
2. Terminalia Chebula, Retz. Vernacular—*Horada, haredha*, Uriya; *Kharaka*, Pálkonda.
Large tree. Common on the hills above 2,000 feet: scarce in the low country.
3. Terminalia tomentosa, W. and A. Vernacular—*Sahajo, kola Sahajo*, Uriya; *Mardi, asono*, Khond; *Maddi*, Pálkonda.
Large tree. Common and of large size in the Goomsur forests: smaller in those of Kimedi and Pálkonda.
4. Terminalia Arjuna, Bedd. Vernacular—*Arjuno, panda Sahajo*, Uriya; *Mardi*, Khond.
Large tree. Along rivers.
5. Terminalia Catappa, L.
Tree. Commonly planted in Berhampore, Chicacole, Russellkonda, &c.
6. Calycopteris floribunda, Lam. Vernacular—*Kokundia*, Uriya.
Very common straggling shrub.
7. Anogeissus latifolia, Wall. Vernacular—*Dhau*, Uriya; *Muniah, miriah*, Khond; *Sirikara*, Pálkonda.
Large tree. Very common everywhere, on the hills often of very large size and fine timber.
8. Anogeissus acuminata, Wall. Vernacular—*Pasi*, Uriya.
Large tree. Common along rivers in Goomsur and reaching a large size.
9. Combretum decandrum, Roxb. Vernacular—*Kora kukundi*, Uriya; *Tirumal*, Khond.
Common white-bracted climber.
10. Combretum ovalifolium, Roxb.
Very common large climber, chiefly of topes and near villages: the twigs are used to tie up cattle.
11. Gyrocarpus Jacquini, Roxb.
Tree. Coast forests: scarce.

XXX.—Myrtaceæ.

1. Psidium Guava, Raddi. The guava.
Small tree. Cultivated.
2. Eugenia Jambos, Linn. The rose-apple.
Tree. Cultivated.
3. Eugenia Jambolana, Lamk. Vernacular—*Jamu, jambo, kudijamu*, Uriya; *Lohudru* Khond.
Large tree. Common in Goomsur forests, as also is the variety *E. caryophylliæfolia*, (*Bhatajana*, Uriya).
4. Eugenia operculata, Roxb. Vernacular—*Monisia jamu, panapoki*, Khond.
Large tree. Goomsur forests; rather scarce.
5. Eugenia Heyneana, Wall.
Small tree. Common along streams.
6. Barringtonia acutangula, Gaertn. Vernacular—*Hinjolo*, Uriya.
Tree. Along streams, not uncommon.
7. Careya arborea, Roxb. Vernacular—*Kumbi*, Uriya; *Kumbé*, Khond; *Kumbé*, Pálkonda.
Large tree. Common and often of large size.

XXXI.—Melastomaceæ.

1. Melastoma malabathricum, Linn.
Shrub. Occasional in swamps and on banks of streams.

2. Memecylon edule, Roxb. Vernacular—*Niraso*, Uriya.
Small tree. Coast forests and inland as far as Suradá and Russellkonda, also southwards to Pálkonda Hills.
One species of *Osbeckia*, perhaps *Nepalensis*, Hook, is found on Mahendragiri.

XXXII.—Lythrarieæ.

1. Woodfordia floribunda, Salisb. Vernacular—*Jatiki, dhatiko*, Uriya; *Pota beluri*, Khond; *Kerani*, Pálkonda.
Extremely common shrub, everywhere.
2. Lawsonia alba, Lamk.
Shrub. Planted only.
3. Lagerströmia parviflora, Hook. Vernacular—*Sidha*, Uriya; *Nahna*, Khond; *Sianangi* Pálkonda.
Large tree. Common in Goomsur and southwards.
4. Lagerströmia Reginæ, Roxb.
Tree. Cultivated, but may perhaps occur wild in the Agency Tracts.

XXXIII.—Samydaceæ.

1. Casearia tomentosa, Roxb. Vernacular—*Giridi*, Uriya; *Gidugum*, Pálkonda.
2. Casearia graveolens, Dalz. Vernacular—*Giridi*, Uriya.
Trees. Both are common, chiefly on old cultivated lands.

XXXIV.—Passifloreæ.

1. Carica Papaya, L. The Papaw.
Cultivated.

XXXV.—Cacteæ.

1. Opuntia Dillenii, Haw. The Cactus.
Coast dry scrub. Not in Goomsur forests.

XXXVI.—Araliaceæ.

1. Heptapleurum venulosum, Seem. Vernacular—*Susurudi*, Khond.
Climber of hilly country.

XXXVII.—Cornaceæ.

1. Alangium Lamarckii, Thw. Vernacular—*Ankulo*, Uriya; *Akori*, Khond; *Wudaga*, Pálkoda.
Common, especially on road sides and on old cultivations.

XXXVIII.—Caprifoliaceæ.

1. Viburnum acuminatum, Wall.
Mahendragiri sholas, above 4,000 feet.

XXXIX.—Rubiaceæ.

1. Anthocephalus Cadamba, Bth. and H. f.
Large tree. Occasionally found along rivers in Goomsur.
2. Adina cordifolia, Hook. f. Vernacular—*Holondho*, Uriya; *Mandugram*, Khond.
Large tree. Common and much valued.
3. Stephegyne parvifolia, Korth. Vernacular—*Mundimundi*, Uriya; *Pajikiru*, Khond; *Kamba*, Pálkonda.
Large tree. Not very common, but widely spread.
4. Hymenodictyon excelsum, Wall. Vernacular—*Bodaka*, Uriya.
Tree. Not common; mixed forests in Goomsur.
5. Wendlandia exserta, DC. Vernacular—*Tilai*, Uriya; *Tieko*, Khond.
Tree. Not very common. Sál forests.
6. Wendlandia tinctoria, DC. Vernacular—*Tilai*, Uriya; *Tilki*, Khond.
Tree. Common especially on dry poor soils.
7. Wendlandia glabrata, Ham.
Tree. Mahendragiri hills above 3,000 feet.
8. Webera corymbosa, Willd.
Large shrub. Coast scrubs and forests of Pálkonda and Kimedi Hills.
9. Randia dumetorum, Lam. Vernacular—*Potowa*, Uriya.
Small tree. Coast scrubs and undergrowth of Sál forest.
10. Randia uliginosa, DC. Vernacular—*Pendra*, Uriya.
Small tree. Goomsur-Suradá forests; scarce.
11. Randia malabarica.
Thorny shrub. Coast scrub forests.
12. Gardenia turgida, Roxb. Vernacular—*Bamunia*, Uriya.
Small tree. Often growing to fairly large size in Goomsur; elsewhere small.
13. Gardenia gummifera, L. Vernacular—*Gurudu*, Uriya; *Kurudu, kanga*, Khond.
Small tree. Dry forests and poor soils.
14. Gardenia latifolia, Aiton. Vernacular—*Juntia, dhantia*, Uriya; *Goteni*, Khond.
Small tree. Common, often half epiphytic.
15. Canthium didymum, Gaertn. Vernacular—*Pita koluchia, dhalasinga*, Uriya; *Pita Kolarsa*, Khond; *Konda, Kolinu*, Pálkonda.
Small tree. Common on banks of streams.
16. Canthium parviflorum, Roxb.
Thorny shrub of coast forests and rocky hills.

17. Ixora parviflora, Vahl. Vernacular—*Kilakerwa*, Uriya; *Tutu kuruperi*, Khond; *Koringi*, Pálkonda.
Small tree. Common.
18. Ixora nigricans, Br.
Small tree. Mahendragiri hills, above 3,000 feet.
19. Pavetta tomentosa, Sm. Vernacular—*Kotapengu*, Uriya.
Large shrub. Common in forest undergrowth.
20. Morinda bracteata, Roxb. Vernacular—*Achu*, Uriya; *Aschu, atzu*, Khond.
Tree. Common and of good size in Goomsur forests.
21. Hamiltonia suaveolens, Roxb. Vernacular—*Jana mirgiri, Pitondi*, Khond.
Shrub with handsome flowers. Slopes of the Maliah hills.

XL.—Compositæ.

1. Senecio corymbosus, Wall.
Climber, often 3 to 4 inches in diameter. Mahendragiri above 3,000 feet.
Senecio candicans, DC., is a climber also found on Mahendragiri, while some *Vernonias*, and especially *V. pectiniformis*, DC., occur in the Sál forests, and attain almost the size of shrubs.

XLI.—Myrsineæ.

1. Mœsa indica, Wall.
Shrub. Hill forests and slopes of the Eastern Ghâts.
2. Embelia robusta, Roxb. Vernacular—*Nuninunika*, Uriya; *Saradi*, Khond.
Shrub. Forest undergrowth and hill slopes.
3. Ardisia humilis, Vahl. Vernacular—*Katapengu*, Uriya; *Bonderi*, Khond.
Shrub or small tree. Common along shady hill streams, especially in Pálkonda hills.

XLII.—Sapotaceæ.

1. Sideroxylon tomentosum, Roxb. Vernacular—*Kontaboro*, Uriya.
Tree. Forests of Goomsur: not common.
2. Bassia latifolia, Roxb. Vernacular—*Moholo*, Uriya; *Irpi*, Khond.
Large tree. Common.
3. Mimusops indica, A.DC. Vernacular—*Khiri, kirakuli*, Uriya; *Pál*, Pálkonda.
Small tree. Scarce in Goomsur, except in Suradá and Kurcholy.

XLIII.—Ebenaceæ.

1. Maba buxifolia, Pers. Vernacular—*Pisinika, gulugu*, Pálkonda.
Shrub. Coast jungles.
2. Diospyros montana, Roxb. Vernacular—*Kossé kuli*, Uriya.
Small tree. Not common; found in Suradá and at Chicacole.
3. Diospyros Embryopteris, Pers. Vernacular—*Gusva kendhu*, Uriya; *Titia*, Khond; *Nititumika*, Pálkonda.
Tree. Common everywhere along streams.
4. Diospyros sylvatica, Roxb. Vernacular—*Kauchia, kaluchia* Uriya; *Gata*, Pálkonda.
Tree. Very common in Goomsur forests.
5. Diospyros Chloroxylon, Roxb. Vernacular—*Kosai*, Uriya; *Tori*, Pálkonda.
Small tree. Coast scrubs and dry forests in outer hills.
6. Diospyros tomentosa, Roxb. Vernacular—*Kendhu*, Uriya.
Large tree. Common and often of large size in Goomsur; small elsewhere. There is another species near this but closely resembling it, which we have not identified.
7. Diospyros orixensis, Wight (?).
Tree. Common on Mahendragiri above 4,000 feet.
There are probably also 2 or 3 other species not yet identified, one especially is a large tree of vallies in the Pálkonda hills.

XLIV.—Styraceæ.

1. Symplocos spicata, Roxb.
Small tree. Mahendragiri above 4,000 feet.

XLV.—Oleaceæ.

1. Nyctanthes Arbor-tristis, L. Vernacular—*Godokodika*, Uriya; *Dor, kalangreti*, Khond.
Large shrub. Dry hills.
2. Schrebera swietenioides, Roxb. Vernacular—*Neniburo*, juntia, Uriya; *Moko*, Khond.
Tree. Goomsur forests, common.
3. Linociera intermedia, Wt. var, Roxburghii. Vernacular—*Esumuko*, Khond.
Tree. Suradá forests and along the ghâts.
There are probably two other species of Olea or Linociera on the Mahendragiri hills, not yet identified. And one or two species of *Jasminum* are not uncommon.

XLVI.—Salvadoraceæ.

1. Azima tetracantha, Lamk.
Thorny shrub. Coast scrub forests.

XLVII.—Apocyneæ.

1. Carissa Carandas, L.
Thorny shrub. Common in dry low forests.
2. Alstonia scholaris, R. Br. Vernacular—*Chochina*, Khond.
Large tree. Scarce and only seen two or three times in Goomsur.

3. Alstonia neriifolia, Dm.
   Shrub. Suradá forests. Scarce.
4. Holarrhena antidysenterica, Wall. Vernacular—*Kherwa, Patrukhorwa*, Uriya; *Pardali*, Khond.
   Tree. Very common everywhere.
5. Wrightia tinctoria, B. Br.
   Small tree. Pálkonda forests.
6. Wrightia tomentosa, R. and S. Vernacular—*Pal kherwa*, Uriya; *Palsi*, Khond.
   Small tree. Common.
7. Ichnocarpus frutescens, R. Br.
   Climber. Common in outer forests and by road sides.
8. Plumeria acutifolia, Poir.
   Small tree. Often cultivated.
9. Thevetia neriifolia.
   Small tree. Cultivated.

XLVIII.—Asclepiadeæ.

1. Calotropis gigantea, R. Br. The Mudar.
2. Calotropis procera, R. Br.
   Common on waste lands. The former often a large shrub.
   There are also many climbers of this order, but none of particular importance. The chief are perhaps.—
   Cryptolepis Buchanani, R. and S., which is common in the Sál forests.
   Dœmia extensa, remarkable for its strong fibre: which is found along the coast.

XLIX.—Loganiaceæ.

1. Buddleia asiatica, Lour.
   Shrub. Old cultivation on the slopes of the ghâts.
2. Strychnos potatorum, Linn. f. The clearing nut. Vernacular—*Kotoko*, Uriya.
   Tree. Rather scarce.
3. Strychnos Nux-vomica, Linn. The strychnine tree. Vernacular—*Kora*, Uriya.
   Large tree. Often planted. Commonly wild in the coast forests and outer hills.
   A climbing *Strychnos* is also met with in the Pálkonda hills.

L.—Boragineæ.

1. Cordia Myxa, Linn. Vernacular—*Ambata*, Uriya; *Bholiya, pajipotong*, Khond.
   Tree. Rather scarce.
2. Cordia Macleodii, H. f. and Th. Vernacular—*Baurlo*, Uriya; *Borla mehranu*, Khond.
   Tree. Goomsur forests. Rather scarce.
3. Ehretia lævis, Roxb. Vernacular—*Guachipo*, Uriya.
   Small tree. Suradá forests.
4. Ehretia buxifolia, Roxb.
   Shrub. Coast scrub forests.

LI.—Convolvulaceæ.

1. Erycibe paniculata, Roxb. Vernacular—*Katapergu*, Uriya.
   Large climber. Common.
   There are several other climbers, species of *Argyreia, Lettsomia, Porana*, and *Ipomœa*, but none of importance; *Argyreia speciosa* occurs about Aska; *Lettsomia bella* in the Sál forests, *Ipomœa biloba* on the coast sands and *Ipomœa cymosa* with its white flowers in the coast scrub.

LII.—Bignoniaceæ.

1. Millingtonia hortensis, Linn. The cork tree.
   Tree. Commonly planted in avenues in Berhampore, Russellkonda and elsewhere.
2. Oroxylum indicum, Bth. Vernacular—*Pomponia*, Uriya; *Dokeri*, Khond.
   Tree. Not uncommon in Goomsur.
3. Stereospermum chelonoides, DC. Vernacular—*Patoli*, Khond.
   Large tree. Goomsur forests.
4. Stereospermum suaveolens, DC. Vernacular—*Patuli*, Uriya.
   Large tree. Goomsur forests.

LIII.—Acanthaceæ.

1. Petalidium barlerioides, Nees., is a common and pretty shrub of the Mohiri Hills and some species of *Strobilanthes*, especially *S. jeyporensis*, Bedd, occur on the Mahendragiri Hills above 4,000 feet. *Barleria strigosa*, Willd, is a handsome blue-flowered small shrub of the Pálkonda Hills.

LIV.—Verbenaceæ.

1. Callicarpa arborea, Roxb. Vernacular—*Sanugambari*, Uriya; *Borodo*, Khond.
   Tree. Found in the Ghât forests above 2,000 feet.
2. Tectona grandis, Linn f. The teak.
   Large tree. Not wild but often planted. It has grown well and reproduces naturally at the Mojagodo plantation.
3. Premna tomentosa, Willd.
   Tree. Common in mixed forests.
4. Gmelina arborea, Roxb. Vernacular—*Gambari*, Uriya; *Gamberi*, Khond.
   Large tree. Not very common, but widespread.
5. Gmelina asiatica, L.
   Shrub. Coast forests.

6. Vitex Negundo, L. Vernacular—*Beyguna*, Uriya.
   Shrub. Planted about villages.
7. Vitex altissima, L. Vernacular—*Teradendong*, Khond.
   Large tree. Common, especially in Goomsur.
8. Vitex pubescens, Vahl. Vernacular—*Dhalasinga*, Uriya.
   Tree. Pálkonda Hills.
9. Vitex Leucoxylon. Vernacular—*Nevaledi*, Pálkonda.
   Tree. Pálkonda Hills.
10. Clerodendron infortunatum, L. Vernacular—*Bania*, Uriya.
    Shrub. Forest undergrowth: common.
11. Clerodendron serratum, Spr.
    Small shrub. Common on the ghât slopes, has pretty blue flowers.
    Another species with sweet-scented flowers is frequently planted near villages.

LV.—Labiatæ.

1. Colebrookia oppositifolia, Sm. Vernacular—*Merota, darigopa*, Khond.
   Shrub. Slope of the Maliah hills, Mahendragiri and Pálkondas.
2. Pogostemon plectranthoides. Bth.
   Shrub. Mahendragiri Hill and Pálkondas.

LVI.—Nyctagineæ.

1. Pisonia aculeata, L.
   Thorny climber. Coast forests.

LVII.—Lauraceæ.

1. Beilschmiedia Roxburghiana, Nees.
   Tree. Common in sholas on Mahendragiri, above 4,000 feet.
2. Tetranthera monopetala, Roxb. Vernacular—*Mosonea*, Uriya.
   Tree. Valleys in the hills, not common. Occasional in mixed forests in the plains.
3. Litsæa zeylanica, Nees. Vernacular—*Bodeda*, Saora.
   Tree. Mahendragiri sholas, above 3,000 feet.
   There are some few other species to be found on Mahendragiri which have not yet been identified. *Cassyta filiformis* is a common plant in the coast forests.

LVIII.—Loranthaceæ.

1. Loranthus longiflorus, Desr.
   Parasitic shrub with handsome red flowers. Common, especially on Bassia latifolia.
   There are some other species of *Loranthus* and *Viscum*, but none of any importance.

LIX.—Santalaceæ.

1. Osyris arborea, Wall.
   Shrub. Mahendragiri, above 4,000 feet.

LX.—Urticaceæ.

1. Phyllochlamys spinosa, Bureau.
   Small tree. Pálkonda Hills.
2. Streblus asper, Lour. Vernacular—*Sahara, Sahada*, Uriya.
   Tree. Common in scrub forests and along streams.
3. Plecospermum spinosum, Trécul.
   Thorny climbing shrub. Coast forests.
4. Artocarpus integrifolia, Linn. The Jack. Vernacular—*Panása*, Uriya.
   Tree. Planted in towns and villages and on roadsides.
5. Artocarpus Lakoocha, Roxb. Vernacular—*Joito*, Uriya; *Losendi*, Khond.
   Tree. Slopes of the Goomsur Maliahs. Seen on Katingia ghât, but probably not common.
6. Ficus bengalensis, L. The Banyan. Vernacular—*Boru*, Uriya.
   Large tree. Wild and planted.
7. Ficus religiosa, L. The Pipal. Vernacular—*Usto*, Uriya; *Pipali*, Khond.
   Large tree. Wild and planted.
8. Ficus infectoria, Willd.
   Large tree. Wild and planted, but not very common.
9. Ficus retusa, L. Vernacular—*Burdungi*, Khond.
   Tree or epiphyte. Common in banks of streams.
10. Ficus Tsiela, Roxb. Vernacular—*Jari*, Uriya.
    Small tree. Wild and planted, but not very common.
11. Ficus Cunia, Buch. Vernacular—*Boroha*, Khond.
    Small tree. Not very common.
12. Ficus glomerata, Roxb. Vernacular—*Dhimeri*, Uriya; *Toga*, Khond.
    Large tree. Common, but chiefly planted.
13. Ficus hispida, Linn. f. Vernacular—*Kerken*, Khond.
    Small tree. Chiefly in wet places.
14. Ficus tomentosa, Willd.
    Tree. Common on hill slopes in dry places.
15. Ficus parasitica, König. Vernacular—*Raseri*, Khond.
    Epiphytic shrub. Common, especially in damp places, near rivers in the open country.
    Some other species of fig also occur, notably *F. biglandulosa*, Miq. found in the valleys of Mahendragiri.

16. Ulmus integrifolia, Roxb.
Large tree. Common, especially near streams.
17. Celtis Wightii, Planch.
18. Celtis Roxburghii, Bedd.
Trees. Mahendragiri slopes, above 3,000 feet.
19. Sponia orientalis, Planch. Vernacular—*Grui*, Khond.
Small tree. Slopes of Eastern Ghâts on old cultivated lands.
20. Cudrania javanensis, Trécul.
Climbing thorny shrub. Pálkonda forests.
Böhmeria platyphylla occurs in the ghât forests.

LXI.—Casuarineæ.

1. Casuarina equisetifolia, Forster.
Tree. Planted in towns and on the coast sands, as at Gopálpur and elsewhere.

LXII.—Euphorbiaceæ.

1. Antidesma Ghæsembilla, Gaertn. Vernacular—*Nuniari*, Uriya.
Small tree. Rather scarce.
2. Antidesma diandrum, Tul. Vernacular—*Nuninunika, nuniari*, Uriya.
Small tree. Very common in Goomsur. The leaves are acid and eatable as spinach.
3. Antidesma Bunias, Spr.
Small tree. Ghât forests.
4. Phyllanthus lanceolarius, Müll. Arg.
Small tree. Rather scarce.
5. Phyllanthus sp.?
Tree of the Glochidion section. Valleys of the Pálkonda Hills.
6. Phyllanthus reticulatus, Müll. Arg.
Straggling shrub. Coast forests and wet places.
7. Phyllanthus Emblica, L. Vernacular—*Onra, Ounla*, Uriya; *Durga*, Khond.
Small tree. Common everywhere.
8. Phyllanthus distichus, Müll. Arg.
Tree. Planted in gardens only.
9. Breynia rhamnoides, Müll. Arg.
Shrub. Common.
10. Putranjiva Roxburghii, Wall. Vernacular—*Paichandia*, Uriya.
Tree. Often of some size. Valleys of the ghât forests.
11. Securinega Leucopyrus, Müll. Arg.
Shrub. Coast scrub forests.
12. Securinega obovata, Müll. Arg.
Shrub. Suradá forests.
13. Bischoffia javanica, Bl.
Large tree. Upper plateau of Pálkonda Hills.
14. Briedelia retusa, Spr. Vernacular—*Kosi*, Uriya, Khond; *Rugendi*, Khond; *Anepu*, Pálkonda.
Tree. Common: thorny — stemmed when young.
15. Briedelia stipularis, Bl.
Large climber. Not uncommon.
16. Briedelia tomentosa. Bl.
Small tree. Suradá forests.
17. Lebedieropsis orbicularis, Müll. Arg. Vernacular—*Korada, Korera*, Uriya; *Karada*, Khond; *Odeshi*, Pálkonda.
Small tree. Extremely common. Makes good house posts.
18. Croton caudatus, Müll. Arg.
Straggling shrub. River banks and damp places.
19. Trewia nudiflora, L.
Tree. Rather scarce. Goomsur.
20. Mallotus philippinensis, Müll. Arg. Vernacular—*Sundragundi, sinduri*, Uriya, Khond.
Tree. Very common and commonly planted about Khond villages for the dye.
21. Macaranga tomentosa, Müll. Arg.
Small tree. Scarce, and only in hill vallies.
22. Ricinus communis, L.
The castor-oil tree, cultivated.
23. Homonoya riparia, Lour.
Shrub. River-beds.
24. Jatropha Curcas, L. Physic nut.
Shrub used for hedges.
J. glandulifera is a common wayside weed, as everywhere along the coast.
25. Gelonium lanceolatum, Willd. Vernacular—*Kakra*, Uriya; *Gulung*, Pálkonda.
Tree. Common.
26. Euphorbia Tirucalli, L. Milk-hedge.
Small tree. Used for hedges.
27. Euphorbia Cattimandoo, Elliot. Vernacular—*Kattimandu*, Pálkonda.
Small tree. Vizagapatam coast.
28. Euphorbia antiquorum, L.
Small tree. Very common in dry outer ranges.
29. Euphorbia neriifolia, L.
Small tree. Sometimes planted or run wild: commonly used for hedges.

30. Euphorbia Nivulia, Ham.
Shrub. Dry rocky hills in Mohiri and the Pálkondas.
31. Sarcococca Hookeriana, Baill.
Shrub. Mahendragiri, above 4,000 feet.

LXIII.—Salicineæ.

1. Salix tetrasperma, Roxb. The willow.
Tree. River banks in Suradá.

LXIV.—Gnetaceæ.

1. Gnetum scandens, Roxb. Vernacular—*Apzu tzulu*, Saora.
Large climber. Mahendragiri sholas, above 4,000 feet.

LXV.—Cycadaceæ.

1. Cycas circinalis, Linn. Vernacular—*Orguna, oruna*, Uriya; *Nareni*, Khond.
Small tree, sometimes with long stems up to 20 feet in height. Very common in forest undergrowth.

MONOWTYLEDONS.

LXVI.—Palmæ.

1. Borassus flabelliformis, Linn. Palmyra.
Tree. Commonly planted in coast taluks.
2. Phœnix sylvestris, Roxb. Date.
Tree. Commonly planted.
3. Phœnix acaulis, Roxb. Vernacular—*Kojiri*, Uriya; *Seeta*, Khond.
Stemless palm. Common in Sâl forest undergrowth.
Another species with a stem up to 6 feet in height is found all over the grassy slopes on Mahendragiri and neighbouring hills. It may be *P. farinifera* or *P. Ouseleyana*, but these species of *Phœnix* are very difficult to distinguish.
4. Caryota urens, L. Vernacular—*Solopo*, Uriya; *Sarta*, Khond; *Jiluga*, Pálkonda.
Tree. Planted and run wild throughout the hills, and largely used by Khonds for toddy.
5. Areca Catechu, L. Areca-nut.
Small tree. Planted.
6. Cocos nucifera, L. Cocoanut.
Tree. Commonly planted.
7. Calamus fasciculatus, Roxb. Vernacular—*Pepa beti*, Pálkonda.
Climber. The common cane of Orissa and the Circars, in the inner country.
8. Calamus Rotang, Roxb.
Climber. Coast taluks, but scarce.

LXVII.—Pandaneæ.

1. Pandanus odoratissimus, Willd. The screwpine.
Shrub. Very common along the coast, especially along backwaters.

LXVIII.—Gramineæ.

1. Bambusa arundinacea, Retz. Vernacular—*Konta bansu*, Uriya.
Thorny bamboo. Valleys in the hills and thickets in open country: very common.
2. Dendrocalamus strictus, Nees. Vernacular—*Salimbo bansu*, Uriya; *Mani, maringo*, Khond.
Male bamboo. Hill slopes. Common.

Some other bamboos may also occur planted, though none were seen. Of the large grasses, *Thysanolæna acarifera* (Vernacular—*Saperi*, Khond) is largely used for fodder and to make brooms, and *Andropogon involutus*, which is extremely common in Goomsúr, is nearly equal to "esparto" as a material for paper manufacture.

Noticeable among other Monocotyledonous plants are the plantain, *Musa paradisiaca*; the bowstring hemp, *Sansevieria zeylanica*, not uncommon in some forests and used for fibre; the aloe, *Agave americana*, planted for fences and used for the fibre; and the thorny climber, *Smilax ovalifolia*.

Note.—The area visited consisted of the Berhampore, Goomsúr and Chicacole Taluks of Ganjam, the Pálkonda Taluk of Vizagapatam, the Parlákimedi Zemindari, the Zemindaris of Dhárákót, Budarsing, Tarlá and Mandasa, and a portion of the Goomsúr Maliahs. These included the chief important points of the ghât range, such as the Kriyamba Hills, those of Darpangia and Dohu, the hills of Suradá, the Mohiri Hills, the Mahendragiri Hill and the Pálkondas.

The vernacular names are few only, and those must be cautiously received. It is hoped that local forest officers will help to complete the list by adding to it the trees and shrubs not mentioned, and by correcting and completing the vernacular names. The names given in Captain Phillips' List of Parlákimedi trees published in 1855, Captain Macdonald's List of Goomsúr trees published in 1854 and Colonel Beddome's List of 1863-64 (Annual Forest Report) have been referred to and to some extent incorporated. Several other trees were seen and specimens collected, but they have not yet been identified.

Camp, Anantapur,
30*th July* 1884.

J. S. GAMBLE,
Conservator of Forests, Northern Circle.

Resolution—dated 18th October 1884, No. $\frac{3597}{\text{Forest 341.}}$

The Administration Reports of the two Forest Conservancy Circles in the Presidency of Madras are submitted to Government.

2 These reports are drawn up in accordance with the arrangement of matter proposed in the Forest Code, but the District Reports are still in the old form, and, therefore, the information in some of the sections is incomplete. The statements which accompany the two reports are not arranged in the same order, and those of the Southern Circle Report are not numbered in one consecutive series.

3. Rules under Section 26 of the Forest Act were issued by Government in March 1884 for all districts except South Canara, and in May 1884 for that district. A correspondence took place concerning rules under Sections 35 and 63 which have since been issued.

4. The Southern Circle was under charge of Major Walker, the Northern Circle under that of Mr. Gamble, and the Central Office under Mr. Douglas, throughout the year. The Conservator, Southern Circle, visited every district in his circle, and the Conservator, Northern Circle, inspected five of the ten districts in his circle during the year. The amount of time spent on tour by the district officers is, in almost every instance, satisfactory. No doubt, as Mr. Gamble remarks in paragraph 139, "time spent in camp is not necessarily always a correct gauge of useful inspection work," but, on the other hand, a Forest Officer, entrusted with a charge so extensive as a Madras district, cannot possibly be efficient unless he spends a large portion of the year in camp. The Board, therefore, have pleasure in bringing the following figures to the notice of Government :—

	Days in Camp.
Mr. H. A. Sim	266
„ H. A. Gass	236
„ Higgens	216
„ Boileau	214
„ Brougham	212
„ Hooper	209
„ Peet	194
„ Sheffield	189
„ Wooldridge	177
„ Morgan	174
„ Stafford	174
„ Bradley *	151

* Out of 189 days in charge.

The Conservators commend the work done during the year by Messrs. Sim, Higgens and Bradley, of the Civil Service, and by Colonel Jago and Messrs. Peet, Gass, Sheffield, Vincent, Hooper and Brougham. The Conservator, Southern Circle, remarks that Mr. Stanbrough did not travel enough, and the Conservator, Northern Circle, is not satisfied with the work done by Mr. Stafford. The Board do not understand how Mr. Stafford spent 174 days in camp without visiting the Jungle Conservancy plantations in his district (Godávari) which have been made over to the Forest Department. As the Conservator will shortly inspect that district, this matter will, no doubt, receive his attention.

5. During the year, the subordinate Forest establishments and the office establishments of the department were re-organised, and very great progress was made in the selection and submission of proposals for notification of reserved forests under Sections 4 and 25 of the Act.

6. The following statement shows the area of reserved forests in the two circles:—

—	Southern Circle.		Northern Circle.		Total.	
	ACRES.	SQ. MILES.	ACRES.	SQ. MILES	ACRES.	SQ. MILES.
Area on 1st April 1883	1,261,003	1,970	519,941	812	1,780,944	2,782
Added during the year	77,305	120	7,719	12	85,024	132
Total ..	1,338,308	2,090	527,660	824	1,865,968	2,914
Excluded or transferred to other heads	28,677	45	300	..	28,977	45
Area on 31st March 1884 ..	1,309,631	2,045	527,360	824	1,836,991	2,869

These figures represent the area of certain tracts which are actually reserved, and of which the area has been approximately ascertained. They do not include the Nallamalai Hills in Kurnool, the slopes of the Nílgiris towards Coimbatore and Malabar, the sholas on the Nílgiris, the Bolampatti and Tadagam Forests, portions of the Anaimalai Hills in Coimbatore, three blocks of the Pachaimalais in Trichinopoly and three tracts in Madura, with various others which are, in fact, reserved, but of which the area has not been ascertained. In the Northern Circle there were, during the year under report, no reserves constituted under the Act, for, although several settlements under it were in progress, the final notification had not in any case been issued. In the Southern Circle, also, several settlements under the Act were in progress, but 683 square miles had actually been constituted "reserved forest" under Section 25 of the Act. The areas shown in the above statement as added during the year consist chiefly of the old Jungle Conservancy reserves and the so-called "village forests" in the Cuddapah District. The areas shown as excluded or transferred during the year comprise the Zemindari reserves in Madura, omitted pending further action under Chapter IV of the Act, and the Kadiramalai reserve in Tinnevelly, transferred to the list of plantations.

7. In connection with the figures which represent the areas of Reserved Forests in Appendix 1 of the Southern Circle Conservator's report, although it is clear that, in the absence of demarcation and survey, they cannot be regarded as more than mere approximations to accuracy, yet the arithmetical manipulation of the figures does not appear to be always correct. For instance, it appears that an area of 14319·15 acres of forest, belonging to certain zemindaris in Madura, has been excluded from the area of Government Reserved Forests during the year under report, pending further action under Chapter IV of the Forest Act. But the details of this acreage are not given, nor the names of the zemindaris alluded to. Turning, however, to the report for 1882-83, and G.O., of 29th August 1881, No. 1284, it is gathered that the following zemindaris and areas are those referred to :—

	Sq. Miles.
No. 1. Warsanad Valley	45·95
„ 2. Erasakanayakanur	1·78
„ 5. Kottagudi Valley	13·79
„ 6. Chothaperai Odai	1·60
„ 7. Kandamariyan Odai	2·49
„ 8. Anrivi Ar	5·93
Total ...	71·54

These areas together make up 71·54 square miles, which is equal to 45785·6 acres instead of only 14319·15. The discrepancy is serious, and should be explained or corrected. Again, the area of the Sandanam Shola on the Upper Palnis in the same district is put down as 300 *square miles*. This is probably a mistake for 300 acres. If so, the error should be corrected. There is, moreover, a want of system in the preparation of the Appendix No. 1 for the Southern Circle. For some districts the areas of reserved forest, as they stood on the 1st April 1883, are given, but not for others, a total for that date for the whole district being only given.

8. The demarcation of reserves appears to have made some progress in the Southern Circle, but the Conservator, Northern Circle, expresses dissatisfaction with the amount of work done in his circle. Paragraph 21 of his report shows that only Rs. 3,547, out of Rs. 15,500, were spent on demarcation. The attention of the Collectors in the Northern Circle is especially asked to this matter, and they are requested to see that the District Forest Officers make use of the budget allotments before the close of each year.

9. In the same paragraph, Mr. Gamble remarks that in one or two districts, especially on the Nílgiris, settlement work would seem to be proceeding unnecessarily slowly. A Forest Settlement Officer, as such, is not subordinate to the Conservator, and it is not desirable that the Conservator should criticize the work of Forest Settlement Officers. Their work is *quasi*-judicial, and—especially on the Nílgiris—must involve the decision of questions strenuously contested; so that it must take time.

10. The forests under lease comprised, as in former years, the Mudumalai Forests, in the Nílgiri District. Under a convention with the Rajah of Sandúr, signed on 12th March 1884, the forests of the Sandúr State, in the Bellary District, were formally taken under lease during the year.

11. In the Southern Circle, the Forest officers selected for the approval of the Board various tracts as fuel and fodder reserves, and many of the actual reserves which await formal notification under the Act are reserved under the powers given by the rules issued by Government under Section 26. No separate mention of these areas is made by Major Walker, and it is difficult, during the present transition, to classify accurately the areas in charge of the Forest Department. Thus the 866 square miles selected by the special Forest officer in Salem District are for the present reserved under these rules, but they include portions of old reserves, which will, in due course, be notified under the Act. In the Northern Circle, areas for fuel and fodder reserves have been selected by the Forest officers in the Ganjam, Vizagapatam and Kurnool districts, as is mentioned in paragraph 24 of the circle report.

12. In the Southern Circle, the department carried out considerable survey operations, especially in Trichinopoly and South Arcot. The Board imagine that there must be some clerical error in paragraph 33 of Major Walker's report where he states that a detailed survey of the Tiruvannámalai Hill was made for the purpose of obtaining two photographs to illustrate the report on Trinomalai Hill chain (*sic*). The allusion to a chain is not understood, Trinomalai being an isolated hill. In the Northern Circle, the only departmental surveys were those executed by Mr. Brougham in Anantapur, and by Mr. Lodge, Assistant Conservator, in Nellore.

13. In the Southern Circle, there are as yet no working plans, and in the Northern Circle, the only working plans are those for certain plantations on the Nílgiris, and a preliminary scheme for the Ballipalle Forests in Cuddapah.

14. The distribution of the staff throughout the districts is, to a great extent, tentative, especially in the Northern Circle, but it is believed that at the close of the present year, the Conservators will be able to place before Government a comprehensive view of the requirements of all the districts in the two circles and to adjust accordingly the establishment which is available.

15. The statistics showing the result of prosecutions for breaches of the Forest laws call for no special remark. In Kurnool, Mr. Sim appears to be doing good work in the repression of smuggling in timber. The Conservator mentions A. Kuppuswami Mudali, the present Tahsildar of Márkápur; M. V. Chellapatti Naidu, Tahsildar of Huvinahadgalli; and A. Akhilandum Mudali, now Tahsildar of Hospet, as officers who assisted the Forest Department.

16. On perusing the remarks of both Conservators on the important subject of forest fires and fire-protection, it would appear that the Northern Conservator has not obtained as much attention to this matter on the part of the district officers as he desires. Collectors are requested to bear this in mind, and to give due weight to the instructions issued by the Conservators. In Ganjam and Vizagapatam, nothing has as yet been done to protect forests from fire. In the Godávari District, most of the reserves had fires in them. In the Kistna District, the Forest Department had under

special fire-protection the Kondapalle reserve, in which the late Collector, Mr. Horsfall, had taken much interest, spending on it large sums from the Jungle Conservancy Fund. Of this reserve, three square miles were burnt. The Board cannot but regard this as discreditable to Mr. Boileau. Other fires took place in the Kistna District, one in a plantation near Masulipatam. In Nellore District nothing was done, although fires are frequent on the Veligondas, and the Conservator had recommended a special area to be selected for fire-protection. In Cuddapah and Kurnool, where fires used to be habitually kindled on the hills every hot season, much has been done by Messrs. Higgens and Sim to put a stop to fires by protecting certain areas and chiefly by inducing the villagers to assist. In Bellary, Mr. Hooper paid attention to the subject, and in Anantapur, special protective works were quite successful. The fires on the grass lands of the Nílgiris are said to have been very bad, and one fire, by the negligence of the fire-patrol, reached the Sígúr sandalwood plantation. The work done in the Southern Circle is detailed at paragraphs 64 to 76 of the report for that circle. The Board are unable to clearly follow Major Walker's observations. The result is said to be very satisfactory, and great credit is said to be due to district officers because Major Walker makes out that the cost of fire protection was reduced by one-half during the year under report, viz., from 4 to 2 pies per acre, although in the very same paragraph in which he congratulates himself on this result, he admits that he regards Mr. Sheffield's figures (on which the result chiefly depends) as almost incredible. That officer has reported that he fire-protected 233,000 acres at a cost of Rs. 1,144. The rate is rather less than 1 pie per acre, but compares unfavorably with the rate at which Mr. Wooldridge in South Arcot appears to have worked, who fire-protected 63,910 acres for Rs. 144, or for less than half-a-pie per acre, without eliciting any remark from Major Walker. It is clear, however, that there is some mistake in Mr. Sheffield's figures, for whereas he reports that the reserves under fire-protection remain the same as last year, the detailed statement shows both their number and extent to have been largely increased. Moreover, Major Walker is evidently doubtful whether Mr. Sheffield clearly understands what fire-protection is and what charges are debitable to that head; and this, too, after he had himself personally inspected the district during the year under report. In the course of his inspection, the Board would have thought that much or all of Mr. Sheffield's fire-protection would have come under the Conservator's notice and attracted his attention, but it does not seem to have done so, and it appears rather late in the day now to call on an officer of Mr. Sheffield's service in the Forest Department to explain his views on such an elementary forest detail as fire-tracing. The Board fear that the Southern Circle Conservator's conclusion in paragraph 64 must be rejected as unsound. In the Wynaad and Pálghat Division, the Conservator was not satisfied with the results of the fire-protection during the year.

17. In paragraphs 73 to 78, Mr. Gamble discusses natural reproduction and urges the importance of felling trees flush with the ground instead of pollarding them, so that there may be good coppice shoots capable of forming good trees, instead of pollard shoots which, as they grow older, cause the centre of the old stool to rot and prevent its ever being used as timber. The need to rigidly exclude goats, which eat the young shoots and seedlings, is also strongly pointed out.

18. There is nothing new that calls for special notice with regard to the plantations and topes in charge of the department. In paragraph 84 of Mr. Gamble's report is quoted the Collector's description of Mr. Vincent's work in the casuarina plantations of Nellore, and in paragraph 33 of Major Walker's report, mention is made of certain data regarding casuarina plantations compiled by Mr. Brasier. The distinction drawn by both Conservators between "Regular Plantations," "Cultural Operations," and "Topes" is rather confusing in the absence of any explanation of what is meant by cultural operations as distinguished from "topes." In paragraph 5 of the Government of India review of the Forest Reports for the Madras Presidency, dated 31st March 1884, No. 194-F, they observe that an uniform classification of plantations and other cultural operations should be made, but no allusion is made to topes, and the Board think that topes should be included under the heading of "Cultural operations including topes," unless any good reason for keeping them separate can be shown. This also

is apparently what was directed in Paragraph 3 of G.O., No. 101, dated 21st January 1884.

19. Paragraphs 104 and 105 of the Northern Circle Report and paragraphs 106 to 114 of the Southern Circle Report mention the various experiments with exotic plants undertaken by different officers.

20. Statement No. 8 appended to the Northern Circle Report, and the corresponding statement of the Southern Circle Report, show the several descriptions and quantities of timber and other forest produce collected by departmental agency in each division and their disposal. The quantities are given in various denominations, and the Board approve of the proposal of the Conservator, Northern Circle, in paragraphs 116 and 120 of his report, to adopt a uniform standard of weights and measures in his next report. The next two statements show (1) the timber and other forest produce received into and issued from the depôts, and (2) sales in the depôts and in the forests, with the prices realized. The total receipts from departmental sales amounted to Rs. 1,22,062 in the Northern Circle and to Rs. 1,96,626 in the Southern Circle, making a grand total of Rs. 3,18,688. The value of stock on hand at the close of the year was Rs. 16,248 in the Northern Circle and Rs. 1,16,216 in the Southern Circle, or Rs. 11,465 and Rs. 14,163, respectively, more than in the previous year.

21. Statement No. 11 in the Northern Circle Report, and the corresponding statement of the Southern Circle Report, show the quantity and value of timber and other produce removed from the forests under the permit system. The receipts realized under this system were Rs. 2,66,164 in the Northern Circle and Rs. 3,32,798 in the Southern Circle, making a total of Rs. 5,99,262, against Rs. 2,64,468 and Rs. 2,95,694, making a total of Rs. 5,60,162, in the previous year.

22. The receipts and charges of the two circles for the year under report, compared with those of the preceding year, are shown below:—

	Receipts.		Charges.		Surplus.	
	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Northern Circle ..	3,91,298	4,13,333	2,53,925	3,02,452	1,37,373	1,10,881
Southern do. ..	5,15,144	5,45,658	3,90,940	4,78,464	1,24,204	67,194
Total ..	9,06,442	9,58,991	6,44,865	7,80,916	2,61,577	1,78,075

23. The surplus revenue, as shown in the above statement, was less than that in the preceding year by Rs. 26,492 in the Northern Circle, and by Rs. 57,010 in the Southern Circle. This was chiefly due to the increase of establishments consequent upon the re-organization of the department.

24. The Board are surprised to find that Major Walker appears to have been under the serious misapprehension that, by the mere passing of the Forest Act, all the old rates of seigniorage leviable under the Jungle Conservancy régime and rules had "become a dead letter" (*vide* paragraph 147 of his report). Those rules remain in full force and effect until superseded by new rules and rates of seigniorage under the Forest Act, which have not yet been sanctioned by Government. If Major Walker has acted in all districts in his circle as he seems to have acted in Chingleput, the Board fear there must have been a serious loss of Forest revenue from his mistaken view of the matter. They hope, however, that such was not the case, and that the above paragraph is merely an abstract from the District Forest Officer's report entered by a clerk in the Conservator's report and passed by him carelessly. Even in that case, the Chingleput Forest Officer should be disabused of his erroneous impression, and it would be well if the Conservator went through his report and its appendices

in future himself, with care, before sending it up to Government, as there are many indications in it of haste or want of care in its preparation.

(True Copies and Extract.)

(Signed) G. MACKENZIE,
Acting Sub-Secretary.

To the Secretary to Government, Revenue Department, with maps.
" all Collectors.
" the Conservator of Forests, Northern Circle.
" the " " Southern "
Copy to the Deputy Conservator, in charge of Central Office of Forest Accounts.

READ—the following Proceedings of the Board of Revenue, dated 3rd December 1884, No. $\frac{4137}{\text{Forest } 425}$:—

Read—the following letter from Major I. CAMPBELL WALKER, Conservator of Forests, Southern Circle, to the Secretary to the Board of Revenue, dated Chittoor, 20th November 1884, No. 1799:—

Referring to Board's Proceedings, No. $\frac{3597}{\text{Forest } 341}$, of 18th ultimo, I have the honor to submit the following remarks, premising that the proofs of the annual report were not revised by me, as they reached the office just before I left for England on privilege leave.

2. *Paragraph 7 of Board's Proceedings.*—The area of reserved forests in the Madura district is correctly given in paragraph 13 of the report, subject to correction of areas on survey.

On the 31st March 1883, it was 306·54 square miles, from which the area of six zemindari tracts, 71·54 square miles, is deducted, and to which 49·17 square miles, area of late jungle conservancy and railway fuel reserves and plantations, is added, making 284·17 square miles as shown in the margin.*

	sq. mls.
* Area on 1st April 1883	306·54
Deduct six zemindari tracts ...	71·54
	235·00
Add additional areas of old jungle conservancy, &c., reserves and plantations	49·17‡
Total on 1st April 1884	284·17
† Area of six zemindari tracts deducted or excluded	71·54
Excess area of old jungle conservancy, &c., tracts added ...	49·17‡
Difference ... or 14,316·8 acres.	22·37

The area shown as "excluded," 22·37 square miles or 14,316·8 acres, is the difference between that deducted and added during the year.†

In the detailed statement (Appendix I), the acreage is correct, but the total under square miles embraces the areas shown in square miles only and not those whose extent is shown in acres, which should have been added.

The grand total of forests classed as reserved, 2,045 square miles, in the circle, is correctly given.

3. The district returns and especially that for Madura, where the District Forest officer was absent, were most confusing, as will be seen by a reference to them, and time did not admit of my sending for explanation.

The registers maintained in my office show only the forests finally reserved under Chapter II of the Act, and even for those the areas are not always available in the absence of surveys.

4. The entry of 300 under square miles opposite the Sandanam shola in Appendix I is erroneous. In the manuscript copy to which I have referred, the figures "300" or "3·00" occur amongst others, which I directed to be struck out as inaccurate. The clerk ran his pencil through them, but the 300 appears to have been printed and overlooked in correcting the proof. It is not included in the total and is a palpable printer's error.

5. As explained above, the areas of reserved forest on 1st April 1883 in the district reports differed so widely from those given in the reports for that year, that I was obliged to discard them and adopt those of my report for 1882-83, which rendered it impossible to give the areas in detail for some districts, the total only being available.

6. *Paragraph* 12 *of Board's Proceedings.*—The word "chain" is an obvious misprint for "claim" as entered in my manuscript. The sentence is, if I mistake not, taken from the district report, but should read "a detailed survey of Tiruvannámalai hill was made and two photographs taken to illustrate the report on the Tiruvannámalai hill claim."

7. *Paragraph* 16 *of Board's Proceedings.*—Mr. Sheffield has explained that the apparent cheapness of his fire-protection is due to considerable areas being plantations and areas in the plains in which there is little or no grass or danger from fire, and from the pay of the fire-patrols not having been debited in the accounts for 1883-84. The circumstances of the fire-protected areas in South Arcot are exceptional, as they are almost entirely situated in the plains and cattle are more or less admitted, which graze down the grass and reduce the danger from fire and expense of fire-protection to a minimum. I did not, therefore, think it necessary to allude to the cost of fire-protection in that district, with which I was satisfied. The North Arcot protection embraced hill forests, and cattle are excluded. Hence my doubts, which Mr. Sheffield has now set at rest.

When I visited the North Arcot district in February, the fire season had not commenced, and Mr. Sheffield's measures of fire-protection could not, therefore, come under my notice.

I personally impressed upon him and his rangers the correct principles of fire-protection, and can assure the Board that proper "fire-tracing," which is only one of several details in fire-protection, is by no means so elementary or so easy as they would appear to imagine. It is a professional matter requiring, like any other, care and experience to effect properly and economically.

There is, however, I am glad to say, no reason for the Board to fear that my conclusion as to results "must be rejected as unsound." It is perfectly correct.

8. *Paragraph* 18 *of Board's Proceedings.*—"Cultural operations" may, of course, be held to embrace plantations and topes. Topes are plantations, though all plantations are not topes; but the terms "regular plantations" and "cultural operations" have now a distinct and separate meaning for the forester, the latter being applied for the most part to sowings or preparation of the ground to receive seed in aid of natural reproduction, and to any operations short of regular planting out from nurseries, undertaken for the regeneration of the forest and re-clothing of denuded areas. I think that, in future, established topes might well be classed with plantations, the area of "cultural operations" being separately exhibited.

9. *Paragraph* 24 *of Board's Proceedings.*—I find nothing to justify the Board's conclusion that I or the District Forest officer, Chingleput, was under a "serious misapprehension" with regard to the effect of the passing of the Forest Act on the old Jungle Conservancy Rules. I merely stated a fact, the absolute correctness of which, I feel sure, the Collector will confirm, that "the old Jungle Conservancy Rules and rates of seigniorage had become a dead letter" in Chingleput. With the causes or reasons for this I had nothing to do, for the district was not under the Forest Department prior to reorganization.

I proposed to re-enforce the old seigniorage rates, but the Collector thought it better to wait till new rates were sanctioned under the Forest Rules, and I deferred to his opinion and took no further action.

I now see that, during my absence on leave, the levy of seigniorage on certain articles has been tentatively adopted, and I have already submitted a scale of new rates for approval.

10. It is a significant comment on the Board's criticisms on the report generally and especially on the concluding paragraph of their Proceedings, that it is the first annual report for many years which has been almost entirely written by the Conservator himself, and that I took special pains to make it accurate and clear without being diffuse, though I explain the exceptional difficulties in my opening paragraphs.

I regret that my efforts would appear to have fallen so far short of the Board's standard, and can only try and do better in future and bear in mind that I am addressing non-professional critics requiring presumably fuller information than I gave.

I beg that this explanation may be submitted to Government as early as practicable, in order that they may have it before them whilst reviewing the report.

Resolution—dated 3rd December 1884, No. $\frac{4137}{\text{Forest } 425}$.

Submitted to Government.

2. The Conservator explains that, while 71·54 square miles of zemindari forest were excluded from the Government reserved forests in Madura, 49·17 square miles were added to them, which had formerly been under jungle conservancy, and that the 14,319·15 acres entered at page 52 of Appendix I represent the difference between these two areas, or 22·37 square miles. As no mention was made of the 49·17 square miles of jungle conservancy areas in the report or appendix, the Board were of course unable to guess the explanation. That the various district returns are very confusing, they can well believe, and Major Walker's not having had the opportunity of revising the proofs of his report accounts for such errors as 300 square miles as the area of Sandanam shola, and the allusion to the Tiruvannámalai hill chain appearing in print.

3. The Board have not seen Mr. Sheffield's explanation regarding his fire-protection operations, but they are unable to understand why he should have included in fire-protected areas "plantations and areas in the plains in which there is little or no grass or danger from fire," and, as the pay of the fire-patrols was not debited in the accounts of 1883-84, it seems clear that his figures of average cost of protection must have been erroneous.

4. The Conservator's remark that in South Arcot the expense of fire-protection and the danger of fire are reduced to a minimum because cattle are admitted to graze in the fire-protected areas seems to the Board of doubtful accuracy. The Board have always understood that the chief cause of forest-fires is the carelessness or mischievousness of the cowherds attending cattle while grazing in the forests. Spontaneous fires are almost unknown in this Presidency; so that, in the absence of some person to set the grass on fire, it cannot make any difference in the risk of a forest-fire whether cattle are admitted to the forests or not, while it would certainly seem that that risk must be greater in a forest where cattle and cowherds are admitted than where they are excluded.

5. The Conservator shows that he was not responsible for the abolition of the jungle conservancy seigniorage rates in Chingleput. At the same time, the Board think he should not have stated the fact of their abolition without commenting on it, seeing that, since the reorganization (a period of now about two years), he has been content to let the collection of fees in the district remain a dead letter, when a reference to the Board would have set the matter right.

(A true Copy and Extract.)

(Signed) C. F. MacCARTIE,
Acting Sub-Secretary.

To the Secretary to Government, Revenue Department.
Copy to the Conservator of Forests, Southern Circle.
" " " " Northern Circle.
" " Deputy Conservator of Forests, in charge of Central Office of Accounts.

Order—dated 24th February 1885, No. 248, Revenue.

Forest, No. 37.

With the first of the Proceedings read above the Board of Revenue submit the administration report of the Madras Forest Department for the year 1883-84.

2. *Leading Events.*—No changes of importance took place in the constitution of the superior staff of the department. The subordinate forest and office establishments were reorganized during the year, and two special Forest Settlement officers appointed from the ranks of the Covenanted Civil Service for the Coimbatore and Nílgiri districts, respectively. A code of rules under Section 26 of the Forest Act for the constitution and protection of "reserved lands" was promulgated in March 1884, but no action was, or could be, taken upon them before the close of the year. Rules were also issued under Section 35 of the Act for the regulation of the transit of timber between the Kurnool district and the territories of His Highness the Nizam.

3. *Inspection.*—Of the ten districts in the Northern Circle, five were inspected by the Conservator during the year. Mr. Gamble's examination of the Ganjam and Vizagapatam forests, which was undertaken at the special desire of Government, was of a peculiarly careful and searching description and will, there is every reason to believe, be productive of very beneficial results. In the Southern Circle the Conservator was able to visit the whole of his districts within the year. The Government note with satisfaction the activity displayed by the District Forest officers generally in the inspection of their charges.

4. *Reserved Forests.*—The extent of forest treated locally as reserved has risen from 1,970 square miles in the Southern Circle to 2,045, and from 812 in the Northern Circle to 824. Of the area claimed in the Southern Circle, 683 square miles are reserved forest in every sense, having been so constituted under Act V of 1882. The remaining area in this circle, as well as the whole of that shown in the returns of the Northern Circle, represents tracts regarded as reserved prior to the passing of the Act. Certain reserves of the old Jungle Conservancy Department having been overlooked in the returns for 1882-83 have now been included, which accounts for the variation in the figures for the Northern Circle as compared with those of that year. As already observed in the Proceedings of Government reviewing the report for 1882-83, these totals include only those tracts of which the area is approximately ascertained, and do not embrace large extents of forest country which have, as a matter of fact, been under the management of the department for many years, but of which the area cannot even be roughly estimated. The Board of Revenue have remarked that Statement No. I of the appendix to the report for the Southern Circle is imperfect, the details of the district totals of forests reserved prior to the 1st April 1883 being in many cases omitted owing, it is now explained, to discrepancies and inconsistencies in the district reports. The practice of showing only the *net* resultant of areas added or excluded during the year is also erroneous and liable to mislead. In future all areas added or excluded for whatever reason during the year should be entered in the appropriate column.

5. The demarcation of reserves made fairly good progress in the Southern Circle, the expenditure of the year aggregating Rs. 14,428 against a sanctioned grant of Rs. 20,450 and a revised estimate of Rs. 18,054. In the Northern Circle the amount of work done under this head was not satisfactory. The Government desire to impress upon all officers of the department that the subject to which their chief attention must be directed at present and for several years to come is the demarcation and settlement of permanent forest estates, and that, as remarked by the Government of India, "until considerable progress has been made in this respect, the more professional work of the forester can only be attempted on a moderate scale." The Government note that in the opinion of the Conservator, Northern Circle, forest settlement of the Nílgiris is not progressing as rapidly as could be desired. It is the duty of a Conservator to bring to the notice of the Board of Revenue or of the Collector concerned any delay which may seem to him to be uncalled for on the part of a Forest Settlement officer, but this should be done in a separate communication.

6. As regards forest survey but little work was done departmentally during the year, except perhaps in South Arcot, and little expenditure was incurred as compared with the budget grant. Work of this description must of course yield precedence to

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been, or can be, done as yet as
operations.

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8. *Reserved Lands.*—A
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9. *Protection.*—The distri
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1883-84			

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December, No. 4137

12. *Plantations*
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Circle and 606 in the Northern,
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will be drawn to Mr. Gamble's

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nt:—

ures.	Percentage of Failures in Area attempted.	Cost of Protection. Per Square Mile in Rupees.	Cost of Protection. Per Acre in Pies.
MLS.			
39	14	22	7
1	0·3	15	4
40	7	18	5
29·5	7·9	15·7	4·7
6·7	1·26	7	2·1
36·2	4	10	3·1

Circle.

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against 36,027 acres in 1882-83.
o be due principally to an extraor-
r of Tanjore, who took credit for
9,260 acres were in reality natural
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f this nature are likely to occur, the
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taken without delay in every case, for instance, be no doubt that in some enormous miscalculation. The other seem to have been certain extensions of Nellore and the planting of a few returns of the Southern Circle, as will report, show signs of hasty compilation 1883-84 is added to the cost of it is deducted. Moreover, areas shown in the columns for 1883-84, although year. The total area under cultivation acres against 68½ in 1882-83, and in the difference in the latter case being areas to "topes," of which both Circles which are of course tentative at present there were 617 Government topes, covering aggregate areas, respectively.

13. *Exotics.*—The Government of the *Landolphias* received from Cloth The plants of *Cephaelis Ipecacuanha* made good progress. Further inquiry *Castilloa* and *Hevea* plants under the District Forest officer of Tanjore. date trees planted in that district.

14. *Departmental Working.*—The quantities of timber and other produce during the year. As, however, the different districts, no attempt has been the returns are thus of little practical The total receipts from departmental shown as Rs. 1,16,216 in the Southern observed that the corresponding figures differ widely from those shown as year. In future reports it should be Public Works and Ordinance Depôts.

15. *Permit System.*—The revenue under permit was Rs. 3,32,798 in the showing a total advance of Rs. 39,11 head.

16. The following statement shows as well as for the whole Presidency.

Receipts			Rs. 9,58,991
Expenditure—			
Conservancy and Works			3,51,445
Establishment and Contingencies			4,29,471
Total Expenditure			7,80,916
			1,78,075

No. 248, Revenue.

With against Tinnevelly alone is an read above unportance during the year the adminis, to the casuarina plantations Forest Depar lgiris and in Kurnool. The of importance took page 18 of Major Walker's The subordinate for cost of areas excluded during two special Forest pril 1883, while in other cases Service for the Coim ations in 1882-83 are omitted ection 26 of the For areas excluded during the as promulgated in the Northern Circle as 144½ re the close of the as 4,728 acres against 7,709, regulation of the t lue to the transfer of certain His Highness the hit detailed lists. These lists, future correction, show that tricts in the Northe d 264 in the Northern Circle, Mr. Gamble's ex 114 acres. ertaken at the specia g description and v al results. In the So m Major Walker's report that istricts within the ve ust 1882 are growing well. ed by the District For nund are also stated to have regards the growth of the ent of forest treated Kerguson of Calicut, and the tern Circle to 2,045, and v particular attention to the d in the Southern Circle, in appearance. g been so constituted under A as the whole of that shown intended to show the arded as reserved prior to th ital agency and sold servancy Department having denominations for n included, which accounts r each circle, and compared with those of that l in future years. rnment reviewing the report Southern and Rs. ich the area is approximately close of the year is ountry which have, as a matter ern Circle. It is for many years, but of which the ment of the year Revenue have remarked that S the report of that outhern Circle is imperfect, the uirements of the the 1st April 1883 being in n est Department. ancies and inconsistencies in th ed by purchasers 4 in Northern, e entered in the appropriate as ge under this de fairly good progress in thally ng Rs. 14,428 against a s ex h circle 18,054. In the Northern a the subject to which their ars to come is the demarcati d remarked by the Governmen the d this respect, the more professi year of so oderate scale." The Govern untapur. rn Circle, forest settlement of t shown d. It is the duty of a Conservat e Collector concerned any delay a Forest Settlement officer, b ,464 tle work was done departmen nd little expenditure was incurr 194 description must of course yiel

Northern Presidency.

24TH FEBRUA

The figures compare as

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ord their

	Receipts.
	RS.
1881-82	8,05,884
1882-83	9,03,914
1883-84	9,58,991

forest produce were sent to the Inte which several officers of the departm collection was also sent to the Edinb

ry to Government.

18. In concluding this review, the satisfaction with the operations of the yea

(True

To the Board of Revenue, with eight Home Department.
„ the Public Works Department.
„ the Military Department.
„ the Director, Government Cincho (Signed) H. E. STOKES,
Secretary to Government.

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Exd. W. H. French.

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REVENUE.

SECRETARIAT TO GOVERNMENT
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REVENUE DEPARTMENT MADRAS

Issued

Encl.

G.O., 24th February 1885,
Nos. 248, 248A.

FEBRUARY.

est Administration Report,
1883-84,

reviewed.

With Order