Revenue (1898) Department.

PRESS SERIES.

G.O., No. 273-273A

DATED 16th May 1898.

[Despatch Abstract.]

Reviewing the progress report of Forest Administration in the Madras Presidency for the year ending 30th June 1897.

20

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Revenue (189) Department.

SECRETARIAT
15 NOV 97
REV. DEPT.

CURRENT No. 9811.

From The Secretary to the Commissioners of Land Revenue

Order No. 486

Dated 13 November 1897.

Received 15

Registered 17

Enclosures

Spare copies

SUBJECT.

Subj to Govt authorisation the progress report of Forest administration in the Madras for the year ending 30 June

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

PROCEEDINGS OF THE BOARD OF REVENUE

(LAND REVENUE).

READ—file of reports received from Collectors and Conservators on the progress of Forest Administration during 1896–97.

RESOLUTION—Forest No. 486, dated 13th November 1897.

The Board resolves to submit to Government the progress report of Forest Administration in the Madras Presidency for the year ending 30th June 1897.

2. The suggestions of Government as regards the arrangement of the appendices have been adopted and the length of all the returns except Forest No. 45 has, in anticipation of sanction, been curtailed in accordance with the circular from the Government of India referred to the Board for remarks in Government Order, Mis. No. 3431, Revenue, dated 7th July 1897.

3. Complete statistical returns from Kistna and Ganjám were not received in the Board's office till the 28th September and 5th October respectively, and the revised timber returns called for on the 25th September from the Collector of Vizagapatam were not submitted by him till the 11th October.

4. The report has, as usual, been prepared by Mr. Popert, the Senior Conservator of Forests.

(True Extract.)

Secretary.

To the Secretary to Government, Revenue Department,
with three copies of the Administration Report.

Erd. S. A. S. Ragaviengar.

REVENUE DEPARTMENT.

1897.

Board of Revenue

(Land Revenue),

MADRAS.

Printed November th.

Proceedings, Forest No. 486, 13th November 1897.

NOVEMBER.

Submitting to Government, with remarks, the progress report of Forest Administration in the Madras Presidency for the year ending 30th June 1897.

Date.

xcl.

Read C. No. 9871 of '97.

L D

he

Order

With its Proceedings read above, the Board of Revenue submits its report on the Administration of the Madras Forest Dept. for the year ending 30th June 189[illegible].

2. The preparation of the report was, as in the previous two years, entrusted to Mr. Popert, the Senior Conservator of Forests. The statements appended have in some cases been curtailed in size and rearranged in accordance with the suggestions contained in G. O. No. 370 Rev: d/ 31st May 1897 and in the Govt. of India A Circular No. 12F/245-1 dated 25th June B 1897. Revised forms of statements giving detailed information as to the origin & results of injuries done to Forests have also been inserted in the present report in accordance with the instructions issued by the Govt. of India in its Circular C No. 9F/171-1 d/ 10th June 1897. The sug-

ons made in the Govt.of India Circu- B

of the 25th June last, quoted above,

re however merely referred for the opinion of

cal Govts.and have not yet been finally

adopted and prescribed. The Board was

wrong,therefore,in having taken action

thereon at the present stage.

3. Extension and constitution of State Forests-Alteration of area. The subjoined statement compares the areas of reserved forests and reserved lands at the beginning and at the end of the year under review:-

	area on 1st July 1896.	area added during 1896-97.	area excluded during 1896-97.	net increase or decrease.	area on 30th June 1897.
	sq:miles.	sq:mls.	sq: mls.	sq:mls.	sq: mls.
Reserved Forests	12,388	863	113	+ 750	13,138
do Lands	6,690	333	1,254	- 921	5,769
Total	19,078	1,196	1,367	- 171	18,907

Of the area added during the year, 845 Sq: miles under reserved forests and 302 sq: miles under reserved lands represent the extent of new reserves, while the remainder is due to rectification of area. The area disafforested or freed from reservation in accordance with the policy enunciated by the

E.O. 888 D 19.12.94

cl.

the Govt.of India in Octr.1894 was 8(D miles of reserved forests and 242 sq: he of reserved lands, while the decrease, du to rectification under the two classes of lands, was 33 sq: miles and 94 sq: mil s respectively. Under reserved lands, there was also a further reduction of 845 sq: miles due to final reservation and 73 sq: miles to exclusion at settlement. The rectified figures now reported do not, however, exclude the area of the enclosures in the Salem reserves, wrongly taken into account in the returns furnished by the Survey of India party, as, owing to press of other work, the survey of these small areas could not be undertaken before the close of the year under review. The actual area of State forests at the end of the year is therefore somewhat less than the figure given in the above statement viz., 18,907 sq: miles.

4. The total area under the control of the Dept.having been less than it was in the previous year, the percentages

hat area to the total extent of Govt. ds (21.24) and to that of unoccupied ds (36.46) also show an almost proportionate decrease as compared with the ures (21.43 & 36.80 respectively) of 5-96. Abstract B, appended to para.2 the report, in which detailed information on the above points is furnished has n prepared with considerable care but completion is marred by a few unexlained variations between the figures ven in Cols: 2& 3 and the corresponding gures given last year and by the fact at the area for which returns are reted to be not available is in excess the previous year's figure by 250 sq: les. The attention of the Sett: Dept. ould be drawn to the matter.

The Board in para.10 of its report, estimates that, if a liberal margin unreserved land is to be allowed for ee grazing, local requirements and exnsion of cultivation, it will not be ssible to add more than 1,114 sq: miles the area already brought under control viz., 18,907 sq: miles or excluding the leased forests in the Nilgiri D 18,832 sq: miles. It is not clear whether the latter figure takes into account the leased forests situated in districts other than the Nilgiris. In any case, making due allowance for the rectification of Salem figures and for the exclusion of areas at settlement, the Govt. considers that the area to be ultimately brought under control is not likely to exceed 20,000 sq: miles. This represents about 22 per cent of the total area of Govt. lands.

6. Forest Settlement. The following table compares the outturn of Forest Settlement work during the year under review as gauged by the area added to the forests reserved under section 16 of the Forest Act with that of the previous four years.

	1892-93. (15 mths)	1893-94.	1894-95.	1895-96.	1896-97.
	sq:mls.	sq: mls.	sq: mls.	sq: mls.	sq: mls.
Outturn	2261	1,350	680	922	750

(Note. The figures given above are the

t area arrived at, after allowing for ectification and after deducting from the total area notified, the area disafforested).

The actual extent ~~finally notified~~ constituted as forest reserve during the year was, however, 845 sq: miles, h as against 858 sq. mls. in 1895-96, while the extent in respect of which final notifications were issued during the two years was 656 sq: miles and 808 sq: miles respectively. Judged by either criterion therefore, the settlement work of the year must be considered to have fallen short of that of the previous year. It has been pointed out in the reviews of the previous years' reports that one of the main reasons for the slow progress made of late in settlement operations is that, while the blocks settled in former years were large hill areas comparatively free of rights and easy to deal with, ~~while~~ those which have now to be settled are smaller and are situated in the neighbourhood of cultivated tracts and are more or less encumbered with communal or private rights. These difficulties have been, to some extent, met by the appointment of an additional Forest Sett: officer. But the Govt must rely on the Board to see that the officers employed on this important work perform their duties efficiently and promptly. The Board should not hesitate to recommend the ~~removal~~ transfer to other duty of any officer who is found to lack the necessary energy and activity.

Please see in this connection letter no G.O. 6289 E 6-12-97

Mr Luckington may have a good explanation if happens he had not the work to do. So it has not been thought proper to mention his name. MK

Self but not numbered para.

The outturn of settlement work by Revenue Divisional officers does not call for any special remarks.

7. Including the leased forests in the Nilgiri district the total area under the control of the Forest Dept was about 20,021 sq: miles classified at present as follows:-

Notified under sec. 16	...	13,138 sq:mls.
Notified under sec. 4	...	4,030 ,,
Reserved under sec. 26	...	1,739 ,,
Further selections	...	1,114 ,,

Of the area notified under section 4 of the Act, settlement work connected with 1453 sq: miles was practically complete, by the close of the year under review 970 sq: miles was settled but not reported on

nd operations were being proceeded with in the case of 1607 sq: miles. Making allowance for leased forests and future rectification, it is observed that, at the rate of outturn during the year under review forest settlement work will take another six years to complete. The Government hopes however that no effort will be spared by all officers concerned to push on the work to as speedy a termination as would be consistent with good and careful administration.

8. Demarcation and Survey.- As desired by the Government of India in its review of the report for 1895-96, the Board has in its present report dealt with the preliminary demarcation and survey of proposed reserves separately from the final demarcation and survey of settled reserves. In return No. 47, however, the distinction between the two classes of survey has not been maintained so far as they have reference to the work of the survey of India

Parties.

with communa-

Govt. 766 7-5-87 F para 3.

BP mg Govt. 5697 E. 5-1-87

Parties. The Board has explained in a separate Proceedings that this is due to the plan found convenient in this Presidency, where by a Party when dealing with settled areas ~~is allowed to~~ takes up at the same time any adjoining tracts recently added to the reserved area though not as yet - settled. Preliminary surveys made by Departmental officers have been excluded from the statement in accordance with the instructions of the Govt. of India.

9. Preliminary demarcation and survey of proposed reserves. The work of preliminary survey done in the several districts is reviewed by the Board in para 12 of its report. The information given is not very full, but the Govt. is glad to note that the outturn of work in preparing and revising the sketch maps to accompany notifications under sections 4 and 16 was satisfactory. As regards demarcation, the outturn during the year under review (1671 miles) showed an increase over that of the previous year (1471 miles

The

he average rate per mile however for
he whole Presidency rose at the same
ime from Rs. 2-13-6 to Rs. 3-9-10. The
ost per mile varied from 10 annas 6
ies in South Canara to Rs.15-10-8 in
orth Coimbatore. The latter rate is
uble that reported for the same divi-
on for the previous year. The Board
plains that this increase as well as that
served in Tinnevelly was justified by
e nature of the forests in which the
rk had to be done. The work and conse-
ently the cost of demarcation must of
urse vary with the particular locality,
the Government trusts that the ex-
diture in each case is carefully
utinized by the D. F. officers and
~~servators.~~ Collectors

Final demarcation and survey of
tled reserves. The work of final
arcation during the past three years
compared in the subjoined statement

	Permanent demarcation.			Reclearing old lines &c		
	1894-95.	1895-96	1896-97	1894-95	1895-96	1896-97.
	miles	miles	miles	miles	miles	miles.
Northern circle	499	855	509	270	597	1150
Central ..	1542	1117	629	991	2834	1327
Southern ..	230	217	238	171	193	549.
Total ...	2271	2189	1376	1432	3624	3026
Average cost per mile ...	Rs. a. p. 9-0-10	Rs. a. p. 9-8-6	Rs. a. p. 12-2-5	Rs. a. p. 6-3-11	Rs. a. p. 2-14-4	Rs. a. p. 4-12-0

B.P. para 7 f/H
M.G.O. 4151 10.897

The abnormal increase in the number of miles recleared in 1895-96 was ascribed by the Board to short work in previous years and the decreased cost was explained by the fact that the work was carried out mostly by guards and watchers.

The fall in outturn and increase in cost in the year under review is apparently accounted for by the omission from the statement of lines recleared by subordinates. A portion of the enhanced cost has, however, to be ascribed to the special difficulties of clearing and erecting cairns in certain localities and in Kistna to bad work. It is presumed that the Board ~~should~~ has ~~report~~

as taken under the orders of the council

The [illegible] of the officers res-

ponsible for the original wrong demarca-

tion in Kistna. It is noted that only

1376 miles of boundary were permanently

demarcated during the year, and that

504 miles remained to be demarcated

at the end of the year. The work should

be pushed on.

11. The area topographically surveyed

by the Survey of India Party No. 19

during the year under review was 745 sq.

miles and the cost incurred per sq.

mile Rs. 84 as against 964 square miles

and Rs. 66 respectively in the previous

year. The main cause of the decrease

in outturn and increase in cost is re-

ported to be the difficult nature of

the country and the dense forests in

the Kurnool District. The new Party

No. 9 surveyed about 66 square miles only

at a cost of about Rs. 354 per square

mile. The abnormally high rate is

attributed to the fact that the Party

was unable to work throughout the sea-

son

season owing to bad weather and the

inefficiency of the subordinate staff

and that the cost of its transfer from

the Central Provinces for work in Madras

was very heavy. The Government is glad

to note that arrangements have since

been made to combine the two Parties

under the charge of one officer and to

give the necessary training to the sub-

ordinates employed and trusts that fu-

ture operations will be more efficient-

ly conducted. As regards departmental

surveys, the report mentions the work

done in Bellary and Salem only but from

statement No. 47 appended to the report

it appears that a considerable amount

of work was also done in Kistna, Trichi-

nopoly, Ganjam, Vizagapatam, Kurnool,

South Canara and North Malabar. In the

absence of detailed information, however

it cannot be ascertained how far the

outturn in the several districts was co

mensurate with the strength of the sta

employed. In future reports the matte

should be more fully dealt with. The

reports

reports abstracted in Appendix D show that due attention was paid by District officers in all districts to the importance of having the maps maintained in accordance with the provisions of section 81 of the Forest Code. From Appendix E it appears that the area of reserves for which final maps had been prepared was 6812 square miles as against 5248 square miles at the end of the previous year. Maps have still to be prepared for 6426 square miles of reserves.

12. Management of State Forests.

Working plans and annual plans of operations. The total area of forests for which working plans were completed by the close of the year under review was 317 square miles, plans for another 769 square miles were under preparation. The corresponding figures for the previous year were 183 and 808 square miles respectively. In several of the districts, the plans already approved were adhered to, while in others, it would appear that, owing to press of other work, the famine and a variety of minor causes deviations from the sanctioned schemes were found to be necessary. The total area for which plans had already been prepared or were under preparation being only 1086 square miles, the area that remained to be dealt with at the close of the year was about 17,821 square miles. Of the two main causes which have hitherto retarded progress, viz: delay in the completion of settlement work and inadequacy of establishments, the latter has since been remedied to a great extent, and the Government trusts that it will be found possible in future to accelerate the progress in the preparation of working plans. The annual plans of operations are reported to have been fairly well adhered to except in the Southern Circle, where Forest surveys and settlements, slackness of demand and altered conditions appear to have interfered with

with their enforcement in most districts. It is stated that no information on the subject was furnished in the reports received from Bellary and South Coimbatore. This was not satisfactory.

13. Communications and buildings. The expenditure incurred during the year in the construction and repair of communications and buildings (Rs.99833) was in excess of that of previous year by Rs.27,750. It is satisfactory to note that of this sum, Rs.18,955 represents the increased expenditure on roads and bridges. The tramways in Cuddapah and South Coimbatore are reported to have worked at a loss while those in Nellore worked at a profit. As pointed out in last year's review the reported profit or loss is based on an estimate of what transport by country cart would have cost. In spite of the instructions issued in the previous reviews no information as to the data on which this estimate is calculated is given. As regards the Nellore tramways, In the case of the South Coimbatore lines the estimate of the cost of transport by cart is apparently meaningless as it is reported that the real advantage gained by working the tramway is that wood is extracted which under other circumstances it would be impossible to work out. The Board should consider whether some more satisfactory way of estimating the usefulness of the tramways could not be devised.

14. Protection of forests from injury. The subjoined statement shows the number and disposal of cases relating to forest offences during the past three years :-

Years	Number of Cases for disposal			Number of Cases disposed of.				Number of acquittals.	Percentage of Cases compounded to cases disposed of	Percentage of acquittals to cases decided by the magistrates
	Cases pending	New cases	Total	Withdrawn	Compounded	Dealt with by the Magistrates	Total			
1894-95	1604	9883	11,487	904	5109	4039	10,052	750	51.8	18.6
1895-96	1365	9610	10,975	1009	4531	3862	9,402	796	48.2	20.6
1896-97	1580	11,638	13,218	1624	5793	4025	11,442	672	50.63	16.7

It will be seen that there was an increase of 2028 cases during the year under review. The number of cases prosecuted however increased by only 287. Much

the

ie greater proportion of the additional ases therefore were either withdrawn or compounded. Withdrawals show an increase of 615 or of 60.7 % over the figure for the previous year. It is unsatisfactory to note that so many petty or doubtful cases are reported and more careful instruction of the subordinate staff seems to be required. The number of cases compounded increased by 1262, an increase of 27.8 per cent. The amount of compensation realised was the largest yet attained viz. Rs.45,279. The increase was most marked in the Northern and Southern Circles. The Board has not furnished any adequate explanation of these figures. The Government fears that the principles repeatedly laid down in the reviews of previous reports both by this Govt. and the Govt. of India as to the composition of forest offences have been overlooked in practice. District Forest Officers should carefully scrutinise every case proposed to be

compounded

compounded and satisfy themselves that the case is a bona fide one clearly proved and that the compensation is not offered merely to escape the worry of a vexatious prosecution. The fall in the percentage of cases acquitted is ~~very~~ as showing that more care was exercised in instituting prosecutions satisfactory and it is noted that several of the acquittals were due to a mistake of law which has been since rectified by a ruling of the High Court.

The number of cases of injury by fire remained practically stationary. The prevalence of illicit goat browsing in S. Arcot and N. Arcot suggests the need for making some futther provision for goat browsing in these districts. The Govt. regrets to note a recrudescence of the lawless violence which marked forest offences in Cuddapah ~~the~~ a few years back. It is hoped that the preventive measures taken will prove successful..

15. The results of the measures adopted for the protection of forests from fire during the past three years

are

are exhibited in the following statement :-

Years	Area in which fire protection was attempted	Percentage area successfully protected.	Average cost of protection per square mile.
	Sq. miles.		Rs. As. Ps.
1894-95	4,979	94	8 7 11
1895-96	5,594	94	7 8 10
1896-97	5,363	99	7 5 6

It is noted that the action of the ryots themselves in abstaining from causing intentional fires through fear of scarcity of fodder contributed largely to the satisfactory result attained during the past year.

16. The total areas closed and open to grazing during the past two years are compared in the following statement:-

Year	Total areas under control	Closed to all animals.		Closed to goats or sheep.		Open to all animals.
		Whole year	Part of year	whole year	Part of year	Whole year.
	Sq.miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.
1895-96	19,078	2,348	281	17,319	..	729
1896-97	18,907	1,767	226	18,081	96	744

The figures for 1896-97 in the last three columns of the statement above

(taken from form No. 32) total up to 18,921 square miles or more than the area under control and are therefore apparently incorrect. It is however clear from the figures already furnished that sheep and goats were practically excluded from Government reserves. In the review of the report for 1895-96 the Gov- desired that the scheme of goat browsing advocated by Mr. Popert should be given as extensive an application as might be practicable and "that in localities where they are really wanted by the people and free grazing areas are inadequate, goat browsing should in the absence of very strong reasons to the contrary, be permitted within reasonable limits and subject to proper control". The ~~Board's~~ Govt. ~~attention is drawn to the matter.~~ takes this opportunity of reiterating these instructions

17. Improvement of Forest growth. The attempts made at natural reproduction appear to have been fairly satisfactory except in the Northern and some parts of the Central Circle where owing to famine and the damage done to reserves by cattle

attle and grass cutters the results obtained were disappointing. The area under regular plantations rose from 18,067 acres in 1895-96 to 23,186 acres in 1896-97 and the expenditure from Rs. 34,070 to Rs. 34,865. There was a small decrease in the area where cultural operations were carried on and a very small increase in that of tops. The progress made in experiments conducted with seeds and seedlings is reported to have been somewhat ~~rather~~ slow but in regard to such of these as were carried out during the year some interesting information is furnished in para 33 of the Board's report. In accordance with the wishes of the Govt. of India expressed in its review of the annual administration Report for 1895-96 a special report has been called for from the Board in regard to the feasibility of growing forests of ~~cora~~ ceara rubber in this Presidency. A report is also due from the Board on the subject of the ravages made by caterpillars in the sal tracts of Ganjam in May 1896. From the fact that the report now under review

G.O. 766 7-8-97 para 4 to F
also G.O. 914 5-11-97 to O

Para 5 of G.O. 766 7-8-97 to F

review merely states that the natural reproduction of the tree in the district left nothing to be desired it may presumably be inferred that the attack was not repeated. The submission of the reports called for should however be expedited.

18. Exploitation of major and minor forest produce. The operations connected with the exploitation and removal of major forest produce have been fully reviewed by the Board in paras 34 to 38 of the present report and do not call for any special remarks. As regards minor produce the Government notes that notwithstanding the throwing open of the reserves in several of the districts on account of famine the grazing revenue of the year reached the highest figure yet attained and amounted to Rs.3,76,354 or nearly Rs. 36,000 more than in the previous year. The revenue was as usual the highest in Kistna (Rs.70,389), Salem ~~Rupees~~ (50,943) and North Coimbatore (Rs.35,914) coming next. As compared with 1895-96 the

he increase in the two districts last
ientioned was about Rs.27,745 and has been
ascribed in Salem to revision of rates
and in North Coimbatore to a very large
addition to the number of licensed ani-
mals admitted into the reserves. Although
the revenue was highest in Kistna yet
there was a fall in this District ~~as~~ from the
revenue realised in
~~compared with~~ the previous years ~~of rents~~
~~nuc~~. The Board remarks that "Kistna
under the parcellaire system again shows
a reduction of revenue"; but it is observ-
ed that the decrease has to be attribut-
ed to the throwing open of some of the
reserves to free grazing and free re-
moval of grass and also to the migration
of professional herdsmen to better pastures.
In Bellary as well as in Salem the increase of
grazing revenue is ascribed in part to the
enhancement of the rates. The Board should
report the circumstances which led to an
enhancement of the rates at a time of
scarcity. As regards the smaller items

of

the review

See also
G.O. 5401 & L
21-10-57

Years &c.	Ti c d

of minor produce, the Govt. notes from
para 51 of the report that due attentio
is being paid to the importance of pre-
venting their collection being mor is
by petty contractors to the detrimen
ryot.

19. Gross yield and outturn of Forest produce. The particulars under this head during the past five years are compared the following statement :-

orest Act has been generally success
ful. The Collectors of Vizagapatam and
Godavari should carefully enquire into
the only worthless sq. miles.
reasonableness or otherwise of the
complaint reported from their districts
viz. that only worthless trees are ex-
cluded from the classified lists. No
allusion is made in the report to the
working of the rules which have been
framed under the Act for the management
of forests and waste lands in certain private
Estat * The Collectors of the districts
where these estates are situated should
be instructed to submit for incorporation
in the report brief notes on any questin

* Jeypore Vizianagram & Sapluru vide Forest manual in the Rules.

and in North Coimbatore to a very large

of its report. The prevailing scarcit

restricted the demand of purchasers. The

removals under free grants ~~however~~ at the same time gre atly

increased owing to the opening of the forests

in the affected districts. The forests

have thus proved a substantial help to

the people in their distress during the

year.

20. The profit derived from the workin g

of the forest produce by Departmental

re-

m The Conduct of the subordinate

of executive staff is not favourably re-

ported on. ~~No substantial~~ The improvement in the pay

and prospects of this branch of the

Department which has been effected by

the recent reorganization will, ~~the Govt.~~ it is hoped,

~~trusts,~~ in time remedy matters.

The Govt. is pleased to observe

the testimony borne by the Conservators

to the good work done by the ~~in~~superior

officers of the Department.

t the Govt. notes that ~~the~~ departmental worki

had the advantage over private working

the matter of the collection of both tim

ber and bamboos. This is however report

ed to have been due to the sale of a lar

quantity of valuable timber by department

al agency ~~and~~ to the extraction of a su-

perior quality of bamboos ~~by~~ ...ble

agency. As indicated under section 26 of

Forest Act has been generally success-

ful. The Collectors of Vizagapatam and

Godavari should carefully enquire into

the

only 753 sq. miles.

(ii) In abstract F attached to pa-

ra 10 of the report, against Ga

either the figure 85 given in

column 4 is a mistake for 93 or the

figure 64 given a mistake for 641.

In the latter case however the per-

centages given in columns 6 and 7

against the district will have to ~~be~~ be

altered. It is observed that the

heading of column 7 is slightly mis-

lead as in calculating the percen-

tag iven therein the area of ~~lan~~ lands

for which re

~~turn~~

ANNUAL

ADMINISTRATION REPORT

OF

THE FOREST DEPARTMENT

MADRAS PRESIDENCY,

FOR THE

TWELVE MONTHS ENDING 30TH JUNE 1897.

(1896-97.)

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

1897.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE MADRAS PRESIDENCY

FOR THE TWELVE MONTHS ENDING WITH 30TH JUNE 1897.

CHAPTER I—EXTENSION AND CONSTITUTION OF STATE FORESTS.

(i) *Alteration of the Area.*

The alterations that have occurred during the year in the area of the State forests in each district are given in Form No. 44. These changes, together with the area of the reserved forests and reserved lands at the end of the year under report, compared with the figures at its commencement, are exhibited in the following abstract:—

ABSTRACT A.—Classes and areas of forests.

—	Area on 1st July 1896.	Added during the year.	Excluded during the year.	Net increase or decrease.	Area on 30th June 1897.
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved forests	4,135	(a) 6, (b) 342	(a) 18, (c) 20, (a) 3	+ 310	4,445
Do. lands	2,424	(a) 25, (d) 101	(c) 36, (e) 55, (f) 342	— 310	2,114
Total	6,559	474	474	..	6,559
Central Circle.					
Reserved forests	5,106	(a) 11, (b) 271	(a) 6, (c) 36, (a) 10	+ 240	5,346
Do. lands	1,776	(d) 158	(c) 126, (e) 14, (f) 271	— 263	1,513
Total	6,882	440	463	— 23	6,859
Southern Circle.					
Reserved forests	3,147	(g) 1, (b) 232	(a) 9, (c) 24	+ 200	3,347
Do. lands	2,490	(a) 6, (d) 43	(a) 81, (c) 80, (e) 4, (f) 232	— 348	2,142
Total	5,637	282	430	— 148	5,489
Total.					
Reserved forests	12,388	(a) 17, (b) 845, (g) 1	(a) 33, (c) 80	+ 750	13,138
Do. lands	6,690	(a) 31, (d) 302	(a) 94, (c) 242, (e) 73, (f) 845	— 921	5,769
Grand Total	19,078	1,196	1,367	— 171	18,907

(a) Rectification of area. (b) Transferred from reserved lands. (c) Disafforested or unreserved.
(d) Newly-constituted reserved lands. (e) Excluded at settlement. (f) Transferred to reserved forests.
(g) By rounding off fraction in previous year's return.

The net results show a decrease of 171 square miles in the total area brought under reservation against an increase of 288 square miles during 1895-96. The decrease is attributable to a great extent to the new forest policy to which complete effect was given during the year, and partly to forest settlement operations and rectification of areas by correct computation. Having regard to individual districts there was an increase during the year in the districts of *Kurnool* in the *Northern Circle*, *Cuddapah*, *Nellore*, *North Arcot* and *Trichinopoly* in the *Central Circle*, and *South Canara* in the *Southern Circle*, where large areas were notified under section 4 of the Forest Act. A considerable portion of the extent which remained as reserved lands under the rules under section 26 at the end of 1895-96 in Kistna, North Coimbatore and South Canara was also notified under section 4 during the year. The increase to the area of reserved forests occurred mainly in the districts of *Vizagapatam*, *Gódávari* and *Kurnool* in the *Northern Circle*, *Cuddapah*, *Nellore* and *South Arcot* in the *Central Circle* and *North Coimbatore* in the *Southern Circle*. The area of 94 square miles of reserved land shown as "excluded by rectification" is principally due to the erroneous inclusion in the previous years of 80 square miles of enclosures in the Guttialattur reserve in the North Coimbatore division specially excluded from settlement in the notification under section 4. In the report for the last year, it was stated that the Survey of India Party omitted to exclude the extent of enclosures in calculating the areas of blocks mapped by that party in the *Salem* district and that the subject was receiving the Collector's attention. No appreciable progress was made in this direction during the year as the Range officers were fully engaged in other important works and the services of a surveyor were not secured until the close of the year.

2. The percentage of the area brought under the Forest Act in each district, to district area and to unoccupied lands is shown in the following statement:—

Abstract B.—District areas and forest reserves.

District.	Total district area excluding feudatory and tributary states.	Area excluding zemindari and whole inam villages.	Occupied area.	Particulars of remaining area (column 3—column 4).			Reserved forests and reserved lands.			Percentage of column 10 to column 3.	Percentage of column 10 to column 7.
				Unoccupied, culturable, uncultivable and forest areas.	Area for which returns are not available.	Total of columns 5 and 6.	Reserved forests under Act V of 1882.	Reserved lands.	Total of reserves, columns 8 and 9.		
1	2	3	4	5	6	7	8	9	10	11	12
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.		
Ganjám	8,369	4,437	599	1,154	2,684	3,838	146	410	556	12·53	14·48
Vizagapatam	17,242	1,377	261	575	541	1,116	136	279	415	30·13	37·18
Gódávari	7,857	3,888	1,544	1,861	483	2,344	810	143	953	24 51	40·65
Kistna	(a) 8,498	5,616	3,157	2,360	(a) 109	2,469	654	510	1,164	20 72	47·33
Kurnool	7,514	† 6,799	2,030	4,769	..	4,769	1,806	525	2,331	34·28	48·87
Bellary	• 5,717	4,621	2,658	1,963	..	1,963	456	170	626	13·54	31·88
Anantapur	5,461	4,569	2,166	2,284	119	2,403	437	• 77	514	11·24	21·38
Total ..	60,658	31,307	12,415	14,956	3,936	18,892	4,445	2,114	6,559	20·95	34·71
Central Circle.											
Cuddapah	8,723	† 7,567	2,148	5,419	.	5,419	1,576	784	2,360	31·18	43·55
Nellore	8,765	4,072	1,746	(c) 2,113	(c) 213	2,326	537	146	683	16·77	29·36
Chingleput	3,092	2,049	1,017	1,023	9	1,032	203	10	213	10·39	20·63
North Arcot	7,365	3,905	1,382	2,517	6	2,523	1,021	113	1,134	29·03	44·94
South Arcot	5,216	4,969	2,431	2,465	73	2.538	573	142	715	14·38	28·17
Salem	7,529	5,390	2,136	3,254	..	3,254	1,229	210	1,439	26·69	44·22
Trichinopoly	3,631	2,686	1,668	1,005	13	1,018	189	108	297	11·05	29·17
Tanjore	3,706	(d) 2,487	1,780	691	(d) 16	707	18	..	18	0·72	2·54
Total ..	48,027	33,125	14,308	18,487	330	18,817	5,346	1,513	6,859	20·70	36·45
Southern Circle.											
South Canara	3,902	3,883	673	3,210	..	3,210	114	995	1,109	28·56	34·54
Malabar	5,593	† 5,565	1,596	3,969	..	3,969	196	406	602	10·81	15·16
The Nilgiris	957	† 957	312	645	..	645	358	92	450	47·02	69·76
Coimbatore	7,860	†(f) 7,330	3,837	(f) 3,493	..	3,493	1,707	573	2,280	31·10	65·27
Madura	8,813	† 3,241	1,684	1,557	..	1,557	562	59	621	19·16	39·88
Tinnevelly	5,389	3,567	2,299	1,260	8	1,268	410	17	427	11·97	33·67
Total ..	32,514	24,543	10,401	14,134	8	14,142	3,347	2,142	5,489	22·36	38·81
Grand Total ..	141,199	88,975	37,124	47,577	4,274	51,851	13,138	5,769	18,907	21·24	36·46

(a) Increase is due to adoption of revised survey areas furnished by the Survey Department.
(c) The difference is due to large decrease in the area by village papers. The Collector has not explained the decrease.
(d) The figure in column 3 represent the survey area, that in column 6 the difference between survey area and area by village papers.
(f) Decrease is due to decrease in the unsurveyed forest area. The Collector will be asked to explain the difference.
• Collector has been asked to explain the variation as compared with the previous year.
† (1) Area by village papers is entered as it is in excess of the survey area.
(2) The figures in column 3 are exclusive of the area of minor inams in Government villages.

The percentage of area to unoccupied lands has slightly fallen from 36·8 to 36·4 during the year.

3. The area of finally constituted reserved forests in each district is shown in the subjoined statement:—

ABSTRACT C.

Districts.	Prior to 1895–96.	During 1895–96.	During 1896–97.	Total.
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Ganjám	136	(c) — 3	21, (c) — 8	146
Vizagapatam	58	29	49	136
Gódávari	521	113	176	810
Kistna	643	10, (a) — 12	27, (a) — 11, (c) — 3	654
Kurnool	1,737	11	58	1,806
Bellary	360	89, (a) 3	11, (a) — 1, (c) — 6	456
Anantapur	380	60	(c) — 3	437
Total ..	3,835	300	310	4,445
Central Circle.				
Cuddapah	1,250	285	45, (c) — 4	1,576
Nellore	417	19	112, (c) — 11	537
Chingleput	197	3	3	203
North Arcot	966	32, (c) — 3	26	1,021
South Arcot	464	86, (a) — 45	84, (c) — 16	573
Salem	1,089	97, (a) — 39, (c) — 1	(a) 6, (c) — 1	1,229
Trichinopoly	192	..	(c) — 3	189
Tanjore	19	..	(c) — 1	18
Total ..	4,594	512	240	5,346
Southern Circle.				
South Canara	114	..	..	114
North Malabar	151	7, (c) — 1	..	157
South Malabar	39	..	..	39
The Nilgiris	355	2	1	358
North Coimbatore	859	..	203, (a) — 1, (c) — 8	1,053
South Coimbatore	566	(a) 85	2, (b) 1	654
Madura	542	17	23, (a) — 8, (c) — 12	562
Tinnevelly	411	..	3, (c) — 4	410
Total ..	3,037	110	200	3,347
Grand Total ..	11,466	922	750	13,138

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

The largest addition was in *North Coimbatore*. *Gódávari* and *Nellore* come next the major portion of the area in these two districts relates to three blocks which were notified during the preceding year, the reservation of which took effect only during the year under report. In *South Arcot*, which ranks next, the outturn was actually much larger than that shown above, as the reservation of four blocks of 80 square miles which were notified during the year takes effect only from dates falling within the current year. The only other districts in which there were noticeable additions were *Vizagapatam*, *Kurnool* and *Cuddapah*. The sanction of the Government of India for the abandonment of small reserves ordered to be given up under the new forest policy was received for all districts except *Chingleput* and notified during the year. The sanction for the exclusion of the blocks in the Chingleput district has since been received. As a result, 172 blocks of 80 square miles were removed from the list of the finally constituted reserved forests during the year.

(ii) *Forest Settlements.*

4. The progress of forest settlement is exhibited in the following abstract:—

ABSTRACT D.

Circle.	Area of reserved lands—*vide* Abstract A above. On 1st July 1896.	Added during 1896–97.	Total.	Excluded during the year mainly by reason of constitution as reserved forests.	Balance at the end of the year.	Area brought under Chapter II of the Madras Forest Act. Area notified under section 4, not constituted reserved forests on 1st July 1896.	Added during 1896–97.	Total.	Constituted reserved forest during 1896–97, or otherwise disposed of.	Balance notified under section 4 but not constituted reserved forest on 1st July 1897.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Northern Circle	2,424	126	2,550	436	2,114	1,601, (d) + 1	161, (a) + 13	1,776	342, (a) 2, (b) 4, (c) 55	1,373
Central „	1,776	158	1,934	421	1,513	1,430	186	1,616	271, (a) 9, (b) 78, (c) 14	1,244
Southern „	2,490	49	2,539	397	2,142	1,702, (d) + 1	55, (a) + 4	1,762	232, (a) 80, (b) 33, (c) 4	1,413
Total ..	6,690	333	7,023	1,254	5,769	4,733, (d) + 2	419	5,772	1,124	4,030

(a) Rectification of area. (b) Initial notifications cancelled.
(c) Excluded at settlement. (d) By rounding off fractions.

5. The statement in Appendix A shows, districtwar, the total area brought under settlement up to the end of the year, the area constituted reserved forests and the particulars of th[illegible]lar[illegible]e under settlement on 30th June 1897. The subjoined table compares the num[illegible] of blocks notified under sections 4 and 16 during the year under report and that of [illegible] previous year:—

	1895–96. Number of blocks.	1895–96. Area.	1896–97. Number of blocks.	1896–97. Area.
		SQ. MLS.		SQ. MLS.
(1) Areas notified as proposed reserves under section 4 and remaining to be constituted reserved forests at the beginning of the year ..	736	5,313	541, (a) 1	4,733, (a) 17, (d) + 2
(2) Notified under section 4 during the year ..	79, (a) 7	442, (a) 17	175	402
Total ..	822	5,772	717	5,154
(3) Deduct area finally constituted as reserved forest under section 16, excluded at settlement or cancelled, &c.	185, (b) 96	858, (a) 29, (b) 71, (c) 81	136, (b) 81	845, (a) 91, (b) 115, (c) 73
	281	1,039	217	1,124
(4) Area which remained to be finally constituted at the end of the year	541	4,733	500	4,030

(a) By rectification. (b) Initial notifications cancelled.
(c) Excluded at settlement. (d) By rounding off fractions.

One hundred and seventy-five blocks covering an area of 402 square miles were notified under section 4 against 79 blocks with an extent of 442 square miles in the previous year. The blocks notified in *Kistna*, *Vizagapatam*, *Nellore*, *Trichinopoly*,

Cuddapah and *Tinnevelly* were principally extensions to existing reserved forests; these being naturally small and numerous, explain the decrease in the area and the increase in the number notified. The cancellation of the initial notifications of the blocks, which were ordered to be abandoned in consequence of the change in the forest policy but which awaited publication in the gazette at the end of the previous year, was effected during the year under report, and as a result, 79 blocks with an area of 88 square miles were struck off the lists of blocks pending settlement with Forest Settlement-officers. In South Canara two blocks covering an area of 27 square miles were also cancelled during the year with a view to their being re-notified. One hundred and thirty-six blocks with an extent of 845 square miles were finally constituted reserved forests during the year against 185 blocks of 858 square miles in the previous year.

The particulars of the balance of the area under settlement shown under item (4) above are as follow:—

	1895–96.		1896–97.	
	Number of blocks.	Area.	Number of blocks.	Area.
		SQ. MLS.		SQ. MLS.
(1) Notified under section 16 but not constituted reserved forest during the year	* 21	* 311	* 23	* 122
(2) With Board or Government awaiting publication of notification under section 16	117	855	92	662
(3) Returned by Board for revision and remaining either with Collector, District Forest-officer or Forest Settlement-officer.	70	820	28	669
Total settled and reported on ..	208	1,986	143	1,453
(4) Settled but not reported on	97	732	72	970
(5) Settlement proceeding	236	2,015	285	1,607
Total of (4) and (5) ..	333	2,747	357	2,577
Total of (1), (2), (3), (4) and (5) ..	541	4,733	500	4,030

* Includes four blocks of eleven square miles notified during 1895–96, the reservation of which takes effect only during 1897–98.

6. A statement showing the causes of the pendency of the blocks not yet constituted reserved forests is given in Appendix B.

Of the 72 blocks comprising 970 square miles shown as settled but not reported on—

21 were awaiting preparation of maps.
10 do. disposal of appeals.
8 do. expiry of time prescribed for appeals.
7 do. payment of compensation or exchange of lands.
9 do. replies to references made to Collector or Board.
17 were pending owing to other causes.

7. Two hundred and eighty-five blocks with an aggregate area of 1,607 square miles were pending with Forest Settlement-officers in various stages of settlement. The following statement compares the results of the present with those of the previous year:—

Date.	Finally notified during the year ending with		Settled and reported on.		Under settlement.		Total yet to be reported.	
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
1	2	3	4	5	6	7	8	9
		SQ. MLS.		SQ. MLS.	*	SQ. MLS.		SQ. MLS.
30th June 1896 ..	185	858	208	1,986	333	2,747	541	4,733
30th June 1897 ..	136	845	143 / * — 4	1,453 / — 11	357	2,577	500	4,030

* Blocks notified during 1895–96 in South Canara but taking effect only during 1897–98.

As will be seen from columns 2—5 of the statement, the year's operations fell short of those of the previous year by 118 blocks of 557 square miles. Progress was somewhat retarded by the introduction of new officers for settlement work and by the transfer of settlement records among the several officers concerned.

No material progress was made in the disposal of the blocks of more than ten years' standing in *Ganjám*. Twenty of them remained at the close of the year and the delay in completing their settlement was due to the causes reported last year. It may be noted that besides the five blocks notified, the settlement reports of eight others were pending with the Board. Four of these have since been returned for further revision. In *Vizagapatam*, the Sinnivaram block, which was pending with the Government at the close of the previous year, was gazetted as reserved forest. Excepting the eleven small additions of an aggregate area of 2 square miles notified under section 4 during the year in the name of Mr. R. H. L. Lushington, Special Forest Settlement-officer, the settlement work of the reserves originally entrusted to Divisional officers was almost completed in 1895–96. The final notifications have not been published pending decision as to the advisability of the acquisition of certain enclosures and village-sites and the provision of other areas for hill villagers. It is noted that this question has received the full attention of the Conservator during his recent inspection of the forests of the district. In the *Gódávari* district seven blocks have been pending for the last seven years, and the submission of final reports therefor awaited survey and mapping which had to be done under the personal supervision of the District Forest-officer and Forest Settlement-officer. The progress in *Kistna*, *Kurnool*, *Bellary*, *Cuddapah*, *Nellore*, *North Arcot*, *South Arcot* and *Madura* was satisfactory. The settlement records of the Palkonda and Wongimilla proposed reserves in the *Cuddapah* district of fourteen and eleven years' standing, which were returned to the Collector during the previous year, were resubmitted to the Board in March last; the publication of the notifications is delayed as the maps have been returned to the Forest Settlement-officer in connection with settlement of extensions to these reserves. The only two old blocks in *Nellore* are the Sríharikóta, major and minor. The latter was notified under section 16 in two portions, the reservation of one taking effect during the year under report and of the other during the current year. The records of "major" block, which were under scrutiny in the Board's office at the close of the preceding year, were returned to the Collector for further revision, and have not been resubmitted. Little work was done in *Bellary*, *Anantapur* and *Trichinopoly* by the Special Forest Settlement-officers as they were engaged in other districts. In *South Canara* four blocks were notified, but the reservation of these and of four others notified last year was not given effect to during the year, owing to delay in publishing in time the necessary proclamation notices under section 16. The settlement of other blocks was also completed, but the preparation of the final reports has been postponed to the rainy season and the work of perambulation which was in arrears has been undertaken in the interval. Thirty-four of the sixty-one blocks pending in the district were perambulated during the year. The outturn in *South Canara* must be considered satisfactory considering the nature of the country travelled over. In *Salem* it had been decided that in the greater part of the district further reservation was unadvisable. This was prior to the issue of the orders that lands to meet all agricultural requirements should be reserved. To avoid unnecessary reservation and to meet the still later orders prescribing liberal provision of unreserved grazing areas a joint report was obtained from the Collector and Conservator during the year and pending its consideration settlement operations were suspended. Final orders have since been passed. Nine blocks under settlement have been abandoned and the cancellation of the initial notification of others awaited publication in the gazette. In *North Malabar*, the complicated case of Bavothi Haji's claim to portions of Peria and Kanoth, two of the long standing blocks is, notwithstanding the years of litigation and negotiation, still far from settled. Settlement operations in the Padri block were completed during the year, but the final notification is pending consideration of a proposal of the District Forest-officer to abandon the block on the ground that it is very much cut up by enclosures. In *South Malabar* the Forest Settlement-officer has been directed to suspend further proceedings in regard to the settlement of all the leased forests as the High Court had decided that all the provisions of chapter II of the Forest Act could not be applied in respect of these lands.

8. *Outturn of work by the Special Forest Settlement-officers.*—The following statement shows the work done by the Special Forest Settlement-officers :—

ABSTRACT E.—Outturn of work by Special Forest Settlement-officers during 1896-97.

Name of Special Forest Settlement-officers.	Districts.	Issue of proclamation after notification under section 4.		Settlement of claims.		Report after settlement submitted.		Final notification proclaimed.		Cost.
		Number of blocks.	Area.	Number of blocks concerned.	Area.	Number of blocks.	Area.	Number of blocks.	Area.	
1	2	3	4	5	6	7	8	9	10	11
			SQ. M.		SQ. M.		SQ. M.		SQ. M.	RS.
Messrs. R. H. L. Lushington and H. S. Mullins.	Ganjám	2	27	23	388	† 11	122	4	14	5,726
Mr. R. H. L. Lushington.	Vizagapatam ..	..	..	11	2	..	..	..	..	1,909
Messrs. R. H. L. Lushington and E. A. Smith.	Gódávari	..	..	6	104	..	..	2	15	5,726
Mr. R. H. L. Lushington.	Kurnool	..	..	3	117	..	..	..	..	1,909
	Total ..	2	27	43	611	11	122	6	29	15,270
Mr. E. A. Smith	Kistna	24	60	24	92	23	92	11	17	4,421
	Kurnool	5	151	10	83	14	162	7	57	2,275
	Bellary	8	16	..	..	..	..	2	11	153
	Anantapur	..	..	2	13	3	15	..	..	600
	Nellore	10	26	11	30	10	19	12	110	4,661
	Total ..	47	253	47	218	50	288	32	195	12,110
M.R.Ry. K. Ganapayya Garu.	Cuddapah	7	31	6	46	6	51	8	56	2,501
	North Arcot	7	36	4	12	2	4	4	15	2,501
	Salem	..	..	1	4	1	4	..	..	2,501
	South Arcot	6	4	..	..	..	..	1	1	104
	Chingleput	9	3	2	1	3	2	1	2	2,502
	Total ..	29	74	13	63	12	61	14	74	10,109
M.R.Ry. C. Raju Sastriar Avergal.	South Arcot ..	..	..	..	..	..	..	1	..	
	Madura	..	..	..	..	..	..	1	1	
	Total ..	..	..	..	..	..	..	2	1	
M.R.Ry. P. S. Singaravelu Pillai Avergal.	South Arcot	..	..	14	32	13	23	6	* 55	
	Trichinopoly ..	46	79	..	..	..	..	..	..	
	Tanjore	1	..	1	..	..	..	..	..	
	Madura	..	..	2	20	3	7	8	14	
	Coimbatore	7	54	3	5	..	..	5	204	
	Tinnevelly	..	..	3	7	1	1	9	4	10,908
	Total ..	54	133	23	64	17	31	28	307	
Mr. F. V. P. Gomperts ..	South Arcot ..	..	..	..	..	..	..	3	..	
	Tanjore	..	..	..	..	‡ 1	..	..	..	
	Madura	..	..	..	..	..	..	1	2	
	Coimbatore	..	..	..	..	‡ 1	2	1	1	
	Tinnevelly	2	..	..	..	‡ 2	3	..	..	
	Total ..	2	..	..	..	4	5	5	3	
Mr. H. S. Mullins ..	Malabar	1	2	3	63	..	..	4	1	5,212
	South Canara ..	9	22	17	215	4	11	8	13	5,213
	Total ..	10	24	20	278	4	11	12	14	10,425
	Grand Total ..	144	511	146	1,234	98	518	99	623	58,822
	In 1895-96	72	497	153	895	144	767	126	325	36,956

* Includes the area of the four blocks shown against Mr. Gomperts and M.R.Ry. C. Raju Sastriar Avergal.

† Includes one block cancelled during the year.

‡ Settled by M.R.Ry. P. S. Singaravelu Pillai Avergal.

M.R.Ry. Singaravelu Pillai Avargal, who replaced M.R.Ry. C. Raju Sastriar Avargal, took charge of his division on the 22nd August 1896, but the notification transferring the blocks to his name was not published till the close of September. Mr. Lushington returned on the 16th July 1896 from three months' privilege leave and Mr. Mullins who was placed in temporary charge of his division was appointed Forest Settlement-officer of the West Coast division—Malabar and South Canara. In August Mr. Mullins obtained three months' leave and returned in November, when he commenced settlement operations in the two districts allotted to him. Mr. Smith was also on privilege leave for one month from 25th May 1897. M.R.Ry. Singaravelu Pillai avargal was retransferred to the Revenue Department on 29th April 1897 to make room for Mr. F. V. P. Gompertz (a Survey officer) who assumed charge on the 10th May. Compared with the previous year the total outturn of all Forest Settlement-officers was not altogether satisfactory considering that five instead of four officers were employed during the year under review. The work in the Trichinopoly division was retarded by the change of officers. This division was practically without a Forest Settlement-officer for four months during the year and the work of M.R.Ry. Singaravelu Pillai Avargal was certainly satisfactory. Mr. Mullins was, as already observed, very active in inspecting boundaries Mr. Smith's work continued satisfactory. M.R.Ry. Ganapayya Garu, who took charge on 9th July 1896, also did good work. Besides the outturn shown in the above statement, he settled about 400 claims relating to blocks which were not reported upon. Mr Lushington's outturn was poor. The short work was noticed by the Board on more than one occasion and eventually it was found necessary to provide him with additional work in other districts as the settlement work in Ganjám and Gódávari was not quite ready for disposal. Sanction of Government was obtained in March last to the transfer to his file of certain blocks in Kurnool and since the close of the year some more from Kistna have been added. It is believed that under this arrangement Mr. Lushington will show better results during the current year. Work of the Forest Settlement-officers was regularly scrutinized in the quarterly reviews and unsatisfactory progress therein noticed.

9. *Outturn of Forest Settlement work by Revenue Divisional Officers.*—In *Ganjám* two blocks were pending at the close of the year under report with the Senior Assistant Collector, Berhampur, and one with the Principal Assistant Collector, Chicacole. One of these awaits information about the land commanded by proposed irrigation channels and the others await submission of final notifications. Out of the seven blocks in *Vizagapatam* pending at the beginning of the year one was gazetted as reserved forest and the pendency of the others has already been explained in paragraph 7 *supra*. In *Nilgiris*, which will eventually be the only district under the charge of a Divisional officer, there was not much work to be done.

10. *Selections for further reservation.*—The proposed selections in the Agency tract "Pondokhol" in *Ganjám* await disposal of a suit brought by the Zamindar of Kharada claiming a portion of the mutta concerned. In *Vizagapatam* Mr. Peet has since reported the results of his inspection made in June last of the areas in the Agency tracts proposed for reservation, and has been directed to include in his proposals all land which it is considered that Government may fairly claim. In paragraph 11 of the last year's report it was stated that selection work in *Gódávari* was complete, but the Collector now reports that it is under contemplation to add 26 square miles in the Ellore taluk. As reservation in the district was long ago determined after a detailed inspection and report by Mr. Arundel and the Special Assistant Agent, very cogent reasons will have to be adduced for the additional proposals. The final scheme for *Kistna* has not yet been submitted, but selection work is reported to have been completed. In *Kurnool* good progress was made in the selection of the eastern Nallamalai extensions. In *Bellary* 103 square miles in the Kudligi and 31 square miles in the Bellary and Alúr taluks remain to be selected and the inadequacy of the existing areas in the taluks of Bellary, Adóni and Alúr for purposes of fuel and fodder was felt by the district authorities during the recent famine and is engaging their serious attention. Considerable advance was made in the matter of selection in *Cuddapah*. Little progress was made in *Nellore* owing to the ill-health of Mr. Brougham and the changes in District Forest-officers. This matter should receive the careful attention of the Collector. For the reasons given in paragraph 7 the selection of

additional areas was held in abeyance in *Salem*. The advisability of bringing under the Forest Act, 43 blocks of about 330 square miles selected in previous years is under consideration by the Collector and the Conservator. Selection work in *Trichinopoly* had already been completed and all the selected blocks except those in the Musiri taluk were notified under section 4 during the year. The blocks in Musiri are undergoing revision. Fifty-three square miles are proposed to be added to the forest area in the *Nilgiris*, about 36 square miles of which appertain to the proposed Wenlock Downs reserve in Todanad. This block has since been notified under section 4. The remaining areas lie in Paranginad and Wynaad. In all other districts except *Malabar* nothing more remains to be done. As stated in last year's report proposals for further reservation in *Malabar* have to be postponed pending settlement of the question of jenm right. In paragraph 9 of the Government order reviewing the report for the last year it was remarked that the question of the adequacy of reservation was not discussed by the Board. In some districts the proportion of forest area to the district and unoccupied areas appears low, but the Board considers that extensions in excess of the area in the abstract (which follows) are impracticable if a liberal margin of unreserved land is to be allowed for free grazing, for local requirements and for extension of cultivation. The estimate in the subjoined abstract is, liable to reduction owing to forest settlement operations or other causes :—

ABSTRACT F.

District.	Originally sanctioned estimate of areas for reservation.	Area brought under the Forest Act.	Additional estimated area selected or to be selected.	Total estimate proposed to be reserved.	Percentage of column 5 to the area of Government lands in the district.	Percentage of column 5 to the total unoccupied culturable and uncultivable lands in the districts.
1	2	3	4	5	6	7
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.		
Ganjám	556	556	86	649	14·62	16·90
Vizagapatam	415	415	..	415	30·13	37·18
Gódavari	997	953	37	990	25·46	42·23
Kistna	(*a*) ..	1,164	..	1,164	20·72	47·33
Kurnool	2,677	2,331	169	2,500	36·77	52·42
Bellary	462	626	275	901	19·49	45·89
Anantapur	535	514	..	514	11·24	21·38
Cuddapah	2,640	2,360	58	2,418	31·95	44·62
Nellore	1,132	683	338	1,021	25·07	43·89
Chingleput	231	213	3	216	10·54	20·93
North Arcot	(*a*) ..	1,134	..	1,134	29·03	44·94
South Arcot	835	715	..	715	14·38	28·17
Salem	1,096	1,439	..	1,439	26·69	44·22
Trichinopoly	(*a*) ..	297	63	360	13·40	35·36
Tanjore	23	18	..	18	0·72	2·54
South Canara	1,011	1,109	..	1,109	28·56	34·54
Malabar	(*c*) 273	602	16	618	11·10	15·57
Nilgiris	(*b*) 411	(*b*) 375	53	428	44·72	66·35
Coimbatore	(*c*) 1,812	2,280	9	2,289	31·22	65·53
Madura	(*a*) ..	621	..	621	19·16	39·88
Tinnevelly	440	427	8	435	12·19	34·30

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

(*b*) Excludes leased forests.

(*c*) Final schemes were submitted only for the northern division of the district.

11. *Reserved lands not brought under settlement.*—Appendix C shows the extent of these lands in each district. Compared with the previous year there was a net decrease of 218 square miles. Three hundred and eleven square miles were added during the year, but 402 square miles were notified under section 4 and 127 square miles abandoned. The large area abandoned was the result of the latest forest policy and of the instructions given by the Board to Collectors to throw open all areas not to be constituted "reserved forests." Collectors were instructed to proclaim the abandonment of these tracts by notification in the District Gazettes and by beat of tom-tom in the villages concerned so that people who were not within reach of the District Gazette might know that the lands not required for forest purposes had been set free for the exercise of communal privileges. Considerable areas have to be notified under section 4 in *South Canara* and *Kistna*. Besides 52 square miles notified during the year in Kistna, notifications for about 40 square miles more were pending with the Board or Government at the close of the year. The progress may be considered satisfactory; better results would have been obtained but for the heavy floods in August 1896 and the necessity for preliminary survey in many cases. For the latter work the services of a Surveyor were only available for about three months in the year. Little progress was made during the year in *South Canara* owing to the non-receipt of taluk maps from the Revenue Survey Department. The reserved lands in *Nilgiris* and *Bellary* consist chiefly of leased forests. The delay in notifying the lands in *Vizagapatam* has been explained in paragraph 10 *supra*.

12. *Survey of proposed reserves.*—During the year the Survey of India Party completed the survey of 61·7 square miles of proposed reserves in the *Salem* district—of 38 square miles in the *Kurnool* district and of 14·3 square miles in the *Trichinopoly* district. A staff of temporary surveyors and draughtsmen was also entertained departmentally in connection with proposals for further reservation. In the *Northern Circle* 189 miles of boundary lines were surveyed in *Ganjám*, of which 184 miles were mapped. Ten blocks comprising an area of 94 square miles were surveyed in *Vizagapatam*. The work in *Gódávari* consisted of the survey of three blocks and four enclosures in a proposed reserve and the preparation of maps therefor, besides the survey of a path and the demarcation of three newly-selected areas. The outturn in *Kistna* was only 20 square miles due to the illness of the surveyor and the delay in procuring a qualified substitute. In *Kurnool* the surveyor surveyed two blocks and the enclosures in the eastern Nallamalai blocks and also portions of the North Dhone block. In the *Central Circle* the work was confined to the *Salem* district as reported last year. It consisted mostly of the survey of disputed patta fields on the Kollimalais. Sixteen fields of about 72 acres were surveyed and plotted, in addition to areas specified in ten applications for lands on the Shevaroys. The surveyor was only entertained during part of the year. In the *Southern Circle* ten blocks covering an area of 5·63 square miles were surveyed in *Madura*. These will be plotted and marked upon the Survey of India maps. In *North Malabar* 34 miles of boundary lines of the Kanoth proposed reserve were surveyed, while in *South Malabar* the survey of 12 miles of the boundary of the new Amarampalam forest was effected. In *South Canara* a departmental surveyor chained 117 miles and plane-tabled 16 square miles. He surveyed and mapped in all five reserves with 11 square miles.

The draughtsmen were as usual engaged in preparing or revising sketch-maps to accompany notifications under sections 4 or 16. The outturn of their work in this direction was satisfactory.

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

Preliminary demarcation work.

—	During 1895–96.			During 1896–97.		
	Miles.	Cost.	Average cost per mile.	Miles.	Cost.	Average cost per mile.
1	2	3	4	5	6	7
Northern Circle.		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Ganjám	35	100	2 13 9	..	..	..
Vizagapatam	114	141	1 3 9	161	535	3 5 2
Gódávari	..	..	..	44	178	4 0 9
Kistna	289	2,132	7 6 0	244	897 (a) 428	5 6 10
Kurnool	153	416	2 11 6	217 (b) 38	527 (b) 196	2 13 4
Bellary	48	60	1 4 0	479	603	1 4 2
Anantapur	25	..	..	..	..	..
Total, Northern Circle ..	664	2,849	4 4 8	1,183	3,364	2 13 6
Central Circle.						
Cuddapah	115	246	2 2 3	179	379 (c) 381	4 3 1
Nellore	..	..	..	37	36	0 15 7
Chinglepat	24	103	4 4 8	29	111	3 13 3
North Arcot	..	..	..	..	..	..
South do.	76	123	1 9 11	12	35	2 14 8
Salem	105	348	3 5 0	6	11	1 13 4
Trichinopoly	223	277	1 3 10	1	8	8 0 0
Tanjore	..	..	..	..	..	..
Total, Central Circle ..	543	1,097	2 0 4	264	961	3 10 3
Southern Circle.						
South Canara	195	101	0 8 3	51	39	0 10 6
North Malabar	..	..	..	5	33	6 9 7
South do.	..	..	..	..	..	..
The Nilgiris	11	79	7 2 11	120	763 (c) 285	8 11 9
North Coimbatore	3	23	7 10 8	36	564	15 10 8
South do.	5	21	4 3 2	..	..	..
Madura	..	..	..	..	..	..
Tinnevelly	58	33	0 9 0	12	28	2 5 4
Total, Southern Circle ..	272	257	0 15 1	224	1,712	7 10 3
Grand Total ..	1,479	4,203	2 13 6	1,671	6,037	3 9 10

(a) Cost of erecting cairns.
(b) Repairs. Besides these, 1,032 miles were cleared free of cost by the subordinate forest establishment.
(c) Half the pay of the establishment employed on demarcation work, the other half being debited to permanent demarcation.

It will be observed from the above that in some districts no work was done during the year, and that in others, in the Central and Southern Circles, the outturn was very small. In these districts either reservation has practically come to a close or the outturn was commensurate with the selected areas on hand. Satisfactory progress was made in those districts of the *Northern Circle* where there were large areas to be notified under section 4. The outturn in *Kistna* would have been larger but for the illness of the surveyor and the unavoidable employment of the establishment, which should have undertaken this work, upon the collection of grazing revenue. The most noticeable increase occurred in *Bellary*, where a temporary Deputy Ranger was entertained for the conduct of the work.

The average cost per mile in *Vizagapatam* is higher than that of last year and the increase is ascribed to the incompetency of the temporary foresters who supervised the work and to the employment of special additional establishment on daily wages. The high rate in *Trichinopoly* is attributed to the dense growth of prickly-pear which had to be removed. The increase in the average rate in *North Coimbatore* and *Tinnevelly* was justified by the nature of the forests in which the work had to be done.

(iii) *Demarcation.*

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

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

ABSTRACT G.—Demarcation work done during 1896-97.

Districts.	Permanent. During 1895-96. Miles.	Permanent. During 1895-96. Cost in Rs.	Permanent. During 1895-96. Average cost per mile.	Permanent. During 1896-97. Miles.	Permanent. During 1896-97. Cost in Rs.	Permanent. During 1896-97. Average cost per mile.	Re-clearing old lines, &c. During 1895-96. Miles.	Re-clearing old lines, &c. During 1895-96. Cost.	Re-clearing old lines, &c. During 1896-97. Miles.	Re-clearing old lines, &c. During 1896-97. Cost.
1	2	3	4	5	6	7	8	9	10	11
Northern Circle.		Rs.	Rs. A. P.		Rs.	Rs. A. P.		Rs.		Rs.
Ganjám	27	756	28 0 0	30	808	26 14 11	83	234	187	(a) 550
Vizagapatam	88	639	16 13 1	13	(a) 330	25 6 2	99	100	..	(a) 136
Gódávari	135	712	5 4 4	79	474	6 0 0	174	579	313	(b) 330 133
Kistna	57	927	16 4 3	125	(a) 2,184	17 7 6	23	(a) 1,720 51	49	(d) 1,209 184
Kurnool	50	410	8 3 2	75	2,391	31 14 1	8	27	(c) 414	682
Bellary	449	2,473	5 8 1	25	651	5 3 4	200	(b) 486	150	.. 429
Anantapur	99	533	5 6 1	62	200	3 3 7	10	(a) 99	37	(b) 376 (a)
Total ..	865	6,450	7 8 8	509	7,038	13 13 3	527	3,286	1,150	4,022
Central Circle.										
Cuddapah	221	1,721	7 12 7	165	(e) 1,385	8 6 3	8	3 (b) 468	..	..
Nellore	6	55	9 2 8	46	(a) 542	11 12 6	15	168 (a) 192	6	12
Chingleput	66	2,136	32 5 9	44	(a) 1,616	36 11 7	..	97 (b) 478	2	25 (b) 672
North Arcot	214	1,808	8 7 2	27	(a) 339	12 8 10	86 (c) 2,095	596	584	1,760
South Arcot	213	3,682	17 4 7	187	2,972	15 14 8	28	999 (b) 539	24	61 (b) 946
Salem	181	894	4 15 0	90	351	3 14 5	591	635	468	665
Trichinopoly	216	1,123	6 3 2	70	376	5 6 0	.. 12	(c) 290	21 (c) 222	156
Tanjore	..	..	..	..	..	..		8	..	..
Total ..	1,117	11,391	10 3 2	629	7,581	12 0 10	2,834	4,473	1,327	4,097
Southern Circle.										
South Canara	37	22	2 12 7	133	1,202	9 0 7	..	..	..	..
North Malabar	7	284	40 9 1	..	..	..	1	10	76	430
South Malabar	5	203	40 9 7	1	49	49 0 0	..	..	18	(b) 488 154
The Nilgiris	28	564	20 2 3	37	411	11 1 8	82	1,384	201	(c) 1,088
North Coimbatore	140	1,884	13 7 4	24	313	13 0 8	31	134 (a) 204 (b) 488	213	2,864 (b) 401
South Coimbatore	..	..	..	..	..	..	44	265	36	639
Madura	..	..	..	..	..	..	2	20	..	3
Tinnevelly	..	76	..	43	..	2 15 3	33	223	6	180
Total ..	217	3,033	13 15 8	238	2,102	8 13 4	193	2,728	649	6,247
Grand Total ..	2,189	20,874	9 8 6	1,376	16,721	12 2 5	3,624	10,487	3,026	14,866

(a) Clearing cairns, &c. (b) Cost of temporary establishments. (c) Cost of sign-boards for boundary and coupe lines.
(d) Cost of the Deputy Ranger, the other half being debited to preliminary demarcation. (e) Including clearing 68 miles of demarcation.

The statement, except in two cases, does not include lines recleared by subordinates free of cost. In *Tanjore*, *South Canara* and *North Malabar*, demarcation is practically complete. In *Madura* the demarcation of outer boundaries is complete, that of enclosures, as also the verification of boundaries and the replacing of cairns, has to be done. In North Arcot the demarcation of the Malayali settlements in the Javadi hills has still to be accomplished. It has been hitherto deferred pending receipt of the maps from the Survey of India. In South Arcot in the Tenmalai hills similar work has also to be undertaken. The decrease in *Bellary* was due to pressure of other work, chiefly enumeration of date trees and putting down illicit tapping, and in *Cuddapah* to fewer blocks having been finally notified during the earlier part of the year and to the staff having been employed on preliminary demarcation of selected blocks. In *Salem* work was postponed pending receipt of final orders on the question of taking up some of the reserves notified under section 4 for which settlement was completed. In *South Canara* better progress could have been made had the Range officers not been fully engaged in settlement and survey work. The outturn in the remaining districts was commensurate with the work on hand.

Compared with the cost of the preceding year there was a marked increase in *Vizagapatam*, *Kurnool*, *Chingleput*, *North Arcot*, *South Malabar* and *South Canara*. The increased rate in *Vizagapatam* is explained to be due to the inclusion of the cost of cairns, but this is apparently incorrect as the previous year's figures included also the cost of cairns. The matter is under inquiry by the Conservator. The work in *Kurnool* included clearing the taluk and district boundaries in the Nallamalai hills and other lines. The clearing of heavy growth in the Nallamalais where it was extremely difficult to procure labour, and the erection of a large number of cairns caused the increase. In *Chingleput*, *Nellore* and *North Arcot* a larger number of cairns and stone slabs respectively had to be erected which raised the average cost per mile of demarcation. The high rate in *South Malabar* is ascribed to the extreme inaccessibility of the tract demarcated and the increase in *South Canara* is attributed to the discontinuance of the system of permitting ryots to clear the boundaries and remove the trees cut, free of charge.

The large expenditure incurred in Kistna upon reclearing old lines, &c., is explained by the Collector as being due to alteration of boundary lines which had not been cut in accordance with the notification under section 16. This is anything but creditable to the officers concerned.

The total expenditure on permanent demarcation inclusive of reclearing old lines amounted to Rs. 31,087.

(iv) *Surveys.*

15. The following is a brief resumé of the work of the Survey of India parties :—

Party No. 19 was employed in four districts and the year's outturn was—

District.	Triangulation.	Traversing.	Topography.	
			Total.	Reserved forests.
	SQ. MLS.	L. MLS.	SQ. MLS.	SQ. MLS.
Salem	..	263·3	540·3	383·9
Kurnool	500	464·6	233·2	173·4
North Arcot	..	..	253·1	188·25
South Arcot	500	..	..	..
Total ..	1,000	727·9	1,026·6	745·54

The total area surveyed, of which 745·5 square miles are reserved forests, shows a considerable increase on any previous outturn, and is ascribed to the favourable season and increased efficiency of the party.

The fair drawing of all the forests, with the exception of 19·3 square miles to be embodied in next season's fair mapping, was completed during the recess. Four sheets of Salem and ten of North Arcot have been kept back, pending insertion of boundaries and minor omissions and corrections.

The actual expenditure, inclusive of cost of instruments for the financial year, amounted to Rs. 85,029–2–6 and for the survey year ending 31st August 1897 to Rs. 88,861–9–8, or Rs. 84 per square mile of topography.

The cost per square mile was considerably in excess of the last four years and was due to various causes. The principal one, however, was the difficult nature of the country combined with the density of the forests in the Kurnool district. Incessant line-clearing was necessary which retarded work. Extra travelling allowance was paid to all working in the Kurnool district. Increased allowances to compensate for dearness of provisions had to be given to menials, and the number of the latter had to be increased owing to the difficult nature of the work. It is very improbable that the cost per mile will, as long as the party is employed in such difficult country, fall to the previous year's low rate of Rs. 66.

The year's work of Party No. 9 is represented by the following :—

District.	Triangulation.	Traversing.	Topography.	
			Total.	Reserved forests.
	SQ. MLS.	L. MLS.	SQ. MLS.	SQ. MLS.
Trichinopoly	250	244	120·84	65·56
Coimbatore	1,200	280	..	..
Total ..	1,450	524	120·84	65·56

The outturn of topography, of which 65·56 square miles are reserved forests, was very small. This was unavoidable. The party had to contend with no ordinary difficulties. The detail work could not be commenced until triangulation and traversing had been undertaken; consequently a large proportion of the party was unable for some time to take any active part in the work. In addition, the majority of the surveyors had no previous experience of topographical surveying and though an attempt was made to train them during the enforced interval of idleness, above alluded to, very few attained sufficient proficiency to be of much use. To add to the difficulties the weather was most unfavourable during November and early part of December owing to the prevalence of heavy rain and dense mists, and to make matters worse all the khalasis locally entertained absconded as soon as commencement of work was attempted. Forest guards and watchers are also said to have caused delay, although the District Forest-officer did his utmost to help on the work. In this respect matters improved in the early part of 1897. The staff suffered considerably from fever, for which the Pachamalai hills are notorious.

The cost of the party for the financial year was Rs. 86,336–4–9, of which a large portion is debitable to the Central Provinces. The total for the survey year is Rupees 83,501–4–6, of which Rs. 3,572 are chargeable to the Central Provinces.

The rate per square mile amounts to Rs. 353–15–3. The expenses incurred in transferring the whole party with its impedimenta from the Central Provinces to Trichinopoly and Bangalore were very heavy and the difficulties and delays already explained account for the exceedingly high rate.

For the ensuing season, under instructions from the Deputy Surveyor-General, the two parties have been combined under charge of one officer. Sub-surveyors, who proved inapt at learning detail surveying, have been discharged. The parties have been re-arranged into three sections. A training camp for sub-surveyors has been organized. This, it is hoped, will provide material for a fourth section in 1898–99.

The foregoing arrangements will effect a reduction in cost. It cannot be expected for some little time that the cost per mile will again fall to Rs. 66. Surveying in Kurnool and North Coimbatore presents more than ordinary difficulty.

The total cost of the two parties after deduction of the Government of India contribution, as adjusted by the Accountant-General amounted to Rs. 82,638.

16. *Departmental Surveys.*—In Bellary, a temporary surveyor was entertained to survey portions of the boundaries of old reserves that did not follow survey numbers.

Twenty square miles were surveyed. Of ten reserves the survey of six blocks is reported correct, that of three others awaits inspection by the District Forest-officer, while the survey of the remaining one was only partly completed. In Salem, the survey of two reserves not taken up by the Survey of India party, was commenced by a temporary Surveyor.

17. The services of the temporary draughtsmen referred to in paragraph 12 *supra* were also utilized in posting and maintaining the maps prescribed in the Forest Code. Particulars of information showing the progress of work in this direction are given in Appendix D.

The area of reserved forests for which final maps have been prepared up to 30th June 1897 amounts to 6,712 square miles. The details for each district will be found in Appendix E.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

(1) Regulation of Management.

(a) *Working Plans and their control.*

Northern Circle.

18. In th *Northern Circle* no working plans have as yet been framed for the forests in the *Ganjám*, *Vizagapatam*, *Kurnool* and *Anantapur* districts. In *Gódávari* the only plans are for the Coringa and Upputur mangrove forests and for the Narsapur plantations; the two former were closely adhered to but some deviation from the latter was found advisable. In *Kistna* a working plan for Orr's reserve of palmyra (*Borassus*) was approved by the Conservator during the year, and the preparation of plans for twelve other reserves was in progress. The proposals for the bulk of the grazing working circles referred to in the last report were somewhat more elaborated, but their completion and submission for approval await the notification under section 4 of the Forest Act of all the areas comprised in each working circle. The Guntúr working plan for babul (*Acacia arabica*) was adhered to. Coppice was much damaged by floods, but there were abundant seedlings. In the Gopuvanipalem working circle (casuarina) it was found that the growth is very unequal. Sample plots of fairly equal size were selected and the trees in alternate lines were felled. The fellings took place in different months and it is proposed to treat a fourth plot in the same manner in December. By these experiments the influence of the season of felling upon the coppice will be ascertained.

In *Bellary* no fresh plans were made as the staff was fully occupied with ordinary works and the additional work of enumeration of date trees. Experimental coupes which were opened showed that the demand was too limited to warrant working plans on a large scale and even the Ramandrug working plan had to be modified during the year. That portion of the previous year's coupe [sub-compartment 10 (*b*)] which remained unfelled was cut over during the year and the felling of 8 (*d*) was begun, but was stopped as a quantity of last year's wood remained unsold. Another coupe for the year—6 (d)—was sold for Rs. 12 an acre. The failure of the working plan is ascribed to the distance of the forest from Bellary, transport alone costing Rs. 5–10–0 per ton. The famine has also had some effect as the market was stocked with cheap wood brought in by poor villagers for sale. There was much theft from all the reserves near Bellary and even the avenue trees were felled in many places. The necessity for recasting the working plan is receiving the attention of the Conservator.

Central Circle.

In *Nellore* the provisions of the Survepalli working plan (2,750 acres) which was approved by the Conservator during the year were adhered to, but those of the Rapur Yerrakondas were not carried out, the Range officer having been engaged in other work. The casuarina plantations, and the annual compartments in the Sríharikóta forests were not worked to the full extent owing to illness of the Ranger and his absence on leave. In *Cuddapah* the provisions of the Balapalle working plan were adhered to, but the cutting was commenced so late that the wood cut was not measured

and delivered to the Railway Department within the year. I
malai reserved forest in the Tiruvannámalai range, the c
Talankodu and Shonankuppam comprised in the working c
accordance with the preliminary working scheme and yielded
the casuarina plantations trees die during the hot season
exploited some years hence in accordance with the rotation
seen how far the estimated revenue of such compartment
coupes in several of the fourteen blocks for which tentative w
area were approved in 1894–95 remained unsold during the ye
A preliminary working scheme for the casuarina plantation
and south) and Nochikadu on the coast in the Cuddalore ran
Conservator during the year. The preparation of the worki
kuppam plantation referred to in last year's report was held
completion of its final demarcation and that of the adjoining
as to conveniently include these two plantations in one wo
plans based upon area were drawn up during the year for four
in extent, and approved by the Conservator. The provision
plan in the *Salem district* were adhered to. In *Tanjore* the
plantations, for which a working plan was approved by the
worked according to its provisions. In the *Trichinopoly di*
plan for the Cauvery south bank plantations and a prelimin
Manaparai hill reserved forests were approved by the Boa
respectively, during the year.

Southern Circle.

In *Tinnevelly* plans were prepared for the systematic t
standards of an area aggregating 19,585 acres. Eight plans we
was withdrawn by the Collector, four were approved by th
and three have also been sanctioned since. The plans might
and based upon area alone had the working circles not inclu
carried out without reference to any plan. The results of th
over in the various working circles are shown below:—

Number.	Name of coupe.	Area in acres.	Outturn. Quantity.	Outturn. Value.	Cost of felling establishment, &c.	Net profit.	Net profit per acre.
					Rs.	Rs.	Rs. A. P.
1	Rengarcoil compartment A, coupe I.	56	Charcoal 3 tons, firewood 278 tons.	101	7	94	1 10 10
2	Rengarcoil compartment B, coupe I.	56	Firewood 78 tons.	59	8	51	0 14 7
3	Valaikulam, coupe I.	57	Charcoal 5 tons, firewood 248 tons.	591	5	586	10 4 6
4	Kalakad, coupe I.	235	Timber 991 cubic feet, charcoal 216 tons, firewood 477 tons.	1,415	159	1,256	5 5 6
5	Coupe III, Padarmalai working circle.	135	Small timber 377 cubic feet, firewood 1,982 tons.	4,595	2,122	2,473	18 5 1

The actual yield of coupe III of the Padarmalai working
15 tons per acre against 20 tons estimated in the working plan
per annum has been As. 14–8 instead of Rs. 1–13–10 estimat

in a large measure due to the want of supervision and interest on the part of the subordinate in charge of the work. As regards the annual coupes of the other working circles the outturn per acre per annum for each coupe is about the same as that estimated. In *Madura* Mr. Latham, Assistant Conservator, has surveyed many of the hills covered with scrub in the Dindigul and Mélúr taluks and has classified the stock. The Conservator remarks: "It will be justifiable now to continue the coupe fellings, hitherto conducted without regard to the supply and sustained yield and on that account it was found expedient to check them. The preparation of simple working plans should offer no difficulty." In *Nilgiris* the uncertain demand for fuel on the Ootacamund plateau has prevented the introduction of Mr. Tireman's working plan. The plantations continued to be worked under Mr. Gamble's original plan which has been more regularly followed in Coonoor than in Ootacamund, the demand being more fixed. The working plan for the experimental treatment of a part of the Vellamundi reserve in *North Coimbatore*, referred to in the last report, was approved during the year. The main feature of the plan consists in the restocking of the blanks by sowings of various species with the castor-oil plant to act as nurse. It is hoped the proceeds from the sale of the castor-oil seeds will more than cover the cost of the sowings. Seeds were sown during the year, but towards its close germination was not general for want of sufficient rain. The rough working plans drawn up for the working of the babul trees (*Acacia arabica*) in the tank-beds of Adiyur and Kunnattur in the Erode taluk were not carried out during the year, the local officers having been fully engaged in settlement work. In *South Coimbatore* the rotation of the Sholakarai working plan having proved too short, the Acting Conservator (Mr. Hooper) sanctioned a period of rest leaving the proposed alteration to be decided by the permanent Conservator (Mr. Cherry). Similarly, a plan was under consideration for the Chinnar working circle. The initial coupes were sanctioned by Mr. Hooper, but the question of the revision of the original plan has been left to be decided by Mr. Cherry. The Aiyarangal block was brought under coppice felling with standards, in accordance with a plan, and yielded a revenue in excess of the estimate. In the case of the Singara Tope working circle the provisions of the plan for securing the introduction of valuable species into the re-growth have not proved a success, and it has been decided to proceed with rotation fellings but to limit the experiment of the sowing and planting to small areas. The full area of the year's coupe was not cut owing to difficulties in procuring labour. Although there is no registered working plan for the reserved forests in *North Malabar*, their working is so far organised that selection fellings are being conducted in blocks in rotation. The maximum outturn has been fixed. In *South Malabar* the operations in the Nilambur teak plantations and the new Amarampalem forest were conducted in accordance with the working plan prepared by Mr. P. M. Lushington. Thinnings in the former were carried out over 717 acres at a cost of Rs. 440. In the natural forests, coupe II was felled and coupe I cleared for planting at a cost of Rupees 2,635 for 80 acres. No work took place in the Walayar forest, reproduction during the first rotation being less advanced than estimated. The collection of information for preparing a working plan for the Chenat Nair forest was in progress. In *South Canara* a simple plan for working fuel in the Sarpanamane reserve was approved during the year.

(b) *Annual Plans of Operations.*

19. In the *Northern Circle* the plans of operations were fairly well followed and no serious divergencies took place. In Ganjám the construction of a rest-house on the Mohiri Hills was postponed pending selection of a site. Some inspection paths were not made as they were found unnecessary. There were some alterations in Gódávari partly owing to the bad season and partly to urgency, as for instance where tannah sheds were built instead of an inspection house. The chief deviations in Kistna were the postponement of improvement fellings in Vinukonda owing to change of rangers, and the supply of casuarina poles on an urgent indent from the Public Works Department. One range camp was not built. The work could not be proceeded with until a well has been sunk. In Kurnool the construction of some roads had to be deferred. The services of the Assistant and Extra Assistant Conservators had to be utilized in selection, demarcation, and in preparing the boundary lines for the Survey of India Party. Permanent demarcation to the extent anticipated could not be completed, as

the reserves were either not sanctioned during the year or not until very late. The drought also caused some alterations. In the *Central Circle* the plans of operations were, with only a few exceptions, adhered to in Chingleput, North Arcot, Nellore, Salem, Trichinopoly and Tanjore. In South Arcot the following works were undertaken, which had not been provided for in the plan of operations. About 1,500 cubic feet of small timber were extracted departmentally from the Tenmalais to meet local requirements; an unexpected indent for 2,500 tons of fuel for the South Indian Railway was met. Some 30,000 bamboo seedlings have been planted out in different reserves. In Cuddapah it was found advisable to defer the construction of one proposed road in favour of another more urgently required. The proposed collection of small timber in Badvel had to be abandoned. The departmental collection of gallnuts was not proceeded with as the crop was too poor and the market slack. In the *Southern Circle*, the annual plan was adhered to for the most part in South Malabar and Nilgiris. In Tinnevelly the proposed departmental operations in Srívilliputtúr and Nángunéri and the fellings of certain coupes were abandoned and contract system was adopted instead. The programme for working timber and fuel plantations in Madura was not followed owing to slackness of demand. The completion of some buildings was delayed and the construction of certain others not effected owing to difficulty in procuring labour. In *North Coimbatore*, there were several deviations. Proposed roads were not constructed as the establishment was required to clear boundaries for the Survey of India. Permanent demarcation was deferred pending decision of Government as to the retention of certain areas. Departmental collection of minor produce was adopted in lieu of leases to contractors. In North Malabar the main deviations were necessitated by changed conditions, while in South Canara the completion of some of the works was interfered with by the forest settlement operations.

The subject has not been dealt with in the reports from Bellary in the *Northern Circle*, and South Coimbatore in the *Southern Circle*.

(2) WORKING OF THE YEAR.

(a) *Communications and buildings.*

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

	1895-96.	1896-97.
	RS.	RS.
Roads and bridges	28,313	47,268
Buildings	41,108	48,342
Other works	2,662	4,223

Compared with the figures of the previous year, there was an increase of expenditure under all heads, that under roads and bridges being particularly large. This is satisfactory as it shows that, as far as establishment and time permit, this most important means of developing and facilitating the working of the forests is receiving due consideration.

21. The expenditure on roads in the *Northern Circle* amounted to Rs. 12,738. A large portion of this was incurred in *Kistna* followed by *Gódávari* and *Kurnool*. In *Kistna* and *Gódávari* 38 and 10 miles of new roads were constructed in addition to the execution of repairs to existing roads. In the latter district the work lay in the Agency tracts of the Peddápuram range and in the Papikonda hills in the Yernagudem range. The work in *Kurnool* consisted chiefly of the repair of five miles of a ghât road besides the laying out and commencement of a new road. The latter when finished will tap the interior plateau of the Nallamalais and open them to wheel traffic.

In the *Central Circle* there was an expenditure of Rupees 7,398 on roads. In *Cuddapah* the construction of three and a half miles of the Pedarallasagudu road was continued during the year and a sum of Rs. 1,685 was spent upon the work. The maintenance of two important roads and the continuance of the new Peddur ghât road in *North Arcot* and the construction of two new roads in *Salem* formed the principal items of work in these districts.

In the *Southern Circle* the amount expended on roads was Rs. 27,132. The only district in which there was a noticeable expenditure on new works is *Coimbatore (North)* where a sum of Rs. 7,000 was spent in opening twenty miles of the Gundila valley road trace in the Kollegal range and Rs. 1,350 in opening a bridle-path of nine and a half miles from Mavanatham to Talamalai for connecting the head-quarters of the Talamalai range with Dimbum. In repairing two main ghât roads heavy expenditure was incurred. In *Tinnevelly* the most important work was the construction of a masonry bridge on the new Papanásam ghât road. The bridge is estimated to cost Rs. 3,500 and a sum of Rs. 2,482 was spent on it during the year under report. The work was a necessary one. The Ambásamudram range depends upon the timber and fuel brought from the ghâts along the road in question, and, as long as the road remained impassable, extraction of produce was impossible. Two traces for roads and two for bridle-paths were also undertaken, besides the execution of repairs to majority of the existing roads at a total cost of Rs. 2,399. A large amount was expended in *South Coimbatore* on new works and repairs, particularly on the latter. The chief works consisted of the construction of a masonry dam across the Tunacaduvu river, tracing of an inspection path and a bridle-path, extension of tram line into the felling compartment of the Tekadi leased forest and of repairs to the timber slide. In *North Malabar* ten miles of new roads were constructed in addition to repairs to the existing roads.

22. The expenditure under buildings has also risen in all the circles. In the *Northern Circle* attention was paid to the construction of rest-houses in the Agency tract of *Gódávari*, owing to the difficulty of securing quarters for the forest subordinates to live in. In *Kistna* seven new range camps were built during the year, while in *Kurnool* the Nandyal range-house and office were completed and the extensions to the subdivisional bungalow at Nandyal commenced, besides attending to the repair of existing buildings. A rest-house at Bukkapatnam in the *Anantapur* district was completed during the year.

In the *Central Circle* no works of importance were constructed during the year. A bungalow on the Buckingham canal at Dugarazpatnam in the *Nellore* district was purchased from the Public Works Department for Rs. 2,000 to be used as a rest-house. A few rest-houses in *Chingleput* and *Salem* and sundry other works in other districts were executed.

In the *Southern Circle* the principal outlay on buildings was incurred in *Tinnevelly, North* and *South Coimbatore* and *South Malabar*. The chief works in *Tinnevelly* were the completion of a rest-house with out-houses at Muthabaruttu on the Srívilliputtúr hills and the commencement of a line of huts for subordinates at Pápanasam tannah site. In *South Coimbatore* the construction of the Punachi rest-house and the workshop for the saw-mill were the most important undertakings during the year. In *North Coimbatore* the erection of some rest-houses and a range office and of out-houses to rest-houses formed the chief important works in this division.

23. *Tramways.*—Form No. 65 shows the results of the working of tramways.

In *Nellore* the actual outturn at Sríharikóta was in excess of 1895–96 by 1,607 tons, though there was a fall in the number of ton miles by 299. The short fall is ascribed to the shorter distance of $2\frac{1}{2}$ miles worked during the year against $5\frac{3}{4}$ miles for a major quantity in the year preceding. Though the quantity cut during the year was greater than in the previous year, the rates charged were less owing to the shorter distance carried and this accounts for the smaller profit. The net loss up to the end of 30th June 1897 has been reduced from Rs. 748 to Rs. 709. In the casuarina plantation range there was a decrease of 163 tons in the outturn due to the illness of the range officer. The net gain on this line up to the end of last forest year is Rs. 26,283.

The tramway in *Cuddapah* continued to work at a loss. The length of line worked during the year was 2 miles against $1\frac{1}{2}$ miles in the previous year, while the outturn was less by $209\frac{1}{2}$ tons. The total loss up to the 30th June 1897 was Rupees 3,897.

In *South Coimbatore* the length of the line was extended from 4 miles to $4\frac{5}{8}$ miles.

from the tramway *terminus* and to the difficulty of working on wet days which is now being gradually overcome. The total loss up to the end of 30th June 1897 was Rs. 22,973. The real advantage gained by the working of the tramway is that wood is extracted which under other circumstances it would be impossible to work out. In the year under review circumstances prevented much advantage being taken of this.

(b) *Protection of Forests from injury.*

(1) General Protection and Breaches of Forest Law.

24. The following summary shows new cases of the year with particulars of last year for comparison :—

Circle.	Year.	Number of cases pending at commencement of year.	New cases of the year.					Total cases.	Cases pending at close of year.
			Injury by fire.	Unauthorised felling, &c.	Illicit grazing.	Other offences.	Total new cases.		
Northern ..	1895-96 ..	493	12	1,809	802	239	2,862	3,355	*567
	1896-97 ..	*567	33	2,268	913	398	3,612	4,179	710
	Difference ..	+ 74	+ 21	+ 459	+ 111	+ 159	+ 750	+ 824	+ 143
Central	1895-96 ..	574	20	2,229	2,190	258	4,697	5,271	595
	1896-97 ..	595	22	2,629	2,745	200	5,596	6,191	682
	Difference ..	+ 21	+ 2	+ 400	+ 555	− 58	+ 899	+ 920	+ 87
Southern ..	1895-96 ..	298	62	892	837	260	2,051	2,349	413
	1896-97 ..	418	43	1,050	814	523	2,430	2,848	384
	Difference ..	+ 120	− 19	+ 158	− 23	+ 263	+ 379	+ 499	− 34
Presidency ..	1895-96 ..	1,365	94	4,930	3,829	757	9,610	10,975	1,580
	1896-97 ..	1,580	98	5,947	4,472	1,121	11,638	†13,218	1,776
	Difference ..	+ 215	+ 4	+ 1,017	+ 643	+ 364	+ 2,028	+ 2,243	+ 196

* Seven cases omitted in last year's return from Gódávari. † Petty officers let off with a warning have not been included.

For the Presidency there is an increase under every head. The cases of injury by fire increased in the *Northern circle* mainly in the *Bellary* district. It is reported but little damage was done as most of the grass had been removed. The increase under unauthorized felling occurred principally in the *Northern* and *Central* circles. To a very great extent the prevailing scarcity and the dearness of food were the cause. Petty thefts were very rife and in some cases assumed rather serious proportions. In *Bellary*, for instance, wood was stolen for sale from most of the reserves near Bellary and even avenue trees were cut for the same purpose. The large increase in *South Arcot* is ascribed to better detection and to offences in unreserved lands. Under grazing without permission, the increase is due to illicit browsing of goats chiefly in the *North* and *South Arcot* districts. The enhanced pound fees sanctioned for the Tiruvannámalai taluk were not enforced during the year. In *Trichinopoly*, there was an increase of 173 cases. These occurred in the "padugais" (lands reclaimed in the Cauvery and Coleroon rivers by the Public Works Department) which have been handed over to the Forest department. The ryots turn their cattle loose and the latter naturally wander to these lands where there is good fodder. Prosecutions generally fail as it cannot be proved the owners "permitted the cattle to trespass." The increase under other offences occurred principally in *Gódávari*, *Bellary* and *South Canara*. In *Gódávari*, it was the result of better detection; more attention was paid to cases of unauthorized "kumri" cultivation; in *Bellary*, there were many cases of illicit tapping of date trees; it is only within the last year or two the Forest department has exercised control over these. In *South Canara*, it was found necessary to take active measures against unlicensed "kumri" cultivation on Government lands; 491 cases were reported in one range, several of these were withdrawn. A number of cases of illegal inclusion of Government land by ryots was also reported. Prosecution was only instituted in glaring cases, *e.g.*, a ryot who, according to his "chitta," was only entitled to 11 acres of *kan* land, had included over 300 acres in the boundaries to be

The number of cases pending at close of the year was 1,776, the majority of which was newly reported cases.

25. The following statement shows the disposals of offences during the year and a comparison with the previous year:—

Circle.	Year.	Total.	Withdrawn.		Compounded.		Prosecuted.		Percentage of cases prosecuted to disposals.	Percentage of acquittals to cases prosecuted.
			Number.	Percentage.	Number.	Percentage.	Convicted.	Acquitted.		
Northern ..	1895–96	2,795	302	10·8	1,269	45·4	940	284	43·8	23·
	1896–97	3,469	546	15·7	1,742	50·2	948	233	34·1	19·7
	Difference ..	+ 674	+ 242	+ 4·9	+ 473	+ 4·8	+ 8	— 51	— 9·7	— 3·3
Central ..	1895–96	4,676	460	9·8	2,463	52·7	1,436	317	37·5	18·
	1896–97	5,509	727	13·2	3,256	59·1	1,284	212	27·7	15·8
	Difference ..	+ 833	+ 267	+ 3·4	+ 793	+ 6·4	— 152	— 75	— 9·8	— 2·2
Southern ..	1895–96	1,931	247	12·8	799	41·4	690	195	45·8	22·
	1896–97	2,464	351	14·2	795	32·3	1,121	197	53·5	14·9
	Difference ..	+ 533	+ 104	+ 1·4	— 4	— 9·1	+ 431	+ 2	+ 7·7	— 7·1
Presidency ..	1895–96	9,402	1 009	10·7	4,531	48·2	3,066	796	41·1	20·5
	1896–97	11,442	1,624	14·2	5,793	50·7	3,353	672	35·1	16·7
	Difference ..	+2,040	+ 615	+ 3·5	+1,262	+ 2·5	+ 287	— 124	— 6·0	— 3·3

The total number of cases disposed of during the year exceeds the total of the previous year by 2,040. This figure excludes 2,018 petty offences inculpating 3,027 people in *South Canara*, and 632 cases in *South Arcot* in which the offenders were simply warned. The number of withdrawals has increased and was due to the rejection by District Forest-officers of petty offences, of cases of long standing and of cases in which the evidence was considered insufficient to procure a conviction. Subordinates have little or nothing to do with the subject of withdrawals. An offence is discovered and whether the evidence is sufficient or insufficient to warrant punishment, has to be reported to the District Forest-officer.

The number of cases compounded has increased by 1,262 or 2·5 per cent. in the Northern and Central circles. It is reported that only cases, which were clearly proved and in which the offenders offered to pay compensation, have been compounded.

The following table gives the sums collected as compensation during the year in each circle:—

Circle.	During 1895–96.			During 1896–97.		
	Amount of compensation realized.	Average amount.		Amount of compensation realized.	Average amount.	
		Per case.	Per person accused.		Per case.	Per person accused.
	Rs.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.
Northern	13,512	10 6 5	3 8 1	18,406	10 9 0	3 11 7
Central	15,806	6 4 2	2 3 2	19,286	5 14 9	2 3 7
Southern	5,821	7 3 5	2 6 4	7,587	9 8 8	3 9 3
Total ..	35,139	7 7 6	2 7 10	45,279	7 13 0	2 13 7

The average for the year exceeds that of 1895–96 by As. 5–6 per case and As. 5–9 per person accused. The increase in the *Northern circle* is due to the collection of Rs. 500 in one case from one man for illegal collection of horns and Rs. 410 in two cases, in *Vizagapatam*, and in the *Southern circle* to increased compensation collected in *South Canara*.

In the *Southern circle* alone, in *South Canara*, there was a material increase in the number of cases prosecuted before Magistrates: these, as already noticed, consisted principally of cases of unauthorized "kumri" cultivation.

The percentage of acquittals shows a most satisfactory decrease in all circles and for the year only amounted to 16·7 for the whole Presidency. Considering that over 4,000 cases were taken into court, the result must be considered very creditable to District Forest-officers. The precentage of acquittals was high in the *Kistna*, *Gódávari* and *Kurnool* districts, though even these districts show a considerable decrease when compared with the previous year. In the first district the leniency of the magistracy is said to have been the cause; in *Gódávari*, several acquittals were due to neglect to institute proper inquiry by a Ranger. In *Kurnool*, Magistrates dismissed several cases under the impression that the *prosecution* had to *prove* that wood found in possession of parties was either cut or removed from a Government forest. A High Court ruling upon the subject has since issued which should prevent a recurrence.

In the Madakasíra reserve, *Anantapur* district, wholesale fellings of rela (*Cassia fistula*) were discovered. The matter is under enquiry and the Range officer in charge has been suspended. A detailed report has been called for by the Board. In *Kistna*, in the Guntúr working circle, systematic stealing of babul was started, some of the offenders have been prosecuted. In *Salem*, a person was fined Rs. 200 for being in possession of a quantity of sandalwood for which he could not account. In *Madura*, a Ranger and tannadar were assaulted after detection of illicit felling, the offenders were convicted; there was also another case of wounding a subordinate and forcibly rescuing cattle. In *Cuddapah*, two large seizures of red sanders were made, but the offenders were not detected. When inspecting this district in the early party of 1897, the Conservator found that fellings of red sanders had been going on for some time on a very extensive scale. It was very evident that the subordinates had either connived at the fellings or had grossly neglected their duties. There is no doubt that the establishment was too weak to actively interfere, but the Range officers had never reported the fellings. It is believed the wood was exported to Madras under cover of zemindari permits. Mr. Batchelor, Assistant Conservator, with an increased staff from other parts of the district, has since been specially deputed to look after this and transit rules have been submitted for sanction. The District Forest-officer has been asked to submit a special report upon the subject, upon receipt of which the conduct of the Range officers will be dealt with. The people engaged in the work are a lawless lot. One forest guard, who had reported two persons for cutting red sanders, was stabbed a few nights afterwards and has since died. A Forester, while attempting to arrest some red sanders thieves, had some stuff thrown in his eyes, which seriously affected them; he was eventually compelled to take leave.

26. Rewards to an extent of Rs. 2,696 were paid during the year to informers and forest subordinates, and Rs. 615 to subordinates of the Abkári department. The Board is glad to observe that on only rare occasions forest subordinates receive rewards. The detection of forest offences is part of their regular work and it would be a mistake to encourage a practice of rewarding men for performance of duties for which they are paid. The following are the statements called for by the Government of India in letter No. 3268, Revenue, dated 29th June 1897. In several districts no return has been made of undetected cases; in future these should be shown.

No. I.

Division or Circle.	Cases taken into Court.				Cases compounded.				Cases undetected or withdrawn.				Total cases.				Grand total of cases.
	Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Northern Circle.																	
Ganjám	..	54	34	12	..	79	8	4	..	14	2	1	..	147	44	17	208
Vizagapatam	..	179	..	..	..	86	40	11	..	49	10	..	..	314	50	11	375
Gódávari	2	100	13	9	1	127	14	109	3	27	..	..	6	254	27	118	405
Kistna	3	95	147	30	..	204	180	20	6	61	184	10	9	360	511	60	940
Kurnool	1	237	124	10	..	183	66	30	..	93	10	10	1	513	200	50	764
Bellary	..	16	18	5	..	298	49	114	14	14	17	1	14	328	84	120	546
Anantapur	4	39	46	3	..	69	49	1	..	11	7	2	4	119	102	6	231
Total, Northern Circle.	10	720	382	69	1	1,046	406	289	23	269	230	24	34	2,035	1,018	382	3,469
Central Circle.																	
Cuddapah	6	133	295	22	..	75	36	3	..	39	63	..	6	247	394	25	672
Nellore	..	35	48	8	..	23	5	..	..	4	7	2	..	62	60	10	132
Chingleput	..	31	25	5	..	141	120	16	..	68	28	6	..	240	173	27	440
North Arcot	1	53	44	8	..	352	404	29	..	17	18	4	1	422	466	41	930
South Arcot	1	215	89	31	..	675	395	45	11	16	100	11	12	906	584	87	1,589
Salem	1	89	150	14	1	332	306	8	13	7	80	..	15	428	536	22	1,001
Trichinopoly	..	55	141	8	..	97	172	..	..	12	191	7	..	164	504	15	683
Tanjore	..	2	14	2	..	13	7	1	..	6	17	..	..	21	38	3	62
Total, Central Circle.	9	613	806	98	1	1,708	1,445	102	24	169	504	30	34	2,490	2,755	230	5,509
Southern Circle.																	
South Canara	10	251	41	288	..	109	..	85	14	56	..	56	24	416	41	429	910
North Malabar	..	..	1	7	..	..	3	7	..	..	..	7	..	..	4	21	25
South Malabar	..	6	..	4	..	1	..	..	..	1	..	3	..	8	..	7	15
The Nilgiris	1	20	33	11	..	18	13	1	6	..	..	..	..	38	46	12	103
North Coimbatore ..	..	59	73	24	..	41	52	3	..	..	48	..	..	100	173	27	300
South Coimbatore ..	..	17	9	7	..	45	84	3	..	5	2	4	..	67	95	14	176
Madura	Not reported.		..	..	..	..	..	..	..	..	..	..	..	..	..	..	519
Tinnevelly	1	11	10	3	..	176	129	4	..	46	32	4	1	233	171	11	416
Total, Southern Circle.	12	864	167	344	..	390	281	103	20	108	82	74	32	832	530	521	2,464
Grand Total.	31	1,697	1,355	511	2	3,144	2,132	494	67	546	816	128	100	5,357	4,303	1,133	11,442

No. II.

Division or Circle.	Details of prosecutions for offences by fire.					
	Serial No. of fire.	Acres burnt.	Character of offence (whether careless or intentional).	Whether acquitted or convicted.	Section of Law under which convicted.	Amount of punishment.
Northern Circle.						
Gódávari	1	100	Careless	Convicted	Section 21 of the Forest Act ..	One Rupee each.
	2	..	Intentional	Do.	,, 21 of the Forest Act ..	Nine Rupees.
Kistna	1	14 sq. yds.	Do.	Do.	Section 21 of the Forest Act ..	Rupees 10 each.
	2	3 acres.	Do.	Do.	,, 26 of the Forest Act ..	Rigorous imprisonment for 15 days.
	3	0·10 acres.	Do.	Do.	,, 21 of the Forest Act ..	Rupees 2.
Kurnool	1	1 square chain.	Do.	Acquitted	....	....
Anantapur	1	..	Careless	Do.	....	....
	2	..	Do.	Convicted	Section 21 of the Forest Act ..	Six accused fined Rs. 3 each in default to suffer one week's simple imprisonment.
	3	..	Do.	Do.	Rules under section 26 of Forest Act..	Fined Rs 5 in default one week's simple imprisonment.
	4	50 acres.	Do.	Do.	Section 21 of the Forest Act ..	Fined Rs. 8 in default one week's simple imprisonment.
Cuddapah	1	..	Intentional	Case pending ..	....	....
	2	..	Do.	Convicted	....	Two weeks' rigorous imprisonment.
	3	..	Careless	Acquitted	....	....
	4	..	Intentional	Convicted	....	Fifteen days' simple imprisonment.
	5	..	Careless	Acquitted	....	....
	6	..	Do.	Withdrawn ..	....	....
North Arcot	1	200 acres.	Careless	Convicted	Section 21 of the Forest Act ..	Twenty-five rupees.
South Arcot	1	40 ,,	Intentional	Case pending ..	....	....
Salem	1	80 ,,	Do.	Convicted	Section 21 of the Forest Act ..	Five were fined Rs. 50 each and four weeks' rigorous imprisonment in default to undergo further rigorous imprisonment of two weeks each. Another fined Rs. 50 and six weeks' rigorous imprisonment in default two weeks.
South Canara	1	¼ acre.	Careless	Do.	For Rules 15 and 26	Rupees 9.
	2	5 acres.	Do.	Do.	Do. ..	Rupees 25.
	3	35 ,,	Intentional	Do.	Section 21	Ten days' rigorous imprisonment.
	4	5 ,,	Do.	Do.	For Rules 11 and 15	Do. do.
	5	50 ,,	Do.	Acquitted	....	....
	6–10	197 ,,	Do.	Cases pending ..	....	....
The Nilgiris	1	¼ of an acre.	Do.	Convicted	21 (3) of the Forest Act	Rupees 10 or to undergo 10 days' simple imprisonment.
Madura	1	No information.	Do.	Do.	Do.	Rupees 10.
Tinnevelly	1	3 acres.	Do.	Acquitted	....	....

No. III.

Division or Circle.	A.—Fire caused by accident or through carelessness in burning fire lines.		B.—Fires entering the forests by crossing exterior fire traces.		C.—Fires beginning inside the reserve or fire traced areas.							
					Owing to carelessness or accident.							
					By workmen employed in the forests, by purchasers of forest produce and by Yah cutters.		By villagers, travellers, &c., passing through the forests.		By railway engines.		By lightning or by fire balloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
1	2	3	4	5	6	7	8	9	10	11	12	13
Northern Circle.												
Ganjám	..	..	..	..	..	..	15	635	..	..	..	..
Vizagapatam *	..	..	2	250	..	..	11	1,643	..	..	..	..
Gódávari	..	..	..	..	..	..	1	3	..	..	..	..
Kistna	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool	..	..	..	..	..	..	..	..	..	..	..	..
Bellary	..	..	..	..	1	400	3	2	..	..	..	..
Anantapur	2	489	..	..	..	..	1	500	..	..	..	..
Total, Northern Circle ..	2	489	2	250	1	400	31	2,783	..	..	..	..
Central Circle.												
Cuddapah	..	..	23	2,919	..	..	..	..	..	..	..	..
Nellore	..	..	..	400	..	..	..	..	..	..	..	..
Chingleput	..	..	1	178	..	..	1	200	..	..	..	..
North Arcot	1	2	5	..	..	..	1	500	..	..	..	..
South Arcot	..	..	..	..	..	..	..	..	..	..	..	..
Salem	..	..	..	..	..	..	1	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..
Total, Central Circle ..	1	2	29	3,497	..	..	3	700	..	..	..	..
Southern Circle.												
South Canara	..	..	..	..	..	..	3	106	..	..	..	..
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..
South Malabar ..	..	..	..	..	..	..	..	..	..	..	..	..
The Nilgiris	..	..	2	1,640	1	80	..	..	..	..	..	..
North Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..
South Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..
Madura	..	..	..	..	..	..	..	..	..	..	..	..
Tinnevelly	..	..	12	Not reported.	4	Not reported.	..	..	..	..	1	..
Total, Southern Circle ..	..	..	14	1,640	5	80	3	106	..	..	1	Not reported.
Grand Total, Presidency ..	3	491	45	5,387	6	480	37	3,589	..	..	2	..
											2	..

* Details not reported.

No. III—*cont.*

Division or Circle.	C.—Fires beginning inside the reserve or fire traced areas—*cont.*										Total A, B and C.	
	By intentional firing.								Causes unknown.			
	In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.		Total.					
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
	14	15	16	17	18	19	20	21	22	23	24	25
Northern Circle.												
Ganjám	12	1,365	5	420	..	..	17	1,785	32	1,488	64	3,908
Vizagapatam *	..	..	..	..	..	..	..	..	..	..	..	3,700
Gódávari	..	..	..	..	..	..	..	..	2	92	15	1,985
Kistna	..	..	3	3	1	..	4	3	4	154	9	160
Kurnool	..	..	..	..	1	..	1	..	10	2,481	11	2,481
Bellary	..	..	..	..	..	..	..	..	8	203	14	1,154
Anantapur	..	..	..	..	..	..	..	..	..	..	1	500
Total, Northern Circle ..	12	1,365	8	423	2	..	22	1,788	56	4,478	114	13,888
Central Circle.												
Cuddapah	2	530	..	..	1	69	3	599	84	8,992	110	12,510
Nellore	..	..	..	..	..	..	..	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..	..	..	..	1	400
North Arcot	9	2,323	4	605	2	191	15	3,119	33	3,162	55	6,661 †
South Arcot	..	..	..	..	1	40	1	40	11	228	12	268
Salem	..	..	..	..	..	..	..	..	13	1,878	14	2,378
Trichinopoly	1	100	..	..	..	..	1	100	..	..	2	100
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..
Total, Central Circle ..	12	2,953	4	605	4	300	20	3,858	141	14,260	194	22,317
Southern Circle.												
South Canara	5	151	1	96	2	40	8	287	13	740	24	1,133
North Malabar	..	..	..	..	..	..	..	..	1	100	1	100
South Malabar ..	..	..	..	..	..	..	..	..	..	..	..	..
The Nilgiris	2	820	1	1,285	2	1	5	2,106	..	..	8	† 3,826
North Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..
South Coimbatore	..	..	..	..	..	..	..	..	..	..	9	2,257
Madura	..	..	..	..	3	420	3	420	31	1,042	35	1,462
Tinnevelly	3	Not reported.	1	Not reported.	26	Not reported.	30	Not reported.	4	Not reported.	51	5,335
Total, Southern Circle ..	10	971	3	1,381	33	461	46	2,813	58	4,139	128	14,113
Grand Total, Presidency ..	34	5,289	15	2,409	39	761	88	8,459	255	22,877	436	50,318

* Details not reported.

† The Collector has not explained the difference between this figure and that given by him in Form No. 51.

(2) Protection from fire.

27. The following abstract exhibits the results of fire-protection :—

Fire-protection.

Circles.	During 1895-96.			During 1896-97.		
	Area attempted in square miles.	Percentage of area attempted which escaped fire.	Average cost per square mile.	Area attempted in square miles.	Percentage of area attempted which escaped fire.	Average cost per square mile.
			Rs. A. P.			Rs. A. P.
Northern ..	1,198	89·5	11 9 4	1,158	98	9 14 1
Central ..	2,517	96	4 15 5	2,362	98·5	5 14 7
Southern ..	1,879	93	8 7 1	1,843	99	7 8 11
Total ..	5,594	94	7 8 10	5,363	98·6	7 5 5

There has been no change in the system of fire-protection which was more or less the same as that reported last year to prevail in the different districts. According to form No. 51, the net result of the year's operations shows a decrease of 231 square miles in the area attempted and of Rs. 2,900 in the expenditure incurred, as compared with the figures of the preceding year. Taking the Circles individually, the area attempted to be protected in each was slightly less; the average cost per square mile was higher in the *Central Circle*, less in the other two Circles and for the Presidency.

The increase in the *Central Circle* was due to the adoption of special measures for protection of part of the Lankamalai hills in Cuddapah. Attempts to keep out fires from the whole range, 165 square miles, by means of patrols and a 12-feet cleared line have annually failed. This year the attempt was abandoned and a block (7,000 acres in extent) was selected, a 60-feet trace cleared round it and the work of the watchers concentrated upon this. The experiment proved a success, 30 acres only were burnt while clearing the traces and the work will be gradually extended. In the *Northern Circle*, the cost of protection was considerably less in *Bellary* and *Anantapur*. The reduction in *Bellary* was consequent upon the abandonment of interior fire lines on the western slope of Ramandrug and of some of the steep interior lines in the Donimalai and North-Eastern ranges. It was found advisable to re-align some of the interior cross-lines and to devote a portion of the savings to widening the exterior lines and opening bridle-paths. The decrease in *Anantapur* is ascribed to the absence of grass owing to the drought and also to the consequent saving in the cost of fire-tracing and establishment. The variations in the *Southern Circle* are spread over most of the districts and being small call for no remarks.

28. The percentage of the area burnt to the area attempted is reported to have been 2 in the *Northern*, 1·5 in the *Central* and 1 in the *Southern* Circles against 10·5, 4 and 7, respectively, in the year preceding. These figures are approximate. Perfectly accurate returns will not be furnished until the personnel of a considerable part of the executive establishment has improved and until accurate maps are at the disposal of District Forest-officers upon which the fire-protected areas can be correctly shown. In districts surveyed by the Survey of India there will be no difficulty as regards the maps and next year's report should show what steps have been taken in this direction. Compared with the previous year the results are very satisfactory. The success in the Central Circle is, in the Conservator's opinion, due in a great measure to the action of the ryots themselves. During the hot weather when, as a rule, fires are most prevalent, this year they were the exception. The originator of most fires (although rarely proved) is undoubtedly the herdsman, his object being the destruction of the dry woody grass-stalks and the early production of young green shoots. The drought and consequent fear that even the dry grass would fail acted as a deterrent. In 1891 during the drought a similar absence of fires was observed.

The percentages for the several districts as compared with those for the preceding year are shown below :—

Northern Circle.			Central Circle.			Southern Circle.		
Districts.	Percentage of fires to area attempted in 1895-96.	Percentage of fires to area attempted in 1896-97.	Districts.	Percentage of fires to area attempted in 1895-96.	Percentage of fires to area attempted in 1896-97.	Districts.	Percentage of fires to area attempted in 1895-96.	Percentage of fires to area attempted in 1896-97.
Ganjám ..	5	3	Cuddapah ..	7	3	South Canara ..	1	2
Vizagapatam ..	13	12	Nellore ..	2	..	North Malabar ..	66	0·15
Gódávari ..	3	1	Chingleput ..	2	2	South do. ..	..	..
Kistna ..	15	..	North Arcot ..	3	1	The Nilgiris ..	1	2
Kurnool .	23	3	South do. ..	2	0·2	North Coimbatore.	..	..
Bellary ..	13	2	Salem ..	3	5	South do.	1	0·5
Anantapur ..	8	4	Trichinopoly ..	..	..	Madura ..	4	0·6
			Tanjore ..	..	..	Tinnevelly ..	2	2
	10·5	2		4	1·5		7	1

Early rains contributed to the success in *Ganjám*, *Madura*, *Coimbatore* (*South*) and *Malabar* (*North* and *South*). Compared with the results of last year, fire-protection in *Vizagapatam* may be regarded as satisfactory. Fire occurred in only one reserve in the Golgonda taluk and burnt down 3,700 acres. The good result in *Gódávari* is attributed to the entertainment of the fire-patrol establishment one month earlier than usual, while in *Kistna* protection is said to have been assisted by the drought. The small percentage in *Kurnool* and *Anantapur* was due to the dearth of grass and in the former district also to larger removals of such grass as there was. In *Kurnool* as well as in *Vizagapatam* and *North Arcot* it is also suggested that graziers abstained from intentional fires anticipating scarcity of fodder. The favourable result in *Bellary* is ascribed to the inducements held out to the Reddis (village heads) in the shape of rewards for preventing and extinguishing fires and to the grazing down of the grass outside reserves. There were two cases of fires in *Chingleput*, one of which is reported to have originated in the Kálahasti zemin forests. The area burnt amounted to 400 acres. In *North Arcot* there was a fire in one important reserve (Musilamadugu) in which 135 acres were burnt. The fire was due to incendiarism and the block has been temporarily closed to grazing and cutting. There were twelve fires in three blocks in *South Arcot* which burnt over an aggregate area of 268 acres. They are all ascribed to incendiarism. The ryots of Paramanandal have been refused permits for grazing for one year for having refused to render assistance in extinguishing a fire which occurred in the reserve of that name. The prohibition will be withdrawn if it is found the grazing is necessary ; and it is hoped the temporary suspension of the privilege will prevent a recurrence. The decrease in the percentage which escaped fire in *Salem* was due to the exceptionally large area burnt in the Hosúr taluk ; of the total of 2,378 acres burnt, the fires in this taluk account for 2,120 acres. They were principally caused by incendiaries. There were two fires in *Trichinopoly*, the damage reported was very trivial. In *Tinnevelly* 168 acres of the protected area were burnt. There were numerous fires in the forests not under special protection and they were caused either by the graziers or dismissed subordinates. In *South Canara* 1,133 acres were burnt, the worst fires being in the Munjimale and the Chinkramale reserves. The open forests are reported to be mostly free from fire, being protected by the belts of ever-green. Collectors' reports furnish little information regarding the damage caused to the forests by the various fires.

Throughout the Presidency the extent of reserved forests, not specially protected, which escape fire annually is very considerable. Very few, if any, of the scrub reserves in the plains are burnt. As a rule they are so heavily grazed, that a fire, if started, would not spread.

(3) Regulation of grazing and protection from cattle.

29. The total area of reserved forests and reserved lands is 18,907 square miles; of these 1,767 square miles were closed to all grazing—Northern Circle 311, Central 243, and Southern 1,213 square miles. The comparatively large area closed in the Southern Circle includes 328 square miles in *South Malabar*. The private forests are

very extensive and there is no demand for grazing in the forests under Government. In *South Coimbatore* the area closed to grazing is very large and proposals are under consideration to throw open additional lands. In the Northern and Central Circles 661 and 78 square miles, respectively, were open to all animals. Sheep were admitted generally except to the specially-closed forests. In the Northern Circle goats were allowed to browse in 236 square miles in the *Kistna* district and in 151 in *Bellary*; in the Central Circle small areas were opened in *Cuddapah*, *Salem* and *Chingleput*. In *North Arcot* 70 square miles were made available, and in *Nellore* 20 square miles were reserved for goats alone.

Licenses were issued to the following extent:—

	Buffaloes and oxen.	Sheep and goats.
Northern Circle	446,546	418,893
Central do.	581,704	602,804
Southern do.	287,131	Sheep. 74,908
Total ...	1,315,381	1,096,605

The Malayalis in the hills in the *North* and *South Arcot*, *Salem* and *Trichinopoly* districts are allowed to graze their cattle free. It is believed this privilege is in places abused and that cattle from the plains are brought up. In addition reserved forests in the *Kurnool*, *Bellary*, *Anantapur*, *Ganjám*, *Vizagapatam*, *Gódávari* and *Cuddapah* districts were thrown open to free grazing as soon as the necessity for it became apparent. The privilege was fully availed of; and Collectors have been asked when the exemption is withdrawn to report the approximate numbers of cattle which obtained free ingress, also whether the concession had any marked effect upon these animals. When grass failed, hacking of branches was indulged in. This of course was anticipated. It is impossible to compare the number of cattle, &c., admitted under licenses during the year with the previous one. The figures for 1895–96 were incomplete and for the year under report are not absolutely correct owing to absence of clear information in some district reports. Collectors will be directed to see that future reports quote separately the number of buffaloes, oxen, sheep and goats.

(c) *Improvement of forest growth.*

(1) Natural reproduction.

30. The year was unfavourable to natural reproduction. It was particularly so in the districts of the Northern Circle owing to the drought and to the damage to the reserves by cattle and grass cutters. Towards the close of the year the drought in many of the Northern districts including Cuddapah in the Central Circle increased in intensity necessitating throwing open the forest reserves to free grazing and free removal of grass. The result has been that trees were lopped and seedlings destroyed, but it was inevitable. The following is a *resumé* of the district reports under this head:—

Northern Circle.

The natural reproduction of sal in *Ganjám* as usual leaves nothing to be desired. There have been good coppice shoots of *Terminalia tomentosa* and *Chloroxylon swietenia* (satinwood). In old *podus* (abandoned cultivation) in the Peddapur reserves in *Gódávari* coppice from *Terminalia tomentosa* and *Chloroxylon swietenia* is very promising. In *Kistna* the coppicing of *Acacia Arabica* (Babul) in the Guntúr Babul working circle was a failure, but has been redeemed by an abundant crop of seedlings. It is reported that *Hardwickia binata* unlike most trees developes more slowly from coppice than from seedlings; plants of five years being 1·39 inches in diameter from coppice, and 2·46 inches in diameter from seedlings. There was a fairly dense crop of seedlings of this species in the Bollapalle reserve. In Bellary and Anantapur *Hardwickia* germinated freely in some reserves but the removal of the projecting grass and the irruption of cattle destroyed all traces of the seedlings.

Central Circle.

In *Nellore* a certain amount of reproduction of red sanders (*Pterocarpus santalinus*) Yelama (*Anogeissus latifolia*) and Yepi (*Hardwickia binata*) was found in the higher Veligondas and of Yelama in the plains. The area cut over in Survepalli has coppiced well. In the Sríharikóta forests the growth from coppice of the species referred to in the last report is good, varying in height from 3 to 8 feet. In the year under report another plot of 8 acres was clean felled. In *Cuddapah* regeneration from seed was very poor owing to the drought. Red sanders (*Pterocarpus santalinus*) suffered from the free grazing, as the leaves are used for fodder. The reproduction of *Anogeissus latifolia* and *Pongamia glabra* appears to have been least affected by the drought. The experimental areas referred to in the last report were cut over in Thanakonda reserve and in Kodur reserved lands; the result will be reported later. In *Chingleput* there was little or no reproduction from seed except in areas containing dense growth of thorny bushes, which had practically excluded cattle. Regeneration from coppice in coupes protected from cattle continues to be good. In *North Arcot* the year has been a bad one for reproduction from seed and coppice owing to deficiency of rainfall during the past three seasons. The statement made last year that *Anogeissus* suffered more than satinwood (*Chloroxylon swietenia*) in fire-burnt areas was a clerical error. The fact is exactly the other way. It is reported that in consequence of unlimited grazing reducing the average grazing area per animal to about 2 acres in most localities, development of seedlings is practically impossible. In *South Arcot* coppice growth in the coupes is as usual good. On the Tenmalai hills a fair sprinkling of sandalwood seedlings is found in places unfrequented by cattle. In the plantations on the coast of the Cuddalore range, self-sown seedlings of casuarina have been collected and transplanted into nursery beds. They are thriving. In the "relief camp tope" of the Tindivanam range, self-sown seedlings of *Acacia ferruginea* and *Ceara rubber* are found in fair abundance. In the Vriddháchalam range reproduction from seed of *Acacia Arabica*, *sundra*, and *leucophlœa* and *Cassia fistula* is reported to be abundant. Reproduction from coppice in *Salem* was fair. The absence of sandalwood seedlings has again been noticed. In *Trichinopoly* reproduction from seedlings and coppice shoots was, as usual, satisfactory in the Cauvery padugai plantation. In *Tanjore* casuarina has coppiced on the coast in the plantation at Tirumalaivassal but the coppice growth after four years will not compare with plants grown from seed and the final crop is not likely to compare favourably with the yield from artificial planting.

Southern Circle.

Natural reproduction under coppice in *Tinnevelly* is generally fair and particularly good in the Kalakad and Aiyanarkoil working circles. Regeneration of teak as well as vengai (*Pterocarpus marsupium*) is fairly satisfactory on the lower slopes of the Sankaranáyinárkóvil and Tenkási taluks; that of Kongu (*Hopea Wightiana* and *Hopea parviflora*) is promising in the ever-green forests of the Ambásamudram range. In *Madura* regeneration from seed in fire-protected areas and from coppice in the coupes is good. About 80 per cent. of coppiced trees are believed to throw up shoots. The average annual rate of growth of coppice shoots is between 3 and 4 feet. In *North Coimbatore* seedlings of teak in the upland taluks are reported to be rarely found while those of Vengai (*Pterocarpus marsupium*), blackwood (*Dalbergia latifolia*), *Terminalia Hardwickia* and *Anogeissus* are very general and likely to develop with fire-protection. Reproduction of sandalwood is good especially in fire protected areas. In the plain taluks *Albizzia amara* and *Acacia leucophlœa* are said to be reproducing themselves freely though hampered by grazing. In *South Coimbatore* it is reported that the seeds of teak (*Tectona grandis*) and rosewood in the Tunacadavu range germinate freely, but the former disappears after a few years, being crowded out of existence by the heavy shading *Terminalias* and other trees. The Conservator, Southern Circle, remarks that "the most promising young teak has sprung up on land completely cleared of forest growth." On the Punachi slopes Vengai (*Pterocarpus marsupium*) is promising. The coppice regrowth in Chinnar and Aiyarangal is luxuriant and that in Sholakarai is described as regular though not as good as was anticipated when the working plan was framed. As regards the teak forests of the Anamalais, the Collector of Coimbatore has reported that Mr. Popert's suggestions as to the future method of treatment of the forests, with a view to promote the regeneration of teak will be carried out. On the Nilgiris the reproduction of the Blue Gum by stool shoots is reported to be as vigorous as ever, the yield in each rotation showing no diminution in volume though there is a certain mortality among the stumps. On the southern slopes, sandalwood seedlings are promising. Teak in the Moyar tracts is growing vigorously as also *Anogeissus*, sandalwood and vengai. In the Mudumalai and Benne forests natural reproduction is what it has been for years past. No improvement can be expected until the forests have undergone a regular course of treatment on the lines indicated by Mr. Popert, which have been accepted by the Board of Revenue but not yet begun. In *North Malabar* there is a fair crop of teak seedlings, but it is doubtful whether they will escape the usual fires which are certain to occur sooner or later. Besides reproduction from seed, there is a very fair growth of young teak from stumps of old trees. The growth of these is being assisted by removing all but one of the shoots in each group. Blackwood (*Dalbergia latifolia*) and Vengai (*Pterocarpus marsupium*) reproduce freely; the former particularly from root suckers. Jack (*Artocarpus integrifolia*) also germinates but young plants are seldom found far

from the parent tree. Other important species reported are *Terminalia tomentosa* and *paniculata* and *Lagerstræmia microcarpa* and *Flos-Reginæ*. A number of seedlings of *Bambusa arundinacea* is coming up. In *South Malabar* Irul (*Xylia dolabriformis*) reproduces itself from seed on laterite soils to the exclusion of almost all other trees especially in the Nilambur range. There is a vigorous growth of *Terminalia tomentosa* in the Amarampalam range on low-lying swampy soil. There is also a fair number of teak (*Tectona grandis*) and benteak (*Lagerstræmia microcarpa*) seedlings in the Karimpoya and Nallikutta blocks. The coppice regrowth in *South Canara* is satisfactory. The catechu is now reproducing itself by seedlings as well as shoots.

(2) Artificial reproduction, plantations and cultural operations.

31. The area under plantations, topes and cultural operations together with the cost incurred thereon during the year under report is given in form Nos. 53 and 54.

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

In the Agusti Nowgam casuarina plantation in *Ganjám*, 63 acres were planted up with 75,632 plants, bringing the total up to 3.34,325 plants. The expenditure incurred was Rs. 9,484 against Rs. 5,598 in 1895–96. The large increase in the expenditure was due to failure of the rains, which not only rendered it necessary to water the plants of the two previous years to save them from perishing but also necessitated the watering to be commenced much earlier than usual. In *Gódávari* there are two casuarina plantations and some 20,000 plants were put out during the year. There was a large number of casualties among the older plants owing to the drought, which have been replaced. In *Kistna* a new departure was made in a casuarina plantation in Bápatla, which had not been very successful, by trying *Dalbergia sissoo*, *Pithecolobium dulce*, *Albizzia lebbeck*, tamarind and other trees placed further apart than usual, some 20 feet. The plants put down in September—November and in June appear exceedingly healthy. One hundred and fifty acres were planted in Bápatla and 25 acres in Karlapalam at Rs. 6 per acre, whereas 42 acres in Gopuvanipalem reserve planted close after the old fashion cost Rs. 41 an acre. Sissoo is relied on to cover the ground from its habit of throwing up root-suckers after 10 years. Nurseries are well stocked. In *Bellary* 10 acres were planted with *Hardwickia binata*, *Tectona grandis* and *Albizzia lebbek*. The expenditure incurred in planting and watering this area including the watering of the area planted in previous years was Rs. 642. One hundred and thirty-four acres were chosen in the alluvial soil adjoining the Toranagallu reserve and 15 acres of this were planted during the year.

In *Nellore* there was no addition to the plantations during the year. The younger plantations of previous years' planting had still to be watered. There was more than the usual number of deaths from *fungus*. Allipuram is not suitable for date. The cashew on the other hand are doing well. In *North Arcot* bamboo transplanting in Chittoor and Vellore ranges was a failure. The prolonged drought was fatal. Red sanders seedlings have succeeded. The two and three year old casuarina plantations are looking fairly healthy, but the death of 4 and 5 year old saplings continues and further planting except for the purpose of filling up blanks has been abandoned. In *South Arcot* 68 acres were planted with casuarina in different localities at an average cost of Rs. 9 per acre against Rs. 13 in the previous year. The average cost represents the cost of planting and watering, including nursery and transplanting charges. The plants put out in the previous years were also watered wherever necessary. The casuarina seedlings obtained from the Tenasserim seeds and referred to in the last report as having been put out in the Shonankuppam plantation are more vigorous and thriving better than those from the local seeds. With the object of meeting domestic and agricultural requirements planting of bamboos in regular patches was undertaken during the year in most of the ranges. Except in Cuddalore the plants in other ranges are reported to be generally in good condition. Several thousand seedlings were put out at a very trifling cost. The experiment was made at the instance of the Collector and if successful will prove invaluable to the neighbouring villages as well as a source of revenue. In *Trichinopoly* the system of giving on short lease small areas of padugai land to ryots on condition of their planting them with casuarina was continued in the Trichinopoly range with little success and will be discontinued. In *Tanjore* an area of 55 acres was planted in Tirumulavásal at varying distances. The plants are doing well except in Neidavasal where the number of failures was about 50 per cent. of the plants put out. The plantations of last year were also maintained.

In Tinnevelly no regular plantations were taken in hand though a nursery for the Melavittam plantation was formed. Some palmyra seeds were sown in the Kudiraimalai Terai and most have germinated. The only two plantations in *Madura* are (1) a small teak plantation in Vannathiparai and (2) the blue gum plantation in Kodaikánal. Nothing was done in the teak plantation; it was considered inexpedient to restock the area owing to the casualties that happen to the seedlings. Some of the trees were attacked with borers and died. In Gundaushola, compartment IX was planted and pits were dug in compartment X, at a total cost of Rs. 442. The only planting in the *Nilgiris* was the putting out of plants—chiefly *Grevillea*—to replace dead ones in the Badaga plantations. The results are not encouraging owing partly to poorness of soil and dryness of climate and partly to bad planting and to want of protection of the areas which are outside reserved forest. The replanting of cultivated tracts in Wynaad was

carried on, but a borer destroyed large number of nursery plants. In *North Malabar* tuckle planting was persevered with; 17 acres were planted with teak, vengai and blackwood at Chedleth at a cost of Rs. 46 including nursery, and 10 acres of the same species in Begur. These as well as the plantations of previous years are doing fairly well. The growth of vengai and blackwood is slow. The older teak plantations of 1876, 1877 and 1878 at Kanoth continue to show very poor growth. The reproduction of jack trees in tuckles has not been a success. The sandalwood plantation at Begur is not thriving. An area of 80 acres in Karimpoya reserve in *South Malabar* was prepared for teak planting in accordance with the provisions of the working plan. The cost up to end of June 1897 amounted to Rs. 2,635. The planting was actually done after that date. In *South Canara* the casuarina plantations at Mangalore suffered from erosion by the sea and it is not proposed to increase the planted area on the coast line.

In *Vizagapatam* dates were sown in various places but after germination they died off for want of rains. In *Bellary* 30 acres were ploughed and sown with date seeds in the Kuppagallu reserve, 13 acres in Metriki and 35 acres in the Bellary taluk. The cost was low as the services of watchers were utilised. An experimental plantation was made by sowing seeds in 2,700 pits in Tungabhadra and 1,500 pits in the Toranagallu reserve. There were also some broadcast sowings of nim and tamarind in reserves, and dibbling date and kanuga (*Pongamia glabra*) along streams and in moist places. In *Anantapur* 139 acres were sown with date seeds during the year in various ranges, but the operation failed except in Madakasira owing to the drought. In *Cuddapah* 49 acres were sown with date and 47 with palmyra seeds but the germination was very poor. A nursery was formed in the Horsleykonda reserve to supply plants for restocking blanks. *Pongamia glabra*, *Terminalia chebula* and *Melia Indica* germinated well, *Anogeissus latifolia* fairly well, and *Terminalia tomentosa* not at all in spite of several attempts. Two hundred and eighty-six acres in *South Arcot* were, as in previous years, leased out to ryots on three years' cowle on condition of their raising cashew plants (*Anacardium occidentale*) 6 feet apart and surrendering them at the end of the period, the ryots being permitted to cultivate cereals on the land in the meantime. The plants thus raised are in good condition varying in height from 1 to 1½ feet. The plants on 308 acres of land similarly dealt with in former years are also thriving with a few exceptions. In *Trichinopoly* seeds of *Acacia Arabica* and *Inga dulcis* were sown 3 feet apart in a portion of the Karaippakkam extension reserved land. The operation proved a thorough success. The cultural operations that had been commenced on portions of the Coleroon South and North banks were washed away by the floods. In *North Coimbatore* cultural operations were tried at Hassanur with a view to assisting the natural regeneration of sandalwood. A sub-compartment of 50 acres was operated upon; blank and open spaces were ploughed and sown with sandal, tamarind and nim seeds between July and November, and sandalwood seeds were also scattered among bushes and thorns. A number of seedlings sprang up but many of them have since been destroyed by the spotted deer that frequent the coupe. There is however a number of seedlings still surviving hidden among the high grass. In *South Coimbatore* a sum of Rs. 265 was spent on sowing seeds of valuable species on 14 acres in plots in compartment 7 of the Tekadi leased forest. The result was not known by the close of the year. Prickly-pear and rubbish were collected and burnt over 36 acres of coupe 4, compartment I, Singara working circle, preparatory to sowing with castor-oil and other seeds. It has since been decided to limit the sowing to an area of 2 acres yearly, the matter being purely experimental. There is some doubt whether caster-oil plants will prove successful nurses. In *South Canara*, seeds of valuable species were sown in certain reserves on a small scale but the result is not encouraging except in areas closed to grazing.

(3) Early thinnings; (4) Other operations for the improvement of the growing stock.

32. In *Bellary*, thinnings were carried out in 100 acres of each of the reserved forests of Chiribi and Sankadakallu. In *Kurnool*, bamboo clumps were thinned. The work of cutting creepers was attended to in *Kurnool*, *Cuddapah*, *South Arcot*, *South Canara* and *South Coimbatore*. In the last-named division some cutting and girdling of miscellaneous trees were also carried out and the rubbish in the felled coupes was cleared and burnt. In *North Malabar* a light thinning of the plantations was made and the dominated and suppressed trees were removed; in *South Malabar* 717 acres of teak plantations were thinned at a cost of Rs. 440. Weedings extending over 3,898 acres, pruning over 240 acres and parasite-clearing over 590 acres were carried out at a cost of Rs. 5,213. In compartment IV Karimpoya 1,000 acres were cleared of climbers, while other operations including weeding, pruning, clearing parasites and similar works cost Rs. 5,243. In *South Canara* improvement fellings were carried out in the Pilarkan and Somesawar reserves. The operations consisted of setting free young growth of *Hopea parviflora*.

(5) Experiments.

33. Experiments with seed and seedlings continued to be made. The year was very unfavourable. The progress made is shown below.

Acacia decurrens.—The growth of these on the Nilgiris is very good. Average height 26 feet and girth 14 inches.

Acacia pynantha.—There are only very few plants on the Nilgiris, even these are of poor growth. Their average height is 8 feet and girth 2¼ inches.

Acer Campbelli.—The plants on the *Nilgiris* are healthy. The growth is slow. Their average height is 6 feet and girth 3 inches.

African seeds.—These seeds introduced into the *Nilgiris* by the late Mr. Rhodes Morgan were sown in beds at Aramby. There are about 200 plants, 3 to 4 inches in height. Of the seven varieties sent by the Conservator, Southern Circle, to *South Malabar* referred to in the last report, 75 plants were raised and planted out in the Nilambur hill.

Abies Douglasii seeds were also sown at Ebbanad nursery (*Nilgiris*). Very few germinated and there are about 40 plants of 1 to 2 inches in height.

Bucklandia populnea.—The growth of the plants of 1887 and 1888 is fairly good on the whole; their average height being 15 feet and girth 7 inches.

Bamboos.—Though the planting of Japanese bamboos was abandoned on the *Nilgiris*, the existing plants are reported thriving. About 85 offsets were distributed among the members of the Nilgiri Agri-Horticultural Society and others, and to the Botanical Gardens at Ootacamund. Twenty-nine offsets were also sent to Mr Gamble at Dehra Dún. They are easily propagated and are handsome and interesting, but of no commercial value. The *Dendrocalamus Nikkimensis* and *D. Hamiltonii* planted in 1889 have attained a height of 20 feet and 16 feet, and girth of 5 inches and 4 inches, respectively. The cuttings of *Bambusa valgaris* put down two years ago at Manantoddy in *North Malabar* have grown vigorously. In *South Malabar*, the *Bambusa longispathus* and *Cephalostachyum pergracile* in Pokote and Mulathmanna and the *Dendrocalamus* planted along the river banks are doing well. Out of the 25 nodes of giant bamboo which struck root last year; 9 have since died and the remainder have been planted out, 8 in Edacode and 8 in Truvellikava, 35 nodes planted during the past year have struck root and will be planted out in 1897–98. The *Bambusa vulgaris* planted in 1879 in *Truvellikava* are doing well. In *South Canara*, the clumps of *Longispathus* in the Wandur reserve show little improvement. The species is doing well in the banks of the *Cumardari* river in the Puttur range. *Dendrocalamus Brandisii* sown last year in the Wandur reserve is doing very well.

Ceara rubber.—The plants put out in *Ganjám* in 1895–96 are mostly doing well. In *South Arcot* the plants in the Tiruvannámalai and Tindivanam ranges exist but are apparently useless for rubber production. The trees in *North Malabar* flourish. Tappings were made in the dry weather and will be continued after the rains. In *South Malabar* all the plants are doing well. Three hundred and nine trees were tapped during the year and yielded 24 lb. of rubber. The largest tree tapped was 3 feet 9 inches in girth and gave 8 oz. of rubber, but the average yield per tree was only 1 oz. It is reported that, the trees appear over crowded and present long leafless stems with a very small crown, this perhaps injuriously affects the production of rubber.

Cephælis Ipecacuanha.—These plants in *South Malabar* are not thriving.

Date.—In *Nellore* the plants in Sriharikóta are reported to have died and those in Allipuram plantation are said to be dying off stea lily. The sowings in the Rameswaram reserve in *Cuddapah* reserve and Periavaram plantation were almost a complete failure The date offsets in *Chingleput* are in fairly good condition, and there are 50 plants living. Of the 75 offsets reported last year as living in *North Arcot*, 11 died during the year. Fifty-nine date seedlings were planted in 1886, of which 36 plonts survived the year, as regards the plants raised from the seed obtained locally, the mortality was very high. There were 121 trees in *South Arcot* at the beginning of the year, of which 3 died, leaving a balance of 118 with varying height from 1 to 22 feet. The 14 plants of 1881 in Vettangudi reserved forest, *Tanjore*, survived but the growth is slow, the greatest height at the commencement and close of the year being 11 feet 3 inches and 13 feet, respectively. In the North Date garden 139 trees survive, 5 having died during the year. Their height varies from 4 to 15 feet in height. They have not fruited. There are 49 unhealthy date trees in *South Malabar*.

Ficus elastica.—A few cuttings were put down at Manantoddy during the year, and one acre was planted at Bagur. These are doing well. There are several trees 12 or 13 years old of this species at Manantoddy and Kuppadi growing vigorously.

Guava (Chinese).—Of the 43 plants that remained at the commencement of the year on the *Nilgiris*, 18 were sent to Mudumalai and 12 to two gentlemen planters, 13 still remain.

Hevea braziliensis.—The two trees at Kanoth in *North Malabar* continued to grow well. One is reported to be 27 feet high and 16 inches in girth.

Mahogany.—The *Swietenia macrphylla* planted at Russellkonda in *Ganjam* is reported to be doing well, and in *Kistna* is reported to have failed. In *Kurnool* seeds were sown, but did not germinate owing to the drought. In the casuarina plantations of the *Nellore* district, four *Macrophylla* seedlings of 1895 have survived. They are reported to be 6 to 8 feet high and 5 to 7 inches in girth. In *Rapur* it is reported that only eight of the plants of the 1893–94 sowings have survived. Of the sowings of 1895–96 only 11 germinated and these have been transplanted in Veerannapenta. In *Cuddapah* the seeds were sown too late in the year to admit of the results being reported. The plants in *Chingleput* are doing well. The sowings in *North Arcot* were a failure during the year except in the river plantation In *South Arcot* 500 seeds were sown in the Ramapuram reserved forest during the year. Only 16 germinated. There were heavy casualties among the Mahogany plants in this reserve from the attacks of a grub. There were 438 plants in the district at the commencement of the year, to which 122 were added and 176 died during the year, leaving a balance of 384 plants with heights varying from 1 to 30 feet. In *Trichinopoly* the result of the experiment with the Mahogany has been discouraging. In the Udaiyárpalaiyam range, only 25 out of the 88 plants that were alive at the end of last year now survive. In *Tanjore* 24 Mahogany plants were planted in the Vettangudi reserved forest (nursery), of which 16 survive varying in height from 10 to 22 feet and in girth from 9 inches to 1 foot 11 inches Of the 28 plants planted in 1887 to the south of the South Date garden in the same reserve, 2 survive varying in height from 12 feet 3 inches to 13 feet 6 inches and in girth from 7 inches to 1 foot. Of the 72 plants planted in 1881 in the same reserve, 5 survive. Their height varies from 15 feet 3 inches to 26 feet 4 inches and girth from 11 inches to 2 feet 4 inches. In *Madura*, the Mahogany continues to thrive in the Alagar valley, where plants irrigated in their early life (now 9 years' old) have attained a height of 42 feet. Those that were planted in 1894 in the same place are also doing well. In the Cumbum range, the species has not thriven. Three pounds of the seed sent to *South Coimbatore* by the Conservator were distributed to the Tunakadavu, Bolampatti and Sholakarai ranges equally. There were at the end of the year 164 seedlings of 18 inches in the first-named range, 149 in the second and 264 in the third, all reported to be in good condition. The Mahogany on the *Nilgiris* has suffered from an attack of the borer. The trees in the Kullar nursery are doing fairly well with an average height of 26 feet and girth of 14 inches. In *North Malabar*, the *Swietenia macrophylla* plants of the previous year at Chedleth were planted out during the year, 4 acres were planted with them round the Chedleth Serambi; 300 plants were put down at the Muthanga Serambi and a few at the Kuppadi bungalow. A few plants of these species were given by the District Forest-officer to Mr. Macdonald of Karticolum estate with a view to ascertain how they would do under the constant supervision which a planter is able to give to such an experiment. Of the 9 plants so given, 1 has died, but the others are growing vigorously being (now 1 year old) about 5 feet high, some *Swietenia mahoganei* at Kanoth (now 9 years' old) have died from the effects of the borer, the rest are doing well, the best one being 26 feet high and 11 inches in girth. In *South Malabar*, the *Swietenia macrophylla* tree in Chathambarai measures 86¾ feet in height and 70 inches in girth against 84 feet in height and 69 inches in girth last year. *Swietenia macrophylla* has been planted in Pukoda and Edacode along with teak. Those saplings which are near compartment lines or open spaces are for the most part doing well, but of those wholly surrounded by teak, a large number has died. From the 6 lb. of seed sown in bamboo pots last year, only 632 plants germinated and were planted out, 530 have since died. Six pounds of seed were received during the year and sown equally in the Nilambur and Amarampalam ranges in bamboo pots. The *Swietenia macrophylla* in Dhoni is reported to be doing fairly well. Those in Walayar are stunted and 2 out of the 7 reported last year to be in existence have since died. The *Swietenia mahoganei* planted in Tiruvallikava, Ramalur and Panangod, now about 16 years' old, are doing very badly. They have been attacked by borer from time to time and are stunted ill-grown saplings that will never make decent trees. In *South Canara* there was no noticeable improvement in the growth of *Swietenia macrophylla* planted in Coondapoor and Puttur ranges.

Syncarpia Laurifolia.—These plants are doing well in *Madura*. In *Nilgiris* the growth of the plants planted in 1888 is good, their average height and girth being 17½ feet and 9 inches, respectively.

From *Kistna* it was reported last year that the rings of *Hardwickia binata* proved to be annual. This was further tested during the year and it has been found that the trees planted about 43–44 years ago exhibited 43 rings and a doubtful ring. *Melia Indica* and *Pithecolobium dulce* were also found to have annual rings, but in the former species spurious rings were also noticed to exist, which did not form a complete circle in the wood and seldom passed more than half-way round.

Examination of the cicatrices found on the outside of palmyra stems proved them to be each formed by the bases of three leaves. Local enquires, corroborated by the Conservator at Waltair, show that 12 leaves grow per annum. Thus four cicatrices correspond to one year's growth.

(d) *Exploitation of major Forest Produce.*

(1) Clear or re-generation fellings.

34. A few clear fellings were made in *Bellary* in different forests for local demand by iron-smelters and others. In *South Arcot* and *Tanjore*, the prescribed coupes in the casuarina plantations were clean felled. In *South Malabar*, 80 acres of forest in coupe No. 1 of the Karimpoya reserve were cleared for teak planting. The contractor paid Rs. 2,100 for the timber and bamboos standing thereon.

Further details of regeneration fellings are shown under (2) and (1).

(2) Selection fellings.

35. The chief departmental operation in *Ganjám* was the felling of sâl (*shorea*) for the Ordnance department. In *Kistna*, casuarina and some miscellaneous timbers were cut. Bamboos were sold in compartments subject to certain restrictions, such as leaving 20 per cent. of the bamboos of a clump. In *Kurnool*, the collection of valuable timber was continued at Ernipad and commenced at Atmakúru for supply to depôts. The branch wood was utilised for agricultural implements. These were offered for sale, but it is said there was very little demand owing partially to the state of the season and partially to the facility with which head-loads of timbers could be stolen. The Collector has been directed to take special measures for a period to check these thefts at whatever cost. In *Bellary*, a hundred *Sundra* pestles and some badly-grown trees of the same species were felled in the North-East range and in the Sandúr leased forests, respectively. A portion of these was sold at the Bellary depôts. The operation in *Chingleput* consisted in the felling of dead and dying casuarina trees in the Maiyur plantation. The felled material was supplied to the Reformatory at a net profit of Rs. 4–10–0 per ton. In *North Arcot*, bamboos were felled and supplied to the Ordnance department for lance-staves and tent-poles. In *South Arcot*, 455 trees of different species were marked and felled in the Tenmalai block, and the timber, about 1,476 cubic feet, was removed to the Tiruvannámalai depôt. Under the same system 108 vengai trees (*Pterocarpus marsupium*) yielding 1,128 cubic feet were removed by a purchaser from the Valasamalai reserved forest. Bamboos of various sizes were selected and felled from different blocks for supply to the Madras Ordnance department, while the bamboos in the hill forests of the Tiruvannámalai range were leased out to a contractor, who was required to leave uncut not less than 7 to 10 culms in each clump. Selection fellings of *Acacia arabica* were carried out in *Trichinopoly* to supply the Trichinopoly Central Jail with fuel. In *Tanjore*, casuarina trees were felled and supplied to the Tahsildar of Shiyáli for closing breaches in the banks of the Coleroon. In *Tinnevelly*, selection fellings were carried on to a limited extent in Ambásamudram and Srívilliputtúr for departmental use. The trees felled were converted into scantlings and poles, which yielded 3,455 cubic feet. In addition 17,250 cubic feet were removed by contractors in the taluks of Ambásamudram, Tenkási and Nángunéri from ever-green forests. The trees were marked by departmental officers, and the contractors paid for the fashioned timber at a fixed rate per cubic foot. In *Nilgiris*, selection fellings were continued in the Mudumalai forests. In *South Malabar*, selection fellings yielded 100,789 cubic feet cut by the department or contractors, in the latter case the trees having been marked by Range officers. Of this quantity, 63,440 cubic feet came from 3,955 acres of the coupe No. I of the Karimpoya reserve, 28,000 cubic feet from 15,200 acres of the Chenat Nair reserve, and the rest from the Punakadu reserve and the new Amarampalam forest. In *South Canara*, 512 trees were felled in Pumale and Someswar, which yielded 843 logs. Only half of these had reached the sale depôts at the close of the year owing to difficulty in carting.

(3) Improvement fellings and (4) Coppice fellings and coppice with standard fellings.

36. These operations are of the greatest importance and upon their skilful execution depends to a great extent the future welfare of the scattered forests in the plains. These, surrounded by villages and cultivation, consist for the most part of growth, stunted, hacked and malformed—the natural consequence of the unregulated fellings and grazings which obtained for years. During the year under review the work has extended over very considerable areas. The Board regrets that in Salem and North Arcot, where these operations were conducted over large areas, it has not yet been found practicable to frame working plans for them. Without plans, although systematically arranged, there is always the danger that the area annually operated upon is in excess of the possibility of the forest. In the *Northern Circle*, improvement fellings were carried on in *Kurnool* and to some extent in *Kistna*. In the last-named district, the babul area was operated on in accordance with the working plan, and

standards were selected by the District Forest-officer. Coupes were opened in the Mangrove working circles. In the Golgonda taluk of the *Vizagapatam* district two coupes of about 60 acres each were felled in the Madalammakonda and Arlova reserves. The material obtained was disposed of locally as firewood, charcoal and small poles. In *Bellary*, a coupe of 200 acres in the Neraniki reserve was sold in auction to meet the local demand for fuel and timber, and two coupes of 450 and 200 acres in extent were leased to iron-smelters for manufacturing charcoal. In the Ramandrug range, portions of 10 (*b*) and 8 (*d*) compartments of the Sandur leased forests were worked, as also sub-compartment 6 (*d*). The system in all these areas is coppice with standards.

In the *Central Circle*, 200 acres of the Balapalle working circle in *Cuddapah* were treated under the coppice with standards system and the wood was supplied to the Madras Railway. About 1,500 acres of the Kodur and Seshachalam reserves were also treated in a similar manner for the same purpose. In *Nellore*, coupes were felled in the Mocherla-Chilamcherla and Survepalle reserves. In *Chingleput*, sample areas were marked in seven coupes to ascertain their yield per acre before accepting offers from contractors. The coupes 666, acres in extent, were sold, the method of working being coppice with standards. In *North Arcot*, coupes were felled for coppice under standards by departmental agency and contract. The area operated upon exceeded 2,800 acres. The average price per acre under contract was Rs. 5–12–2. In *South Arcot*, coupes in five reserves were felled over departmentally for supply of engine fuel to the South Indian Railway, and in eight others were felled over by purchasers. The area of the coupes amounted to 1,530 acres. In *Salem*, several coupes were opened for working departmentally in connection with railway fuel and local supply and other coupes were worked by contractors. It is estimated more than 3,900 acres were operated upon. In *Trichinopoly*, coppice fellings were carried on in some of the *Casan* (Memecylon) coupes. Some of the coupes in the Kulittalai Cauvery south bank plantations were felled departmentally as coppice with standards and the wood (in billets) was supplied to the South Indian Railway departmentally. A few coupes in the Manaparai hill reserved forests were also worked under the same system, but the right of felling was sold to private contractors. In all 418 acres were felled for coppice.

In the *Southern Circle*, improvement fellings were conducted in *North and South Malabar*. The operation in *North Malabar* is reported to have yielded 54,000 cubic feet of timber, but the Conservator remarks that "this is really given by selection fellings, the true improvement operation supplying very little timber and for the most part returning no immediate profit." In No. I Karimpoya forest, *South Malabar*, 238 trees of useless species were cut. In *Tinnevelly*, working circles were formed and fellings regulated. The fellings, amounting to 539 acres, were, with one exception, carried out through contractors. In *Madura*, the coupe fellings in six localities yielded a total outturn of 62,374 cubic feet from 168 acres or an average of 371 cubic feet per acre. The local mills paid Rupees 2,749 for 392 tons against an expenditure of Rs. 2,356. In *South Malabar*, the produce on 100 acres near Walayar was sold and realised Rs. 1,514. In *South Canara*, coppice felling was conducted in eight blocks by contractors, and departmentally in Sabladi, where twenty acres yielded 1,642 cubic feet, the cost of felling being Rs. 127 and the revenue Rs. 193.

(5) Unregulated fellings.

37. Extraction from reserved forests under cover of permits prevails to a large extent throughout the Presidency. It is gradually being replaced by located fellings. The substitution of the latter is a work of time and even when complete, arrangements must still be made under which ryots can procure timber, not available in the coupes, from other parts of the forests. Any incompletely-considered system of restriction is to be deprecated. It is not an easy task to wean the ryots from customs they have practised for years and to arrange for coupes within reasonable distance to meet all the small local requirements. In *Kistna*, poles of miscellaneous timbers were allowed to be cut on permit and the scheme of making the village heads recovering officers is working well. In *Gódávari*, it is reported that the permit system "has been brought under better control by stopping village officers from issuing permits and by entrusting this work to permit gumastahs on fixed pay." In *Kurnool*, the removal of the lower

classes of timber, bamboos, fuel and charcoal on permit continued throughout the year. In a few localities, a limited quantity of higher class timber was also removed on permit. In *Bellary*, fellings under permits were permitted in reserves to meet the requirements of the ryots in places where the demand was not quite sufficient to warrant the opening of coupes. In *Nellore*, head-load tickets were issued to meet the wants of the people. In *Cuddapah*, the permit system had to be largely resorted to again as the attempt to introduce located fellings was not attended with success for want of suitable contractors. In *Chingleput*, the local demand for timber and firewood was met by the issue of permits by permit-issuing officers and Range-officers. In *South Arcot*, permits are issued for removals from unreserved lands. In *Tanjore*, permit-issuing officers are authorised to issue permits only for dead-wood and third-class timber trees. Unregulated fellings in *North Malabar* included the free grant of timber and bamboos as well as jack timber cut on special permits from unreserved lands. In *Madura*, no permits were issued for first-class timbers, but Range officers are authorised to issue permits for second and third class timbers to meet the requirements of the villagers.

(e) *Extraction and transport of Major forest produce by land and water.*

38. There is little to be recorded under this head which has not already been said in previous reports. In *South Coimbatore*, an attempt to float timber down the Bhaváni above Méttupálaiyam failed, but is proposed to be repeated with smaller logs. The timber slide referred to in the last report was reconstructed during the year. The scheme was to do away with the defective bottom or pavement and to replace it with planking and to put up thick planks at the sides also in order to reduce the width of the slide. The difficulty which hitherto existed in using the slide on dry days has now been overcome, but further improvement is under contemplation in the direction of controlling the speed.

(f) *Exploitation of Minor Forest Produce.*

(1) Extraction of fodder.

39. Towards the close of the year under report, the reserves in several districts in the Northern Circle and in Cuddapah in the Central Circle were thrown open to free grazing on account of the famine. Free cutting of grass in the reserves of the Berhampur taluk, *Ganjám*, was granted from January to July 1897, but the concession was not availed of to any extent. In *Kistna*, grass and leaves were allowed to be taken on free permit from all forest reserves during the greater part of the year, as fodder in unreserved lands was extremely scarce. Leaves were prohibited to be taken from only six species, viz., (1) *Harwickia binata*, (2) *Anogeissus latifolia*, (3) *Chloroxylon swietenia*, (4) *Dalbergia latifolia*, (5) *Pterocarpus marsupium* and (6) *Acacia sundra*. In *Kurnool*, removal of head-loads of grass was permitted free of charge during the latter half of the year. Only in *Bellary* was fodder extracted departmentally and supplied to the Commissariat Department. During the first half of the year, the ryots in general removed fodder on payment. The revenue from this source was Rs. 7,017 against Rs. 1,247 in the preceding year, which represents nearly 22,500 cart-loads at five annas a cart-load. A great portion of this revenue was derived from the Sandur leased forests. In *Cuddapah*, the removal of fodder free of charge was permitted during a great portion of the year and the privilege was extensively availed of. In *South Arcot*, 2,337 head-loads of grass at 3 pies per head-load were cut and removed from the Annamalai forests for cattle brought for sale to the annual fair at Tiruvannámalai. In *South Canara*, the right to cut and remove grass from reserves was sold in auction. The amount realized was Rs. 334 against Rs. 127 collected in the preceding year.

(2) Grazing.

40. The attempt to distinguish agricultural and non-agricultural cattle has been finally abandoned and the ordinary rates have been fixed at three-fourths of the old maxima, viz., buffalo, As. 6; ox, As. 3; sheep and goats, As. 1–6. In special tracts reserved for cattle-breeding, &c., increased rates are permissible under the sanction of the Government.

The year under review shows an increase of Rs. 35,858 from grazing and grass removals :—

	1895–96.	1896–97.
	RS.	RS.
Northern Circle	1,24,747	1,27,255
Central Circle	1,62,681	1,78,470
Southern Circle	53,068	70,629
Total ...	3,40,496	3,76,354

The *Northern Circle* contributes Rs. 2,508. There was a decrease in *Ganjám* due to abandonment of proposed plains reserves and free grazing; in *Kurnool*, throwing open reserves to free grazing caused the deficit. *Kistna* under the parcellaire system again shows a reduction of revenue. In two years the revenue has fallen from Rs. 90,144 to Rs. 70,389. This year the falling off is ascribed to migration of professional herdsmen to the Nizam's dominions and elsewhere and to the removal on free permit of leaves and grass from reserves. In *Bellary* there was an increase of Rupees 14,457, of which Rs. 5,770 came from sales of fodder; the balance was the result of the enhancement of grazing rates and the unfavourable season. The latter compelled the ryots to resort to the reserves. The increase in the *Central Circle* was general except in *Cuddapah* where free grazing was allowed and in *Trichinopoly* and *Tanjore*. In the last two districts proposals to reserve several tracts in the plains have been abandoned. The largest increase occurred in the *Salem* district due to the revision of the rates.

In the Southern Circle, in *North Malabar* and the *Nilgiris*, the revenue was less than in 1895–96. The decrease in *North Malabar* was trifling and in the *Nilgiris* was due to mortality from cattle disease. The revenue in *North Coimbatore* increased by Rs. 13,521 (over 50 per cent.); the number of licensed animals rose from 119,490 to 199,687. The increase in the remaining districts was due to more efficient control.

(3) Miscellaneous produce.

41. As noticed in the last report, miscellaneous produce is not usually collected by Departmental Agency, but by contractors under lease. In exceptional cases, however, such as want of adequate offers, the collection is made departmentally. In *Vizagapatam*, the contract system is reported to suit the convenience both of the merchants and the hillmen and to be financially successful. Only in Palkonda, where no offer was not made, the collection was made departmentally. In *Gódávari*, the produce is worked neither departmentally nor under contract, except Rela (*Cassia fistula* and Tangedu (*Cassia auriculata*) in the unreserved lands of the Yernagudem and Ellore ranges. In Bhadráchalam seigniorage is levied on exports. The produce is mostly brought down by coolies or pack bullocks to the weekly markets held at the foot of the hills and there bought by merchants. In *Bellary*, the department undertook the collection of gallnuts and gum for which there were no bids at auction. In *Chingleput* and *Tanjore* permits were issued for manure leaves. In the former district they were issued also for palmyra leaves and for fruit of toddy-yielding trees not tapped. The collection of Divi-divi (*Cæsalpinia coriaria*) pods was the only departmental operation in *Trichinopoly*. In *Madura*, manure leaves and thatch grass were removed on permits. In *North Malabar*, horns, skins and gum-kino are collected departmentally. The last-named produce is extracted from the Vengai tree (*Pterocarpus marsupium*). The price originally obtained was As. 8 a pound, but is now Rs. 2–8–0. The effect of the tapping on the trees is being watched. In *South Canara*, catechu was manufactured to the extent of nearly 17 tons at a cost of Rs. 216 a ton, while a sum of Rs. 715 was realised against Rs. 540 a ton in the previous year. Twenty-two cinnamom stills were worked yielding Rs. 1,021. The collection of horns departmentally was tried but with little profit.

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

42. The total outturn of the year under timber and other produce compares with that of the previous year as follows:—

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

—	Timber (in cubic feet) including sandalwood.		Fuel (in cubic feet).		Bamboos (in numbers).		Minor produce (gross value in rupees).	
	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.
1	2	3	4	5	6	7	8	9
By Government Agency ..	423,476	449,988	2,897,561	2,450,068	57,067	229,852	16,959	47,746
By purchasers (including confiscations)	2,409,066	2,107,635	10,829,705	9,467,371	33,611,403	30,437,257	* 1,060,371	* 852,453
By free grants	70,678	82,961	12,074	7,212	57,349	157,961	2,099	1,773
By right-holders	3,826	1,702	45	257,541	..	21,614	457	40,767
Total ..	2,907,046	2,642,276	13,739,385	12,182,192	33,725,819	30,846,684	1,079,886	942,739
Increase or decrease in 1896-97 as compared with 1895-96	..	— 264,770	..	—1,557,193	..	—2,879,135	..	— 137,147
Percentage of increase or decrease over the previous year's total	..	— 9·1	..	— 11·3	..	— 8·5	..	— 12·7

* Includes grazing fees.

The variations are explained below under the respective heads.

Section I.—Departmental Operations (Form No. 57).

43. The following abstract shows the produce collected and disposed of departmentally during 1896–97 as compared with that of the previous year:—

Produce collected.	During 1895-96.			During 1896-97.		
	Quantity.	Cost.	Average.	Quantity.	Cost.	Average.
1	2	3	4	5	6	7
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber .. .. C. ft.	421,784	74,206	0 2 10	447,438	67,287	0 2 5
Fuel .. .. „	2,904,126	1,02,065	0 0 7	2,450,068	1,10,388	0 0 8
Bamboos .. .. No.	57,067	1,389	0 0 5	229,852	4,576	0 0 4
Sandalwood .. .. C. ft.	2,711	2,855	1 0 10	2,550	2,645	1 0 7
Minor produce .. .. Mds. (of 25 lbs.)	64,420	8,217	0 2 0	49,143	15,644	0 5 1
Total ..	..	1,88,732	..	..	2,00,540	..

Produce disposed of.	During 1895-96.			During 1896-97.			Stock on 1st July 1896.	Stock on 30th June 1897.
	Quantity.	Value.	Average.	Quantity.	Value.	Average.		
8	9	10	11	12	13	14	15	
		Rs.	Rs. A. P.		Rs.	Rs. A. P.		
Timber .. .. C. ft.	339,851	1,62,337	0 7 8	367,693	1,76,885	0 7 9	243,646	323,391
Fuel .. .. .. „	2,965,310	1,62,292	0 0 11	2,564,100	1,88,079	0 1 2	949,852	835,820
Bamboos .. .. No.	39,263	3,025	0 1 3	229,881	10,086	0 0 8	19,746	19,717
Sandalwood .. .. C. ft.	3,897	21,418	5 7 11	1,797	15,720	8 12 0	1,202	1,955
Minor produce .. Mds.	21,525	18,946	0 14 1	51,091	34,837	0 10 11	81,456	79,508
Total ..	..	3,68,018	..	..	4,25,607	..	..	..

The quantity collected under "timber" and "bamboos" is in excess of the collections of the year preceding, while that under "fuel," "sandalwood" and "minor produce" shows a decrease. The increase under timber occurred chiefly in *Kistna*,

Kurnool, *South Canara* and *South Malabar*, counterbalanced partly by large decrease in *Bellary* and *Tinnevelly*. The felling of two coupes in Gopuvanipalem and cutting of piles for the Madras-Bezwada Railway contributed to the increase in *Kistna*, while that in *Kurnool* and *South Canara* was the result of greater demand. In *South Malabar* the collection of a large number of saplings in connection with improvement fellings accounts for the increase. The decrease in *Bellary* is ascribed to the stoppage of the coupe felling in the Ramandrug range owing to absence of demand, and that in *Tinnevelly* to the abandonment of departmental operations in Srívilliputtúr, Sankaranayinárkóyil and Nángunéri taluks.

The decrease under "fuel" was generally due to the substitution of private for direct working. There was a falling off in *Kurnool*, *Bellary*, *Cuddapah*, *North Arcot*, *Trichinopoly* and *Tinnevelly* which was somewhat made up by the increase in *Vizagapatam*, *Nellore*, *South Arcot*, *Salem*, *Nilgiris* and *South Coimbatore*. The decrease in *Kurnool* was due to the suspension of improvement fellings at Chelama as there was a large stock of the previous year's cuttings. In *Bellary* fellings were restricted owing to absence of demand. A large quantity of fuel from patta and waste lands was brought in by poor ryots and sold at cheap rates as a means of livelihood during the famine. The supply of engine fuel to the Madras Railway through contractors accounts for the decrease in *Cuddapah*, and in *North Arcot* fellings in the Mamandur coupes were suspended owing to the ill-health of the establishment. In *Trichinopoly* the collection was practically normal. A quantity of stacked as well as branch wood felled by contractors in 1894–95 was brought to account in 1895–96 which tended to swell the year's collection. The decrease in *Tinnevelly* is ascribed to the partial working of coupe No. IV of the Padaramalai working circle. The increase in *Vizagapatam* was due to increased working of the coupes in the Golgonda and Sarvasiddhi ranges and that in *Nellore* is explained by the larger outturn from the Sríharikóta forests and by the greater extraction of dead trees from the casuarina plantation range. In *South Arcot* and *Salem* there was an increased demand for engine fuel. The increase in *South Coimbatore* was due to the greater yield from the Sholakarai and Ayirangal working circles.

Under "bamboos" there was a large increase chiefly in *South Arcot*, *Salem*, *South Malabar* and *North* and *South Coimbatore*. In *South Arcot* and *Salem* the increase was due to the demand from the Madras Ordnance Department and from the Hosur Remount Depôt. In *South Malabar* the cutting of a larger number of saplings was accompanied by the cutting of more bamboos. The experimental cutting of bamboos in *North Coimbatore* and the larger collection in Bollampatti and Sholakarai ranges in *South Coimbatore* accounted for the increase in these districts.

Under "sandalwood" the decrease was small and calls for no remarks. The decrease under "minor produce" occurred chiefly in *Vizagapatam*, *Bellary* and *Nellore*. It was due to a great extent to the unfavourable character of the season during the year. In *Vizagapatam* the collection of rela and avuru grass was restricted as there was a large stock of the previous year's collection on hand. In *Bellary* the decrease is attributed to the removal of grass required by the Commissariat Department on permits in preference to departmental collection and sale. The large decrease in *Nellore* was due to short demand for nux-vomica and smaller collections of soapnuts owing to prevalence of disease in the sea-borne villages. These decreases were partly counterbalanced by increases in *North* and *South Coimbatore* where departmental collections were undertaken on a large scale. Although the total quantity collected under minor produce was less compared with that of the previous year, the gross value of the produce collected during the year under report is far higher. This was chiefly due to the collection departmentally of valuable produce such as gallnuts, seekoy, *Acacia Concinna* wax, horns, &c., in North and South Coimbatore.

Under disposals the quantity of timber sold showed an advance on the sales of the preceding year. The increase occurred principally in *Kistna*, *Kurnool*, *North* and *South Malabar*. It was somewhat counterbalanced by decrease in *Ganjám*, *Bellary*, *North Arcot*, *South Coimbatore* and *Tinnevelly*. The increase in *Kistna* was due to causes already explained under collections, and that in *Kurnool* to the working of two sale depôts throughout the year. In *North* and *South Malabar* the demand was brisk

so that a quantity of the previous year's collections which remained on hand was sold during the year. The decrease in *Ganjám* was due to logs for sleepers in the Russellkonda depôt not having been sold during the year for want of good prices, to the cessation of demand by the East Coast Railway and to the prevalence of famine. In *Bellary* and *Tinnevelly* the decrease was due to causes already explained under collections and that in *North Arcot* to absence of demand for red-wood posts and miscellaneous timber. South Coimbatore has not explained the cause of decrease.

The disposals under "fuel" show a decrease which occurred chiefly in *Kistna*, *Kurnool*, *Bellary*, *North Arcot*, *Trichinopoly*, *Madura* and *Tinnevelly* and an increase in *Vizagapatam*, *Nellore*, *South Arcot*, *Salem* and *South Coimbatore*. In *Kistna* and *Bellary* the decrease was due to slack demand and in *Kurnool* to the suspension of improvement fellings at Chelama and to smaller demand from the cotton press at Nandyal. In *North Arcot* previous year's sales included large quantities of old material from previous years which, coupled with the absence of demand for the fuel felled in the Naickaneri coupes during the year, accounts for the decrease in the district. In *Trichinopoly* and *Tinnevelly* the decrease was due to causes already explained under collections and in *Madura* there was no demand from the mills. The increase in *Vizagapatam* and *South Coimbatore* has not been explained, while in *Nellore* it was due to a better market for casuarina wood than in previous year. The increase in *South Arcot* and *Salem* was due to causes already explained under collections.

The increase in the disposals of "bamboos" occurred chiefly in *Kurnool*, *South Arcot*, *South Malabar* and *North* and *South Coimbatore*. In *Kurnool* it was due to the sale of most of the material collected at close of 1895–96. The increase in *South Arcot* is only nominal as a large number was used for departmental works and some were written off as decayed and useless. In *South Malabar* it was due to the disposal of the stock collected for floating the saplings as explained under collections. There was a keen demand in *North Coimbatore* which accounted for the increase; no explanation has been given for the increase in *South Coimbatore*.

The decrease under "sandalwood" was due to want of satisfactory offers in *Salem*, *North Coimbatore* and the *Nilgiris*. The disorganization of all business in Bombay, the chief market for sandalwood, explains the decrease.

Under "minor produce" the increase chiefly occurred in *Vizagapatam* and *North Coimbatore*. The increase in *Vizagapatam* has not been explained, but that in *North Coimbatore* is ascribed to causes already explained under collections.

As regards cost of collection there was a slight decrease in the rate for timber, bamboos and sandalwood and increase for fuel and minor produce. The decrease in the case of timber was chiefly due to the cost of sawing and carting sleepers and timber supplied to the Ordnance Department from North Malabar having been included in the previous year in the cost of collection and to saving effected in carriage in the Nilgiri district where no departmental transport was undertaken during the year under report. The low rate paid for felling in *South Coimbatore* and the steps taken to reduce the size of logs by sawing so as to reduce cartage also contributed to the decrease. The decrease in the cost rate of collection of bamboos and sandalwood was small and calls for no remarks. The slight increase under "fuel" is due to collection and supply to Government depôts. The increase in the rate for minor produce was chiefly due to the collection (which costs comparatively little) of a very large quantity of rela and avuru grass in the *Vizagapatam district* in the previous year and to the restricted collection in the year under report.

The average rate of sale under timber shows a slight increase due to the sale of a larger quantity of valuable timber than in the previous year. The increase in the average sale rate of fuel was due to keen competition for coupes generally and to the demand for casuarina wood in the *Nellore district*. The decrease in the rate under "bamboos" was due to the experimental collection and sale undertaken departmentally in *North Coimbatore*, while the increase under "sandalwood" is due to a sum of Rs. 10,970 appertaining to the sales of 1895–96 having been received and credited into account during 1894–95. The decrease under "minor produce" was due chiefly to the sale of a large quantity of rella and avuru grass in the *Vizagapatam district*.

44. The subjoined abstract shows the quantity and value of timber and other produce removed by consumers and purchasers as compared with the results of the previous year:—

(FORM No. 72-A)

ABSTRACT K.—Produce removed by purchasers.

		During 1895–96.			During 1896–97.		
		Quantity.	Amount of sales.	Average.	Quantity.	Amount of sales.	Average.
Northern Circle.			Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber	C. ft.	1,427,394	1,30,610	0 1 6	1,078,313	1,08,811	0 1 7
Firewood	"	3,260,124	73,379	0 0 4	2,425,998	55,510	0 0 4
Bamboos	No.	19,819,703	92,290	0 0 1	15,905,473	69,664	0 0 1
Grass and grazing		..	1,28,043	..	..	1,23,939	..
Minor produce		..	3,11,775	..	..	1,58,319	..
	Total ..	..	7,36,096	..	..	5,16,243	..
Central Circle.							
Timber	C. ft.	784,368	78,167	0 1 7	811,280	89,956	0 1 9
Firewood	"	4,474,468	1,75,849	0 0 8	3,859,689	1,30,828	0 0 7
Bamboos	No.	11,698,159	97,242	0 0 2	12,442,370	91,468	0 0 1
Grass and grazing		..	1,60,475	..	..	1,78,438	..
Minor produce		..	2,88,858	..	..	2,19,072	..
	Total ..	..	8,00,591	..	..	7,09,762	..
Southern Circle.							
Timber	C. ft.	166,119	32,454	0 3 2	154,039	47,041	0 4 10
Firewood	"	3,076,333	81,654	0 0 5	3,137,739	90,505	0 0 6
Bamboos	No.	2,038,050	22,126	0 0 2	2,065,094	18,149	0 0 2
Grass and grazing		..	53,068	..	..	71,117	..
Minor produce		..	1,17,628	..	..	1,00,548	..
	Total ..	..	3,06,930	..	..	3,27,360	..
Presidency Total. Timber	C. ft.	2,377,881	2,41,231	0 1 7	2,043,632	2,45,808	0 1 11
Firewood	"	10,810,925	3,30,881	0 0 6	9,423,426	2,76,843	0 0 6
Bamboos	No.	33,555,912	2,11,658	0 0 1	30,412,937	1,79,281	0 0 1
Grass and grazing		..	3,41,586	..	..	3,73,494	..
Minor produce		..	7,18,261	..	..	4,77,939	..
Grand Total of Sales	..	..	18,43,617	..	..	15,53,365	..

The total value of removals in the year under report, as compared with that of the previous year, shows a net decrease of Rs. 2,90,252 as detailed in the margin. The slight increase under "timber" is noticeable chiefly in the districts of *Gódávari*, *Chingleput*, *North Arcot*, *Salem* and *Tinnevelly*. The increase under this item was mainly due to the credit of the value of trees on unreserved lands to Forests instead of to Land Revenue—Miscellaneous, and to the realization during the year of the value of trees on lands in reserved forests leased out to planters for coffee cultivation on the Shevaroy Hills in the Salem district.

	Rs.
Timber	+ 4,577
Fuel	— 54,038
Bamboos	— 32,377
Grass and grazing	+ 31,908
Minor produce	— 2,40,322
Total	— 2,90,252

Under "Fuel" there was a decrease chiefly in *Vizagapatam*, *Gódávari*, *Kistna*, *Kurnool*, *Cuddapah*, *South Arcot*, *Salem*, *South Coimbatore* and *Madura*. The concessions allowed under Rule 7 of the rules under section 26 of the Forest Act partially explain this, particularly in the last two districts. In *Vizagapatam* it is attributed to the unfavourable character of the season and in *Gódávari* to the removal of a smaller quantity of casuarina wood by Public Works Department authorities from the Bendamoorlanka and Narsapur plantations of the delta range. It is explained that inability of the poor classes to pay for fuel when the price of grain was ruling high was the cause of the decrease in *Kistna* and *Kurnool* districts. The decrease in

Cuddapah is attributed to the unfavourable season and to the stoppage of the issue of licenses for fuel and the introduction of the system of located fellings, in *South Arcot* to the working of certain coupes by departmental agency for supply of fuel to the South Indian Railway and to want of demand generally in certain ranges. In *Salem* coupe contracts in the Tiruppattúr Range were not given out as the period of previous contracts extended to the year under report.

Under "Bamboos" the decrease is chiefly spread over *Ganjám*, *Gódávari*, *Kurnool* and *North Arcot*. It is generally attributed to famine which prevailed during the year and to slack demand. The increase under "grass and grazing" is explained under "grazing" in paragraph 40 *supra*. The decrease under "minor produce" occurs in *Vizagapatam*, *Kurnool*, *Bellary*, *Anantapur*, *Cuddapah*, *Nellore*, *North Arcot*, *Trichinopoly*, *North* and *South Coimbatore*, and it was due in a large measure to the drought. The tanning industry, for which Avaram bark (*Cassia auriculata*) is used, has suffered from the restrictions placed on the import of hides into Europe on account of the plague in India; this decreased the sales of Avaram bark. In *Vizagapatam* rela and tangedu contracts were not sold and in *Anantapur* payments on account of the Tangedu bark leases were temporarily suspended owing to adverse season and the revenue from date trees was not fully realized. In *Cuddapah* the amroy crop failed and only a smaller amount was realized from tangedu leases owing to the bad season. In *Nellore* the areas leased contained little tangedu. In *Kurnool* and *Bellary* the decrease was due to famine. The decrease in *North Arcot* was due to postponement of the bark leases of some of the ranges for a year with a view to give rest to the forests, and that in *Trichinopoly* was almost nominal, as the lease amounts for periods covering two or more years were all brought to account during 1895-96. The decrease in *North* and *South Coimbatore* was due to the introduction of departmental collection and disposal.

45. The following statement shows the comparative cost of departmental and private working and the net profit derived from each class of produce under each system:—

Items.	Measure.	Quantity sold.	Amount of sale-proceeds.	Charges.			Net profit or loss.	Rate of net profit (column 8 ÷ column 3) per mensem in column 2.
				A. Conservancy and works.	B. Establishment and contingencies.	Total.		
1	2	3	4	5	6	7	8	9
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.
Departmental Working—								
Timber	C. F.	367,693	1,76,885	67,287	37,449	1,04,736	72,149	0 3 2
Fuel	,,	2,564,100	1,88,079	1,10,388	45,776	1,56,164	31,915	0 0 2
Bamboos	No.	229,881	10,086	4,576	2,249	6,825	3,261	0 0 3
Sandalwood	C. F.	1,797	15,720	2,645	2,817	5,462	10,258	5 11 4
Minor produce	Mds.	51,091	34,837	15,644	7,743	23,387	11,450	0 3 7
Private Working—								
Timber	C. F.	2,043,632	2,45,808	15,642	40,099	55,741	1,90,067	0 1 6
Fuel	,,	9,423,426	2,76,843	17,617	45,162	62,779	2,14,064	0 0 4
Bamboos	No.	30,412,937	1,79,281	11,409	29,246	40,655	1,38,626	0 0 1
Grazing	..	..	3,73,494	23,768	60,929	84,697	2,88,797	..
Minor produce	..	..	4,77,539	30,415	77,967	1,08,382	3,69,557	..

The rate of profit in the case of departmental working of timber exceeds that in the case of private working and is due to the sale of a larger quantity of valuable timber such as teak, rosewood, vengai, redwood, sâl, &c. Under "fuel" departmental working shows a loss as compared with private working. This is chiefly due to the inclusion in the quantity sold of 101,867 cubic feet of fuel used departmentally or written off as useless, &c. That under bamboos shows more profit under departmental working and is due to the superior quality of bamboos extracted by Government.

46. The sales of confiscated produce during the year under report, as compared with those of the previous year, are presented in the subjoined abstract:—

ABSTRACT L.—Confiscation (Form No. 72 B).

	During 1895-96.			During 1896-97.		
	Quantity.	Value.	Average.	Quantity.	Value.	Average.
Northern Circle.		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber .. .. C. ft.	15,038	3,618	0 3 10	49,917	5,741	0 1 11
Firewood .. .. .. ,,	4,584	191	0 0 8	16,241	330	0 0 4
Bamboos .. .. .. No.	50,738	269	0 0 1	17,960	187	0 0 2
Minor produce .. Money value.	..	315	..	..	648	..
Total ..	..	4,393	..	..	6,956	..
Central Circle.						
Timber .. .. C. ft.	4,996	803	0 2 7	7,024	976	0 2 3
Firewood .. .. .. ,,	6,431	326	0 0 10	8,239	659	0 1 3
Bamboos .. .. .. No.	3,969	106	0 0 5	4,100	64	0 0 3
Minor produce .. Money value.	..	114	..	..	97	..
Total ..	..	1,349	..	..	1,796	..
Southern Circle.						
Timber .. .. C. ft.	11,151	3,166	0 4 7	7,062	2,272	0 5 2
Firewood .. .. .. ,,	7,765	998	0 2 1	19,465	613	0 0 6
Bamboos .. .. No.	784	77	0 1 7	2,260	38	0 0 3
Minor produce .. Money value.	..	95	..	..	275	..
Total ..	..	4,336	..	..	3,198	..
Presidency Total.						
Timber .. .. C. ft.	31,185	7,587	0 3 11	64,003	8,989	0 2 3
Firewood .. .. .. ,,	18,780	1,515	0 1 3	43,945	1,652	0 0 7
Bamboos .. .. No.	55,491	462	0 0 2	24,320	289	0 0 2
Minor produce .. Money value.	..	524	..	..	1,020	..
Grand Total ..	..	10,078	..	..	11,950	..

The total amount of sales shows an increase of nearly Rs. 2,000. It is noticeable chiefly in Gódávari, and was due to stricter supervision exercised by the drift wood inspector and to the credit during the year of the sale-proceeds of some drift timber unsold in previous years.

47. In accordance with the circular from the Inspector-General of Forests, No. 6, dated 5th March 1897, the value of produce removed under rights or free grants is shown in the following statement:—

	Timber.		Fuel.		Bamboos.		Minor produce.	Grazing.	Total value.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	
By Right-holders.		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.
Northern Circle	1,311	94	257,510	4,828	20,489	128	38,450	700	44,200
Central Circle	..	..	..	..	..	..	356	..	356
Southern Circle	391	27	31	2	1,125	3	432	829	1,293
Total ..	1,702	121	257,541	4,830	21,614	131	39,238	1,529	45,849
By Free-grantees.									
Northern Circle	38,010	2,910	..	..	73,046	336	605	129	3,980
Central Circle	37,476	3,268	400	25	70,270	426	840	74	4,633
Southern Circle	7,465	811	6,812	429	14,645	189	125	..	1,554
Total ..	82,951	6,989	7,212	454	1,57,961	951	1,570	203	10,167

Note.—The value under grazing shown above is exclusive of free grazing and grass removals allowed during drought in the affected districts.

As usual free grants of forest produce were allowed to poor ryots whose houses were burnt by fires or demolished by floods. During the year under report free grants of building materials were made for construction of famine kitchens. No produce was granted on free permit in the districts of Chingleput, Tanjore and Madura.

CHAPTER IV.—FINANCIAL RESULTS.

48. The financial results of the forest year for the Presidency compared with 1895–96 show a decrease in the net revenue of Rs. 97,602.

The details according to circles are shown in the following table:—

Forest year.	Circle.	Revenue.	Expenditure. A. "Conservancy and works."	Expenditure. B. "Establishments."	Expenditure. Total.	Net results.
		Rs.	Rs.	Rs.	Rs.	Rs.
1895–96	Northern	7,23,859	1,68,443	2,15,434	3,83,877	+ 3,39,982
	Central	9,39,733	2,79,773	2,81,222	5,60,995	+ 3,78,738
	Southern	5,04,038	2,64,609	2,59,507	5,24,116	− 20,078
	Total	21,67,630	7,12,825	7,56,163	14,68,988	+ 6,98,642
1896–97	Northern	5,97,422	2,42,025	2,23,255	4,65,280	+ 1,32,142
	Central	9,48,547	3,06,570	2,78,212	5,84,782	+ 3,63,765
	Southern	6,42,948	2,79,605	2,58,210	5,37,815	+ 1,05,133
	Total	21,88,917	8,28,200	7,59,677	15,87,877	+ 6,01,040

The gross receipts exceeded those of the previous year by Rs. 21,287 and the variations are explained as follows:—

Departmental working.

(1) Timber + Rs. 14,548. Due to the sale of timber from Karimpoya reserve in *South Malabar* and of the previous year's balance in *North Malabar*.

(2) Fuel + Rs. 25,787. The result of fuel supply to the Madras and South Indian Railways in *Salem* and *South Arcot*.

(3) Bamboos + Rs. 7,061. Supplies of bamboos to the Ordnance Department for lance staves, &c.

(4) Sandalwood — Rs. 5,698. Sales were withheld in consequence of the fall in the Bombay market.

(5) Minor produce + Rs. 15,891. Derived from departmental collection of catechu in *South Canara* and miscellaneous produce in *North Coimbatore*.

Private removals.

(6) Timber + Rs. 3,628. Explanation unnecessary.

(7) Fuel — Rs. 30,597. The departmental supply of railway fuel contributed to the deficit but the famine was the chief cause.

(8) Bamboos — Rs. 16,525. The drought and consequent agricultural distress in the Northern Circle affected the demand and fewer bamboos were extracted from the Walayar reserve in *South Malabar*.

(9) Grazing + Rs. 35,858. The increase was general throughout the Presidency, explanation has been afforded under grazing.

(10) Other produce — Rs. 1,04,559. Decrease entirely due to the famine and drought; the crops were poor and the *Cassia auriculata* sales were low.

(11) Confiscated wood and miscellaneous revenue + Rs. 75,893. Principally the purchase money for lands opened out for coffee cultivation in the Anamalais in *South Coimbatore*.

The expenditure under "Conservancy and Works" increased by Rs. 1,15,375. The excess of Rs. 11,808 under "I." corresponds to the increased revenue. The cost of temporary establishments and percentage of collections paid to permit-issuing officer explain the increase of Rs. 8,910 under "II." Under live-stock, stores, &c., there was an increase of Rs. 12,769 due to cost of establishments engaged in the capture of elephants in the Southern Circle. The supply of tents to different officers accounts for the balance. The outlay upon communications and buildings exceeded that of the previous year by Rs. 27,750; details have been already given in other parts of the report. The expenditure upon improvement and extension of forests, VIII, increased by Rs. 34,587, the greater part of which was the cost of the Survey of India. Miscellaneous expenditure rose by Rs. 23,274 consequent upon refunds in the Northern Circle. The total difference in the cost of establishments only amounted to Rs. 3,514 being increased official postage and carriage of records.

The following districts contributed chiefly to the net surplus: *Salem* over 20 per cent., *Bellary* 13, *Nellore* 11, *North Arcot* 10 and *South Coimbatore* over 9.

CHAPTER V.—IMPORTANT ADMINISTRATIVE CHANGES.

49. *Realization of Revenue from the Usufruct of Toddy-yielding Trees in the Reserved Forests and Government Waste and Poramboke Lands.*—This question received careful consideration during the year under report. The system of selling by public auction the lease of the usufruct of the toddy-yielding trees was superseded in several districts by that of levying a fixed fee of 4 annas per tree for the usufruct together with the tree-tapping fee levied by the Abkári Department. The relative merits of the two systems and the reasonableness of the rate were discussed at length and Government has finally decided that the ordinary rate should be 4 annas which may be raised to 8 annas with the sanction of the Board.

50. *Modification in the System of Grazing Fees.*—The only modification in the system of grazing fees was the imposition of special higher rates in special tracts in the case of cattle kept in large numbers for breeding purposes or for profit. Detailed proposals specifying the areas in which the levy of higher rates of fees are recommended were submitted to Government during the year and sanction in the case of the Southern Circle has since been received. With reference to the remark made by the Government of India in reviewing the Forest Administration Report of this Presidency for 1894–95, the question of the feasibility of extending to other districts the parcellaire system of grazing which has been working in *Kistna* was under the consideration of the Board. Government has since been informed that, excepting in *Kurnool*, where the introduction of the system is being arranged for, and in *Nellore*, where the system is being tried, it is not advisable at present to attempt any change in the districts, save such as will follow from the adoption of the rules sanctioned by Government during the year for the regulation of grant of permits for grazing in reserved forests. These provide that the reserved forests of a district shall be divided into grazing blocks which may consist of one reserve or several or even part of a reserve, the size of the blocks being left to the discretion of the district authorities. As regards grazing in special tracts, special forms of permits have since been approved.

51. *Working of the Department—Improvement of Forest Growth and the Wants of the People.*—The special attention of all Collectors was drawn to the instructions of Government in the matter of safeguarding the interests of the ryots when making arrangements for the sale of forest produce and particularly against levying prohibitive prices upon leaves required for use as manure or upon small timber for domestic purposes. Reports were, at the same time, called for from all Collectors as to whether any modification was required in the working of minor produce in their districts. From the replies that have since been received, it appears that the instructions of Government above referred to have had the desired effect of removing any hardships that might have accrued by leasing out small items of minor produce to uncontrolled contractors. A considerable number of items is reported to have been removed from the sale lists and District officers should continue to devote particular attention to this subject. Free gleaning is generally permitted in coupes after removal of marketable

produce. Depôts have been established in *Salem* and *South Arcot* to meet local fuel requirements, and in the latter district bamboo planting has been undertaken for purely local supply. With the system of located fellings, which is now being gradually introduced in all districts, and which during the year extended over more than 16,700 acres, improvement of forest growth will undoubtedly take place and any hardship resulting from temporary closure to grazing of the coupes will be more than compensated by the improved growth and quality of the grass, &c. The required information on the improvement of standing growth and the efforts made to encourage it is given in paragraphs 30 and 31 of chapter II.

52. *Rules under the Forest Act.*—Timber Transit rules under sections 35 and 36 of the Forest Act for the districts of *Ganjám*, *Kurnool* and *South Coimbatore* and rules for regulating transit of sandalwood in *North Coimbatore* and the management of forest and waste lands in the *Saptur estate*, *Madura* district, were sanctioned during the year. Transit rules for *Vizagapatam* have since been published and those for the districts of *South Canara*, *Cuddapah* and *Kistna* submitted since the close of the year await the sanction of Government. It was found that there is at present no necessity for Timber Transit rules in the *North Arcot* district and the old rules were accordingly cancelled. Revised rules to regulate the collection and disposal of drift wood and drift timber in the Gódávari river were also issued during the year as also revised lists of classified trees and the seigniorage rates fixed for each. The Forest Manual was finally revised by the Board and awaits the approval of Government.

53. *Working of the rules under section 26 of the Forest Act.*—This subject is not noted by the Collectors of *Kistna*, *North Coimbatore* and *North Malabar*. In *South Malabar* the rules scarcely affect the people as nearly all the lands not included in reserves belong to private owners. In *Ganjám* the rules offered considerable relief to the people in obtaining produce for their domestic and agricultural requirements and the people are reported not to have abused the privilege. In *Vizagapatam* and *Gódávari* some difficulty was experienced in working rule 7 of the rules; in the former district the ryots complained that the concessions do not go far enough and that only worthless trees are excluded from the classified lists. In the latter district the difficulty lay in distinguishing produce brought for sale from that brought for domestic use. It is reported that in *Gódávari* and *Kurnool* there is a tendency to abuse the privileges, timber being deliberately cut for sale and other non-agricultural purposes. It is doubtful whether the new rules really added to the facilities for the irregularities which appear to be of old standing. In *Bellary* the rules worked satisfactorily; minor breaches such as cutting down babul saplings for goat browsing and pollarding of babul trees for fencing were promptly stopped. In South Arcot it is reported the ryots have not availed themselves to any extent of the privileges accorded by the rules; the reason, given, is their ignorance of them. This will remedy itself. In *Anantapur* and *North Arcot* the privileges were extensively exercised and there were no abuses. In all the other districts the rules worked satisfactorily. It is reported that in *South Canara* the Wargdars are inclined to take up on darkhast waste lands which have been excluded from reservation to supply free produce to the villagers.

54. *Coffee cultivation in reserved forests.*—In *Salem* twenty-three leases have been granted to planters—two during 1895–96 and twenty-one during the year under report—for cultivating plots of land on the Shevaroys. The total extent of these leases as per final sketches amounts to 2,930 acres. Out of the total demand of Rs. 26,553 on account of the value of tree growth on the lands, Rs. 12,180 were realized during the year under report and Rs. 2,446 in the previous year. The balance is due only after 1st December next. The survey of the lands covered by five other applicants and the execution of the final lease deeds in respect thereof remained to be completed. The question of opening the Yelagiris and the Kollemalais to coffee cultivation is under consideration. Proposals for allowing cultivation in Kudrakote in *North Malabar* on leases similar to those on the Anamalais are also under consideration. In *South Coimbatore* the conditions and rules under which lands are to be leased on the Anamalais for planting purposes were decided, and the maximum of 1,000 acres for each applicant is being enfored. Twelve of the original applicants have taken up 11,968 acres at the upset price of Rs. 5 per acre without the land being subjected to public auction. Under the auction system there was only one application for two blocks of 1,000 acres each. The form of the lease is awaiting the final approval of Government.

55. *Tours of Forest Member.*—The Honourable Mr. J. Sturrock was the Forest Member of the Board of Revenue throughout the year. He visited the districts of *Madura*, *Tinnevelly*, *Trichinopoly*, *Nellore*, *Chingleput*, *North Arcot* and the *Nilgiris*. In August 1896 he proceeded to *Nellore* and visited the Mica mines. A portion of the Palmanér range and the departmental coupes near Ambúr in North Arcot were inspected in March last. In May and June he inspected the forests of the Nilgiris and held a conference with the Collector and District Forest-officer, at which various matters of forest interest were discussed.

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

Circle.	Names of Conservators.	Number of days in charge.	Number of days spent in camp.	Districts visited.	Districts for which inspection notes were submitted to the Board.	District Forest-offices inspected.
Northern ..	Mr. A. W. Peet ..	Whole year.	183	All the districts except Kurnool.	Vizagapatam ..	Ganjám, Vizagapatam, Kistna and Anantapur.
Central ..	„ E. P. Popert ..	Do.	173	All the districts except Tanjore.	....	All District Forest-offices.
Southern ..	„ E. D. M. Hooper ..	Do.	269	All the districts of the Circle.	South Canara, North Malabar and the Nilgiris.	Do. do.

Mr. Peet made, under orders from the Board, thorough inspection of the Agency tracts proposed for further reservation in Vizagapatam. His visit to Bellary was made for the purpose of conferring with the Collector on famine arrangements. The forests in all the districts under his charge except those of *Tanjore* and *Nellore* were inspected by Mr. Popert. In *South Arcot* he visited the plantations and in *Nellore* the Mica mines. His visit to *Salem* was made chiefly with a view to report in consultation with the Collector on the question of over reservation in the district. Mr. Hooper made detailed inspection of the *South Canara*, *North Malabar*, *Nilgiris*, *Coimbatore* and *Tinnevelly districts*.

57. *Touring of District Forest-officers.*—More than half the year was spent in camp by District Forest-officers except Vizagapatam, Chingleput, Nilgiris and Madura. Mr. Hayne was in charge of Chingleput for 246 days but was unable owing to illness to spend more than 85 days in camp. The touring of the District Forest-officer, Nilgiris and Madura, fell short of the prescribed minimum only by 41 and 8 days, respectively; the District Forest-officer, Nilgiris, was unable to complete the minimum, as he was engaged at head-quarters in examination of records and in preparing the case for the Nilgiri-Mysore boundary dispute.

58. *Inspection of Range offices by District Forest-officers.*—The ranges of all districts, except Kurnool, Nellore, Chingleput, South Arcot, South Malabar, North Coimbatore and Madura were inspected twice during the year. In these districts some of the Range offices were inspected only once.

59. *Audit of the accounts of District Forest-offices.*—The accounts of all District Forest-offices, except Vizagapatam, Kurnool, Trichinopoly, Tanjore, Nilgiris and North and South Coimbatore were audited during the year as usual by the Local Fund Inspecting staff of the Accountant-General's office.

60. *Forest school.*—Two Deputy Rangers from the Southern Circle—one from the Northern Circle and one from the Central Circle—were deputed during the year to the Forest school and one Deputy Ranger returned from the school to the Southern Circle with a Ranger's certificate.

61. *Permanent Establishment.*—During the year under report two officers—Messrs. J. S. Scot and C. B. Dawson—arrived from England and were posted to do work under the immediate supervision of the District Forest-officers, Cuddapah and Tinnevelly, respectively. Mr. Brougham, Deputy Conservator, 3rd grade, retired from the service

on the 15th January 1897, and Assistant Conservator Mr. F. C. L. Cowley-Brown was promoted permanently to the grade of Deputy Conservator in the vacancy. The sanction of the Secretary of State for India to the scheme for the reorganisation of the subordinate executive staff was received in February 1897. The scale of establishment fixed under this sanction for the whole Presidency is 106 rangers, 199 deputy rangers and foresters and 980 guards, and the maximum scale is to be worked up to gradually during three years. Thus to a portion of the sanction effect was given during the last six months of the year, and the following statement exhibits circlewar the scale sanctioned for the official year 1897–98 :—

Circle.	Rangers on Rupees.							Deputy Rangers on Rupees.			
	150.	125.	100.	80.	60.	50.	Total number.	40.	35.	30.	Total number.
1	2	3	4	5	6	7	8	9	10	11	12
Northern Circle	..	..	..	..	..	..	26	5	6	7	18
Central „	..	..	..	..	..	..	30	7	2	12	21
Southern „	..	..	..	..	..	..	34	7	6	7	20
Total ..	3	5	9	15	22	36	90	19	14	26	59

Circle.	Foresters on Rupees.				Forest guards on Rupees.						
	25.	20.	15.	Total number.	12.	10.	9.	8.	7.	6.	Total number.
	13	14	15	16	17	18	19	20	21	22	23
Northern Circle	2	17	21	40	14	23	45	203	..	..	285
Central „	2	19	21	42	14	23	14	345	..	..	395
Southern „	1	20	26	47	18	25	40	108	40	69	300
Total ..	5	56	68	129	46	70	99	656	40	69	980

Difficulty was experienced in finding qualified candidates for the posts in the higher and lower grades, even for the partial increase and special exemptions had to be sought for.

62. *Conduct and work of the establishment.*—The conduct and work of the subordinate executive staff still leave much room for improvement.

In the *Northern Circle* the services of a Ranger in Vizagapatam were dispensed with for physical unfitness and two temporary Foresters were removed, one for disobedience of orders and the other for incompetence; in *Gódávari* one Forester was suspended.

In *Kurnool* one Range officer (a Forester) was dismissed and the case of two others was under consideration. One Range officer in *Ganjám* was dismissed and another in Anantapur suspended. In the *Central Circle* one Deputy Ranger in *Nellore* was dismissed and two were reduced. In *South Arcot* two were under suspension, one of whom has since been reinstated. Four Rangers were reduced in *Salem*, the reduction in the case of three being only temporary, and one Deputy Ranger was suspended. In the *Southern Circle* one Ranger and three Deputy Rangers were dismissed, and one Forester and a Deputy Ranger suspended. Two Rangers were reduced temporarily to Deputy Ranger's grade for neglect of duty.

As regards the protective staff, several guards and watchers were suspended or removed for misconduct and gross neglect of duty. Two guards were convicted—one of writing false diaries and libelling the Range officer in anonymous petitions and the other of criminal breach of trust.

63. *Health of the Establishment.*—In the *Northern Circle* the districts of *Ganjám*, *Vizagapatam*, *Gódávari* and *Kurnool* continued to be unhealthy. There was a great deal of fever in all these districts, with the addition of dysentery and cholera in the first-named district. In the *Central Circle* the health of the establishment was far from good in *South Arcot*, *North Arcot* and *Salem*; and in the *Southern Circle* bad in *Malabar* and *South Coimbatore* and indifferent in *Nilgiris*, *Madura* and *Tinnevelly*.

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

65. *Inventory of valuable stock.*—Stock registers are reported to have been kept and verified in all districts except *Nellore*, *South Coimbatore* and *Tinnevelly*. Information for these districts has not been furnished by the Collectors concerned.

66. *Elephants.*—Fifteen elephants were captured during the year—one in *South Coimbatore*, one in *South Malabar* and thirteen in *North Malabar*. The elephant captured in *South Malabar* was sold and of the thirteen in *North Malabar* one was shot in the pit and two died. The number of elephants borne on the strength of the department is 62 as per Form No. 63.

67. *Rain-gauges.*—Rain-gauges readings have been properly recorded in *Vizagapatam*, *Gódávari*, *Kistna*, *Kurnool*, *South Arcot*, *Tinnevelly*, *Madura*, *North and South Coimbatore* and *North and South Malabar*.

68. *Iron industry in the Salem district.*—Enquiries have been instituted as to whether a sustained supply of charcoal in sufficiently large quantities and at a comparatively low rate can be furnished so as to enable the iron smelters to compete with the imports from Europe. The result is awaited.

69. *Madgole Estate.*—The proposal to have the estate forests managed by Government has, with the permission of Government, been withdrawn and the charge of the management has been handed over to the Dewan of the Estate.

70. *Work and services of superior officers—Northern Circle.*—Mr. Peet reports well of Mr. Lushington particularly with reference to his management of grazing, attention to forest settlement and preparation of instructions for subordinates. The Collector (*Kistna*) considers "that the year's work does great credit to Mr. Lushington." Mr. Lodge worked as usual well. Mr. Thornton showed great activity in making himself acquainted with his district and devoted particular attention to check of timber in river transit. The other District Forest-officers worked satifactorily. With reference to Extra Assistant Conservators, Mr. Ward did excellent work during the famine. Mr. Nallaswami Nayudu did very good work in *Kistna* and Mr. Hearsey displayed his usual activity in a trying charge.

Central Circle.—Mr. Popert, the Conservator, remarks: "The work of all Gazetted officers in the circle has, as usual, been thorough and the Conservator is indebted to District Forest-officers for the able and zealous management of their charges. Mr. Cowley-Brown, although a junior officer, successfully carried on the work in the Salem district during the absence of Mr. Brasier and deserves special mention. Mr. Stanbrough is entitled to credit for the bamboo planting operations which were scattered over the district and entailed constant supervision. Mr. Brougham retired during the year after more than thirty years' good service; in him Government has lost an officer with a vast knowledge of forest products and their uses. It is entirely due to his careful and tactful management that the department has been enabled to retain the Yanadis at Srîharikóta, without whom it would be almost impossible to carry on work. Mr. Hayne's health completely gave way in the early part of 1897, and he was compelled to take two years' furlough."

Southern Circle.—Mr. Hooper states that "all District Forest-officers have worked energetically and to the satisfaction of their Collectors."

ANNUAL FORM No. 44.

Forest Department, Madras Presidency.

AREA of reserved forests and reserved lands, 1896–97.

District.	Area of reserved forests.						Area of reserved lands.						Total area of reserved forest and reserved lands on 30th June 1897 in square miles.
	Area on 1st July 1896.		Added during the year.	Excluded during the year.	Area on 30th June 1897.		Area on 1st July 1896.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1897.		
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Northern Circle.													
Ganjám	84,816	133	13,654	4,953	93,517	146	272,762	426	4,047	14,277	262,532	410	556
Vizagapatam	55,625	87	31,514	..	87,139	136	209,822	328	22	31,360	178,484	279	415
Gódávari	405,578	634	112,881	..	518,459	810	218,600	341	4,199	131,499	91,200	143	953
Kistna	410,357	641	17,043	8,692	418,708	654	365,332	571	14,412	53,557	326,187	510	1,164
Kurnool	1,118,833	1,748	37,127	..	1,155,960	1,806	317,143	496	58,126	39,462	335,807	525	2,331
Bellary	289,311	452	10,906	8,759	291,458	456	118,211	185	..	9,379	108,832	170	626
Anantapur	281,523	440	...	1,997	279,526	437	49,542	77	..	..	49,542	77	514
Total ..	2,646,043	4,135	223,125	24,401	2,844,767	4,445	1,551,312	2,424	80,806	279,534	1,352,584	2,114	6,559
Central Circle.													
Cuddapah	982,575	1,535	28,938	2,489	1,009,024	1,576	525,790	822	18,322	42,447	501,665	784	2,360
Nellore	278,944	436	71,770	7,303	343,411	537	144,062	225	22,820	73,326	93,556	146	683
Chingleput	128,029	200	1,738	18	129,749	203	24,289	38	380	18,532	6,137	10	213
North Arcot	636,732	995	16,614	..	653,346	1,021	87,315	136	10,300	25,181	72,434	113	1,134
South Arcot	323,017	505	54,064	10,231	366,850	573	175,151	274	2,515	86,870	90,796	142	715
Salem	783,749	1,224	5,702	2,963	786,488	1,229	153,517	240	1,906	20,805	134,618	210	1,439
Trichinopoly	122,816	192	1,121	2,720	121,217	189	26,250	41	45,032	1,926	69,356	108	297
Tanjore	12,160	19	117	858	11,419	18	..	..	100	..	100	..	18
Total ..	3,268,022	5,106	180,064	26,582	3,421,504	5,346	1,136,374	1,776	101,375	269,087	968,662	1,513	6,859
Southern Circle.													
South Canara	72,795	114	..	5	72,790	114	652,482	1,020	23,544	39,396	636,630	995	1,109
Malabar, North	100,722	157	..	..	100,722	157	73,532	115	1,575	..	75,107	117	274
Do. South	25,173	39	54	..	25,227	39	184,977	289	..	57	184,920	289	328
Nilgiris	228,442	357	556	124	228,874	358	60,569	95	430	1,865	59,134	92	450
Coimbatore, North	549,760	859	130,185	6,047	673,898	1,053	549,086	858	1,120	185,160	365,046	570	1,623
Do. South	416,947	651	1,392	47	418,292	654	3,986	6	97	2,101	1,982	3	657
Madura	357,886	559	14,939	13,017	359,808	562	58,144	90	2,612	23,096	37,660	59	621
Tinnevelly	262,920	411	1,831	2,192	262,559	410	10,896	17	1,707	2,115	10,488	17	427
Total ..	2,014,645	3,147	148,957	21,432	2,142,170	3,347	1,593,672	2,490	31,085	253,790	1,370,967	2,142	5,489
Grand Total ..	7,928,710	12,388	552,146	72,415	8,408,441	13,138	4,281,358	6,690	213,266	802,411	3,692,213	5,769	18,907

Form No. 45.

FORM No. 45.

Forest Department.

STATEMENT showing the Progress made in, and the expenditure incurred on, Forest Settlements during 1896–97.

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					Areas undergoing settlement.					Estimate of areas in which settlement operations have not yet commenced.
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.	Entire cost per square mile of areas finally settled during the year.	At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.	
					In forest accounts. / In other accounts.		Name of tract.	Area.	Name of tract.	Area.	In forest accounts. / In other accounts.	
1	2	3	4	5	6 / 7	8	9	10	11	12	13 / 14	15
Northern Circle.												
	SQ. MLS.			SQ. MLS.	RS. / RS.	RS. A. P.		SQ. MLS.		SQ. MLS.	RS. / RS.	SQ. MLS.
Ganjám ..	133	No. 21, dated 11th January 1897.	Kaliamba	14	.. / ..	..	Baiballi	34	....	..	5,726 / ..	
		No. 309, dated 2nd July 1896.	Chodiapalli	1			Darpangia	25	....	..	.. / ..	
		No. 692, dated 3rd December 1896.	Bodochendana	2			Gullery	37	....	..	.. / ..	
		No. 452, dated 10th September 1896.	Sandosalia	3			Ambozora	50	....	..	.. / ..	
		No. 443, dated 5th September 1896.	Agasti Nowgam	1			Gundribadi and extensions ..	34	....	..	.. / ..	
							Gogodo	24	....	..	.. / ..	
							Paichalia	21	....	..	.. / ..	
							Brahmanosai	13	....	..	.. / ..	
							Kurcholi	9	....	..	.. / ..	
							Kriamba	36	....	..	.. / ..	
							Kuddapada	6	....	..	.. / ..	
							Rogada	25	....	..	.. / ..	
							Pippalapanka	12	....	..	.. / ..	
							Mundapetta	11	....	..	.. / ..	85
							Hukuma	7	....	..	.. / ..	
							Raipada	10	....	..	.. / ..	
							Dheppaguda	2	....	..	.. / ..	
							Bainamari	6	....	..	.. / ..	
							South Mohiri	6	....	..	.. / ..	
							Chatrapuram	1	....	..	.. / ..	
							Podra	1	....	..	.. / ..	
							Napier's park					
							Rankuhunumanthapuram ..	2	....	..	.. / ..	
							Teliki	24	....	..	.. / ..	
							Dowgam	4	....	..	.. / ..	
							Ramagoda	10	....	..	.. / ..	
			Total ..	21	.. / ..	..		Total ..	410		.. / 5,726	85
Vizagapatam.	87	No. 330, Rev., dated 14th July 1896.	Sinnivaram	49	.. / ..	..	Kadagandi	166	1. Extension block to Bharnakonda.	2	1,909 / ..	111
							Dharakonda		2. Extension blocks Nos. I and II to Antikonda reserve.			
							Bharnakonda		3. Extension block to Kadagandi reserve block No. I.			
							Bointi		4. Extension block to Kadagandi reserve block No. II.			
									5. Redimkonda reserve extension.			
									6. Arlova reserve extension block No. 2.			
									7. Arlova reserve extension block No. IV.			
									8. Arlova reserve extension block No. 5.			
									9. Sinnivaram reserve extension block.			
									10. Boddapalem reserve ..			
			Total ..	49	.. / ..	..		Total ..	166	Total ..	2 / 1,909	111
Gódávari ..	780	No. 705, Rev., dated 9th December 1896.	Tirumalayapaliem	8	.. / ..	..	1. Kandikuppa	14	....	..	.. / 6,096	37
		No. 636, Rev., dated 16th November 1896	Upputeru blocks Nos. I and II	22			2. Jilugumilli	5	....	..		
							3. Dharbhagudem	3	....	..		
							4. Marlagudem	4	....	..		
							5. Beddadavole	24	....	..		
							6. Kopalli	30	....	..		
							7. Kovada	30	....	..		
							8. Papikonda	33	....	..		
			Total ..	30	.. / ..	..		Total ..	143		.. / 6,096	37

Statement showing the Progress made in, and the expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
							Northern
Kistna ..	SQ. MLS. 637	No. 405, dated 18th August 1896.	Narasayapalem	SQ. MLS. 2·3	RS. 8	RS. ..	RS. A. P. ..
		No. 105, dated 16th February 1897.	Nagarazupalli	0·4	61	..	..
		No. 689, dated 3rd December 1896.	Putsanutula	1·2	38	..	..
		No. 87, dated 11th February 1897.	Guttikonda extension No. 1 ..	1·6	53	..	..
		No. 64, dated 2nd February 1897.	Do. do. ,, 6 ..	1·6	61	..	..
		No. 261, dated 23rd April 1897.	Andugulapad	3·2	76	..	..
		No. 716, dated 12th December 1896.	Mutukur extension No. 3 ..	4·3	38	..	..
		No. 504, dated 1st October 1896.	Pasvemula extension No. 1 ..	0·5	23	..	..
		No. 504, dated 1st October 1896.	Pasvemula extension ,, 3 ..	0·4	23	..	..
		No. 63, dated 2nd February 1897.	Adaviladivi extension ,, 1 ..	0·2	53	..	..
		No. 426, dated 2nd June 1897.	Bollapalli extension ,, 2 ..	8	83	..	..
		No. 347, dated 18th May 1897.	Darvemula	1	83	..	..
			Total ..	24·7	600	..	21 7 0
Kurnool ..	1,748	No. 691, dated 13th December 1896.	Mundlapad	2	..	2	..
		No. 742, dated 22nd December 1896.	Yerrakondapalem	14	..	14	..
		No. 24, dated 13th January 1897.	Kamalapuram	3	..	3	..
		No. 28, dated 13th January 1897.	Pendikallu	4	..	4	..
		No. 19, dated 11th January 1897.	Gundlakonda	7	..	7	..
		No. 22, dated 13th January 1897.	Jonnagiri	1	..	25	..
		No. 90, dated 13th February 1897.	Ganapavaram	23	..	23	..

incurred on, Forest Settlements during 1896-97—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle—cont.						
	SQ. MLS.		SQ. MLS.	RS.	RS.	SQ. MLS. 363
Kothur	1	....	..	91	..	
Tumurukodu No. 2	6	....	..	180	..	
Gollapudi						
Vinukonda	13	....	..	91	..	
Yellamanda No. 1	1	....	..	91	..	
Nizampatam	10	....	..	91	..	
Gudimetla	2	....	..	91	..	
Tumurucode No. 4	1	....	..	182	..	
Do. ,, 5						
Bandar Forest extension No. 1.	1	....	..	91	..	
Bollapalli extension No. 1 ..	6	....	..	91	..	
Do. ,, 3 ..	4	....	..	91	..	
Do. ,, 8 ..	3	....	..	91	..	
Takkellapad	2	....	..	180	..	
Bandar Fort extension No. 2.						
Narasayapalem do. ,, 1	1	....	..	180	..	
Do. do. ,, 2						
Potumerakaparra	8	....	..	91	..	
Adavuladiviparra	4	....	..	91	..	
Pasvemula extension No. 4 ..	4	....	..	91	..	
Kandipad	1	....	..	91	..	
Veldurti	7	....	..	91	..	
Janapad	5	....	..	91	..	
Bapatla No. 3	1	....	..	91	..	
Guttikonda extension No. 7 ..	3	....	..	91	..	
Amudalapalli	2	....	..	90	..	
		Gopuvanipalem extension No. 2.	0·3	53	..	
		Nizampatam extension No. 1 ..	2·4	83	..	
		Pullaripalem	1·3	30	..	
		Purlavallapalem	1·8	68	..	
		Muthayapalem extension No. 1	6·7	76	..	
		Nayanipalli do. ,, 1	1·5	30	..	
		Budavada do. ,, 1	0·9	76	..	
		Do. do. ,, 2	0·9	76	..	
		Do. do. ,, 3	0·5	76	..	
		Venkatayapalem extension No. 3.	2·7	76	..	
		Venkatayapalem extension No. 6.	1·7	76	..	
		Kamipalli	3·2	76	..	
		Matsavaram	1·8	45	..	
		Vemavaram	3·0	45	..	
		Guttikonda extension No. 9 ..	1·4	84	..	
		Bollapalli extension ,, 7 ..	3·5	76	..	
		Mukkellapad	1·9	53	..	
		Muppalla	7·6	37	..	
		Kakirala extension No. 7 ..	0·9	84	..	
		Gangulakunta addition No. 1.				
		Do. ,, 2.	0·1	53	..	
		Do. ,, 3.				
		Darvemula extension No. 1 ..	1·3	53	..	
		Pasvemula do. ,, 5 ..	0·4	45	..	
		Goli	6·4	45	..	
Total ..	86		52·2	3,775	..	
North Dhone	22	....	..	..	50	
Sirvel addition No. 2. ..	25	....	..	615	50	
Do. ,, 3 ..	18	....	..	108	50	
Jaladurgam	28	....	..	..	50	
Tamballapalli	3	....	..	..	45	
Tokapalli	2	....	..	..	30	
Millampalli	5	....	..	..	80	
Uyyalavada addition	33	....	..	553	678	
Velugode	69	....	..	..	1,145	
Maduva	1	....	..	..	15	
Ambavaram	16	....	..	16	240	
Somidevipalli	18	....	..	..	270	
Betamcherla	16	....	..	..	240	
Nandyal addition No. 1 ..	11	....	..	66	145	

Statement showing the Progress made in, and the expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
	SQ. MLS.			SQ. MLS.	RS.	RS.	RS.
Kurnool—*cont.*	..	No. 262, dated 23rd April 1897.	Katarukonda	4	..	4	..
		No. 436, dated 4th June 1897.	Peddapaya	5	..	5	..
			Total ..	63	..	87	1 6 1
Bellary ..	445	No. 148, dated 10th March 1897.	Kuppigallu	11	..	..	..
		No. 186, dated 19th March 1897.	Kosigi				
			Total ..	11	..	..	..
Anantapur ..	437	....	....	..	..	..	..
Cuddapah ..	1,535	No. 445, dated 5th September 1896.	Ganugapenta extension ..	12	..	..	..
		No. 466, dated 13th September 1896.	Kalasapad extension	8	..	..	..
		No. 133, dated 1st March 1897.	Nigadi extension	4	..	..	..
		No. 157, dated 11th March 1897.	Tummalur extensions, A and B.	4	..	..	..
		No. 155, dated 11th March 1897.	Voruvoi	3	..	..	..
		No. 189, dated 19th March 1897.	Dasaripalle extensions, B, C and D.	13	..	..	..
		No. 188, dated 19th March 1897.	Vedurur	1	..	..	..
		No. 390, dated 26th May 1897.	Marella extension	2	..	..	..
			Total ..	47	..	..	..

incurred on, Forest Settlements during 1896-97—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle—cont.	SQ. MLS.		SQ. MLS.	RS.	RS.	SQ. MLS.
Nandyal addition No. 2 ..	20	....	..	319	200	
Pyalakurti	1	....	..	..	15	
....	..	Veludurti	2	..	30	
....	..	Guvvalagunta	27	..	764	
....	..	Eastern Nallamalai Block No. 1 of Cumbum taluk.	20	..	..	312
....	..	Eastern Nallamalai Block No. 2.	33	..	..	
....	..	Duddyala	7	..	..	
Total ..	288		89	1,677	4,097	
Neraniki	16	Bellahumshi	2			
Molagavalli	2	Hampasagaram	2	..	153	
Kodalu	2	Basarukodu	2			
Ubbalugandi extension ..	2	Bachigondunahalli	3	..	..	
Marutla	5	Chintalapalli, north	2	..	..	359
Kosigi	1	Do. south	2	..	..	
....	..	Koyalargatti extension ..	1	..	..	
....	..	Kullura, west	2	..	..	
....	..	Jittinakatti south-east extension.	2	..	..	
Total ..	28		18	..	153	
Golla	11	....	..			
Iyampalli	2	....	..			
Yemmihatty	5	....	..			
Pillelapalli						
Iydakallu	6	....	..			
Shetturu	7	....	..			
Kondepalli	7	....	..			
Khyrevu	10	....	..	601	..	
Narasampalli	3	....	..			
Ratnagiri	3	....	..			
Hottaibetta, north	14	....	..			
Do. south						
Durgam extension	9	....	..			
Kaligera						
Total ..	77		..	601	..	
Circle.—						
Chennupalle		Neridikonda				
Lankamalai extension ..		Musalikunta				
Horsleykonda extension ..		Gundlakonda	31	..	..	
Palakonda		Madhavaram extension, east and west.				
Wongimalla		Sibyala extension, north and south.		2,501	..	
Sancherla extension						
Yerrappakonda						
Kottakota Dasaripalli extension.						
Idupalpaya extension						
Ganganapalle extension ..	605	....	..	..	..	204
Yellutla extension						
Sangasamudram						
Gandlur						
Marripad						
Seshachelam extension ..						
Katagalla extension						
Vontimitta extension ..						
Konarazupalle extension. ..						
Chitvel extension						
Kanchelamoram extension ..						
Palakonda extension						
Total ..	605		31	2,501	..	

Statement showing the Progress made in, and the expenditu re

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
	SQ. MLS.			SQ. MLS.	RS.	RS.	RS. A. P.
Nellore ..	425	No. 203, dated 18th May 1896.	Udayagiri Veligondas ..	94	..	..	..
		No. 262, dated 13th June 1896.	Abbasahebipeta Gudipad Peddannalur.	2	..	..	..
		No. 385, dated 3rd August 1896.	Dubbagunta Rajavolu ..	5	..	..	..
		No. 404, dated 11th August 1896.	Veligondla				
		No. 439, dated 3rd September 1896.	Bhimavaram				
		No. 430, dated 28th August 1896.	Boyilacheruvilla	1	..	..	..
		No. 474, dated 17th September 1896.	Venadu	3	..	..	..
		No. 167, dated 15th March 1897.	Abbasahebepeta Gudipad, West				
		No. 224, dated 30th March 1897.	Manubolupad extension ..	1	..	..	..
		No. 225, dated 30th March 1897.	Chelamcherla extension ..				
		No. 270, dated 27th April 1897.	Anantasagaram A	4	..	..	..
		No. 270, dated 27th April 1897.	Do. B				
		No. 324, dated 13th May 1897.	Chakicherla, North	2	..	..	..
		No. 418, dated 1st June 1897.	Pernad	4	..	..	..
			Total ..	116	..	2,130	19 0 4
Chingleput..	200	No. 284, dated 23rd June 1895.	Nemeli extension No. I ..	1	..	..	..
		No. 283, dated 23rd June 1896.	Paranur extension No. I ..				
		No. 481, dated 23rd June 1896.	Do. do. No. III ..				
		No. 449, dated 8th September 1896.	Hunmantaputheri extension No. II.				
		No. 598, dated 7th November 1896.	Salur	2	..	..	..
			Gudalur				
			Total ..	3	..	..	..
North Arcot. ..		No. 288, dated 24th June 1896.	Synagunta extensions A and B	7	..	..	..
		No. 382, dated 1st August 1896.	Putramadi or Airala extension.	5	..	..	..
		No. 657, dated 21st November 1896.	Jangalapalle	5	..	..	..
		No. 2, dated 4th January 1897.	Reddigunta	4	..	..	..
		No. 25, dated 13th January 1897.	Gundlapalle extension ..	1	..	..	..
		No. 310, dated 3rd July 1897.	Bommannikampoliem	1	..	..	..
		No. 237, dated 6th June 1896.	Chases hill	3	..	..	..
		No. 414, dated 31st May 1897.	Parappamalai	2	..	..	..
			Total ..	28	..	..	..

incurred on, Forest Settlements during 1896-97—*cont.*

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

Circle—cont.

	SQ. MLS.		SQ. MLS.	RS.	RS. A. P.	SQ. MLS.
Duttalur	7½	Tammenapatam extension ..	1			351
Rapur-Velgondas extension A	1½	Yerukolla-Gundamadakole ..	6			
Do. do. B	9¾	Balayapalli	1			
Do. do. C	4	Korisakonda	7			
Veminabhi extension	½	Gudlakonda	10			
Pottukonda extension ..	¾	Udayagiri-Veligonda extension.				
Sriharikota	40	Vedanaparti	3			
.... ..	..	Rapur-Veligondla extension ..	2			
Peramanakondur	1⅛	Chintalapolem				
Mahimalu	16½	Chipinapi				
Gavaravaram	11¼	Rallakonda				
		Tirumalpad				
		Mogallur extension	4			
		Tenumalalapur extension ..				
		Sydapuram extension A ..				
		Do. do. B ..				
		Chaganam extension	2			
		Cherlapalli extension				
	93		36	2,530	..	
Ugumudi extension Nos. I, V and VI.		Nandambakkam extension No. I	1	2,501	..	4
Perumbakkam extension No. I.		Meyyur extension No. I ..				
Vallam extension No. II ..		Do. ,, II ..				
Melamaiyur		Tirumalavoyal extension No. I				
Koliyalam						
Tandarai extension No. I. ..	8					
Kovilpidagai extension No. I..						
Nanmangalam extension Nos. I and II.						
Tirumalavoyal extension No. II						
Thirumani extension No. II ..						
Tirukkalikundrum extension No. II.						
Total ..	8		1	2,501	..	
Tiruvamur extensions A and B..	5	Basavareddipalle extensions A and B.	8	2,501	..	1
Pakala, A and B	4	Allapalle	3			
Santhapet extension	4	Nellipatla	12			
Pattikonda	7	Viralabunda	4			
Sanankuppam	9	Thotakanama	8			
Palmaner	3					
Peddur extension	15					
Musilimadugu extension ..	3					
Pallalakuppam extension A ..	10					
Kempasamudram	3					
Kallapadi	10					
Solavaram extension	1					
Thandappenthangal extension..	1					
Nembedu extensions A, B and C						
Total ..	75		35	2,501	..	

Statement showing the Progress made in, and the expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
	SQ. MLS.			SQ. MLS.	RS.	RS.	RS. A. P.
Central.							
South Arcot.	505	No. 331, dated 14th July 1896.	Rayandapuram	7	8	Information not available.	..
		No. 79, dated 8th February 1897.	Eraiyurmelai	8			
		No. 743, dated 22nd December 1896.	Padipallam	5			
		No. 141, dated 6th March 1897.	Pakkamalai	23			
		No. 196, dated 15th May 1896.	Swamimalai 1st bit	3			
		No. 280, dated 29th April 1897.	Kunjaram	2			
		No. 311, dated 3rd July 1896.	Takarai	22			
		No. 95, dated 15th February 1897.	Kaduvanur	6			
		No. 103, dated 16th February 1897.	Rishivandiyam	6			
		No. 23, dated 13th January 1897.	Kammapuram	2			
		No. 346, dated 18th May 1897.	Ponniar	75	..	..	..
		No. 391, dated 26th May 1897.	Settiyandal	1	..	..	..
		No. 470, dated 17th June 1897.	Odayanachi	1	..	..	..
		No. 458, dated 14th June 1897.	Pusappadi	3	..	..	..
			Total ..	164	8	..	..
Salem ..	1,224	....	....	..	..	..	..
Trichinopoly	189	....	....	..	..	..	..

incurred on, Forest Settlements during 1896-97—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle—cont.						
	SQ. MLS.		SQ. MLS.	RS.	RS. A. P.	SQ. MLS.
....	..	Odaiyanatham	3			
Pinjur	12	Sankarapuram tope (south) ..				
Mannurmangalam	4	Do. do. (north) ..				
.....	..	Kattuvananjur tope	1			
Uchimalai	3	Puttai do.				
....	..	Kattumaiyulur extension ..				
Sorakalathur	12					
Damarakadu	9					
Annamangalam	1					
Perumpujai	1					
Pichavaram extension ..	1			1,923	..	..
Melakondalappadi tope ..						
Aviriyur	4					
Ravuthanallur	2					
Marur	1					
Melpalankur	4					
Tachur	2					
Thottapadi	2					
Total ..	58		4	1,923	..	
Kombur	4					
Bothamalai extension ..	3					
Odiathur, west	3					
Mavar	3					
Pattiwedu extension	3					
Onnakarai	6					
Morappur	9					
Oblinaickenpatti	3					
Uttangarai	5					
Kottipalli	5					
Thogarapalli extension ..	1					
Papinayakanhalli	5					
Periyapatti	5			2,501	..	81
Kalladipatti	4					
Vathampatti	2					
Shelur	28					
Ubbarani	19					
Pungulam, west	3					
Do. south-west ..						
Andiyappanur extension ..	1					
Ponnagarapatti	6					
Vellalagundam	5					
Poyyapatti	5					
Jambuthu extension	1					
Total ..	129	Total ..	..	2,501	..	
Valayur	2	Tatchankurichi	4	..		
....	..	Kundur Kalvarayankolam ..	3	..		
....	..	Peruvalappur	1	..		
....	..	Adavathoor tank-bed	1	..		
....	..	Punganur do.				
....	..	Kumarikutti hill	4	..		
....	..	Mogavanur				

Statement showing the progress made in, and the expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
							Central
Trichinopoly —*cont.*	SQ. MLS. 189	....	....	SQ. MLS. ..	RS. ..	RS. ..	RS. A. P. ..
Tanjore ..	19	....	....	..	..	..	..
							Southern
South Canara.	114	No. 522, dated 10th October 1896.	1. Darligudde	6	184	..	13 2 1
		No. 230, dated 4th June 1896.	2. Guruvankote				
		Do.	3. Abbigudde	1			
		No. 522, dated 10th October 1896.	4. Mudarigudde				
		Do.	5. Honnukodlu	1			
		No. 230, dated 4th June 1896.	6. Kadike	7			
		Do.	7. Karnigadde				
		No. 363, dated 24th July 1896.	8. Sarpanamane				
			Total ..	14	184	..	13 2 1

incurred on, Forest Settlements during 1896–97—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operation have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area.	Name of tract.	Area.	In Forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle—cont.						
	SQ. MLS.		SQ. MLS.	RS.	RS.	SQ. MLS.
.... ..	..	Shemmalai extension, No. 1 ..	2	..		
.... ..	..	Naganûr (Viramalai eastern) extension.				
.... ..	..	Aniyappur (Viramalai western) extension.	1	..		
.... ..	..	Arasadi Arivithi	3	..		
.... ..	..	Puliyur extension, No. 1 ..	2	..		
.... ..	..	Kurumbalur	4	..		
.... ..	..	Naranamangalam	2	..		
.... ..	..	Irur	4	..		
.... ..	..	Pillankolam				
.... ..	..	Iyanarpalayam	3	..		
.... ..	..	Kariyanur	1	..		
.... ..	..	Vannarampundi	1	..		
.... ..	..	Mattavarai Mavalingai ..	2	..		
.... ..	..	Sirukodal	2	..		
.... ..	..	Kunnam	4	1,819		
.... ..	..	Mangalam				
.... ..	..	Sittali	2	..	..	90
.... ..	..	Vempavur	2	..		
.... ..	..	Mettupalayam	2	..		
.... ..	..	Pulumbadi, No. 1	4	..		
.... ..	..	Do. No. 2	6	..		
.... ..	..	Puliyur extension, No. 2 ..	4	..		
.... ..	..	Siruvachur				
.... ..	..	Peraiyur	3	..		
.... ..	..	Periyavalayam Eastern extension, No. 1.	2	..		
.... ..	..	Periyavalayam Western extension, No. 2.				
.... ..	..	Vedayathangudi	2	..		
.... ..	..	Sundaresvarapuram extension .				
.... ..	..	Ulliyakkudi extension ..				
.... ..	..	Pilakkurichi	1	..		
.... ..	..	Tirukonam extension				
.... ..	..	Vilangudi extension, No. 1 ..	2	..		
.... ..	..	Do. do. No. 2 ..				
.... ..	..	Vengaram				
.... ..	..	Alangoy extension	3	..	..	
.... ..	..	Karaipakam extension ..				
.... ..	..	Siluvacheri				
.... ..	..	Kulumur extension	2	..	..	
.... ..	..	Kilakolathur				
Total ..	..		79	..	..	
....	..	North casuarina extension ..	15	1,819	..	
Circle.						
Charmadi-Kanapadi	20	Hurabe	1	..		
Herur	4	Kalangimale	9	..		
Hulimishepare	3	Karadka				
Menashinaguddi	1	Chintaramale extension ..	1	..		
Hullumurdibare	16	Mulliar	3	..		
Hallaktihola		Savantagudde	1	..		
Balkattehola		Virakhamba	3	..		
Vadanaberuhola		Menasinkan	2	..		
Jarkalane	5	Kodiamale	2	..		
Surtihola		Panamleri	1	..		
Hulikuppana Ane		....	..	..	5,028	564
Sural Advi		....	..	..		
Madgalpare	12	....	..	..		
Nujina Ane	1	....	..	..		
Nagannalbare	10	....	..	..		
Kamradihola		....	..	..		
Naravi	101	....	..	..		
Mettakallugudde	9	....	..	..		
Karkamadi	3	....	..	..		
Neral manekanu		....	..	..		
Sampakere	4	....	..	..		
Chittur		....	..	..		

Statement showing the Progress made in, and the expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
							Southern
South Canara —*cont.*	SQ. MLS. 114	....	....	SQ. MLS. ..	RS. ..	RS. ..	RS. ..
North Malabar.	157	....	....	..	..	..	..
South Malabar.	39	No. 128, dated 25th February 1897.	Beypore tope	54 acres.	..	..	..

incurred on, Forest Settlements during 1896-97—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle—cont.						
	SQ. MLS.		SQ. MLS.	RS.	RS.	SQ. MLS.
Jarvattukadu	1	....	..	..		
Metkalgudde		....	..	..		
Murkodihola	2	....	..	..		
Halisomeshwar	3	....	..	..		
Jattakattumale	2	....	..	..		
Doddinamane	6	....	..	..		
Bakudihola	2	....	..	..		
Madibare	30	....	..	..		
Koratikalbare	10	....	..	..		
Megani valley	28	....	..	..	5,028	
Kursegudde	5	....	..	..		
Tombattu	20	....	..	..		
Surikodlu	6	....	..	..		
Balimane	20	....	..	..		
Mavinakodlu	3	....	..	..		
Someshwar	37	....	..	..		
New Someshwar	4	....	..	..		
Baregundi	13	....	..	..		
Baindur	10	....	..	..		
Mavinaguli	2	....	..	..		
Dottinaberu	1	....	..	..		
Total ..	394		23	5,028	..	
Kannoth	40	....	..	..	..	
Kannoth extension A	2	Dindimal	2	..	..	18
Periya	21	....	..	..	..	
Periya extension	2	....	..	2,606	..	
Padri	48	....	..	..	..	
Wood-stock						
Total ..	113		2	2,606	..	
Nilambur Range.						
1. Nilambur block						
2. Pokote						
3. Panangod						
4. Valluasseri						
5. Kanakut						
6. Erambadam						
7. Ambalakandi						
8. Arimbracuttamala ..						
9. Mangalasseri paramba ..						
10. Puthalatha and chitharikal paramba.	169	....	..	(*b*) 4,822	..	29
Amarampalem Range.						
11. Muriat						
12. Karien						
13. The new Amarampalam forest.						
14. Thampurattipotta: *alias* Pillacheripallam.						
15. Dhoni *alias* Pilakatampalli-paramba.						
16. Puliampally tope						
Attapady Valley.						
17. Block No. I						
18. Do. „ II	91		..	..	..	
19. Do. „ III						
20. Do. „ IV						
Total ..	260		..	4,822	..	

(*b*) Charged under A-VIII (*b*) being the amount of compensation paid to the owner of Karsery and Thalikolly lands in the new Amarampalam Forest.

Statement showing the Progress made in, and the expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
							Southern
	SQ. MLS.			SQ. MLS.	RS.	RS.	RS.
Nilgiris ..	357	No. 667, dated 25th November 1896.	Bikkul	1	..	..	..
			Kallakorai				
			Nirkul				
			Araiyatti				
			Turaiyalla				
			Vummandu				
			Attuboil				
			Vulibattu				
			Belthal				
			Gundada				
			Bulhattihulla				
			Hakku				
			Devashola addition				
			Umarikandi				
			Ulimokkai				
			Pattakarai				
			Osatti addition No. 1				
			Do. ,, 2				
			Neyatti				
			Bear Hill				
			Edaiyatti				
			Katteri				
			Palukkurai				
			Bellimara				
			Welbeck No. 1				
			Do. ,, 2				
			Do. ,, 3				
			Kudikadu				
			Upperkatteri				
			Pillimalaikorai				
			Gundorai				
			Total ..	1	* 100	..	..
North Coimbatore.	859	No. 390, dated 4th Aug. 1896.	Gutialatur	200	..	..	..
		No. 673, dated 26th Nov. 1896.	Ellapalayam	3	..	1,819	9
		Do. ..	Villikaradu				
		No. 670, dated 26th Nov. 1896.	Arachalur Hill				
		No. 596, dated 7th Nov. 1896.	Sullipalayam				
		No. 348, † dated 18th May 1897.	Kongampalayam	1	..	..	..
			Total ..	204	..	1,819	9
South Coimbatore.	651	No. 219, dated 28th May 1896.	Elayamuthur	2	..	..	..
		No. 374, dated 29th July 1896.	Dhalli				
Madura ..	551	No. 308, dated 2nd July 1896.	Mannadimangalam	1	*Nil.*	*Nil.*	*Nil.*
		No. 453, dated 10th Sept. 1896.	Tigershola	3			
		No 434, dated 1st Sept. 1896.	Manjampatti	6			
		No. 431, dated 28th August 1896.	Usilampatti	2			
		No. 436, dated 1st Sept. 1896.	Sanamalai				
		No. 104, dated 16th Feb. 1897.	Sakkimangalam				
		No. 465, dated 13th Sept. 1896.	Vellamalainedumalai	1			

* This has been expended this year on account of the settlement of Sigur reserve during 1894–95.
† Finally settled during 1896–97, but reservation commences in 1897–98.

incurred on, Forest Settlements during 1896–97—*cont.*

Areas undergoing settlement.						Estimates of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle—cont.						
	SQ. MLS.		SQ. MLS.	RS.	RS. A. P.	SQ. MLS.
Nirburra	..	Belerambu Halla	1	..	..	75
		Keraipadu				
		Mullimalai				
		Arappilai				
		Sampangi				
		Bikkemara				
		Neggilhada				
		Thogalhatti				
		Mokkai				
		Uchchukadavu				
		Konemara				
		Selemara				
Total ..	..		1	..	..	
Yedaralli	212	Guligy	2	..	..	
Ponnachi	246	Cowdally	25	..	..	
Hanur	34	Vellodu	1	..	..	45
Arachalur	2	Kanjikoil				
Sennimalai	3	Attaivanai				
Virumandampalayam ..	2		..	..	..	
Sinnaviragangili ..	2		..	..	..	
Pandiampalayam ..	2		..	..	..	
Voipadi	1		..	..	..	
Thambikalayan ..	1		..	..	..	
Total ..	505	Total ..	28	..	..	
....	..	Sunkarayapuram	3	..	..	
		Nellimalai				
Kappuvamadai	11	....	Nil.	1,822	..	
Nallatevanpatti						
Kodimangalam	10	....				
Andipatti, south						
Anaigirishola	7	....				
Mulaiyar						
Kadavumalai						
Koviladi						
Siruganimalai						
Umaiyar						
Kodavanar						
Sirumalai north-west slopes ..	5	....				
Thoppasamimalai	18	....				
Erakalamali						

Statement showing the Progress made in, and the expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.						Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.	At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
					In forest accounts.	In other accounts.		Name of tract.	Area.	Name of tract.	Area.	In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

APPENDIX A.

Forest Settlement.

Particulars of balance of lands under settlement.

District.	Total number and area of blocks brought under settlement up to end of 1896-97.		Total number and area of blocks constituted finally as reserved forests up to end of 1896-97.		Balance at end of 1896-97.	
	Number.	Area.	Number.	Area.	Number.	Area.
1	2	3	4	5	6	7
Northern Circle.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Ganjám	45 (b) — 1	559 (a) + 6 (b) — 1 (c) — 8	16	154 (c) — 8	28	410
Vizagapatam	39	304	22	136	17	168
Gódávari	78 (b) — 1	975 (a) + 7 (b) — 1 (d) — 28	69	810	8	143
Kistna	166 (b) — 7 (c) — 6	843 (a) — 11 (b) — 3 (c) — 3 (d) — 25	106 (c) — 6	668 (a) — 11 (c) — 3	53	147
Kurnool	51	2,191 (a) — 2 (d) — 1	29	1,806	22	382
Bellary	135 (c) — 13	509 (a) — 1 (c) — 6	120 (c) — 13	463 (a) — 1 (c) — 6	15	46
Anantapur	82 (c) — 6	517 (c) — 3	68 (c) — 6	440 (c) — 3	14	77
Total, Northern Circle	562	5,818	405	4,445	157	1,373
Central Circle.						
Cuddapah	173 (c) — 8	2,226 (a) — 8 (c) — 4	144 (c) — 8	1,580 (c) — 4	29	638
Nellore	179 (a) + 1 (b) — 1 (c) — 22	683 (b) — 1 (c) — 11 (d) — 1	150 (c) — 22	548 (c) — 11	29	133
Chingleput	221 (b) — 21	225 (b) — 13	182	203	18	9
North Arcot	149 (b) — 1	1,137 (b) — 3 (d) — 1	127	1,021	21	112
South Arcot	211 (b) — 25 (c) — 27	776 (b) — 33 (c) — 16 (d) — 12	161 (c) — 27	589 (c) — 16	25	142
Salem	174 (b) — 9	1,381 (a) + 5 (b) — 27 (c) — 1	141	1,224 (a) + 6 (c) — 1	24	129
Trichinopoly	121 (c) — 10	273 (c) — 3	74 (c) — 10	192 (c) — 3	47	81
Tanjore	22 (c) — 7	19 (c) — 1	21 (c) — 7	19 (c) — 1	1	..
Total, Central Circle	1,120	6,590	926	5,346	194	1,244
Southern Circle.						
South Canara	90 (b) — 2	572 (b) — 27	27	114	61	431
North Malabar	23	272	16	157	7	115
South Malabar	27	299	7	39	20	260
The Nilgiris	255 (b) — 2	359	240	358	13	1
North Coimbatore	85 (a) — 1 (b) — 5 (c) — 38	1,679 (a) — 81 (b) — 3 (c) — 8	64 (a) — 1 (c) — 38	1,062 (a) — 1 (c) — 8	16	534
South Coimbatore	19 (b) — 1	657 (c) + 1 (b) — 1	16	653 (c) + 1	2	3
Madura	179 (b) — 5 (c) — 25	637 (a) — 4 (b) — 3 (c) — 12 (d) — 2	159 (c) — 25	582 (a) — 8 (c) — 12	15	54
Tinnevelly	63 (c) — 10	429 (— 4	48 (c) — 10	414 (c) — 4	15	15
Total, Southern Circle	652	4,760	503	3,347	149	1,413
Grand Total	2,334	17,168	1,834	13,138	500	4,030

(a) Rectification. (b) Initial notifications cancelled. (c) Disafforested.
(d) Excluded at settlement. (e) By rounding off fraction in previous year's figures.

APPENDIX A.

Forest Settlement—*cont.*

Particulars of balance of lands under settlement—*cont.*

District.	Classification of balance in columns 6 and 7.											
	Settled and reported on.								Settled, but not reported on.		Settlement proceeding.	
	Notified under section 16 during 1896-97, but reservation effected only after 30th June 1896.		With Board or Government awaiting publication of notification under section 16.		Returned by the Board for revision and remaining either with Collector, District Forest-officer or Forest Settlement-officer.		Total settled and reported on.					
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle.		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ.MLS.		SQ.MLS.		SQ. MLS.
Ganjám	..	..	8	50	12	268	20	318	5	54	3	38
Vizagapatam	..	..	1	73	..	..	1	73	3	41	13	54
Gódávari	..	..	1	24	1	14	2	38	4	97	2	8
Kistna	2	9	15	47	1	1	18	57	2	8	33	83
Kurnool	1	5	7	90	1	18	9	113	3	63	10	206
Bellary	..	..	1	16	..	..	1	16	1	2	13	38
Anantapur	..	..	1	1	..	..	1	1	2	13	11	63
Total, Northern Circle.	3	14	34	301	15	301	52	616	20	278	85	479
Central Circle.												
Cuddapah	1	2	8	194	1	68	10	264	1	33	18	341
Nellore	1	5	4	9	1	40	6	54	2	3	21	76
Chingleput	..	..	7	6	..	..	7	6	1	..	10	3
North Arcot	1	2	5	23	2	12	8	37	7	40	6	35
South Arcot	4	80	13	37	..	..	17	117	2	21	6	4
Salem	..	..	9	37	3	15	12	52	..	..	12	77
Trichinopoly	..	..	1	2	..	..	1	2	..	..	46	79
Tanjore	..	..	..	..	..	..	..	..	1	..	..	..
Total, Central Circle	7	89	47	308	7	135	61	532	14	97	119	615
Southern Circle.												
South Canara	* 8	14	4	11	..	..	12	25	14	221	35	185
North Malabar	..	..	..	..	..	..	..	..	5	111	2	4
South Malabar	3	1	..	..	..	..	3	1	17	259	..	..
The Nilgiris	..	..	1	..	..	..	1	..	..	..	12	1
North Coimbatore	1	1	1	34	1	212	3	247	1	2	12	285
South Coimbatore	..	..	..	..	..	..	..	..	..	..	2	3
Madura	1	3	2	4	5	21	8	28	..	..	7	26
Tinnevelly	..	..	3	4	..	..	3	4	1	2	11	9
Total, Southern Circle.	13	19	11	53	6	233	30	305	38	595	81	513
Grand Total, Presidency.	23	122	92	662	28	669	143	1,458	72	970	285	1,607

* Of these, four blocks were notified during 1895-96, but reservation takes effect only after 30th June 1897.

APPENDIX A.

Forest Settlement—*cont.*

Particulars of balance of lands under settlement—*cont.*

District.	Of lands notified under section 4 in the year.																									
	1883–84.		1884–85.		1885–86.		1886–87.		1887–88.		1888–89.		1889–90.		1890–91.		1891–92.		1892–93.		1893–94.		1894–95.		1895–96.		1896–97.	
	Number.	Area.	Number.	Area.	Number	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Northern Circle.		s. m.		s. m.		s. m.		s. m.		s. m.		s. m.		s. m.		s. m.		s. m.		s. m.		s. m.		s. m.		s. m.		s. m.
Ganjám ..	..	..	17	362	3	22	..	..	..	..	..	..	..	..	..	..	1	2	5	16	..	..	1	2	1	6	..	..
Vizagapatam ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	* 41	2	125	..	..	2	..	..	..	11	2
Gódávari ..	..	..	..	..	..	.	..	..	..	..	..	..	7	110	1	33	..	..	..	..	..	..	..	..	..	..	..	..
Kistna	..	..	..	..	..	..	..	..	..	..	..	..	4	*20	..	..	1	13	5	12	4	15	6	23	* 8	*12	25	52
Kurnool ..	..	..	..	..	..	..	..	..	1	22	..	..	..	..	..	..	6	107	2	5	1	5	7	*154	..	..	5	89
Bellary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	16	4	12	10	18
Anantapur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	16	4	12	10	18
Total ..	..	..	17	362	3	22	..	..	1	22	..	..	11	130	1	33	10	163	14	158	6	22	28	261	15	39	51	161
Central Circle.																												
Cuddapah ..	1	137	..	..	..	..	1	18	..	..	..	..	..	..	..	..	..	..	1	68	2	18	13	234	4	132	7	31
Nellore	2	† 45	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	28	6	24	18	36
Chingleput ..	..	..	..	..	..	..	..	..	..	..	..	..	1	‡..	..	..	2	2	1	2	2	1	2	‡..	6	3	4	1
North Arcot ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	6	31	4	24	4	19	6	35
South Arcot ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	75	..	..	* 5	* 31	2	6	8	16	3	10	6	4
Salem	..	..	..	..	..	..	..	..	..	..	..	..	1	4	..	..	..	..	..	..	3	14	11	44	9	67	..	..
Trichinopoly ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	46	79
Tanjore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	‡..
Total ..	3	182	..	..	..	..	1	18	..	..	..	..	2	4	1	75	2	2	8	104	15	70	42	348	32	255	88	186
Southern Circle.																												
South Canara ..	..	..	..	..	1	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	84	12	*214	8	90	10	23
North Malabar ..	..	..	2	69	1	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	2	1	‡..	1	2
South Malabar ..	..	..	..	..	..	..	..	..	12	19	5	240	..	..	..	..	..	..	..	..	3	1	..	..	..	..	..	1..
The Nilgiris ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	‡..	12	1
North Coimbatore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	458	..	..	..	..	1	34	8	14	..	..	5	28
South Coimbatore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	‡..
Madura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	54	..	..	1	‡..	..	..	..	..	..	..
Tinnevelly ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3	6	11	7	1
Total ..	..	..	2	69	2	60	..	..	12	19	5	240	..	..	2	458	14	54	..	..	36	121	23	233	17	104	36	55
Grand Total ..	3	182	19	431	5	82	1	18	13	41	5	240	13	134	4	566	26	219	22	262	57	213	93	842	64	398	175	402

* By rectification. † A portion of the Srísharikóta minor forest was notified during the year. ‡ Below one mile.

APPENDIX B.

Causes of delay in the submission of final notifications of forest reserves.

Districts.	Causes of delay.																
	1	Notified under section 16 during 1896–97, but with effect only after 30th June 1897.	2	With Board or Government awaiting publication of notification under section 16.	3	Pending preparation of maps.	4	Awaiting disposal of appeals.	5	Awaiting expiry of time prescribed for appeal.	6	Only recently notified under section 4.	7	Awaiting payment of compensation or exchange of lands.	8	Awaiting settlement of claims under enquiry.	9
Ganjám ..				8		8		1				2				1	
Vizagapatam ..				1				4				11		1		1	
Gódávari ..			2	15		4		3		2		8					
Kistna ..			1	7		1		1				1				2	
Kurnool ..				1						1		1				1	
Bellary ..				1								1				2	
Anantapur ..				8								6				10	
Cuddapah ..			1	4								6		3			
Nellore ..				7		1				2						1	
Chingleput ..				1		1		1		1		9					
North Arcot ..			1	5												3	
South Arcot † ..			4	13										2		9	
Salem † ..				9												2	
Trichinopoly ..				1										1		1	
Tanjore ..																4	
South Canara ..			6	4		3											
North Malabar ..																	
South Malabar ..			3	1		1		1									
The Nilgiris ..				1													
North Coimbatore ..				3		1											
South Coimbatore ..			1	2				4									
Madura ..				3													
Tinnevelly ..																	
Total ..	1	23	92		21		10		8		70		36		7		36

Districts.	Causes of delay.																
	10	Awaiting District Forest-officer's answers to claims, demarcation, &c.	11	Settled, but final report pending with the Collector or Forest Settlement-officer.	12	Pending with the Collector or Forest Settlement-officer for revision of notifications.	13	Awaiting replies to references made to Collector or Board.	14	Awaiting inspection by Forest Settlement-officer.	15	Other causes, i.e., awaiting return of records from the District Courts, information from Tahsildars, &c.	16	Total. *			
Ganjám ..			1		6				1		1		28				
Vizagapatam ..					1								17				
Gódávari ..			2		1						18		8				
Kistna ..			3		1				2		1		53				
Kurnool ..					1		1		12				22				
Bellary ..			2						9				15				
Anantapur ..													14				
Cuddapah ..			1		3		1		6		4		29				
Nellore ..			4		1								18				
Chingleput ..			1		1								21				
North Arcot ..					2				46		12		25				
South Arcot † ..			1		1				27				24				
Salem † ..					1						2		47				
Trichinopoly ..			1		4				2				1				
Tanjore ..					6		3						61				
South Canara ..			1		1		4				2		7				
North Malabar ..													20				
South Malabar ..			1		1								13				
The Nilgiris ..													16				
North Coimbatore ..			1		2				2				2				
South Coimbatore ..													15				
Madura ..					6		4				3		15				
Tinnevelly ..			1		1						1						
Total ..	9	16	21		39		9		105		43		500				

* The difference between the total of the column and the total in Appendix C to Board's Proceedings, Forest No. 369, dated 26th August 1897, is due to—
(1) the clubbing or division of blocks, (2) the inclusion in this statement of blocks with Divisional-officers and (3) to the reported blocks pending with the Board or Government, &c.
† All the blocks in the district except one were pending the decision of the question of their retention or abandonment.

APPENDIX C.

RESERVED lands not under settlement in square miles.

Districts.	Up to 1895-96.	Added during 1895-96.	Added during 1896-97.	Total.	Transferred for settlement.				Balance, remaining "reserved lands," not under settlement.
					Up to 1895-96.	During 1895-96.	During 1896-97.	Total.	
1	2	3	4	5	6	7	8	9	10
Northern Circle.									
Ganjám	576	{c — 6 c — 23	{a + 6 c — 9	556	{553 c — 9	6	a + 6	556	..
Vizagapatam ..	432	c — 17	..	415	{301 e + 1	..	2	304	111
Gódávari	1,001	b — 26	{a + 7 b — 28 c — 1	953	{975 c — 1 b — 28	..	a + 7	953	..
Kistna	1,112	100	{21 b — 25 c — 33 d — 11	1,164	{780 b — 25 c — 6 d — 11	11	52	801	363
Kurnool	2,233	11	{80 a + 8 b — 1	2,331	{2,091 b — 1 a — 2	11	89	2,188	143
Bellary	564	73	{c — 10 d — 1	626	{479 c — 6 d — 1	12	18	502	124
Anantapur	513	4	c — 3	514	{508 c — 3	9	..	514	..
Total ..	6,431	128	..	6,559	5,595	49	174	5,818	741
Central Circle.									
Cuddapah	2,267	90	{28 a — 8 c — 17	2,360	{2,063 a — 8 c — 4	132	31	2,214	146
Nellore	652	9	{36 c — 1 b — 1 c — 12	683	{615 b — 1 c — 12	32	36	670	13
Chingleput	240	{3 c — 5	{1 c — 26	213	{221 c — 13	3	1	212	1
North Arcot	1,137	c — 6	{16 b — 1 c — 12	1,134	{1,083 c — 3 b — 1	19	35	1,133	1
South Arcot	866	— 87	{4 b — 12 c — 56	715	{762 b — 12 c — 49	10	4	715	..
Salem	1,346	118	{3 a — 1 c — 32 d + 5	1,439	{1,296 a — 1 c — 28 d + 6	85	..	1,358	81
Trichinopoly ..	237	c — 4	{70 c — 6	297	{194 c — 3	..	79	270	27
Tanjore	33	c — 14	c — 1	18	{19 c — 1	..	..	18	..
Total ..	6,778	104	— 23	6,859	6,123	281	186	6,590	269
Southern Circle.									
South Canara ..	1,140	— 6	{35 a + 1 c — 61	1,109	{434 c — 27	115	23	545	564
North Malabar ..	277	c — 5	2	274	270	..	2	272	2
South Malabar ..	328	..	..	328	299	..	..	299	29
The Nilgiris ..	450	a + 2	{1 c — 2 a — 1	450	358	..	1	359	91
North Coimbatore ..	1,718	a — 1	{2 a — 80 c — 15 d — 1	1,623	{1,651 a — 80 c — 11 d — 1	..	28	1,587	36
South Coimbatore ..	587	70	..	657	654	3	..	657	..
Madura	651	{a + 1 c — 3	{a + 4 b — 2 c — 22 d — 8	621	{637 b — 2 c — 15 d — 8	..	a + 4	616	5
Tinnevelly	430	{11 a — 5 c — 8	{3 c — 4	427	{417 c — 4	11	1	425	2
Total ..	5,581	56	— 148	5,489	4,572	129	59	4,760	729
Grand Total ..	18,790	288	— 171	18,907	16,290	459	419	17,168	1,739

a. By rectification. *b.* At Settlement. *c.* Unreserved or disforested.
d. By rectification of areas already constituted reserved forests. *e.* By rounding off fraction in previous year's return.

ANNUAL FORM No. 46.

Forest Department, Madras Presidency.

RECORD of Demarcation and Maintenance of Boundaries.

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired during the year.	Length of previously existing boundaries not repaired during the year.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at close of year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.	
								On new work.	On repairs.
1	2	3	4	5	6	7	8	9	10
Northern Circle.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	RS.	RS.
Ganjám	30	187	531	748	153	55	956	(a) 808	(a) 550
Vizagapatam	13	..	226	239	385	18	642	(a) 330	(a) 136
Gódávari	79	313	460	852	36	374	1,262	474	463
Kistna	125	49	605	779	99	..	878	(a) 2,184	{(b)+ 682
Kurnool	75	414	..	489	409	168	1,066	2,391	(c) ..
Bellary	125	150	758	1,033	462	..	1,495	651	(d) 429
Anantapur	62	37	97	196	..	..	196	200	(a) 376
Total ..	509	1,150	2,677	4,336	1,544	615	6,495	7,038	4,022
Central Circle.									
Cuddapah	(f) 165	..	1,990	2,155	..	..	2,155	(c) 1,385	..
Nellore	46	6	991	1,043	292	86	1,421	(a) 542	12
Chingleput	44	2	705	751	..	..	751	1,616	(d) 597
North Arcot	27	584	1,832	2,443	60	12	2,515	339	1,760
South Arcot	187	24	1,421	1,632	413	..	2,045	2,972	(d) 1,007
Salem	90	468	1,875	2,433	298	88	2,819	351	565
Trichinopoly	70	{21 (c) 222}	732	1,045	..	..	1,045	376	156
Tanjore	..	..	79	79	..	..	79	..	..
Total ..	629	1,327	9,625	11,581	1,063	186	12,830	7,581	4,097
Southern Circle.									
South Canara	133	..	1,172	1,305	30	2	1,337	1,202	..
Malabar, North	..	76	395	471	80	2	553	..	(d) 918
Do. South	1	18	107	126	52	92	270	49	154
The Nilgiris	37	201	605	843	..	174	1,017	411	(e) 1,088
Coimbatore, North	24	213	344	581	30	221	832	313	{2,864 (d)+ 401
Do. South	..	36	442	478	13	77	568	..	639
Madura	..	..	1,105	1,105	32	164	1,301	..	3
Tinnevelly	43	5	241	289	197	17	503	127	180
Total ..	238	549	4,411	5,198	434	749	6,381	2,102	6,247
Grand Total ..	1,376	3,026	16,713	21,115	3,041	1,550	25,706	16,721	14,366

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

(*a*) Includes cost of cairns repaired or erected.
(*b*) Cost of boards for boundary and coupe lines.
(*c*) Cleared by the forest establishment.
(*d*) Includes cost of establishment.
(*e*) Includes half the pay of temporary establishment, the other half being debited to preliminary demarcation.
(*f*) Includes rectifying 53 miles of demarcation.

ANNUAL FORM No. 47.

Forest Department, Madras Presidency.

STATEMENT of Forest Areas surveyed and under survey during the year 1896–97.

Districts.	Areas surveyed and under survey during the year 1896–97.															
	Special Surveys—Maps on 4-inch scale or over by Survey of India Department or Madras Survey.								Ordinary, included in district surveys.							
	With interior details.					Boundary surveys.			With interior details.					Boundary Surveys.		
	With details of growing stock.		Without details of growing stock.		Total cost.	Previous.	Of year.	Total cost.	With details of growing stock.		Without details of growing stock		Total cost.	Previous.	Of year.	Total cost.
	Previous.	Of year.	Previous.	Of year.					Previous.	Of year.	Previous.	Of year.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	SQ. MLS.	SQ. MLS.	RS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	SQ. MLS.	SQ. MLS.	RS.
Ganjám	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gódávari	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kistna	..	..	..	..	..	..	17	..	17	1	276	35	216	39	146	898
Kurnool	..	..	..	173	12,318	..	465	..	..	..	..	..	..	..	..	..
Bellary	..	..	..	..	..	..	..	..	..	..	..	..	..	2	20	1,035
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	173	12,318	..	482	..	17	1	276	35	216	41	166	1,933
Central Circle.																
Cuddapah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	833	188	(a)15,320	..	..	..	..	..	..	..	..	..	..	..
South „	..	..	99	..	(b) ..	..	..	..	..	..	..	..	..	..	..	..
Salem	..	..	570	384	(a)30,000	..	263	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	66	(a)25,000	9	244	..	..	..	..	..	..	129	22	..
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	1,502	638	70,320	9	507	..	..	..	..	..	..	129	22	..
Southern Circle.																
South Canara	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South „	10	2	46	..	314	..	..	..	..	..	..	..	..	2	..	..
The Nilgiris	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore (b)	..	..	..	..	..	..	280	..	..	..	..	..	..	..	..	..
South „	..	..	652	..	..	..	..	..	..	..	..	2	..	..	..	..
Madura	..	..	562	..	(b)	..	..	..	..	..	..	..	..	..	..	..
Tinnevelly	..	..	410	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	10	2	1,670	..	314	..	280	..	..	..	..	2	..	2	..	..
Grand Total	10	2	3,172	811	82,952	9	1,269	..	17	1	276	37	216	172	188	1,933

(a) Cost during the year. (b) Information not available.

Statement of Forest Areas surveyed and under survey during the year 1896–97—*cont.*

Districts.	Areas surveyed and under survey during the year 1896–97—*cont.*								Areas remaining to be taken under survey.	Total area of reserved forest at the end of year, as per form No. 44.	Cost.		
	Chain and compass or other surveys by local officers.												
	With interior details.					Boundary surveys.					Previous.	Of year.	Entire cost of all surveys to end of the year.
	4-inch or over.		Under 4-inch.		Total cost.	Previous.	Of year.	Total cost.					
	Previous.	Of year.	Previous.	Of year.									
	18	19	20	21	22	23	24	25	26	27	28	29	30
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	MLS.	MLS.	RS.	SQ. MLS.	SQ. MLS.	RS.	RS.	RS.
Ganjám	..	..	..	..	..	120	138	7,519	146	146	6,390	1,130	7,520
Vizagapatam	114	..	..	..	2,403	..	94	1,163	22	136	2,403	1,171	3,574
Gódávari	..	..	..	..	..	..	..	..	810	810	..	..	..
Kistna	2	2	..	..	..	108	38	..	321	654	{ 4,871 + 4,963 }	1,286	{ 6,157 4,963
Kurnool	5	..	..	..	254	40	63	1,605	1,628	1,806	884	13,253	14,137
Bellary	..	..	..	..	..	..	..	..	456	456	332	703	1,035
Anantapur	342	..	..	..	901	..	..	..	95	437	(a) 901	..	901
Total	463	2	..	..	3,558	268	333	10,287	3,478	4,445	20,714	17,543	38,287
Central Circle.													
Cuddapah	..	..	..	..	..	..	..	..	1,576	1,576	..	..	..
Nellore	..	..	..	..	..	..	..	..	537	537	..	..	..
Chingleput	..	..	..	..	..	..	..	..	203	203	..	..	..
North Arcot	..	..	..	..	..	..	..	..	..	1,021	(b) ..	15,320	15,320
South „	6	..	..	..	52	..	..	..	468	573	52	..	52
Salem	9	..	..	..	..	..	2	..	266	1,229	3,063	31,030	34,093
Trichinopoly	1	..	..	..	..	..	..	..	122	189	..	25,000	25,000
Tanjore	..	..	..	..	..	..	..	..	*Nil.*	18	..	..	..
Total	16	..	..	..	52	..	2	..	3,172	5,346	3,115	71,350	74,465
Southern Circle.													
South Canara	No information is available.					200	117	..	*Nil.*	114	1,517	1,236	2,753
North Malabar	..	..	..	..	..	..	34	493	157	157	..	493	493
South „	..	..	..	..	..	..	..	..	*Nil.*	39	513	328	841
The Nilgiris	..	..	..	..	..	..	..	..	*Nil.*	358	..	..	..
North Coimbatore (b)	..	..	..	..	..	..	..	..	1,053	1,053	..	..	..
South „	..	..	..	..	..	..	..	..	*Nil.*	654	(b) ..	..	..
Madura	..	..	..	..	..	..	..	..	*Nil.*	562	(b) ..	843	843
Tinnevelly	..	..	..	..	..	..	..	..	*Nil.*	410	(b) ..	..	..
Total	..	..	..	..	..	200	151	493	1,210	3,347	2,030	2,900	4,930
Grand Total	479	2	..	..	3,610	468	486	10,780	7,860	13,138	25,889	91,793	1,17,682

(a) Cost during 1895–96. (b) Information not available.

APPENDIX D.

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

Northern Circle.

Ganjám.—Forty-seven reserve maps were prepared and the district and range maps posted up to 30th June 1897.

Vizagapatam.—The district reference and taluk maps have been posted, and Range officers supplied with range maps. Preparation of separate maps for each reserve has to await survey by the Survey of India Party.

Gódávari.—The district and range maps have been maintained and separate maps for each reserve kept.

Kistna.—Separate maps for reserves are under preparation. Maps for four blocks were prepared and sent to the Survey office and maps for nineteen blocks were printed and distributed.

Kurnool.—The district and range maps have been posted up, and these as well as reserve maps supplied to Range officers.

Bellary.—Orders on the subject of maintenance of the district, range and reserve maps in the District and Range offices have been attended to.

Anantapur.—The district map has been posted up to date, as also taluk maps for four taluks; 34 lithograph maps on a scale of 8 inches to 1 mile have been mounted and distributed to Range officers and 54 copies of maps sent to the Survey office for preparation of additional copies.

Central Circle.

Cuddapah.—The district reference map has been maintained and range maps have been supplied to all Range officers posted up to date. Separate maps for all reserves except eight blocks have also been supplied to Range officers.

Nellore.—One hundred and twenty sketch maps of reserves have been supplied to Range offices.

Chinglepat.—The district and range maps have been posted up to date and copies of 150 sketches of final maps supplied to Range officers.

North Arcot.—The district map has been posted up to date as also the range maps; copies of the latter have been supplied to all Range officers. Copies of reserve maps received from Survey of India have been furnished to Range officers. Of the 103 square miles of the finally reserved area excluded from the Survey of India maps, final maps for 26 square miles remain to be prepared departmentally.

South Arcot.—The district and taluk maps have been posted up to date and copies of the latter supplied to all Range officers. Separate maps for all reserves except those on the Tenmalais which are being surveyed by the Survey of India Party have also been furnished to all Range officers.

Salem.—The district, forest and range reference maps have been posted up to date and separate copies of reserve maps have been supplied in some cases.

Trichinopoly.—The district as well as the range reference maps have been posted. As regards separate maps for each reserve, tracings have been prepared for almost all the reserves in the Udaiyárpálaiyam range from the village maps prepared according to the resurvey. Steps are being taken to prepare maps of reserves in the Trichinopoly and Kulittalai ranges from resurvey village maps while those for the reserves on the Pachamalais in the Musiri and Perambalúr ranges are under preparation by the Survey of India Party.

Tanjore.—The district as well as the range reference maps have been maintained. There are also separate maps for each reserve with topographical features and admitted rights of way indicated therein. Working plan maps are maintained for the Vattangudi reserved forest and the north, the south and the Neidavasal casuarina plantations. The Vettangudi map is not quite complete.

Southern Circle.

Tinnevelly.—The district reference map has been posted. The maps of the ghât forest reserves were reduced and attached to the taluk maps. Three copies of the reduced taluk maps were prepared and each of the Range officers was supplied with a copy relating to his range. Range officers were also supplied with Survey of India maps for the reserves surveyed by that party.

Madura.—The maps prescribed in the Code are in the hands of the District and Range officers except in the case of six reserves which were surveyed only during the year under report and for which the surveyors' maps are under scrutiny.

North Coimbatore.—The office reference map is maintained. The topographical sheets are used as range reference maps and are being posted. There are no reserve maps but the settlement map has been supplied to Range officers for the principal reserves to be used together with the topographical sheets as reserve maps.

South Coimbatore.—The district and range reference maps have been prepared but in the latter a few details have still to be entered. There are Survey of India maps for all the reserves but some details have still to be entered on them. There are also separate maps for the working circles.

Nilgiris.—The district and range reference maps have been posted. There are no reserve maps separately but settlement maps for each village are maintained, all the reserves being shown therein. Working circle maps are also maintained.

North Malabar.—The district reference map has been posted up to end of 30th June 1897 and one set of taluk maps with the ranges shown therein was supplied to Range officers. Separate maps for all reserves except for six blocks have also been supplied.

South Malabar.—The district reference map has been posted up to 30th June 1897. The range reference maps have not yet been prepared for want of the services of a draughtsman. There are separate maps for each reserve and working circle maps for areas for which working plans have been prepared.

South Canara.—The district reference map has been maintained and range maps except that of Coondapur are inaccurate and incomplete and nothing can be done before the publication of taluk maps by the Survey Department. Separate maps except for two blocks are maintained.

APPENDIX E.

STATEMENT showing area of reserved forests for which final maps have been prepared.

Districts.	Area of reserved forests.	Area of reserved forests for which final maps have been prepared.	Districts.	Area of reserved forests.	Area of reserved forests for which final maps have been prepared.
	SQ. MILES.	SQ. MILES.		SQ. MILES.	SQ. MILES.
Ganjám	146	139	Trichinopoly	189	15
Vizagapatam	136	14	Tanjore	18	18
Gódávari	810	80	South Canara	114	65 *
Kistna	654	340	North Malabar	157	.. †
Kurnool	1,806	..	South Malabar	39	39
Bellary	456	282	The Nilgiris	358	.. †
Anantapur	437	392	North Coimbatore	1,053	12 ‡
Cuddapah	1,576	1,481	South Coimbatore	654	652
Nellore	537	517	Madura	562	560
Chingleput	203	203	Tinnevelly	410	407
North Arcot	1,021	494			
South Arcot	573	573			
Salem	1,229	529	Total ..	15,138	6,712

* Revised figure.

† No final maps in accordance with the instructions contained in Board's Proceedings, Forest No. 37 of 1894, have been prepared.

‡ Maps for other areas have been prepared, but cannot on account of their inaccuracy be considered final.

ANNUAL FORM No. 48.

Forest Department, Madras Presidency.

PROGRESS made in Working Plans during 1896–97.

District.	Areas for which working plans have been completed.		Areas for which working plans are being compiled.		Areas for which working plans have still to be taken in hand.	Total Forest area as in Form No. 44.	Entire cost per square mile of working plans completed.	Remarks.
	At commencement of year.	During year.	At commencement of year.	Taken in hand during year.				
1	2	3	4	5	6	7	8	9
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	
Ganjám	..	..	..	..	556	556	..	
Vizagapatam ..	..	..	..	..	(a) 415	415	..	
Gódávari ..	31	..	..	..	922	953	*Nil.*	
Kistna ..	8	(b)..	(c) 680	..	476	1,164	*Nil.*	A sum of Rs. 721 was spent during the year for stock masters and stock men.
Kurnool	..	..	..	..	2,331	2,331	..	
Bellary	12	..	38	..	576	626	..	A sum of Rs. 68 was spent under this head during the year.
Anantapur ..	1	..	..	..	513	514	..	
Total ..	52	..	718	..	5,789	6,559	..	
Central Circle.								
Cuddapah ..	3	..	..	..	2,357	2,360	..	
Nellore	..	40	..	11	632	683	*Nil.*	A sum of Rs. 63 was spent under this head during the year.
Chingleput ..	..	..	..	..	213	213	..	
North Arcot ..	..	..	..	..	1,134	1,134	..	
South Arcot ..	(d) 58	(e) 41	..	..	616	715	(f) 52	
Salem	1	..	..	..	1,438	1,439	*Nil.*	
Trichinopoly ..	16	18	..	..	263	297	(g) *Nil.*	A sum of Rs. 115 was spent under this head during the year.
Tanjore	..	4	..	4	10	18	..	
Total ..	78	103	..	15	6,663	6,859	..	
Southern Circle.								
South Canara ..	..	1	..	..	1,108	1,109	..	
North Malabar ..	..	..	..	..	274	274	..	
South Malabar ..	34	..	..	24	270	328	99	
The Nilgiris ..	(h) 6	..	..	..	444	450	83	
North Coimbatore.	..	(i)..	..	..	1,623	1,623	..	
South Coimbatore.	8	1	..	..	648	657	..	A sum of Rs. 51 was spent under this head during the year.
Madura	..	..	(k) 12	..	609	621	..	
Tinnevelly ..	5	29	..	..	393	427	(l) 30	
Total ..	53	31	12	24	5,369	5,489	..	
Grand Total ..	183	134	730	39	17,821	18,907	..	

(a) No working plans can be prepared till maps are prepared.

(b) The working plan of the Orr reserve was completed during the year; but as its area is only 123 acres, it is not shown in this column.

(c) This consits of 33 grazing working circles; maps have to be prepared and stock-taking has not yet been commenced.

(d) Working scheme for 5 square miles and simple working plans based upon area for 53 square miles.

(e) Working scheme for one square mile and simple working plans based upon area for 40 square miles.

(f) So far as known.

(g) Prepared by the ordinary staff.

(h) Fuel plantations around Ootacamund and Coonoor.

(i) Rough working plans of a very preliminary nature were prepared for certain small areas by the ordinary staff.

(k) The difference between this column and column 5 in the last year's report has not been explained by the Collector.

(l) The decrease in the average cost as compared with the last year is due to the smallness of the expenditure, Rs. 626, incurred during the year in completing the working plan of 29 square miles.

Annual Form No. 49.

ANNUAL

Forest Department

Communications

District.	New work undertaken during the year.						Repairs executed during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.	Buildings.		Roads and paths.			Total expended on repairs.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.		Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
1	2	3	4	5	6	7	8	9	10	11	12	13

Communications and Buildings.

District.	New work undertaken during the year. Buildings. Description of building.	Buildings. Expenditure incurred.	Roads and paths. Road or path and object of the same.	Roads and paths. Length of road or path.	Roads and paths. Expenditure incurred.	Total expenditure on new work.
1	2	3	4	5	6	7
						Central Circle.
Cuddapah ..	(d) Others	Rs. 278 ..	(a) Cart roads .. .. .. (b) Bridle-paths	Mls. 14 ..	Rs. 1,899 3	Rs.
	Total, Cuddapah ..	278	Total ..	14	1,902	2,180
Nellore ..	(c) Houses for subordinate establishments .. .. (d) Others	2,000 24	....	..	..	..
	Total, Nellore ..	2,024	Total ..	..	..	2,024
Chingleput ..	(b) Rest-houses	450	....	..	..	..
	Total, Chingleput ..	450	Total ..	..	..	450
North Arcot ..	(c) Houses for subordinate establishments	535	(a) Cart roads	2	1,531	..
	Total, North Arcot ..	535	Total ..	2	1,531	2,066
South Arcot ..	(b) Rest-houses .. .. .. (c) Houses for subordinate establishments	22 13	....	..	..	..
	Total, South Arcot ..	35	Total ..	..	..	35
Salem ..	(b) Rest-houses .. .. .. (c) Houses for subordinate establishments .. .. (d) Others	406 606 497	(a) Cart roads	4	1,611	..
	Total, Salem ..	1,509	Total ..	4	1,611	2,120
Trichinopoly ..	....	..	....	..	..	
	Total, Trichinopoly ..	..	Total ..	..	..	..
Tanjore ..	(c) Houses for subordinate establishments	171	....	..	..	..
	Total, Tanjore ..	171	Total ..	..	..	171
Total, Central Circle.	(b) Rest-houses .. .. .. (c) Houses for subordinate establishments .. .. (d) Others	878 3,325 799	(a) Cart roads .. .. .. (b) Bridle-paths .. .. .. (c) Others	20	5,041 3 ..	.. .. ..
	Total, Central Circle ..	5,002	Total ..	20	5,044	10,046

Repairs executed during the year. Buildings. Nature of repairs.	Buildings. Expenditure incurred.	Roads and paths. Nature of repairs.	Roads and paths. Length repaired.	Roads and paths. Expenditure incurred.	Total expended on repairs.
8	9	10	11	12	13
Circle.	Rs.		Mls.	Rs.	Rs.
(b) Rest-houses .. .. (c) Houses for subordinate establishment .. .. (d) Others	669 175 98	(a) Cart roads	1½	259	
	942		1½	259	1,441
Add pay of Bungalow watchers ..	240	Add A-VII (c)	..	..	5
Total ..	1,182	Total ..	..	..	1,446
Total ..	..	Total ..	..	..	..
(b) Rest-houses .. .. (c) Houses for subordinate establishments .. .. (d) Others	545 67 29	(a) Cart roads	..	29	
Total ..	641	Total ..	..	29	670
(a) Head-quarter houses .. .. (b) Rest-houses .. .. (c) Houses for subordinate establishment	400 588 160	(a) Cart roads	18	1,299	
	1,148	Total ..	18	1,299	3,061
Add pay of watchers ..	614	Add A-VII (c)	..	..	35
Total ..	1,762	Total ..	..	..	3,096
(b) Rest-houses .. .. Add pay of watchers ..	543 341	(a) Cart roads .. .. Add A-VII (c)	7 ..	552 ..	1,436 81
Total ..	884	Total ..	..	..	1,517
(b) Rest-houses .. .. (c) Houses for subordinate establishments	300 392	....	..	..	692
Total ..	692	Add A-VII (c)	..	..	16
		Total ..	..	..	708
(b) Rest-houses .. .. (d) Others	19 30	(a) Cart road	4	215	
Total ..	49	Total ..	4	215	264
(b) Rest-houses	180	....	..	..	180
Total ..	180	Total ..	..	..	180
(a) Head-quarter houses .. .. (b) Rest-houses .. .. (c) Houses for subordinate establishments .. .. (d) Others	400 2,844 794 157	(a) Cart roads .. .. (b) Bridle-paths .. .. (c) Others	30½	2,354	
	4,195		30½	2,354	7,744
Add pay of watchers ..	1,195	Add A-VII (c)	..	..	137
Total ..	5,390	Total ..	..	..	7,881

Communications and Buildings—*cont.*

District.	New work undertaken during the year.						Repairs executed during the year.					
	Buildings.		Roads and paths.			Total expenditure on new works.	Buildings.		Roads and paths.			Total expended on repairs.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.		Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
1	2	3	4	5	6	7	8	9	10	11	12	13
Southern Circle.												
		Rs.		MILS.	Rs.	Rs.		Rs.		MLS.	Rs.	Rs.
South Canara.	(*b*) Rest-houses	85	....	..	..		(*c*) Houses for subordinate establishments	126	(*a*) Cart roads	9	33	..
	(*d*) Others	90					(*d*) Others	18		9	33	177
	Total, South Canara ..	175	Total ..	..	..	175	Total ..	144	Add A-VII (*c*)	..	..	12
									Total ..	..	..	189
North Malabar.	(*d*) Others	376	(*a*) Cart roads	10	540		(*a*) Head-quarter houses	185	(*a*) Cart roads	88	1,045	
							(*b*) Rest-houses	156				
							(*d*) Others	58				
	Total, North Malabar ..	376	Total ..	10	540	916	Total ..	399	Add A-VII (*c*)	88	1,045	1,444
										..	..	407
									Total ..	..	..	1,851
South Malabar.	(*b*) Rest-houses	972	....	..	..		(*a*) Head-quarter houses	34				
	(*c*) Houses for subordinate establishments.	3,163					(*b*) Rest-houses	118	(*a*) Cart road	1	501	
	(*d*) Others	17					(*c*) Houses for subordinate establishments	184	(*b*) Bridle-path	6	45	
							(*d*) Others	405		7	546	1,287
	Total, South Malabar ..	4,152	Total ..	..	..	4,152	Total ..	741	Add A-VII (*c*)	..	..	85
									Total ..	..	..	1,372
The Nilgiris ..	(*b*) Rest-houses	32	(*a*) Cart roads	1	500		(*d*) Others	974	(*a*) Cart roads	57	848	
	(*c*) Houses for subordinate establishments.	891								57	848	1,822
	(*d*) Others	313							Add A-VII (*c*)	..	..	88
	Total, Nilgiris ..	1,236	Total ..	1	500	1,736	Total ..	974	Total ..	..	..	1,910
North Coimbatore.	(*b*) Rest-houses	258	(*a*) Cart roads	20	7,000		(*b*) Rest-houses	417	(*a*) Cart roads	60	3,935	
	(*c*) Houses for subordinate establishments.	2,209	(*b*) Bridle-paths	9½	1,850		(*c*) Houses for subordinate establishments	210				
	(*d*) Others	43					(*d*) Others	255		60	3,935	4,097
								882				
							Add pay of watchers ..	280	Add A-VII (*c*)	..	..	29
	Total, North Coimbatore ..	2,510	Total ..	29½	8,350	10,860	Total ..	1,162	Total ..	..	..	5 126
South Coimbatore.	(*b*) Rest-houses	1,944	(*a*) Cart roads	3	403		(*a*) Head-quarter houses	27	(*a*) Cart roads	21	2.542	
	(*c*) Houses for subordinate establishments.	123	(*b*) Bridle-paths	2	127		(*b*) Rest-houses	391	(*b*) Bridle-paths	1½	49	
	(*d*) Others	511	(*c*) Others	1	749		(*c*) Houses for subordinate establishments	780	(*c*) Others	10	665	
							(*d*) Others	59	Add A-VII (*c*)	32½	3,256	4,513
										..	..	662
	Total, South Coimbatore ..	2,578	Total ..	6	1,279	3,857	Total ..	1,257	Total ..	..	..	5,175
Madura ..	(*b*) Rest-houses	617	(*a*) Cart roads	..	625		(*a*) Head-quarter houses	275				
							(*b*) Rest-houses	447	(*a*) Cart roads	..	136	
										..	136	858
									Add A-VII (*c*)	..	..	74
	Total, Madura ..	617	Total ..	..	625	1,242	Total ..	722	Total ..	..	..	932

FORM No. 65.

Tramway Statement.

STATEMENT showing the results of transport of wood by tramway compared with transport by country carts.

I.—*Nellore District.*

(i) Sriharikóta Range.

Capital Account.

—	1895-96.	1896-97.	—	1895-96.	1896-97.
Dr.	Rs.	Rs.	*Cr.*	Rs.	Rs.
To balance from the previous year	19,463	18,380	By depreciation at 6 per cent...	1,173	1,103
Add cost of iron caps and brass journals purchased	90	..	„ balance of stock	18,380	17,277
Total ..	19,553	18,380	Total ..	19,553	18,380

Revenue Account.

—	1895-96.	1896-97.	—	1895-96.	1896-97.
Dr.	Rs.	Rs.	*Cr.*	Rs.	Rs.
To working expenses	614	499	By balance written off ..	2,875	2,719
„ road-making and repairs ..	306	382			
„ interest at 4 per cent. ..	782	735			
„ depreciation at 6 per cent. ..	1,173	1,103			
Total ..	2,875	2,719	Total ..	2,875	2,719

—	1895-96.			1896-97.		
	Number of tons carried.	Miles carried.	Total ton miles.	Number of tons of fuel carried.	Number of miles carried.	Total ton miles.
Work done	{ 1,516 407	5¾ 1	8,717 407	3,530	2½	8,825
Total ..	1,923	..	9,124			

REMARKS.—Interest and depreciation were allowed for the whole outlay although 2½ miles only were worked.

—	1895-96.			1896-97.		
	Number of ton miles.	Amount.	Rate per ton mile.	Number of ton miles.	Amount.	Rate per mile.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Actual charge for carrying	9,124	2,875	0 5 0	8,825	2,719	0 4 11
Estimated cost of carting	9,124	3,089	* 0 5 5	8,825	2,758	* 0 5 0

* The decrease in the rate is due to the decrease in the distance carried.

ABSTRACT.

Year.	Profit.	Loss.
	Rs.	Rs.
1889-90 to 1891-92	..	2,596
1892-93 to 1895-96	1,848	..
1896-97	39	..
Total ..	1,887	2,596
Net loss up to 30th June 1897 ..	709	

(ii) Casuarina Plantation Range.

Capital Account.

—	1895-96.	1896-97.	—	1895-96.	1896-97.
Dr.	Rs.	Rs.	*Cr.*	Rs.	Rs.
To balance from the previous year ..	14,073	13,313	By depreciation at 6 per cent. ..	850	798
„ cost of caps and journals purchased	* 90	..	„ balance of stock	13,313	12,515
Total ..	14,163	13,313	Total ..	14,163	13,313

* This item which has been wrongly included in the Revenue Account in the last year's return has now been carried to the Capital Account.

Revenue Account.

—	1895-96.	1896-97.	—	1895-96.	1896-97.
Dr.	Rs.	Rs.	*Cr.*	Rs.	Rs.
To working expenses	302	468	By balance written off	1,718	1,798
„ interest at 4 per cent.	566	532			
„ depreciation at 6 per cent. ..	850	798			
Total ..	1,718	1,798	Total ..	1,718	1,798

—	1895-96.			1896-97.		
	Number of tons of wood carried.	Number of miles carried.	Total ton miles.	Number of tons of wood carried.	Number of miles carried.	Total ton miles.
Work done	1,262	4	5,048	1,099	4	4,396

—	1895-96.			1896-97.		
	Number of ton miles.	Amount.	Rate per ton per mile.	Number of ton miles.	Amount.	Rate per ton per mile.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Actual charge for carrying	5,048	1,718	0 5 5	† 4,396	1,798	0 6 6
Estimated cost of carting	5,048	4,680	0 14 10	4,396	4,396	1 0 0

† The decrease in the quantity trolled is due to change of officers. The variation in the cost rate of carting has not been explained.

ABSTRACT.

Year.	Profit.	Loss.
	Rs.	Rs.
1885-86 to 1886-87	3,681	..
1887-88	..	570
1888-89	2,999	..
1889-90	..	165
1890-91 to 1894-95	14,778	..
1895-96	2,962	..
1896-97	2,598	..
Total ..	27,018	735
Net ..	26,283	

II. *Cuddapah District.*

Capital Account.

—		1895-96.	1896-97.	—		1895-96.	1896-97.
	Dr.	Rs.	Rs.		*Cr.*	Rs.	Rs.
To balance from previous year ..		11,601	10,905	By depreciation at 6 per cent. ..		696	654
				,, balance of stock		10,905	10,251
Total		11,601	10,905	Total ..		11,601	10,905

Revenue Account.

—		1895-96.	1896-97.	—		1895-96.	1896-97.
	Dr.	Rs.	Rs.		*Cr.*	Rs.	Rs.
To working expenses		153	62	By revenue from contractors ..		126	* ..
,, road repairs		51	7	,, balance written off		1,278	1,248
,, depreciation		696	654				
,, interest at 4 per cent.		464	436				
,, Tramway repairs		40	89				
Total ..		1,404	1,248	Total ..		1,404	1,248

* Rupees 151 received from the contractor subsequent to the close of the year for wood trucked during the year have not been shown here.

—	1895-96.			1896-97.		
	Number of tons of fuel carried.	Number of miles carried.	Total ton miles.	Number of tons of fuel carried.	Number of miles carried.	Total ton miles.
Work done	(*a*) 756½	1½	1,134¾	547	2	1,094

—	1895-96.			1896-97.		
	Total number of ton miles.	Total cost of carrying.	Rate per ton per mile.	Total number of ton miles.	Total cost of carrying.	Rate per ton per mile.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Actual charges for carrying	1,134¾	1,404	1 3 10	1,094	1,248	1 2 3
Estimated cost by carts	1,134¾	1,135	(*b*) 1 0 0	1,094	1,094	1 0 0

(*a*) Of these 546½ tons were trucked by the department.

(*b*) The estimated cost by carts is based on the number of trips which one cart can make in one day carrying half a ton.

ABSTRACT OF PROFIT AND LOSS.

Year.	Profit.	Loss.
	Rs.	Rs.
1892-93 to 1895-96	..	3,743
1896-97	..	154
Total Loss ..	..	3,897

III. *South Coimbatore District.*

Capital Account.

—		1895-96.	1896-97.	—		1895-96.	1896-97.
	Dr.	Rs.	Rs.		*Cr.*	Rs.	Rs.
To balance from previous year ..		50,092	47,244	By depreciation at 6 per cent. ..		3,015	2,878
,, extension of tram line		16	669	,, balance of stock		47,244	45,085
,, cost of brakes to tram trucks ..		151	..				
,, construction of temporary sheds for storing tram materials.		..	50				
Total ..		* 50,259	47,963	Total ..		50,259	47,963

* This differs from that entered in the last year's report as the cost of repairs to tram trucks and of tarring spare rails and sleepers has now been rightly taken to the Revenue Account instead of to the Capital Account.

Revenue Account.

—		1895-96.	1896-97.	—		1895-96.	1896-97.
	Dr.	Rs.	Rs.		*Cr.*	Rs.	Rs.
To working expenses		4,768	3,834	By balance written off		† 10,156	8,873
,, depreciation at 6 per cent. ..		3,015	2,878				
,, interest at 4 per cent.		2,010	1,918				
,, repairs to roadway		104	100				
,, repairs to tram trucks		195	143				
,, tarring spare rails and sleepers..		64	..				
Total ..		10,156	8,873	Total ..		10,156	8,873

† The difference between this figure and that entered in the last year's return is due to the explanation given under Capital Account.

—	1895-96.			1896-97.		
	Number of tons of timber carried.	Number of miles carried.	Total ton miles.	Number of tons of timber carried.	Number of miles carried.	Total ton miles.
Work done	1,797 tons (5,748 $\frac{2}{25}$ candies or 71,862 cubic feet)	4	7,188	1,419 tons (4,539 $\frac{3}{25}$ candies or 56,739 cubic feet.)	4½	6,563

—	1895-96.			1896-97.		
	Total number of ton miles.	Total amount spent.	Rate per ton per mile.	Total number of ton miles.	Total amount spent.	Rate per ton per mile.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Actual charges for carrying ..	7,188	10,156	1 6 7	6,563	8,873	1 5 6
Estimated cost by carts	7,188	7,488	1 0 8	6,563	6,836	1 0 8
Annual cost of maintaining cart road before construction of tramways now saved.	..	1,200	..	..	1,200	..
Total ..	7,188	8,688	..	6,5 3	8,036	..

ABSTRACT OF PROFIT AND LOSS.

	Profit.	Loss.
	Rs.	Rs.
1889-90 to 1895-96	..	22,136
1896-97	..	837
Total Loss ..	..	22,973

N.B.—The rate paid for carting from Sungam to Venthamudi, a distance of 6 miles prior to the construction of the tramway, was Rs. 2 per candy of 12½ cubic feet. This comes to slightly more than 5 pies per cubic foot per mile, or Rs. 1-0-8 per ton mile. A ton being taken as equivalent to 40 cubic feet; hence the estimated cost by carts has been calculated at the rate of Rs. 1-0-8 per ton mile.

ANNUAL FORM No. 50.

Forest Department, Madras Presidency.

PROSECUTIONS for breaches of Forest Rules during 1896-97.

District.	Cases pending from 1895-96.	NEW CASES OF THE YEAR.				DISPOSED OF DURING THE YEAR.								Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.	Convictions.		Acquittals.		Compounded.		Withdrawn.		Total.	
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1	2	3	4	6	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle.																		
Ganjám ..	20	..	165	44	17	226	246	85	232	15	100	91	201	17	46	208	579	38
Vizagapatam ..	30	..	374	50	11	435	465	160	607	19	68	137	330	59	259	375	1,164	90
Gódávari ..	• 38	..	338	31	144	619	657	94	281	30	129	251	651	30	152	405	1,113	152
Kistna ..	309	6	273	388	45	716	1,024	213	730	62	392	404	1,272	261	681	940	2,975	84
Kurnool ..	90	9	649	200	50	900	990	285	927	87	222	279	914	113	217	764	2,280	226
Bellary ..	71	1	332	87	124	557	628	35	171	4	6	461	1,390	46	82	546	1,649	82
Anantapur ..	9	14	137	113	7	260	269	76	328	16	106	119	445	20	53	231	937	38
Total ..	567	33	2,268	918	398	3,612	4,179	948	3,176	233	1,023	1,742	5,103	546	1,395	3,469	10,697	710
Central Circle.																		
Cuddapah ..	103	6	247	401	18	672	775	394	1,114	62	260	352	1,074	102	424	672	2,150	103
Nellore ..	20	..	82	69	10	161	181	79	190	12	31	28	74	13	47	132	342	49
Chingleput ..	20	..	235	180	28	443	463	48	160	13	42	277	701	102	177	440	1,050	23
North Arcot ..	63	1	474	527	19	1,021	1,084	87	310	19	71	785	1,845	89	172	930	2,399	164
South Arcot ..	256	12	932	477	87	1,508	1,764	282	1,020	54	300	1,115	2,966	138	380	1,589	4,666	175
Salem ..	48	8	484	534	24	1,045	1,093	212	755	42	309	647	1,879	100	366	1,001	3,309	92
Trichinopoly ..	80	..	153	519	12	684	764	166	389	38	140	269	755	210	106	683	1,300	81
Tanjore ..	6	..	22	38	2	62	67	16	29	2	6	21	57	23	40	62	132	5
Total ..	596	22	2,629	2,745	200	5,596	6,191	1,284	3,967	242	1,159	3,256	8,629	727	1,712	5,509	15,467	682
Southern Circle.																		
South Canara † ..	149	8	431	88	418	895	1,044	493	703	97	251	194	275	126	164	910	1,393	134
North Malabar ..	9	..	..	4	17	21	30	4	10	4	6	10	14	7	23	25	63	6
South Malabar ..	7	..	10	..	3	13	20	9	18	1	5	1	1	4	18	15	42	5
Nilgiris ..	15	..	38	59	9	106	121	61	149	4	21	32	83	6	9	103	261	18
North Coimbatore ..	24	..	100	192	27	319	343	131	352	26	104	96	330	48	126	300	912	43
South Coimbatore ..	22	..	65	99	14	178	200	26	68	7	33	133	333	11	44	176	468	24
Madura ..	141	33	173	263	24	483	624	383	1,151	48	292	21	111	67	72	519	1,626	105
Tinnevelly ..	51	2	233	169	11	415	466	14	42	11	37	309	974	82	255	416	1,308	50
Total ..	•418	43	1,050	814	523	2,430	2,848	1,121	2,483	197	749	795	2,120	351	711	2,464	6,063	384
Grand Total, Presidency ..	1,580	98	5,947	4,472	1,121	11,638	13,218	3,353	9,626	672	2,931	5,793	15,852	1,624	3,818	11,442	32,227	1,776

• Now reported by the Collector.

† Excludes 2,018 petty offences committed by 3,027 people let off with a warning.

ANNUAL FORM No. 51.

Forest Department, Madras Presidency.

AREA of Forest Tracts protected from Fire during 1896-97.

District.	Ranges or taluks.	Area actually protected up to 30th June 1896	During dry season of 1896-97.			Cost during the season.	Remarks.
			Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8
	Northern Circle.	ACS.	ACS.	ACS.	ACS.	RS.	
Ganjám ..	....	129,876	137,224	3,908	133,316	1,322	
Vizagapatam.	....	43,509	32,006	3,700	28,306	{ 178 / (a)+262	(a) Added or subtracted as per Accountant-General's audited figures.
Gódávari—Special ..	Bhadráchalam	13,739	13,912	41	13,871	479	
	Marrigudem	27,394	29,300	544	28,756	533	
	Rekapalle	8,600	9,500	90	9,410	216	
	Total, Special, Gódávari.	49,733	52,712	675	52,037	1,228	
General ..	Rajahmundry	49,040	49,065	1,150	47,915	313	
	Peddápur	2,150	2,150	..	2,150	24	
	Yernagudem	16,160	17,700	160	17,540	265	
	Ellore	17,125	17,340	..	17,340	196	
	Total, General, Gódávari.	84,475	86,255	1,310	84,945	798	
	Total, Special and General Gódávari.	134,208	138,967	1,985	136,982	2,026	
Kistna—Special ..	....	64,156	83,822	160	83,662	1,889	
General ..	Palnad range	80,346	80,346	..	80,346	3	
	Total, Special and General, Kistna.	144,502	164,168	160	164,008	1,892	
Kurnool ..	....	55,937	73,305	2,481	70,824	3,161	
Bellary—Special ..	Sandúr	33,000	40,000	909	39,091	1,705	
	Kudligi	18,350	19,000	..	19,000	224	
	Bellary	796	1,066	..	1,066	..	
	Total, Special, Bellary ..	52,146	60,066	909	59,157	1,929	
General ..	Sandúr	10,800	12,000	..	12,000	..	
	Adóni	1,574	1,574	245	1,329	(b) ..	(b) No expenditure was incurred as almost all grass was removed by ryots. The fire that occurred was put out by ryots.
	Total, General, Bellary..	12,374	13,574	245	13,329	..	
	Total, Special and General, Bellary.	64,520	73,640	1,154	72,486	1,929	
Anantapur ..	....	113,445	121,915	500	121,415	672	
	Total, Special, Northern Circle.	166,035	196,600	1,744	194,856	5,046	
	Total, General, Northern Circle.	519,962	544,625	12,144	532,481	6,396	
	Grand Total, Northern Circle.	685,997	741,225	13,888	727,337	11,442	
	Central Circle.						
Cuddapah ..	....	489,148	422,380	12,510	409,870	5,720	
Nellore .. Chingleput—Special ..	....	113,610	115,720	..	115,720	642	
	....	23,441	23,873	400	23,473	452	
North Arcot—Special ..	Chittoor	..	47,814	25	47,789	220	
	Chandragiri	97,697	99,252	1,749	97,503	1,066	
	Palmanér	21,586	66,868	1,205	65,663	567	
	Gudiyáttam	22,928	81,214	706	80,508	548	
	Vellore	82,208	107,852	660	107,192	955	
	Polur	117,286	126,714	220	126,494	1,041	
	Arcot-Wallajah ..	6,941	10,776	1,740	9,036	242	
	Total, Special, North Arcot.	348,646	540,490	6,305	534,185	{ 4,639 / (a)+ 48	

Area of Forest Tracts protected from Fire during 1896-97—*cont.*

District.	Ranges or taluks.	Area actually protected up to 30th June 1896.	During dry season of 1896-97. Area attempted to be protected.	Fires.	Actually protected.	Cost during the season.	Remarks.
1	2	3	4	5	6	7	8
	Central Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS.	
North Arcot—*cont.*							
General ..	Chittoor	84,225	34,164	224	33,940	..	
	Chendragiri	10,800	10,850	..	10,850		
	Palmanér	87,774	52,978	..	52,978		
	Gudiyátam	71,563	14,687	2	14,685		
	Vellore	33,463	7,653	130	7,523		
	Polur	43,431	43,426	..	43,426		
	Wallajah	3,078	3,078	..	3,078		
	Wandiwash	10,771	10,801	..	10,801		
	Arcot	10,207	7,329	..	7,329		
	Total, General, North Arcot.	355,312	184,966	356	184,610	..	
	Total, Special and General, North Arcot.	703,958	725,456	6,661	718,795	4,687	
South Arcot—							
Special ..	Tiruvannámalai	50,790	51,600	90	51,510	498	
	Kallakurchi	14,338	14,338	..	14,338	91	
	Total, Special, South Arcot.	(*a*) 65,128	65,938	90	65,848	589	
General ..	Tiruvannámalai	29,361	30,468	178	30,290	29	
	Total, Special and General, South Arcot.	94,489	96,406	268	96,138	618	
Salem ..	Salem, West	10,277	10,537	37	10,500	563	
	Uttankarai	12,248	15,748	2,120	13,628	227	
	Tiruppattúr	10,807	11,983	221	11,762	508	
	Krishnagiri	5,738	6,800	...	6,800	314	
	Total, Salem ..	39,070	45,068	2,378	42,690	1,612 +(*b*)118	
Trichinopoly—							
General ..	Musiri	49,581	50,081	100	49,981	74	
	Perambalur	32,600	32,600	..	32,600	48	
	Total, General, Trichinopoly.	82,181	82,681	100	82,581	122	
Tanjore ..	....	..	..	..	..	..	
	Total, Special, Central Circle.	(*c*) 437,215	630,301	6,795	623,506	5,728	
	Total, General, Central Circle.	1,108,682	881,283	15,522	865,761	8,243	
	Grand Total, Central Circle.	1,545,897	1,511,584	22,317	1,489,267	13,971	
	Southern Circle.						
South Canara.	Coondapoor range ..	15,314	16,504	256	16,248	140	
	Udipi range	10,685	11,325	200	11,125	259	
	Mangalore range	7,825	7,825	650	7,175	168	
	Uppinangadi range ..	4,620	4,632	27	4,605	404	
	Puttur range	2,460	5,256	..	5,256	118	
	Total, General, South Canara.	40,904	45,542	1,133	44,409	1,089	
North Malabar—							
Special .	....	21,499	65,612	100	65,512	1,091	
General ..	....	10,923	..	..	..	..	
	Total, North Malabar ..	32,422	65,612	100	65,512	1,091	

(*a*) This area was shown under general last year, but it is now reported to have been under special protection.

(*b*) Amount spent in beating out fires in other areas.

(*c*) *Vide* remark (*a*).

Area of Forest Tracts protected from Fire during 1896-97—*cont.*

District.	Ranges or taluks.	Area actually protected up to 30th June 1896.	During dry season of 1896-97. Area attempted to be protected.	Fires.	Actually protected.	Cost during the season.	Remarks.
1	2	3	4	5	6	7	8
	Southern Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS.	
South Malabar—							
Special ..	Nilambur range	4,571	4,685	..	4,685	807	
	Amarampalam range ..	80,679	80,779	..	80,779	470	
	Palghat range	18,344	18,344	..	18,344	969	
	Total, Special, South Malabar.	103,594	103,808	..	103,808	2,246	
The Nilgiris—							
Special ..	....	10,446	11,475	1,386	10,089	1,676	
General ..	....	71,722	71,740	..	71,740	146	
	Total, Special and General, Nilgiris.	82,168	83,215	1,386	81,829	1,822	
North Coimbatore—							
Special ..	Satyamangalam range ..	5,648	5,648	..	5,648	118	
	Kollegal range	4,676	4,691	..	4,691	382	
	Talamalai range	..	332	..	332	16	
	Total, Special, North Coimbatore.	10,324	10,671	..	10,671	516 +3	(*a*) Sundries.
South Coimbatore—							
Special ..	Tunacadavu range ..	23,520	24,000	..	24,000	544	
	Pollachi range	9,675	9,775	..	9,775	479	
	Udamalpet range ..	485	485	..	485	45	
	Méttupálaiyam range ..	230	230	..	230	182	
	Bolampatti range ..	(*b*) 22,364	23,433	67	23,366	1,025	
	Total, Special, South Coimbatore.	56,274	57,923	67	57,856	2,275	
General ..	Tunacadavu	357,557	38,843	..	38,843	*Nil.*	(*b*) The Sholakarai range has been amalgamated with the Bolampatti range from 1st April 1897.
	Pollachi		72,543	..	72,543		
	Udamalpet		141,544	750	140,794		
	Méttupalaiyam		49,370	..	49,370		
	Bolampatti		58,069	1,440	56,629		
	Total, General, South Coimbatore.	357,557	360,369	2,190	358,179	..	
	Total, Special and General, South Coimbatore.	413,831	418,292	2,257	416,035	2,275	
Madura—							
Special ..	....	176,515	182,122	1,242	180,880	3,562	
General ..	....	33,509	36,632	220	36,412	..	
	Total, Special and General, Madura.	210,024	218,754	1,462	217,292	3,562	
Tinnevelly—							
Special ..	Ambásamudram taluk ..	8,880	9,225	22	9,203	172	
	Nanguneri taluk	3,996	2,918	..	2,918	147	
	Tenkási taluk	3,060	1,856	141	1,715	88	
	Sankaranayinárkóyil taluk	5,000	5,000	4	4,996	117	
	Srívilliputtur taluk ..	3,992	7,706	1	7,705	134	
	Total, Special, Tinnevelly.	24,928	26,705	168	26,537	648	
General ..	Ambasamudram taluk ..	79,856	81,034	2,762	78,272	177	
	Nanguneri taluk	46,987	48,199	200	47,999	145	
	Tenkási taluk	19,069	20,624	1,355	19,269	172	
	Sankaranayinárkóyil taluk	19,459	21,534	250	21,284	171	
	Srívilliputtúr taluk ..	38,663	35,264	600	34,664	27	
	Total, General, Tinnevelly	204,034	206,655	5,167	201,488	692 (*c*)— 14	(*c*) Added or subtracted as per Accountant-General's audited figures.
	Total, Special and General, Tinnevelly.	228,962	233,360	5,335	228,025	1,326	
	Total, Southern Circle—						
	Special	403,580	458,316	2,963	455,353	12,017	
	General	718,649	720,938	8,710	712,228	1,913	
	Grand Total, Southern Circle.	1,122,229	1,179,254	11,673	1,167,581	13,930	
	Total, Presidency—						
	Special	1,006,830	1,285,217	11,502	1,273,715	22,791	
	General	2,347,293	2,146,846	36,376	2,110,470	16,552	
	Grand Total, Presidency.	3,354,123	3,432,063	47,878	3,384,185	39,343	

N.B.—Where Collectors have not reported the figures separately for special areas, they are shown under general Where Collectors have not reported the figures separately for ranges or taluks, they are shown for the whole districts.

FORM No. 52.

Forest Department, Madras Presidency.

AREA closed and open to grazing during 1896–97.

District.	Total forest area as per Form No. 44.	Area in square miles.				
		Closed to all animals.		Closed to goats and sheep.		Open to all animals.
		Whole year.	Part of year.	Whole year.	Part of year.	Whole year.
1	2	3	4	5	6	7
Northern Circle.	SQ. MLS.					
Ganjám	556	123	..	(a) 556	..	..
Vizagapatam	415	1	..	173	..	242
Gódávari	953	12	..	953	..	..
Kistna	1,164	132	..	928	..	236
Kurnool	2,331	..	114	2,329	..	2
Bellary	626	(b) 43	112	445	96	181
Anantapur	514	..	..	(c) 514	..	..
Total, Northern Circle ..	6,559	311	226	5,898	96	661
Central Circle.						
Cuddapah	2,360	1	..	(a) 2,353	..	..
Nellore	683	7	..	663	..	..
Chingleput	213	31	..	205	..	8
North Arcot	1,134	65	..	(a) 1,064	..	70
South Arcot	715	20	..	(a) 715	..	..
Salem	1,439	63	..	(a) 1,434	..	5
Trichinopoly	297	55	..	(a) 242	..	..
Tanjore	18	1	..	18	..	..
Total, Central Circle ..	6,859	243	..	6,694	..	83
Southern Circle.						
South Canara	1,109	22	..	(a) 1,109	..	..
Malabar, North	274	52	..	274	..	..
Do. South	328	328	..	* 328	..	..
The Nilgiris	450	5	..	(a) 450	..	..
Coimbatore, North	1,623	215	..	(a) 1,623(d)	..	..
Do. South	657	(c) 265	..	(a) 657	..	..
Madura	621	22	..	621	..	..
Tinnevelly	427	304	..	(a) 427	..	..
Total, Southern Circle ..	5,489	1,213	..	5,489	..	..
Grand Total, Presidency ..	18,907	1,767	226	18,081	96	744

* No demand for grazing.

(a) Closed to goats only.
(b) Includes forty square miles of leased forests.
(c) Sixty-five square miles open to sheep.
(d) In 17 square miles sheep were also not admitted.
(e) Under consideration.

ANNUAL FORM No. 53.

Forest Department, Madras Presidency.

AREA of Plantations, 1896–97.

District.	Number of plantations.	Area in acres.				Receipts	Charges	Remarks.
		On 1st July 1896.	Added during the year.	Excluded during the year.	Area on 30th June 1897.	Of the year.		
1	2	3	4	5	6	7	8	9
REGULAR PLANTATIONS.		ACS.	ACS.	ACS.	ACS.	RS.	RS.	
Northern Circle.								
Ganjám	1	241	63	..	304	12	9,484	
Vizagapatam	..	..	..	..	..	..	..	
Gódávari	2	476	..	..	476	2,858	1,110	
Kistna	18	1,287	197	..	1,484	1,353	2,346	
Total ..	21	2,004	260	..	2,264	4,223	12,940	
Central Circle.								
Cuddapah	8	2,100	..	(a) 2,100	..	44	470	
Nellore	9	3,053	..	..	3,053	31,781	1,860	
Chingleput	4	352	..	..	352	321	370	
North Arcot	6	1,048	..	..	1,048	1,532	4,414	
South Arcot	13	1,920	(b) 6,698	..	8,618	4,740	(c) 2,694 / (d) —19	
Tanjore	4	703	..	(e) 60 / (b) 104	539	3,571	1,263	
Total ..	44	9,176	6,698	2,264	13,610	41,989	11,052	
Southern Circle.								
South Canara	3	183	..	..	183	1,799	62	
North Malabar	11	401	37	(f) 200	719	..	1,066	
South do.	17	4,439	(b) 481	(b) 158	(b) 37	4,560	20,325	(g) 8,380
The Nilgiris	22	1,610	..	..	1,610	5,484	501	
South Coimbatore ..	4	28	..	..	28	..	(h) + 423	
Madura	8	226	7	21	212	992	441	
Total ..	65	6,887	683	258	7,312	28,600	10,873	
Grand Total, Regular Plantations	130	18,067	7,641	2,522	23,186	74,812	34,865	

(a) Included in reserved forest and so omitted.
(b) By rectification.
(c) Includes Rs. 380 Municipal tax on plantation lands.
(d) Added or deducted as per Accountant-General's audited figures.
(e) Unreserved lands looked after by the Revenue subordinates.
(f) Failures.
(g) Of this, Rs. 2,634 appertain to 80 acres in Karumpoya reserve prepared for teak planting.
(h) Municipal assessment.

ANNUAL FORM No. 53.

Forest Department, Madras Presidency.

AREA of Plantations, 1896–97.

District.	Number of plantations.	Area in acres. On 1st July 1896.	Added during the year	Excluded during the year	Area on 30th June 1897.	Receipts Of the year.	Charges Of the year.	Remarks.
1	2	3	4	5	6	7	8	9
CULTURAL OPERATIONS.						Rs.	Rs.	
Northern Circle.								
Direction	..	..	..	..	..	..	8	(a) Planting up certain bungalow and range house compounds.
Ganjám	..	404	..	..	404	13	176	
Vizagapatam	..	..	..	..	..	..	10	
Gódávari	..	..	..	..	..	..	(a) 22	(b) Failure.
Kistna	..	62	..	..	62	11	1,012	(c) Expenditure on bamboo planting.
Kurnool	..	..	..	..	..	..	(a) 41	(d) Expenditure on exotics.
Bellary	..	358	105	331	132	..	1,407	(e) Rectification.
Anantapur	..	52	139	(b) 40	151	71	(f) + 14 208	(f) Added or deducted as per Accountant-General's audited figures.
Total ..	..	876	244	371	749	95	2,898	
Central Circle.								
Cuddapah	..	601	..	..	601	21	270	(g) Excluded being unreserved lands looked after by the revenue subordinates or abandoned or excluded by rectification.
Nellore	..	1,132	..	..	1,132	..	144	
Chingleput	..	..	..	..	..	..	..	
North Arcot	..	1,562	..	6	1,556	11	2,704	
South Arcot	..	1,490	..	..	1,490	..	(e) 3,057 (d) + 33	
Trichinopoly	..	mls. 100 acs. 94	(e) 10	mls. (e) 10	mls. 90 acs. 104	1,480	(f)+1,187	
Tanjore	..	1,248	..	(g) 492	756	..	..	
Total ..	..	mls. 6,127 mls. 100	10	mls. 498 mls. 10	mls. 5,639 mls. 90	1,512	7,482	
Southern Circle.								
The Nilgiris	..	479	..	..	479	..	940	
South Coimbatore ..	..	175	52	..	227	..	539	
Tinnevelly	..	3,396	8	..	3,404	16	(f) — 3 266	
Total, Southern Circle ..	..	4,050	60	..	4,110	16	1,742	
Total, Cultural operations.	..	mls. 11,053 mls. 100	314	mls. 869 mls. 10	mls. 10,498 mls. 90	1,623	12,122	
Total, Regular plantation, and cultural operations, Northern Circle.	..	2,880	504	371	3,013	4,318	15,838	
Total, Regular plantations and cultural operations, Central Circle.	..	mls. 15,303 mls. 100	6,708	mls. 2,762 mls. 10	mls. 19,249 mls. 90	43,501	18,534	
Total, Regular plantations and cultural operations, Southern Circle.	..	10,937	743	258	11,422	28,616	12,615	
Presidency total, Plantations and cultural operations ..	..	mls. 29,120 mls. 100	7,955	mls. 3,391 mls. 10	mls. 33,684 mls. 90	76,435	46,987	

ANNUAL FORM No. 54.

Forest Department, Madras Presidency.

Annual list of topes.

District.	Number of topes.	Chief trees.	Area.	Cost. During year.	Cost. To end of year.
			Acs.	Rs.	Rs.
Northern Circle.					
	7	Miscellaneous	101	..	922
Ganjám	2	Teak, sal and rellu grass	78	237	1,020
Vizagapatam		....	..	..	..
Gódávari	(a) 11	Casuarina, graft mangoes, tamarind, margosa, nim, palmyras, soapnut, &c.	57	736	3,659
Kistna			206	183 (c)— 4	9,914
	(b) 30	Tamarind, mango and ippa	212	291	2,300
Kurnool	30	Casuarina, tamarind, mango, margosa, figs, &c.	2,885	86	9,313
Bellary	95	Palmyra, babul and tamarind			
Anantapur		Total ..	3,539	1,529	27,128
Total ..	175				
Central Circle.					
Cuddapah	71	Palmyrah, mango, tamarind, margosa, dirasanam, casuarina, babul, tella tumma, orange, coffee, tangedu and other ornamental trees.	1,630	262	61,518
Chingleput	10	Mango, margosa, tamarind, jack, iluppai, casuarina, korakapili, cocoanut and wood-apple.	99	125	9,375
North Arcot	71	Mango, fig, palmyrah, cocoanut, illuppai, woodapple, tamarind, date, banyan, babul, teak, jack, orange, soapnut, casuarina, &c.	1,938	668	45,450
South Arcot	(d) 64	Tamarind, iluppai, palmyra, nagai, vembu, mango, kattuvagai, puvarasu, babul, red-sanders, ceara rubber, sissu, cashew, casuarina, nelli.	(d) 465	..	9,027
	(e)126	Vagai, mango, pungam, nagai, casuarina, seemaivaram, illupai, tamarind, palmyra, thurinji, cocoanut, margosa.	(e)1,598	..	93,036
Salem				73	
	(f)19	Mango, cocanut, bamboo, sissu, tamarind, palmyra and elandai.	(f) 500	70	1,944
Trichinopoly					
Total ..	361	Total ..	6,303	1,125	2,20,350
Southern Circle.					
North Malabar	(g) 10	Eucalyptus, ceara rubber, mahoghany, ficus elastica, dendrocalamus, brandessee and other bamboos, pepper wines, Liberian coffee plants.	(g) 56	396 (e)+ 83	5,063
	1	Mango, *pongamia glabra*, tamarind, *terminalia paniculata*; eugenia jambolana.	20	..	9
South do.	5	Palmyra, sandalwood, *acacia arabica*, *albizzia amara lebbeck melia*, satinwood.	317	(c) 103	(h) 103
Coimbatore, North ..	23	Tamarind, palmyra, cocoanut and pasturage ..	267	40	5,290
Do. South ..	(i) 24	....	91	..	18,893
Madura	9	Mango, tamarind, gooseberry, palmyras, bamboos, banyan, jack, illuppai, teak, vengai, casuarina and nim.	84	114	2,332
Tinnevelly					
Total ..	72	....	835	736	31,690
Grand Total, Presidency.	608	....	10,677	3,390	2,79,168

(a) The Bezwada Head Assistant Collector's office compound was added during the year.
(b) One tope of 4 acres added during the year.
(c) Added or deducted to tally with the audited figures of the Accountant-General.
(d) Five topes were transferred to list of reserves and one expunged from the list having been ordered to be sold in auction. Hence the decrease in the number and area of the topes.
(e) Three topes of 263 acres excluded; one tope of 2 acres added; 5 acres added by rounding off fractions.
(f) The upper anicut padugais of about 500 acres were added during the year.
(g) Eight topes of 36 acres added.
(h) Cost of the previous years not reported.
(i) *Vide* remark in the report for 1895-96.

FORM No. 55.

Forest Department, Madras Presidency.

Outturn (in cubic feet, solid) of Timber and Fuel during the year 1896-97, and Agency of Exploitation.

District.	Timber.					Fuel.					Total.
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Outturn.
1	2	3	4	5	6	7	8	9	10	11	12
Northern Circle.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Ganjám	23,265	109,820	2,940	..	136,025	456	607,603	..	..	608,059	744,084
Vizagapatam	1,723	95,283	2,820	..	99,876	38,001	218,525	..	..	256,526	356,402
Godávari	..	359,252	4,296	..	363,548	..	429,017	..	..	429,017	792,565
Kistna	28,480	180,964	10,260	..	219,704	6,161	322,927	..	..	329,088	548,792
Kurnool	9,792	213,555	13,300	1,311	237,958	215	302,672	..	257,510	560,397	798,355
Bellary	25,384	98,458	2,010	..	125,852	19,440	423,008	..	..	442,448	568,300
Anantapur	..	20,981	2,384	..	23,365	..	122,246	..	..	122,246	145,611
Total ..	88,694	1,078,313	38,010	1,311	1,206,328	64,273	2,425,998	..	257,510	2,747,781	3,954,109
Central Circle.											
Cuddapah	44,571	185,668	1,200	..	231,439	5,260	636,719	..	..	641,979	873,418
Nellore	1,526	209,066	27,750	..	238,342	287,352	174,543	..	..	461,895	700,237
Chingleput	..	99,934	..	..	99,934	2,074	124,420	..	..	126,494	226,428
North Arcot	1,198	22,937	4,514	..	28,639	181,025	351,987	..	..	533,012	561,651
South Arcot	1,503	28,088	830	..	30,421	226,000	374,382	400	..	600,782	631,203
Salem	3,533	223,659	238	..	227,430	681,618	420,547	..	..	1,102,165	1,329,595
Trichinopoly	..	18,785	2,944	..	21,729	151,777	1,227,814	..	..	1,379,591	1,401,320
Tanjore	..	23,143	..	..	23,143	94	549,277	..	..	549,371	572,514
Total ..	52,321	811,280	37,476	..	901,077	1,535,200	3,859,689	400	..	5,395,289	6,296,366
Southern Circle.											
South Canara	23,002	12,435	15	..	35,452	13,728	755,584	..	..	769,312	804,764
North Malabar	58,740	3,350	4,880	..	66,970	..	1,754	6,272	..	8,026	74,996
South Malabar	124,823	57,488	..	..	182,311	1,500	78,234	..	..	79,734	262,045
Nilgiris	31,719	4,788	20	391	36,917	425,056	14,080	..	31	439,167	476,084
North Coimbatore	1,635	..	544	..	2,179	..	..	..	..	..	2,179
South Coimbatore	64,416	18,410	790	..	83,616	245,448	659,367	540	..	905,355	988,971
Madura	1,042	18,768	..	..	19,810	50,592	107,863	..	..	158,455	178,265
Tinnevelly	3,597	25,911	1,216	..	30,724	114,271	1,252,523	..	..	1,366,794	1,397,518
Total ..	308,973	141,150	7,465	391	457,979	850,595	2,869,405	6,812	31	3,726,843	4,184,822
Grand Total ..	449,988	2,030,743	82,951	1,702	2,565,384	2,450,068	9,155,092	7,212	257,541	11,869,913	14,435,297

FORM No. 56.

Forest Department, Madras Presidency.

OUTTURN of Minor Forest Produce during the year 1896-97.

Circle.	Description of produce.	Produce removed or utilized.									
		By Government Agency.		By purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1	2	3	4	5	6	7	8	9	10	11	12
Northern Circle	Bamboos	NO. 7,349	RS. 264	NO. 15,905,473	RS. 69,664	NO. 73,046	RS. 336	NO. 20,489	RS. 128	NO. 16,006,357	RS. 70,392
	Grass and grazing	[illegible]9	236	..	1,23,939	..	129	..	700	..	1,25,004
	Gallnuts, Soapnuts	252	149	MDS. 25,880	1,58,319	..	605	..	38,450	..	1,97,849
	Miscellaneous	529	326	MDS. 71,640 C. L. 279							
	Total ..	..	975	..	3,51,922	..	1,070	..	39,278	..	3,93,245
Central Circle	Bamboos	NO. 23,542	9,290	NO. 12,442,370	91,468	NO. 70,270	426	..	..	NO. 12,536,182	1,01,184
	Grass and grazing	..	..	..	1,78,438	..	74	..	356	..	1,78,868
	Gallnuts, Soapnuts, Nuxvomica ..	MDS. 1,318	855	..	..	..	..	..	..	..	855
	Miscellaneous	427	399	C. L. 42,079	2,19,072	C. L. 296	840	..	..	..	2,20,311
	Total ..	..	10,544	..	4,88,978	..	1,340	..	356	..	5,01,218
Southern Circle	Bamboos	NO. 198,961	4,050	NO. 2,065,094	18,149	NO. 14,645	189	NO. 1,125	3	NO. 2,279,825	22,391
	Grass and grazing	..	..	..	71,117	..	..	..	829	..	71,946
	Catechu	MDS. 1,518	12,072	..	..	..	..	..	..	..	12,072
	Gallnuts, Soapnuts, Nuxvomica ..	21,038	20,872	..	..	..	..	..	..	..	20,872
	Miscellaneous	2,952	12,837	MDS 718 C. L. 43,342 NO. 18,500	1,00,548	MDS. 400	125	..	432	..	1,13,942
	Total ..	..	49,831	..	1,89,814	..	314	..	1,264	..	2,41,223
	Grand Total ..	..	61,350	..	10,30,714	..	2,724	..	40,898	..	11,35,686

FORM No. 57.

Forest Department, Madras Presidency.

ACCOUNT of Timber cut or collected by Government Agency and brought to depôt, sold locally, or otherwise disposed of during the year 1896–97.

Name of district.	Balance at commencement of the year in forests and sale depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forests and sale depôts.
1	2	3	4	5	6
TIMBER (CUBIC FEET).					
Northern Circle.					
Ganjám	2,028	23,265	25,293	17,170	8,123
Vizagapatam	..	1,773	1,773	1,773	..
Gódávari	..	..	..	..	..
Kistna	..	28,480	28,480	19,605	8,875
Kurnool	2,302	9,792	12,094	7,918	4,176
Bellary	20,682	25,384	46,066	21,307	24,759
Anantapur	..	..	..	..	..
Total ..	25,012	88,694	113,706	67,773	45,933
Central Circle.					
Cuddapah	20	44,571	44,591	40,455	4,136
Nellore	42	1,526	1,568	1,568	..
Chingleput	..	..	..	..	..
North Arcot	47	1,188	1,235	212	1,023
South Arcot	576	1,503	2,079	1,006	1,073
Salem	624	3,533	4,157	3,539	618
Trichinopoly	..	..	..	..	..
Tanjore	..	..	..	..	..
Total ..	1,309	52,321	53,630	46,780	6,850
Southern Circle.					
South Canara	12,051	23,002	35,053	10,188	24,865
Malabar (North)	47,647	58,740	106,387	44,056	62,331
Do. (South)	85,322	124,823	210,145	112,081	98,064
Nilgiris	3,709	31,718	35,427	32,440	2,987
Coimbatore (North)	2,925	1,635	4,560	1,595	2,965
Do. (South)	63,748	64,416	128,164	49,798	78,366
Madura	661	1,042	1,703	852	851
Tinnevelly	2,464	3,597	6,061	3,927	2,134
Total ..	218,527	308,973	527,500	254,937	272,563
Grand Total ..	244,848	449,988	694,836	369,490	325,346
FUEL (CUBIC FEET).					
Northern Circle.					
Ganjám	..	456	456	456	..
Vizagapatam	149	38,001	38,150	38,150	..
Gódávari	..	..	..	..	..
Kistna	3,?18	6,161	9,509	..	..
Kurnool	22,916	215	23,131	4,482	5,027
Bellary	202,466	19,440	221,906	11,979	11,152
Anantapur	..	..	..	153,304	68,602
Total ..	228,879	64,273	293,152	208,371	84,781
Central Circle.					
Cuddapah	5,170	5,260	10,430	10,430	..
Nellore	106,599	287,352	393,951	325,521	68,430
Chingleput	..	2,074	2,074	2,074	..
North Arcot	113,950	181,025	294.975	89,292	205,683
South Arcot	14,409	226,000	240,409	221,652	18,757
Salem	4,260	681,618	685,878	681,613	4,265
Trichinopoly	60,322	151,777	212,099	122,754	89,345
Tanjore	..	94	94	94	..
Total ..	304,710	1,535,200	1,839,910	1,453,430	386,480
Southern Circle.					
South Canara	1,910	13,728	15,638	14,873	765
Malabar (North)	..	..	..	..	..
Do. (South)	..	1,500	1,500	1,425	75
Nilgiris	326,784	425,056	751,840	422,679	329,161
Coimbatore (North)	520	..	520	520	..
Do. (South)	43,666	245,448	289,114	278,380	10,734
Madura	4,103	50,592	54,695	51,623	3,072
Tinnevelly	39,280	114,271	153,551	132,799	20,752
Total ..	416,263	850,595	1,266,858	902,299	364,559
Grand Total ..	949,852	2,450,063	3,399,920	2,564,100	835,820

Account of Fuel collected by Government Agency and brought to depôt, sold locally, or otherwise disposed of during the year—*continued.*

Name of district.	Balance at commencement of the year in forests and sale depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forests and sale depôts.
1	2	3	4	5	6
MINOR FOREST PRODUCE (MAUNDS OF 25 LB.).					
Northern Circle.					
Ganjám	..	..	..	..	..
Vizagapatam	66,564	21,109	87,673	21,109	66,564
Gódávari	..	..	..	..	..
Kistna	62	1	63	63	..
Kurnool	99	544	643	588	55
Bellary	45	236	281	199	82
Anantapur	..	..	..	..	..
Total ..	66,770	21,890	88,660	21,959	66,701
Central Circle.					
Cuddapah	..	455	455	..	455
Nellore	6,164	1,005	7,169	1,381	5,788
Chingleput	..	..	..	..	..
North Arcot	..	100	100	100	..
South Arcot	..	..	..	..	..
Salem	7,036	..	7,036	7,036	..
Trichinopoly	..	185	185	185	..
Tanjore	..	..	..	..	..
Total ..	13,200	1,745	14,945	8,702	6,243
Southern Circle.					
South Canara	..	1,673	1,673	1,516	157
Malabar (North)	37	128	165	122	43
Malabar (South)	134	283	417	156	261
Nilgiris	1,112	505	1,617	1,122	495
Coimbatore (North)	184	19,400	19,584	14,254	5,330
Coimbatore (South)	19	3,469	3,488	3,210	278
Madura	..	..	..	..	..
Tinnevelly	..	50	50	50	..
Total ..	1,486	25,508	26,994	20,430	6,564
Grand Total ..	81,456	49,143	130,599	51,091	79,508
BAMBOO (NUMBER).					
Northern Circle.					
Ganjám	..	1,115	1,115	1,085	30
Vizagapatam	..	880	880	880	..
Gódávari	..	..	..	..	..
Kistna	..	..	..	..	..
Kurnool	5,280	3,200	8,480	4,400	4,080
Bellary	853	2,154	3,007	1,616	1,391
Anantapur	..	..	..	..	..
Total ..	6,133	7,349	13,482	7,981	5,501
Central Circle.					
Cuddapah	..	..	..	..	..
Nellore	..	..	..	..	..
Chingleput	..	..	..	..	..
North Arcot	1,293	5,737	7,030	5,183	1,847
South Arcot	..	10,212	10,212	7,868	2,344
Salem	..	7,593	7,593	7,593	..
Trichinopoly	..	..	..	..	..
Tanjore	..	..	..	..	..
Total ..	1,293	23,542	24,835	20,644	4,191
Southern Circle.					
South Canara	..	..	..	..	..
North Malabar	..	15,869	15,869	15,804	65
South Malabar	..	..	..	..	..
Nilgiris	..	105,966	105,966	100,206	5,760
North Coimbatore	11,800	76,900	88,700	84,500	4,200
South Coimbatore	520	6	526	526	..
Madura	..	220	220	220	..
Tinnevelly	..	..	..	..	..
Total ..	12,320	198,961	211,281	201,256	10,025
Grand Total ..	19,746	229,852	249,598	229,881	19,717

ANNUAL FORM No. 58.

Forest Department, Madras Presidency.

ABSTRACT showing the Value of Timber and other Produce at sale depôts, for the year 1896-97.

Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
			RS.			RS.	RS.	RS.
Northern Circle.								
Sal	..	1,544	580	..	7,136	2,676	..	..
Teak	..	371	462	..	1,742	2,174	..	..
Vengai	..	1,050	1,178	..	2,422	2,420	..	..
Miscellaneous	..	22,047	3,225	..	34,633	6,392	..	..
Total, Timber ..	..	25,012	5,445	..	45,933	13,662	8,217	..
Fuel	..	228,879	11,509	..	84,781	4,456	..	7,053
	NO.			NO.				
Bamboos	6,133	..	350	5,501	..	204	..	146
	MDS.			MDS.				
Minor produce	66,770	..	899	66,701	..	577	..	322
Central Circle.								
Teak	..	255		..	117			
Vengai	..	53	493	..	48	1,838	..	..
Red wood	..	..		..	830			
Miscellaneous	..	401		..	5,220			
Sandalwood	..	600	6,010	..	635	6,330	..	..
Total, Timber ..	..	1,309	6,503	..	6,850	8,168	1,665	..
Fuel	..	304,710	26,147	..	386,480	18,623	..	7,524
	NO.			NO.				
Bamboos	1,293	..	152	4,191	..	317	165	..
	MDS.			MDS.				
Minor produce	13,200	..	3,472	6,243	..	3,641	169	..
Southern Circle.								
Teak	..	60,711		..	93,061			
Rosewood	..	4,006		..	4,049			
Vengai	..	9,312	1,29,145	..	9,416	1,49,916	..	..
Iron wood	..	231		..	648			
Miscellaneous	..	143,665		..	164,069			
Sandalwood	..	602	6,513	..	1,320	13,946	..	..
Total, Timber ..	..	218,527	1,35,658	..	272,563	1,63,862	28,204	..
Fuel	..	416,263	7,786	..	364,559	5,269	..	2,517
	NO.			NO.				
Bamboos	12,320	..	106	10,025	..	65	..	41
	MDS.			MDS.				
Minor produce	1,486	..	2,938	6,564	..	8,740	5,802	..
Grand Total.								
Timber	..	244,848	1,47,606	..	325,346	1,55,692	38,086	..
Fuel	..	949,852	45,442	..	835,820	28,348	..	17,094
	NO.			NO.				
Bamboos	19,746	..	608	19,717	..	586	..	22
	MDS.			MDS.				
Minor produce	81,456	..	7,309	79,508	..	12,958	5,649	..
	..	..	..	..	..	..	..	..

ANNUAL FORM No. 72-A.

Forest Department, Madras Presidency.

TIMBER and other produce cut, collected and removed by consumers or purchasers during 1896-97.

District.	Timber.	Firewood and charcoal.	Bamboos.	Timber.		Bamboos.		Firewood and charcoal.		Grazing and fodder grass.		Minor produce.		Total.	
				Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.
	C. FEET.	C. FEET.	NO.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Northern Circle.															
Ganjam	109,820	607,603	1,298,560	10,248	10,275	4,650	4,631	7,955	7,955	6,295	6,295	4,650	4,650	32,679	32,706
Vizagapatam ..	95,283	218,525	1,789,040	6,608	6,375	4,631	4,631	6,158	6,158	2,762	2,762	6,609	6,609	26,207	28,858
Godávari	359,252	429,017	8,567,482	44,431	44,431	8,928	8,951	13,944	13,944	4,147	4,147	3,180	3,180	1,03,406	1,03,247
Kistna	180,964	322,927	132,555	16,560	16,560	37,573	37,673	7,652	7,643	70,389	70,389	3,311	3,311	1,08,863	1,08,890
Kurnool	213,555	302,672	4,016,750	20,676	20,676	463	463	8,812	8,812	10,389	10,389	13,845	13,809	83,590	66,440
Bellary	98,458	423,008	93,206	7,278	7,278	16,299	16,296	8,236	7,636	7,045	7,045	29,270	30,768	92,963	1,17,575
Anantapur	20,981	122,246	7,880	3,010	3,010	1,716	1,716	3,753	3,753	27,863	27,863	47,870	47,870	68,585	61,896
Total ..	1,078,313	2,425,998	15,905,473	1,08,811	1,07,603	69,664	69,683	64,904	64,904	1,23,939	1,23,939	1,58,319	1,79,167	5,16,243	5,38,612
Central Circle.															
Cuddapah	185,668	636,719	1,837,323	14,212	14,212	6,648	6,648	13,634	16,027	33,868	33,877	65,534	62,782	1,33,896	1,23,546
Nellore	209,066	174,543	1,917	16,708	16,624	148	148	6,681	6,681	25,719	25,719	43,769	43,769	67,704	92,941
Chingleput	99,934	124,420	26,700	9,657	9,657	169	169	8,788	8,788	7,458	7,458	10,663	10,663	37,834	36,635
North Arcot	22,937	351,987	2,236,276	6,091	5,019	28,835	36,544	35,043	27,399	21,647	21,647	43,213	43,213	1,17,937	1,41,466
South do.	28,088	374,382	60,600	8,533	8,533	2,811	2,811	27,399	16,602	30,541	30,541	24,145	24,145	76,195	88,429
Salem	223,659	420,647	7,757,485	38,000	38,000	44,285	44,285	16,602	24,914	60,943	60,943	67,805	46,920	2,16,085	1,96,650
Trichinopoly ..	18,785	1,227,814	629,050	1,276	1,276	7,697	7,697	20,598	11,985	7,707	7,730	4,551	4,388	41,829	45,568
Tanjore	23,143	649,277	4,019	1,479	1,479	876	876	11,985	11,985	655	655	4,388	4,396	19,282	19,290
Total ..	811,280	3,859,689	12,442,370	89,956	89,800	91,468	95,071	1,47,339	1,30,828	1,78,438	1,78,470	2,19,072	2,33,845	7,09,762	7,44,625
Southern Circle.															
South Canara ..	12,435	755,584	39,072	2,886	2,886	1,221	1,221	11,806	11,806	4,857	4,857	17,635	16,635	38,405	37,405
North Malabar ..	3,350	1,764	14,856	739	739	221	221	17	17	1,912	1,912	1,679	1,261	4,668	4,140
South do. ..	67,488	78,234	126,175	9,589	9,589	1,727	1,727	1,605	1,605	150	150	784	1,325	13,855	14,396
Nilgiris	4,788	14,080	236,753	1,333	1,333	2,802	2,802	925	925	8,131	8,131	1,425	1,425	14,616	14,616
North Coimbatore	12,889	268,334	898,000	1,165	1,165	5,581	5,581	20,972	19,059	35,914	35,914	7,631	7,631	71,263	69,379
South do. ..	18,410	659,867	261,000	9,632	9,632	4,049	4,049	10,216	10,216	6,975	6,975	2,887	4,245	32,759	34,117
Madura	18,708	107,863	27,222	13,292	13,292	2,082	2,082	5,629	4,681	5,835	5,835	39,297	43,393	66,135	69,183
Tinnevelly ..	25,911	1,252,523	462,016	8,405	7,656	466	414	39,335	34,739	8,343	7,855	29,210	24,631	85,759	75,295
Total ..	154,039	3,137,739	2,065,094	47,041	46,292	18,149	18,097	90,505	82,977	71,117	70,629	1,00,548	1,00,536	3,27,360	3,18,531
Grand total ..	2,043,632	9,423,426	30,412,937	2,45,808	2,43,695	1,79,281	1,82,851	2,76,843	2,85,220	3,73,494	3,76,354	4,77,939	5,13,548	15,53,865	16,01,668

MONEY VALUE OF SALES.

Add outstandings from previous year as per audited figures	2,27,389	
Total ..	17,80,764	
Deduct written off, &c.	8,181	
Balance ..	17,72,573	
Deduct amount realized as per Form No. 59	16,01,668	
Balance outstanding on 30th June 1897	1,70,905	

ANNUAL FORM No. 72-B (OLD CODE).

Forest Department, Madras Presidency.

TIMBER and other Produce confiscated and sold during the year 1896-97.

District.	TIMBER.		FIREWOOD.		BAMBOOS.		Minor produce in value.	Total amount of sales.	Amount actually realized.
	Quantity in cubic feet.	Amount of sales.	Quantity in cubic feet.	Amount of sales.	Number.	Amount of sales.			
		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.
Northern Circle.									
Ganjám ..	1,367	171	336	12	1,370	7	1	191	191
Vizagapatam ..	223	22	378	22	880	7	556	607	607
Gódávari ..	43,863	3,801	13,366	218	3,941	37	1	4,057	4,057
Kistna ..	1,150	210	400	10	6	1	4	225	225
Kurnool ..	2,931	1,498	862	65	11,764	133	83	1,781	1,705
Bellary ..	383	39	360	39	..	..	3	39	39
Anantapur ..			639	14	..	..		66	66
Total ..	49,917	5,741	16,241	380	17,960	187	648	6,956	6,880
Central Circle.									
Cuddapah ..	4,455	675	200	9	1,410	10	3	697	697
Nellore ..	649	63	2,950	248	..	..	4	252	252
Chingleput ..	304	84	1,094	140	610	2	6	211	211
North Arcot ..	403	60	531	53	134	3	6	98	98
South do. ..	987	140	2,282	143	80	8	28	224	224
Salem ..	202	12	933	55	1,755	43	25	263	263
Trichinopoly ..	24	2	227	10	111	3	12	47	47
Tanjore ..			22	1	..	..	1	4	4
Total ..	7,024	976	8,239	659	4,100	64	97	1,796	1,796
Southern Circle.									
South Canara ..	3,753	1,412	2,848	178	25	1	9	16,600	1,600
North Malabar ..	107	50	..	..	..	..	..	50	50
South do. ..	17	3	40	1	..	..	..	4	4
Nilgiris ..	..	..	33	1	286	3	6	9	9
North Coimbatore ..	464	218	563	14	1,823	31	4	267	267
South do. ..	2,130	221	5,167	25	40	1	209	456	456
Madura	293	165	515	61	6	..	23	249	249
Tinnevelly	293	203	10,299	333	80	2	25	563	563
Total ..	7,062	2,272	19,465	613	2,260	38	275	3,198	3,198
Grand Total ..	64,003	8,989	43,945	1,652	24,320	289	1,020	11,950	11,874

Add outstandings due from previous year	5	
Deduct amount realized during the year as per Form No. 59 .. .. Total ..	11,955	11,874
Balance outstanding on 30th June 1897 ..	81	

ANNUAL FORM No. 59.

SUMMARY of Revenue of the different districts, 1896-97 (Forest year).

Budget heads.	Northern Circle.									Central Circle.				
	Direction.	Ganjám.	Vizagapatam.	Gódávari.	Kistna.	Kurnool.	Bellary.	Anantapur.	Total.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Receipts.	Rs.	Rs.	Rs.	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	..	5,449	95	..	1,170	7,253	4,101	..	18,068	..	400	8,130	..	308
(b) Firewood and charcoal	..	9	1,353	..	208	746	4,343	..	6,659	..	35,312	574	237	6,046
(c) Bamboos	..	..	..	..	..	44	101	..	145	..	..	..	..	3,092
(d) Sandalwood	..	..	..	..	..	..	..	..	..	..	..	..	..	1,742
(e) Grass and other minor produce	..	..	234	..	1	120	141	..	496	..	731	21	1	75
II. Timber and other produce removed from the forests by consumers or purchasers—														
(a) Timber	..	10,275	5,375	44,431	16,560	20,674	7,278	3,010	1,07,603	..	16,624	14,212	9,657	5,019
(b) Firewood and charcoal	..	7,955	5,161	13,944	7,643	8,812	7,636	3,753	54,904	..	6,681	16,027	8,788	35,043
(c) Bamboos	..	4,531	8,951	37,573	453	16,295	1,716	164	69,683	..	148	6,648	169	36,544
(d) Grazing and fodder grass	..	5,295	2,762	4,119	70,389	10,389	27,863	6,438	1,27,255	..	25,719	33,877	7,458	21,647
(e) Other produce	..	4,650	6,609	3,180	13,845	29,270	73,082	48,531	1,79,167	..	43,769	52,782	10,563	43,213
III. Confiscated drift and waifwood	..	191	607	4,057	225	1,705	39	56	6,880	..	252	697	211	98
IV. Revenue from forests not managed by Government ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V. Miscellaneous—														
(a) Fines and forfeitures	..	27	..	33	2	77	129	2,318	2,586	..	300	817	14	436
(b) Refunds	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(c) Other sources	..	478	1,604	5,031	4,071	3,138	8,273	1,381	23,576	52	1,202	1,421	1,641	3,979
Total, Receipts ..	..	38,860	32,751	1,12,368	1,14,567	98,523	1,34,702	65,651	5,97,422	52	1,31,138	1,35,206	38,739	1,57,243

Budget heads.	Central Circle—*cont.*					Southern Circle.								
	South Arcot.	Salem.	Trichinopoly.	Tanjore.	Total.	Direction.	Nilgiris.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Receipts.	Rs.	Rs.	Rs.	Rs.	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	804	1,482	..	..	11,124	..	10,895	1,098	37,405	449	4,523	18,593	68,249	6,081	1,47,693
(b) Firewood and charcoal	16,130	76,593	9,995	823	1,45,710	..	20,803	40	5,925	3,971	2,843	..	96	2,032	35,710
(c) Bamboos	2,507	776	..	..	6,376	..	..	2,301	652	..	11	..	601	..	3,565
(d) Sandalwood	24	11,270	..	..	13,036	..	2	2,682	..	..	..	..	..	..	2,684
(e) Grass and other minor produce	..	..	178	..	1,006	..	739	14,300	5,161	195	22	78	346	12,494	33,335
II. Timber and other produce removed from the forests by consumers or purchasers—															
(a) Timber	3,533	38,000	1,276	1,479	89,800	..	1,333	1,165	9,632	13,292	7,656	739	9,589	2,886	46,292
(b) Firewood and charcoal	27,399	16,502	24,914	11,985	1,47,339	..	925	19,088	10,216	4,581	34,739	17	1,605	11,806	82,977
(c) Bamboos	2,811	44,285	3,591	875	95,071	..	2,802	5,581	4,049	2,082	414	221	1,727	1,221	18,097
(d) Grazing and fodder grass	30,541	50,943	7,730	555	1,78,470	..	8,131	35,914	5,975	5,835	7,855	1,912	150	4,857	70,629
(e) Other produce	24,115	46,920	8,057	4,396	2,33,845	..	1,425	7,631	4,245	43,393	24,631	1,251	1,325	16,635	1,00,536
III. Confiscated drift and waifwood	224	263	47	4	1,796	..	9	267	456	249	563	50	4	1,600	3,198
IV. Revenue from forests not managed by Government ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V. Miscellaneous—															
(a) Fines and forfeitures	222	450	523	..	2,762	..	..	31	1,106	758	277	1	..	177	2,350
(b) Refunds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(c) Other sources	6,986	6,307	515	109	22,212	12	3,899	3,027	62,454	962	3,736	5,866	10,568	5,358	95,882
Total, Receipts ..	1,15,326	2,93,791	56,826	20,226	9,48,547	12	50,963	93,125	1,47,276	75,767	87,670	28,728	94,260	65,147	6,42,948

MADRAS,
13th August 1897.

(Signed) W. H. MIC[illegible]
Deputy A[illegible]

ANNUAL FORM No. 59.

Forest Department, Madras Presidency, Northern Circle.

SUMMARY of Expenditure of the different districts for the forest year 1896–97.

Budget heads.	Direction.	Ganjám.	Vizagapatam.	Gódávari.	Kistna.	Kurnool.	Bellary.	Anantapur.	Total.
A.—Conservancy and Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—									
(*a*) Timber	..	3,875	24	21	1,194	4,747	2,163	..	12,024
(*b*) Firewood and charcoal	..	..	1,623	..	494	498	3,174	..	5,789
(*c*) Bamboos	..	..	..	..	..	36	92	..	128
(*d*) Sandalwood ..	..	..	..	..	..	..	..	..	..
(*e*) Grass and other minor produce ..	..	..	53	..	3	21	92	..	169
II. Timber and other produce removed from the forests by consumers or purchasers	3	6,484	4,903	10,972	6,522	14,307	4,334	1,644	49,169
III. Confiscated drift and waifwood	..	742	14	749	..	120	16	20	1,661
IV. Revenue from forests not managed by Government—									
V. Rent of leased forests and payments to share-holders in forests managed by Government	..	..	..	..	..	..	10,000	..	10,000
VI. Live-stock, stores, tools and plant—									
(*a*) Purchase of cattle ..	..	..	..	..	..	..	..	..	..
(*b*) Feed and keep of cattle	1,086	520	..	717	..	658	..	..	2,981
(*c*) Stores, tools and plant	301	33	62	1,509 — 20	1,304	1,400	253	105	4,967 — 20
VII. Communications and buildings—									
(*a*) Roads and bridges..	..	1,237	882	2,562	5,303	2,171	583	..	12,738
(*b*) Buildings	5	1,407	1,547	3,596	2,797	5,476	154	1,817	16,799
(*c*) Other works ..	..	71	70	..	2,132	450	..	6	2,729
VIII. Demarcation, improvement and extension of forests—									
(*a*) Demarcation ..	..	1,358	1,001	1,115	5,577	3,114	1,683	576	14,424
(*b*) Cost of forest settlement; compensation for land and rights	..	11	656	370	386	1,677	— 4	380	3,476
(*c*) Surveys—									
1. Local surveys ..	..	1,130	1,171	631	1,351	1,783	1,244	621	7,931
2. Survey of India .	..	..	..	..	..	12,318	..	..	12,318
(*d*) Working plans ..	..	..	..	..	721	..	68	..	789
(*e*) Sowing and planting.	8	9,660	247	1,132	4,094	220	1,712	294	17,367
(*f*) Protection from fire.	..	1,322	440	2,026	1,892	3,161	1,929	672	11,442
(*g*) Other works ..	1	73	..	..	11,379	..	2,491	2,323	16,267
IX. Miscellaneous—									
(*a*) Refunds	..	29,193	554	247	260	11	545	2,280	33,090
(*b*) Law charges ..	..	180	143	3	7	15	..	10	358
(*c*) Other charges ..	3	3	3,042	168	1,358	92	154	609	5,429
Total, A.—Conservancy and Works.	1,407	57,299	16,432	25,818 — 20	46,774	52,275	30,683	11,357	2,42,025

MADRAS,
14th August 1897.

(Signed) J. C. MITRA,
for Deputy Accountant-General.

ANNUAL FORM No. 59.

Forest Department, Madras, Central Circle.

SUMMARY of Expenditure of the different districts for the forest year 1896–97.

Budget heads.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	Total.
A.—Conservancy and Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber ..	..	73	8,294	..	145	560	1,420	..	..	10,492
(*b*) Firewood and charcoal ..	..	16,334	1,443	74	4,727	6,196	50,540	2,730	39	82,083
(*c*) Bamboos ..	..	..	..	..	1,091	526	505	..	..	2,122
(*d*) Sandalwood ..	..	..	..	..	158	1	729	..	..	888
(*e*) Grass and other minor produce ..	..	1,397	70	..	..	..	..	20	..	1,487
II. Timber and other produce removed from the forests by consumers or purchasers ..	3	716	10,190	2,093	281	2,697	12,058	2,104	523	30,665
III. Confiscated, drift and waifwood	..	1	225	1	..	3	53	..	..	283
IV. Revenue from forests not managed by Government—										
V. Rent of leased forests and payments to shareholders in forests managed by Government	..	..	..	..	..	..	10	..	..	10
VI. Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle ..	..	..	56	..	..	..	..	..	..	56
(*b*) Feed and keep of cattle ..	..	..	..	..	..	..	..	..	..	..
(*c*) Stores, tools and plant ..	1,929	..	75	96	136	8	349	40	..	2,633
VII. Communications and buildings—										
(*a*) Roads and bridges ..	..	..	2,161	29	2,830	552	1,611	215	..	7,398
(*b*) Buildings ..	..	2,024	1,460	1,091	2,297	919	2,201	49	351	10,392
(*c*) Other works ..	..	..	5	..	35	81	16	..	..	137
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	590	2,145	2,324	2,099	4,014	927	540	..	12,639
(*b*) Cost of forest settlement; compensation for land and rights ..	..	17	..	..	153	8	101	..	..	279
(*c*) Surveys—										
(1) Local Survey	238	360	722	355	242	249	1,030	420	..	3,616
(2) Survey of India ..	..	..	..	..	15,320	..	30,000	25,000	..	70,320
(*d*) Working plans.	..	..	..	63	..	..	..	115	..	178
(*e*) Sowing and planting ..	..	2 004	1,002	495	7,786	5,765	..	1,344	1,263	19,659
(*f*) Protection from fire	..	642	5,720	452	4,687	618	1,730	122	..	13,971
(*g*) Other works ..	..	1,208	2,543	3,045	7,352	4,939	7,692	3,934	1,381	32,094
IX. Miscellaneous—										
(*a*) Refunds	..	627	1,748	385	158	85	1,147	183	87	4,420
(*b*) Law charges ..	..	14	..	..	125	4	87	..	..	230
(*c*) Other charges ..	23	17	159	7	22	212	36	40	2	518
Total A.—Conservancy and Works ..	2,193	26,024	38,081	10,447	49,644	27,437	1,12,242	36,856	3,646	3,06,570

MADRAS,
16th August 1897.

(Signed) J. C. MITRA,
for Deputy Accountant-General.

ANNUAL FORM No. 59.

Forest Department, Madras, Southern Circle.

SUMMARY of Expenditure of the different districts for the forest year 1896–97.

Budget heads.	Direction.	Nilgiris.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
A.—Conservancy and Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber ..	..	3,055	391	17,650	107	2,357	3,203	12,817	5,191	44,771
(*b*) Firewood and charcoal ..	..	16,615	116	1,919	2,585	859	69	1	352	22,516
(*c*) Bamboos ..	..	..	1,879	211	209	6	..	21	..	2,326
(*d*) Sandalwood ..	..	636	1,121	..	..	..	..	..	..	1,757
(*e*) Grass and other minor produce.	..	210	5,658	3,728	..	..	279	221	3,892	13,988
II. Timber and other produce removed from the forests by consumers or purchasers ..	3	1,395	2,195	2,725	2,021	2,665	389	19	6,605	19,017
III. Confiscated, drift and waifwood	..	..	77	66	305	..	..	..	99	547
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government	..	4,500	..	2,500	..	..	..	434	..	7,434
VI. Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle ..	..	..	..	429	..	..	3,830	1,127	..	5,386
(*b*) Feed and keep of cattle ..	..	3,391	..	4,677	..	..	7,562	9,301	458	25,389
(*c*) Stores, tools and plant ..	873	453	347	323	91	755	216	471	707	4,236
VII. Communications and buildings—										
(*a*) Roads and bridges ..	..	1,348	12,285	4,535	761	6,039	1,585	546	83	27,139
(*b*) Buildings ..	..	2,210	3,672	3,835	1,339	4,108	775	4,893	319	21,151
(*c*) Other works ..	..	88	29	662	74	..	407	85	12	1,357
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	2,547	4,142	639	3	335	951	203	1,241	10,061
(*b*) Cost of forest settlement; compensation for land and rights ..	..	100	629	..	9	3	..	4,822	..	5,563
(*c*) Surveys—										
(1) Local surveys.	246	420	508	362	843	896	509	328	3,887	7,999
(2) Survey of India ..	..	..	..	..	..	..	..	..	..	..
(*d*) Working plans.	..	..	..	51	..	626	..	..	..	677
(*e*) Sowing and planting ..	..	1,864	103	576	441	380	1,545	8,380	62	13,351
(*f*) Protection from fire	..	1,822	519	2,275	3,562	1,326	1,091	2,246	1,089	13,930
(*g*) Other works ..	..	619	5,861	1,502	4,208	4,897	1,043	2,229	2,167	22,526
IX. Miscellaneous—										
(*a*) Refunds ..	..	33	533	482	267	1,002	539	..	287	2,963
(*b*) Law charges ..	..	..	..	7	1	..	..	149	5	162
(*c*) Other charges ..	..	3,009	347	234	1,313	15	64	81	303	5,366
Total A.—Conservancy and works ..	1,122	44,315	40,412	50,388	18,139	26,269	23,877	48,374	26,709	2,79,605

MADRAS,
17th August 1897.

(Signed) W. H. MICHAEL,
Deputy Accountant-General.

ANNUAL FORM No. 59.

SUMMARY of Expenditure of the different districts for the forest year 1896–97.

Budget heads.	Northern Circle.							Central Circle.							Southern Circle.							
	Direction.	Ganjam.	Vizagapatam.	Godavari.	Kistna.	Kurnool.	Bellary.	Anantapur.	Total.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	Direction.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	20	21	22	23	24	25	26	27	28	29	30
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
B.—"Establishments."																						
Brought forward, Total A. "Conservancy and Works" ..	1,407	57,299	16,432	25,798	46,774	52,275	30,683	11,857	2,42,025	2,193	26,024	38,081	10,447	49,644	27,437	1,12,242	86,856	3,646	3,06,670	1,122	44,315	40,412
I. Salaries—																						
(*a*) Conservators	16,200	..	..	..	..	..	..	..	16,200	19,200	..	..	..	..	13,200	..	..	..	19,200	13,200	..	..
(*b*) Superior officers	8,992	8,987	6,795	9,967	12,585	13,742	4,800	..	76,983	14,537	7,425	18,552	10,935	12,102	10,700	17,271	8,932	1,279	99,102	10,700	774	6,888
(*c*) Subordinate forest and depôt establishments	371	4,681	3,618	7,290	8,293	6,582	5,765	5,003	41,603	32	6,903	11,313	2,972	10,343	7,943	11,004	4,905	808	69,231	7,943	3,129	3,905
(*d*) Office establishments	9,874	2,014	1,088	3,316	3,587	3,623	2,417	1,972	28,491	12,060	2,773	4,030	1,749	3,566	2,730	3,607	1,993	..	33,316	8,441	1,673	1,048
(*e*) Exchange compensation allowances	2,866	1,068	810	821	1,343	1,219	498	85	8,690	2,298	250	1,890	1,269	960	1,121	783	1,033	..	9,694	2,764	..	..
II. Travelling allowances—																						
(*a*) Conservators	2,646	..	..	..	..	..	..	..	2,646	2,462	..	..	..	..	..	..	..	..	2,462	2,931	..	..
(*b*) Superior officers	2,787	1,990	940	3,043	2,427	3,111	..	1,100	16,149	6,402	1,446	3,376	..	1,711	684	4,144	793	231	19,429	3,624	1,872	1,939
(*c*) Subordinate forest and depôt establishments	116	1,565	1,123	2,222	1,892	1,705	1,739	1,201	11,563	6	1,515	2,221	841	2,736	2,547	8,533	1,887	317	15,603	315	1,072	1,072
(*d*) Office establishments	1,845	346	219	816	1,316	814	246	485	6,086	2,874	338	793	177	403	213	554	323	62	6,727	1,278	631	899
III. Contingencies—																						
(*a*) Stationery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(*b*) Carriage of tents and records	587	116	244	620	1,265	443	356	109	3,640	1,020	183	201	111	217	121	527	108	36	2,634	442	27	477
(*c*) Rents, rates and taxes	563	39	244	113	6	82	93	99	1,238	6	1,446	308	9	47	624	30	64	..	1,072	20	261	95
(*e*) Official postage and service telegrams	547	405	397	1,124	1,587	626	552	477	5,715	702	828	966	390	1,146	846	1,847	401	202	6,826	631	394	746
(*f*) Sundries	782	146	835	2,176	642	208	863	199	6,251	668	332	311	269	277	855	1,079	268	67	4,126	899	1,073	761
Total B.—"Establishments" ..	48,166	21,347	16,913	31,408	35,141	32,155	17,580	20,545	2,23,255	62,251	21,493	43,961	19,364	33,497	29,568	44,389	20,697	2,992	2,78,212	46,019	33,175	29,328
Grand Total of Expenditure ..	49,573	78,646	33,345	57,206	81,915	84,430	48,253	31,902	4,65,280	64,444	47,517	82,042	29,811	83,141	57,005	1,56,631	57,553	6,638	5,84,882	47,141	77,490	69,740

MADRAS,
17th August 1897.

(Signed) W. H. MICHAEL,
Deputy Accountant-General.

SUMMARY of receipts and expenditure during 1896–97 for each circle and for the Presidency prepared in the Board's office from the Accountant-General's statement.

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Grand Total, Presidency.	
				1896–97.	1895–96.
1	2	3	4	5	6
RECEIPTS.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—					
(a) Timber	18,068	11,124	1,47,693	1,76,885	1,62,337
(b) Firewood and charcoal	6,659	1,45,710	35,710	1,88,079	1,62,292
(c) Bamboos	145	6,376	3,565	10,086	3,025
(d) Sandalwood	..	13,036	2,684	15,720	21,418
(e) Grass and other minor produce	496	1,006	33,335	34,837	18,946
Total, I	25,368	1,77,252	2,22,987	4,25,607	3,68,018
II. Timber and other produce removed from the forests by consumers or purchasers—					
(a) Timber	1,07,603	89,800	46,292	2,43,695	2,40,067
(b) Firewood and charcoal	54,904	1,47,339	82,977	2,85,220	3,15,817
(c) Bamboos	69,683	95,071	18,097	1,82,851	1,99,376
(d) Grazing and fodder grass	1,27,255	1,78,470	70,629	3,76,354	3,40,496
(e) Other produce	1,79,167	2,33,845	1,00,536	5,13,548	6,18,107
Total, II	5,38,612	7,44,525	3,18,531	16,01,668	17,13,863
III. Confiscated drift and waifwood	6,880	1,796	3,198	11,874	10,073
V. Miscellaneous—					
(a) Fines and forfeitures	2,586	2,762	2,350	7,698	2,184
(b) Refunds	..	..	..	..	..
(c) Other sources	23,976	22,212	95,882	1,42,070	73,492
Total, V	26,562	24,974	98,232	1,49,768	75,676
Grand Total, Receipts	5,97,422	9,48,547	6,42,948	21,88,917	21,67,630
EXPENDITURE.					
A.—Conservancy and Works.					
I. Timber and other produce removed from the forests by Government Agency—					
(a) Timber	12,024	10,492	44,771	67,287	74,206
(b) Firewood and charcoal	5,789	82,083	22,516	1,10,388	1,02,065
(c) Bamboos	128	2,122	2,326	4,576	1,389
(d) Sandalwood	..	888	1,757	2,645	2,855
(e) Grass and other minor produce	169	1,467	13,988	15,644	8,217
Total, A-I	18,110	97,072	85,358	2,00,540	1,88,732
II. Timber and other produce removed from the forests by consumers or purchasers	49,169	30,665	19,017	98,851	89,941
III. Confiscated drift and waif wood	1,661	283	547	2,491	2,570
V. Rent of leased forests and payments to shareholders in forests managed by Government	10,000	10	7,434	17,444	21,088
VI. Live stock, stores, tools and plant—					
(a) Purchase of cattle	..	56	5,386	5,442	3,067
(b) Feed and keep of cattle	2,981	..	25,389	28,370	23,872
(c) Stores, tools and plant	4,947	2,633	4,236	11,816	5,920
Total, A-VI	7,928	2,689	35,011	45,628	32,859
VII. Communications and buildings—					
(a) Roads and bridges	12,738	7,398	27,132	47,268	28,313
(b) Buildings	16,799	10,392	21,151	48,342	41,108
(c) Other works	2,729	137	1,357	4,223	2,662
Total, A-VII	32,266	17,927	49,640	99,833	72,083
VIII. Demarcation improvement and extension of forests—					
(a) Demarcation	14,424	12,639	10,061	37,124	38,143
(b) Cost of forest settlement, compensation for land and rights	3,476	279	5,563	9,318	7,781
(c) Surveys (1) Local surveys	7,931	3,616	7,999	19,546	19,048
(c) Surveys (2) Survey of India	12,318	70,320	..	82,638	54,837
(d) Working plans	789	178	677	1,644	891
(e) Sowing and planting	17,367	19,659	13,351	50,377	46,602
(f) Protection from fire	11,442	13,971	13,930	39,343	42,243
(g) Other works	16,267	32,094	22,526	70,887	66,745
Total, A-VIII	84,014	1,52,756	74,107	3,10,877	2,76,290

Summary of receipts and expenditure during 1896–97 for each circle and for the Presidency prepared in the Board's office from the Accountant-General's statement—*cont.*

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Grand Total, Presidency.	
				1896–97.	1895–96.
1	2	3	4	5	6
EXPENDITURE—*cont.*					
A.—Conservancy and Works—cont.	Rs.	Rs.	Rs.	Rs.	Rs.
IX. Miscellaneous—					
(a) Refunds	33,090	4,420	2,963	40,473	19,805
(b) Law charges	358	230	162	750	1,946
(c) Other charges	5,429	518	5,366	11,313	7,511
Total, A-IX	38,877	5,168	8,491	52,536	29,262
Total, A.—Conservancy and Works	2,42,025	3,06,570	2,79,605	8,28,200	7,12,825
B.—Establishments.					
I. Salaries—					
(a) Conservators	16,200	19,200	13,200	48,600	48,624
(b) Superior officers	75,983	99,102	89,423	2,64,508	2,61,362
(c) Subordinate forest and depôt establishments.	41,603	59,231	56,076	1,56,910	1,56,986
(d) Office establishments	28,491	33,316	33,609	95,416	91,217
(e) Exchange compensation allowances	6,690	9,594	11,350	29,634	37,885
Total, B-I	1,70,967	2,20,443	2,03,658	5,95,068	5,96,074
II. Travelling allowances—					
(a) Conservators	2,646	2,452	2,931	8,029	9,699
(b) Superior officers	16,149	19,429	14,944	50,522	49,873
(c) Subordinate forest and depôt establishments.	11,563	15,603	17,070	44,236	44,711
(d) Office establishments	6,086	5,727	4,943	16,756	15,223
Total, B-II	36,444	43,211	39,888	1,19,543	1,19,506
III. Contingencies—					
(a) Stationery	..	..	..	..	..
(b) Carriage of tents and records	3,640	2,534	3,220	9,394	7,715
(c) Rents, rates and taxes	1,238	1,072	725	3,035	2,843
(d) Official postage and service telegrams	5,715	6,826	5,138	17,679	16,409
(f) Sundries	5,251	4,126	5,581	14,958	13,616
Total, B-III	15,844	14,558	14,664	45,066	40,583
Total, B.—Establishments	2,23,255	2,78,212	2,58,210	7,59,677	7,56,163
Grand Total of Expenditure	4,65,280	5,84,782	5,37,815	15,87,877	14,68,988
Surplus	1,32,142	3,63,765	1,05,133	6,01,040	6,98,642
Deficit	..	..	..	..	..
Total	5,97,422	9,48,547	6,42,948	21,88,917	21,67,630

ANNUAL FORM No. 60.

Forest Department, Madras, Northern Circle.

OUTSTANDINGS and Liabilities on account of contractors and disbursers for the forest year 1896–97.

District.	Department Debtor.			Department Creditor.			Balance due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Conservator, Northern Circle	..	5,632 10 10	5,632 10 10	3 5 4	5,662 10 9	5,666 0 1	33 5 3	..
Forest Settlement-officer, Ganjám, &c.	..	831 15 8	831 15 8	24 6 1	849 3 9	873 9 10	41 10 2	..
Do. Nellore, &c.	..	625 9 11	625 9 11	21 8 10	630 1 10	651 10 8	26 0 9	..
Forest School, Dehra Dun	..	..	..	78 10 8	..	78 10 8	78 10 8	..
Ganjám	..	37,216 7 6	37,216 7 6	1,376 12 2	36,446 11 2	37,823 7 4	606 15 10	..
Vizagapatam	..	19,402 13 9	19,402 13 9	3,761 8 11	16,027 4 10	19,788 13 9	386 0 0	..
Gódávari	..	49,574 13 7	49,574 13 7	882 2 5	51,477 0 3	52,359 2 8	2,784 5 1	..
Kistna	..	66,642 4 10	66,642 4 10	3,626 9 3	65,738 2 7	69,364 11 10	2,722 7 0	..
Kurnool	..	56,862 15 11	56,862 15 11	1,615 2 10	57,231 6 2	58,846 9 0	1,983 9 1	..
Bellary	..	37,947 5 8	37,947 5 8	1,394 9 7	37,453 13 7	38,848 7 2	901 1 6	..
Anantapur	..	16,549 6 9	16,549 6 9	710 10 3	16,261 5 4	16,971 15 7	422 8 10	..
Total ..	..	2,91,286 8 5	2,91,286 8 5	13,495 *6 4	2,87,777 12 3	3,01,273 2 7	9,986 10 2	..

* The difference between this and that given in the previous year's report is Rs. 19-12-6 which is explained below :—

	RS.	A.	P.
Amount transferred to Southern Circle against Forest school, Dehra Dun	41	5	4
Do. from Central Circle against Forest Settlement-officer, Nellore, &c. ..	21	8	10
Hence difference ..	19	12	6

MADRAS,
27th August 1897.

(Signed) W. H. MICHAEL,
Deputy Accountant-General.

ANNUAL FORM No. 60.

Forest Department, Madras, Central Circle.

OUTSTANDINGS and Liabilities on account of contractors and disbursers for the forest year 1896–97.

District.	Department Debtor.			Department Creditor.			Balance due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Conservator, Central Circle	..	1,049 5 5	1,049 5 5	51 6 10	1,060 6 4	1,111 13 2	62 7 9	..
Forest Settlement-officer, Trichinopoly, &c. ..	..	2,839 6 0	2,839 6 0	..	2,848 9 1	2,848 9 1	9 3 1	..
Do. North Arcot, &c.	..	26 4 10	26 4 10	2 13 6	23 7 10	26 5 4	0 0 6	..
Forest School, Dehra Dun	..	60 0 0	60 0 0	60 0 0	..	60 0 0	..	..
Nellore	..	34,550 4 0	34,550 4 0	956 15 2	35,026 12 6	35,983 11 8	1,433 7 8	..
Cuddapah	..	71,424 9 11	71,424 9 11	2,121 13 3	71,612 2 5	73,733 15 8	2,309 5 9	..
Chingleput	..	29,858 7 7	29,858 7 7	858 14 5	29,611 7 9	30,470 6 2	611 14 7	..
North Arcot	..	60,135 7 2	60,135 7 2	1,370 5 3	62,622 5 1	63,992 10 4	3,857 3 2	..
South do.	..	56,885 9 2	56,885 9 2	2,694 13 7	57,112 7 2	59,807 4 9	2,921 11 7	..
Salem	..	1,29,012 4 3	1,29,012 4 3	4,856 13 2	1,30,382 3 3	1,35,239 0 5	6,226 12 2	..
Trichinopoly	..	22,796 0 11	22,796 0 11	312 7 4	22,944 15 10	23,257 7 2	461 6 3	..
Tanjore	..	7,823 0 8	7,823 0 8	417 8 2	7,905 11 9	8,323 3 11	500 3 3	..
Total ..	..	4,16,460 11 11	4,16,460 11 11	13,703 14 8	4,21,150 9 0	4,34,854 7 8	18,393 11 9	..

MADRAS,
27th August 1897

(Signed) W. H. MICHAEL,
Deputy Accountant-General.

ANNUAL FORM No. 60.

Forest Department, Madras, Southern Circle.

OUTSTANDINGS and Liabilities on account of contractors and disbursers for the forest year 1896–97.

District.	Department Debtor.			Department Creditor.			Balance due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Conservator, Southern Circle	..	12,846 0 11	12,846 0 11	24 12 7	12,861 9 5	12,886 6 0	40 5 1	..
Forest Settlement-officer, Malabar, &c.	..	536 10 4	536 10 4	..	528 6 7	528 6 7	..	8 3 9
Do. Trichinopoly &c.	..	2,839 6 0	2,839 6 0	..	2,848 9 2	2,848 9 2	9 3 2	..
Forest School, Dehra Dun	..	..	..	* 78 5 4	60 0 0	138 5 4	138 5 4	..
Nilgiris	..	55,679 13 4	55,679 13 4	639 5 5	56,126 9 0	56,765 14 5	1,086 1 1	..
North Coimbatore	..	70,297 7 3	70,297 7 3	846 5 11	70,989 6 4	71,835 12 3	1,538 5 0	..
South do.	..	46,038 13 3	46,038 13 3	2,709 7 5	44,926 15 10	47,636 7 3	1,597 10 0	..
Madura	..	32,915 9 6	32,915 9 6	2,559 14 5	31,472 5 8	34,032 4 1	1,116 10 7	..
Tinnevelly	..	40,884 5 9	40,884 5 9	4,247 7 3	41,682 15 5	45,930 6 8	5,046 0 11	..
North Malabar	..	28,537 10 7	28,537 10 7	1,994 7 5	27,702 5 4	29,696 12 9	1,159 2 2	..
South do.	..	53,340 9 7	53,340 9 7	517 15 6	54,200 15 4	54,718 14 10	1,378 5 3	..
South Canara	..	31,521 8 6	31,521 8 6	2,739 11 0	30,243 4 2	32,982 15 2	1,461 6 8	..
Total ..	..	3,75,437 15 0	3,75,437 15 0	* 16,357 12 3	3,73,643 6 3	3,90,001 2 6	14,571 7 3	8 3 9

* This is inclusive of Rs. 41-5-4 transferred from Northern Circle (*vide* annual form No. 60 of that circle).

MADRAS,
30th August 1897.

(Signed) W. H. MICHAEL,
Deputy Accountant-General.

ANNUAL FORM No. 61.

Forest Department, Madras Presidency, Northern Circle.

REVENUE received and Outstandings on account of revenue during the forest year 1896–97.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Direction	Timber and other forest produce.	..	..	..	..	..
Ganjám	Do. do. ..	27 8 0	38,833 1 5	38,860 9 5	38,860 7 2	0 2 3
Vizagapatam	Do. do. ..	4,252 2 0	30,099 13 8	34,351 15 8	32,750 15 6	1,601 0 2
Gódávari	Do. do. ..	..	1,12,527 5 0	1,12,527 5 0	1,12,368 3 0	159 2 0
Kistna	Do. do. ..	36 5 1	1,14,929 0 7	1,14,965 5 8	1,14,567 0 8	398 5 0
Kurnool	Do. do. ..	4,934 6 8	96,767 8 6	1,01,701 15 2	98,522 6 2	3,179 9 0
Bellary	Do. do. ..	60,493 14 5	1,10,090 4 7	1,70,584 3 0	1,34,702 4 0	35,881 15 0
Anantapur	Do. do. ..	78 0 0	72,290 1 10	72,368 1 10	65,651 3 1	6,716 14 9
	Total ..	69,822 4 2	5,75,537 3 7	6,45,359 7 9	5,97,422 7 7	47,937 0 2

MADRAS,
27th August 1897.

(Signed) W. H. MICHAEL,
Deputy Accountant-General.

ANNUAL FORM No. 61.

Forest Department, Madras Presidency, Central Circle.

REVENUE received and Outstandings on account of revenue during the forest year 1896-97.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and othe rrevenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Direction	Timber and other forest produce.	..	52 3 6	52 3 6	52 3 6	..
Nellore	Do. do. ..	32,125 0 0	1,14,088 10 0	1,46,213 10 0	1,31,138 5 2	15,075 4 10
Cuddapah	Do. do. ..	4,886 14 4	1,49,712 1 9	1,54,599 0 1	1,35,205 11 4	19,393 4 9
Chingleput	Do. do. ..	1,460 8 0	40,055 1 10	41,515 9 10	38,738 14 6	2,776 11 4
North Arcot	Do. do. ..	59,542 15 4	1,33,244 13 10	1,92,787 13 2	1,57,243 2 4	35,544 10 10
South Arcot	Do. do. ..	16,588 15 6	1,00,938 11 11	1,17,527 11 5	1,15,325 12 2	2,201 15 3
Salem	Do. do. ..	3,170 7 8	3,14,497 0 4	3,17,667 8 0	2,93,791 2 3	23,876 5 9
Trichinopoly	Do. do. ..	27,910 5 7	51,617 14 3	79,528 3 10	56,825 13 5	22,702 6 5
Tanjore	Do. do. ..	700 0 10	20,217 13 11	20,917 14 9	20,225 8 3	692 6 6
	Total ..	1,46,385 3 3	9,24,424 7 4	10,70,809 10 7	9,48,546 8 11	1,22,263 1 8

MADRAS,
27th August 1897.

(Signed) W. H. MICHAEL,
Deputy Accountant-General.

ANNUAL FORM No. 61.

Forest Department, Madras, Southern Circle.

REVENUE received and Outstandings on account of revenue during the forest year 1896-97.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Direction	Timber and other forest produce.	..	12 0 0	12 0 0	12 0 0	..	
Nilgiris	Do. do. ..	844 0 10	56,157 0 2	57,001 1 0	50,963 3 10	6,037 13 2	
North Coimbatore ..	Do. do. ..	8,202 7 0	86,807 2 10	95,009 9 10	93,125 2 7	1,884 7 3	
South do. ..	Do. do. ..	1,711 0 0	1,47,576 8 11	1,49,287 8 11	1,47,275 12 4	2,011 12 7	
Madura	Do. do. ..	6,261 0 10	72,275 1 4	78,536 2 2	75,767 4 10	2,768 13 4	
Tinnevelly	Do. do. ..	1,078 13 3	98,019 8 3	99,098 5 6	87,670 5 2 + * 30 1 9	11,397 14 7	* Rupees 30-1-9 written off in Government Order, No. 711, dated 10th December 1896. Communicated in Board's Proceedings, Land Revenue, No. 3, dated 5th January 1897.
North Malabar	Do. do. ..	666 10 8	30,615 3 7	31,281 14 3	28,727 15 3	2,553 15 0	
South do.	Do. do. ..	2,023 8 0	93,718 1 6	95,741 9 6	94,259 9 6	1,482 0 0	
South Canara	Do. do. ..	3 0 0	66,348 3 1	66,351 3 1	65,146 12 1	1,204 7 0	
	Total ..	20,790 8 7	6,51,528 13 8	6,72,319 6 3	6,42,943 1 7 + * 30 1 9	29,341 2 11	

MADRAS,
30th August 1897.

(Signed) W. H. MICHAEL,
Deputy Accountant-General.

ANNUAL FORM No. 62.

Forest Department, Madras Presidency.

Financial results of the year 1896–97.

District.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
Northern Circle.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Ganjám	5,649	7,542	33,211	50,210	25,851	38,860	83,603
Vizagapatam	1,682	2,930	31,069	13,176	15,544	32,751	36,650
Gódávari	4,057	1,563	1,08,311	43,049	20,855	1,12,368	65,467
Kistna	1,379	2,722	1,13,188	39,794	49,314	1,14,567	91,830
Kurnool	8,163	7,508	90,360	43,874	42,963	98,523	94,345
Bellary	8,686	8,757	1,26,016	22,766	23,350	1,34,702	54,873
Anantapur	..	..	66,651	24,294	14,218	65,651	38,512
Total ..	* 29,616	31,022	5,67,806	2,42,163	1,92,095	5,97,422	4,65,280
Central Circle.							
Nellore	36,443	24,733	94,695	13,679	15,330	1,31,138	53,742
Cuddapah	8,725	14,508	1,26,481	46,555	33,608	1,35,206	94,671
Chingleput	238	333	38,501	18,331	14,260	38,739	32,924
North Arcot	11,264	9,691	1,45,979	27,376	55,667	1,57,243	92,734
South Arcot	19,465	11,043	95,861	24,657	31,064	1,15,326	66,764
Salem	90,121	66,537	2,03,722	41,556	63,659	2,93,843	1,71,752
Trichinopoly	10,173	5,082	46,653	18,119	40,800	56,826	64,001
Tanjore	823	797	19,403	3,995	3,402	20,226	8,194
Total ..	1,77,252	1,32,724	7,71,295	1,94,268	2,57,790	9,48,547	5,84,782
Southern Circle.							
South Canara	20,607	23,640	44,540	15,002	19,235	65,147	57,877
North Malabar	18,671	30,788	10,057	1,175	15,780	28,728	47,743
South Malabar	69,292	36,890	24,968	147	37,041	94,260	74,078
Nilgiris	32,439	48,688	18,524	4,613	31,559	50,963	84,860
North Coimbatore ..	20,421	18,854	72,704	5,005	52,525	93,125	76,384
South Coimbatore ..	49,143	52,410	98,133	7,343	30,371	1,47,276	90,124
Madura	4,615	9,627	71,152	7,598	31,262	75,767	48,487
Tinnevelly	7,799	10,143	79,883	7,003	41,116	87,682	58,262
Total ..	2,22,987	2,31,040	4,19,961	47,886	2,58,889	6,42,948	5,37,815
Grand Total ..	4,29,855	3,94,786	17,59,062	4,84,317	7,08,774	21,88,917	15,87,877

* The Conservator has not explained the difference between these figures and those given by the Accountant-General in Form No. 59.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for 1896–97.

Districts.	Surveying, &c., instruments			Tools			Furniture			Machinery			Building materials, small stores, tents, &c.	
	On hand at commencement of the year.		On hand at end of the year.	On hand at commencement of the year.		On hand at end of the year.	On hand at commencement of the year.		On hand at end of the year.	On hand at commencement of the year.		On hand at end of the year.	On hand at end of the year.	
	Number.	Value.	Number.	Number.	Value.	Number.	Number.	Value.	Number.	Number.	Value.	Number.	Number.	Value.
	2	3	4	6	7	8	16	17	18 (d)	10	11	12	18 (c)	18 (d)
Northern Circle.		Rs.			Rs.			Rs.			Rs.			Rs.
Direction	24	402	23	..	370	..	75	625	..	..	..	..	..	..
Ganjám	42	900	46	271	639	4	83	355	..	..	..	..	..	..
Vizagapatam	* 19	* 568	19	* 166	568	680	147	1,343	..	..	..	..	14	2,356
Gódávari	60	534	90	467	680	468	245	1,794	..	..	..	..	..	..
Kistna	67	1,238	74	468	653	1,029	114	512	6	..	..	..	6	1,173
Kurnool	72	665	79	1,029	1,157	834	135	713	..	..	..	..	..	..
Bellary	83	201	97	834	458	240	61	408	..	..	..	..	..	..
Anantapur	53	240	63	240	723	247	107	613	..	..	..	..	..	..
Total, Northern Circle ..	420	4,736	481	3,188	4,822	3,333	967	6,363	20	3	136	1	20	3,529
Central Circle.														
Direction	49	830	49	(a) 4	(a) 21	4	99	916	..	..	..	..	..	..
Cuddapah	125	628	124	475	1,356	550	129	926	..	..	..	..	..	..
Nellore	57	390	57	430	1,101	419	85	638	..	..	..	..	..	..
Chingleput	21	368	20	405	778	420	78	495	..	..	..	..	..	..
North Arcot	20	542	43	1,350 cwt. 33	1,780	894 cwt. 33	261	730	4	16 miles 3¼	73	16 miles 3¼	176	176
South Arcot	118	1,415	117	1,001	710	524	163	1,820	3	246 miles 9¾	401	246 miles 9¾	421	421
Salem	133	1,458	137	1,620	3,007	1,658	381	1,872	..	7	7	7	..	..
Trichinopoly	55	419	54	1,053	613	1,056	126	701	2	2	21	2	217	217
Tanjore*	21	105	20	110	86	67	29	270	..	..	10	..	..	..
Total, Central Circle ..	599	6,155	621	6,448 cwt. 33	9,452	5,592 cwt. 33	967	6,268	9	272 miles 13¼	49,503	270 miles 13¼	814	814

* Revised figures.

(a) Omitted to be shown in last year's return.

Abstract showing the value of Live-stock, Stores, Tools and Plant for 1896-97—*cont.*

Districts.	Buildings				Live-stock				Miscellaneous				Total					
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		Difference in value	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Northern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.
Direction	..	..	..	..	1	1,600	1	1,600	..	..	1	103	134	3,792	106	2,738	..	1,054
Ganjám	24	15,766	26	15,799	1	1,800	..	..	..	..	..	..	416	19,418	425	16,976	..	2,442
Vizagapatam	18	1,035	(a) 18	(a)1,035	..	..	..	..	64	236	63	235	374	3,020	451	3,456	436	..
Gódávari (d)	44	26,565	49	28,832	1	..	1	..	182	526	251	421	1,057	29,616	1,260	35,080	3,684	..
Kistna	(d) 64	(d)12,323	71	11,740	..	..	..	..	5	(d)2,440	5	1,865	716	17,607	776	15,318	..	2,289
Kurnool	56	29,361	58	32,549	1	1,600	1	1,600	20	169	20	165	1,311	33,742	1,316	38,302	4,560	..
Bellary	22	3,948	22	3,862	..	..	..	..	27	84	33	142	511	4,973	681	5,305	332	..
Anantapur	14	12,808	16	15,619	..	..	..	..	..	..	..	..	398	14,324	423	17,162	2,838	..
Total, Northern Circle..	242	1,01,806	260	1,09,436	4	5,000	3	3,200	298	3,455	373	2,931	4,917	1,26,492	5,438	1,34,337	6,065	..
Central Circle.																		
Direction	..	..	..	..	..	..	..	..	(b) 2	(b) 6	2	5	(d) 155	(d) 1,879	154	1,720	..	159
Cuddapah	108	19,985	110	20,503	1	18	2	56	..	..	..	..	827 miles 3½	36,826	915 miles 3½	37,451	625	..
Nellore	9	2,079	10	3,685	..	..	..	..	241	5,154	301	4,713	1,070 miles 9¾	44,355	1,118 miles 9¾	45,354	999	..
Chingleput	17	4,300	18	5,004	..	..	..	..	31	27	34	83	547	6,171	570	6,372	201	..
North Arcot	(d) 41	8,298	42	8,414	..	..	..	..	..	..	..	..	1,576 cwt. 33	11,269	1,259 cwt. 33	10,663	..	606
South Arcot	18	9,532	20	19,803	..	..	..	..	591	1,611	509	1,547	1,927	15,253	1,348	26,144	10,891	..
Salem	19	15,489	19	15,489	..	..	..	..	4	87	16	1,002	2,119	21,720	2,213	22,939	1,219	..
Trichinopoly	9	2,530	8	2,092	..	..	..	..	1,118	603	1,016	785	2,360	4,865	2,263	4,903	38	..
Tanjore	6	406	7	586	..	..	..	..	50	111	44	101	217	984	167	1,088	104	..
Total, Central Circle ..	227	62,619	234	75,576	1	18	2	56	2,037	7,599	1,922	8,186	10,798 miles 13½ cwt. 33	1,43,322	10,007 miles 13½ cwt. 33	1,56,634	13,312	..

(a) The figures for the year 1896-97 not having been reported by the Collector, those for the preceding year have been adopted.
(b) Omitted to be shown in the last year's return. (d) Revised figures.

Abstract showing the value of Live-stock, Stores, Tools and Plant for 1896-97—*cont.*

Districts.	Surveying, &c., instruments				Tools				Machinery				Furniture				Building materials, small stores, tents, &c.			
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18 (a)	18 (b)	18 (c)	18 (d)
Southern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Direction	41	454	42	504	1	30	1	30	..	..	..	..	97	723	102	769	..	..	5	764
South Canara ..	• 107	1,092	115	1,141	544	725	592	782	..	..	..	..	157	1,325	160	1,329	..	..	2	225
North Malabar ..	47	1,104	70	1,355	626	1,423	626	1,423	..	..	..	..	87	692	87	692	..	..	..	..
South do. ..	27	939	33	875	589	637	739	845	12	103	17	145	64	525	95	709	..	..	..	..
Nilgiris	57	986	65	1,064	783	1,277	627	1,588	3	750	1	250	122	691	143	1,182	..	..	3	278
North Coimbatore	71	1,344	71	1,344	516	933	567	1,144	..	..	..	..	173	1,371	174	1,372	73	294	81	272
South do. • ..	78	1,583	84	1,534	583	602	588	584	6,560	255	(a) 6,560	247	365	2,322	397	2,418	..	..	..	..
Madura • ..	59	1,597	58	1,571	1,106	998	1,070	692	..	..	..	..	214	1,158	212	1,104	..	..	5	645
Tinnevelly ..	92	1,592	106	1,592	453	1,515	541	1,316	15	289	15	289	337	2,142	453	2,423	..	..	1	428
Total, Southern Circle ..	579	10,691	644	10,980 •	5,201	8,140	5,351	8,404	6,590	1,397	6,593	931	1,616	10,949	1,823	11,998	73	294	97	2,612
Grand total, Presidency ..	1,598	21,582	1,746	21,909	14,837 cwt. 33	22,414	14,276 cwt. 33	20,482	6,863 mls 13¼	50,912	6,866 mls 13¼	50,536	3,594	25,586	4,145	26,629	73	294	126	6,955

• Revised figures. (a) The cost of tramway materials has not been given.

Abstract showing the value of Live-stock, Stores, Tools and Plant for 1896-97—*cont.*

Districts.	Buildings				Live-stock				Miscellaneous				Total					
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		Difference in value	
	Number.	Value.	Number.	Value.	Number	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Southern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.
Direction	..	..	..	..	..	..	..	..	646	574	674	600	785	1,781	824	2,667	886	..
South Canara	21	7,458	14	7,556	1	..	..	..	613	1,656	649	2,082	1,443	12,266	1,532	13,115	859	..
North Malabar ..	..	..	..	..	22	29,350	22	37,225	..	..	..	..	782	32,569	805	40,695	8,126	..
South do.	27	33,346	28	36,295	29	37,500	21	32,400	211	1,371	210	1,382	959	74,421	1,143	72,651	..	1,770
Nilgiris	53	6,062	65	6,767	6	5,500	7	7,900	21	179	23	198	1,045	15,445	934	19,227	3,782	..
North Coimbatore ..	49	12,313	51	16,188	..	..	..	..	319	476	340	528	1,201	16,731	1,284	20,848	4,117	..
South do. ..	48	28,263	53	31,483	8	8,700	9	* 22,500	136	736	148	834	7,778	42,461	7,839	59,600	17,139	..
Madura	43	23,030	43	21,925	..	..	..	..	..	..	..	..	1,422	26,783	1,388	25,937	..	846
Tinnevelly	111	22,434	115	27,443	..	..	..	..	..	..	..	..	1,008	27,972	1,231	33,491	5,519	..
Total, Southern Circle.	352	1,32,906	369	1,47,657	66	81,050	59	1,00,025	1,946	4,992	2,044	5,624	16,423	2,50,419	16,980	2,88,231	37,812	..
Grand total, Presidency ..	821	2,97,331	863	3,32,669	71	86,068	64	1,03,281	4,281	16,046	4,339	16,741	32,128 mls. 13¼ cwt. 33	5,20,233	32,425 mls. 13¼ cwt. 83	5,79,202	57,189	..

* The value of elephants has now been fixed with reference to their probable selling value.

ANNUAL FORM No. 63.

Forest Department, Madras Presidency.

STATEMENT of Elephants during the year 1896-97.

PART I.

Elephants in possession of the reporting officers throughout the year.

District.	Names.	When purchased or otherwise obtained by Government.	Average cost of monthly keep including servants and food.	
1	2	3	4	
Conservator, Northern Circle.	Captain Gunning	Purchased in July 1888	Per head ..	Rs. A. P. 90 8 0
Gódávari ..	Sirai Pari	Purchased in November 1894 in Sonepur fair.	Do. ..	59 12 0
Kurnool	Bytagi Pizri	Do. do. ..	Do. ..	(a) 54 13 4
South Coimbatore.	1. Sankara	Received from North Malabar on 28th June 1888.	Do. ..	44 14 0
	2. Chloe			
	3. Karthiyayini ..			
	4. Periya Rani ..	Received from South Malabar, August 1888.		
	5. Sinna Rani ..	Do. do. May 1889.		
	6. Phyllis, II ..	Do. do. 19th August 1891.		
	7. Jumbo, II ..	Captured, 25th September 1892		
	8. Ranger	Do. 23rd July 1893		
The Nilgiris ..	1. Latchmi	Transferred from the Anamalais on the 30th January 1882		
	2. Chinna Latchmi ..			
	3. Akbar Buksh ..	Born in 22nd February 1888		
	4. Meenatchi ..	Do. in 9th April 1889	Do. ..	42 7 9
	5. N. Latchmi ..	Purchased in September 1894		
	6. Seetha	Transferred from North Malabar in June 1896.		
South Malabar ..	1. Vixon	Transferred from Wynaad in 1882 ..		
	2. Peyru			
	3. Samson	Purchased from Mr. Morgan in 1885..		
	4. Eva			
	5. Theebow	Captured on 3rd January 1886 ..		
	6. Juno	Do. on 17th February 1886 ..		
	7. Jupiter	Do. on 9th January 1887		
	8. Maharajah ..	Transferred from Wynaad on 29th September 1888.		
	9. Gordon	Captured on 11th February 1889 ..		
	10. Eddy	Do. on 10th February 1890 ..	Do. ..	31 5 0
	11. Loo	Do. on 21st April 1890		
	12. Hercules ..	Do. on 24th December 1890 ..		
	13. Parvathi ..	Transferred from South Coimbatore in August 1891.		
	14. Jessie	Captured on 10th December 1891 ..		
	15. Tippu	Do. on 25th February 1893 ..		
	16. Maharani ..	Do. on 2nd March 1893 ..		
	17. Venus	Do. on 1st April 1893 ..		
	18. Charlie	Do. in February 1893 ..		
	19. May	Do. on 23rd November 1894 ..		
	20. Mars	Do. on 11th January 1896 ..		
	21. Abdul	Do. on 4th October 1891 ..		
North Malabar ..	1. Phyllis	Purchased in January 1878	▪Do. ..	49 14 10
	2. Peri	Captured in April 1889	Do. ..	43 3 1
	3. Kalyani	Purchased in October 1889 ..	Do. ..	48 11 4
	4. Lallameah ..	Captured in March 1891	Do. ..	47 7 9
	5. Cherry	Do. in May 1892	Do. ..	46 8 5
	6. Moideen Khan ..	Do. on 3rd January 1896 ..	Do. ..	48 14 0
	7. Padmini	Do. on 8th February 1896 ..	Do. ..	42 0 11
	8. Mothy	Do. on 22nd " " ..	Do. ..	48 10 10
	9. Kadar Buksh ..	Do. on 29th " " ..	Do. ..	49 12 1
	10. Krishna	Do. on 3rd March 1896" ..	Do. ..	41 12 9
	11. Thisbe	Do. on 15th April 1896	Do. ..	41 15 9

(a) This is the rate arrived at according to the audited figures of the Accountant-General. The Collector's statement gives Rs. 57-1-5 as the rate, and no explanation has been given for the variation.
(b) Died on 31st March 1897.

PART II.

Elephants received in the year.

District.	Names.	When purchased or otherwise obtained by Government.	Average monthly cost of keep including servants and food.	
1	2	3	4	
Nilgiris	Zahara	Captured on 14th March 1896 and transferred from North Malabar on 12th November 1896.	Per head ..	Rs. A. P. 39 12 0
South Coimbatore	Neville	Captured on 2nd September 1896 ..	Do. ..	16 5 7
	Dora	Captured on 16th March 1894 and transferred from South Malabar on 25th December 1896.	Do. ..	34 6 10
	Jumbo I	Transferred from South Malabar on 25th December 1896.	Do. ..	70 0 0
	Baghavate	Do. do.	Do. ..	58 0 0
South Malabar ..	Flo	Captured on 14th January 1897 ..	Do. ..	* 32 8 0
	Ganapathy	Do. on 23rd ,, ,, ..	Do. ..	24 0 2
	Cow Elephant	Do. on 23rd February 1897 ..	Do. ..	1 2 0
	Josephine	Do. on 9th March 1897	Do. ..	43 9 5
	Wilkie	Do. on 9th ,, ,, ...	Do. ..	24 6 6
	Kunjunni	Do. on 17th March 1897	Do. ..	31 4 5
	Tusker Elephant	Do. on 19th ,, ,, ...	Do. ..	..
	Sybil	Do. on 19th ,, ,, ...	Do. ..	30 9 2
	Arthur	Do. on 7th April 1897	Do. ..	25 4 11
North Malabar ..	Mukva Elephant	Do. on 14th ,, ,, ...	Do. ..	..
	Pyramus	Do. on 15th ,, ,, ...	Do. ..	29 7 3
	Minnie	Do. on 8th June ,, ...	Do. ..	34 11 8
	Darsie	Do. on 8th ,, ,, ...	Do. ..	16 1 6
	Donald	Do. on 13th ,, ,, ...	Do. ..	11 13 9
	Ethel	Captured on 18th April 1895 and retransferred to North Malabar on 8th July 1896 from the Nilgiris.	Do. ..	50 1 9

* Charged under A. VI (*a*).

PART III.

Elephants gone off the list during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Average monthly cost of keep including servants and food.		How disposed of.
1	2	3	4		5
Ganjám ..	Kesari Pyari ..	Purchased in November 1894 at the Sonepur fair.	Per head ..	Rs. A. P. 57 12 5	Died on 1st April 1897.
Nilgiris ..	Ethel	Captured on 18th April 1895 ..	Do. ..	14 10 0	Retransferred to North Malabar on 8th July 1896.
South Canara	Canara Shankara ..	Purchased on 2nd August 1894.	Do. ..	50 14 2	Died on the 31st March 1897.
South Coimbatore	1. Neville	Captured on 2nd September 1896.	Do. ..	16 5 7	Transferred to South Malabar on 10th March 1897 and there sold for Rs. 825.
	2. Jumbo I ..	Arrived from South Malabar on 25th December 1896.	Do.	70 0 0	Transferred to Public Works Department with effect from 11th January 1897.
	3. Baghavati ..			58 0 0	
South Malabar.	1. Flo	Captured on 14th January 1897.	Do. ..	32 8 0	Sold in auction on 10th March 1897.
	2. Jumbo	Transferred from Wynaad on 29th September 1888.	Do. ..	37 2 8	Transferred to South Coimbatore.
	3. Mary	Captured on 31st March 1890..	Do. ..	28 10 0	Sold in auction in March 1897.
	4. Alice	Transferred from South Coimbatore in December 1893.	Do. ..	22 2 0	Do.
	5. Pragasam ..	Do. do.	Do. ..	21 14 0	Do.
	6. Dora	Captured on 16th March 1894.	Do. ..	33 2 8	Transferred to South Coimbatore on 25th December 1896.
	7. Baghavati ..	Captured on 27th June 1893 and transferred from North Malabar on 29th August 1894.	Do. ..	25 10 8	Do.
	8. Percy	Captured on 22nd November 1894.	Do. ..	21 6 0	Sold in auction in March 1897.
	9. Hary	Do. on 11th Feb. 1895 ..	Do. ..	14 12 0	Do.
North Malabar.	1. Cow elephant ..	Do. on 23rd Feb. 1897 ..	Do. ..	1 2 0	Died in the Kraal on 27th February 1897.
	2. Tusker elephant.	Do. on 19th March ,,	Do. ..	..	Shot in the pit.
	3. Mukva do.	Do. on 14th April ,,	Do. ..	..	Died in the pit.
	4. Plato	Do. on 27th May 1896 ..	Do. ..	26 6 11	Drowned in the Muthanga river on 20th November 1896.
	5. Zahara	Do. on 14th March 1896	Do. ..	31 0 5	Transferred to Nilgiris.
	6. Shegaram ..	Do. on 14th ,, ,,	Do. ..	18 5 10	Sold in auction on 15th February 1897.
	7. Draupathi ..	Do. on 15th Feb. ,,	Do. ..	31 15 9	
	8. Pyrrah	Do. on 13th April ,,	Do. ..	22 9 7	
	9. Colleen	Do. on 28th June ,,	Do. ..	24 3 11	
	10. Saraswathi ..	Do. on 29th May ,,	Do. ..	23 3 6	

Proceedings dated 13th 1897

PROCEEDINGS OF THE BOARD OF REVENUE
(Land Revenue).

Read—file of reports received from Collectors and Conservators on the progress of Forest Administration during 1896–97.

Resolution—Forest No. 486, dated 13th November 1897.

The Board resolves to submit to Government the progress report of Forest Administration in the Madras Presidency for the year ending 30th June 1897.

2. The suggestions of Government as regards the arrangement of the appendices have been adopted and the length of all the returns except Forest No. 45 has, in anticipation of sanction, been curtailed in accordance with the circular from the Government of India referred to the Board for remarks in Government Order, Mis. No. 3431, Revenue, dated 7th July 1897.

3. Complete statistical returns from Kistna and Ganjám were not received in the Board's office till the 28th September and 5th October respectively, and the revised timber returns called for on the 25th September from the Collector of Vizagapatam were not submitted by him till the 11th October.

4. The report has, as usual, been prepared by Mr. Popert, the Senior Conservator of Forests.

(True Extract.)

(Signed) R. C. C. CARR,
Secretary.

To the Secretary to Government, Revenue Department,
with three copies of the Administration Report.

Exd. S A. S. Rega.ingar.

REVENUE DEPARTMENT.

1897.

Board of Revenue

(Land Revenue),

MADRAS.

d November 25th.

Proceedings, Forest No. 486, 13th November 1897.

NOVEMBER.

Print V.F

No. , Revenue, March 1898.

Read—C. No. 9871 of 1897.

Order—No. 273, Revenue, dated 16 April 1898.

Forest No. 7/.

Department for the year ending 30th June 1897.

2. The preparation of the report was, as in the previous two years, entrusted to Mr. Popert, the Senior Conservator of Forests. The statements appended have in some cases been curtailed in size and re-arranged in accordance with the suggestions contained in G.O., No. 370, Revenue, dated 31st May 1897, and in the Government of India Circular No. 12-F.—245-1, dated 25th June 1897. Revised forms of statements giving detailed information as to the origin and results of injuries done to forests have also been inserted in the present report in accordance with the instructions issued by the Government of India in its Circular No. 9-F.—171-1, dated 10th June 1897. The suggestions made in the Government of India Circular of the 25th June last quoted above were, however, merely referred for the opinion of Local Governments and have not yet been finally adopted and prescribed. The Board was wrong, therefore, in having taken action thereon at the present stage.

3. *Extension and constitution of State Forests—alteration of area.*—The subjoined statement compares the areas of reserved forests and reserved lands at the beginning and at the end of the year under review:—

	Area on 1st July 1896.	Area added during 1896-97.	Area excluded during 1896-97.	Net increase or decrease.	Area on 30th June 1897.
	Sq. Mls.	Sq. Mls.	Sq. Mls.	Sq. Mls.	Sq. Mls.
Reserved forests	12,388	863	113	+ 750	13,138
Do. lands	6,690	333	1,254	— 921	5,769
Total	19,078	1,196	1,367	— 171	18,907

Of the area added during the year, 845 square miles under reserved forests and 302 square miles under reserved lands represent the extent of new reserves, while the remainder is due to rectification of area. The area disafforested or freed from reservation in accordance with the policy enunciated by the Government of India in October 1894 was 80 square miles of reserved forests and 242 square miles of reserved lands, while the decrease, due to rectification under the two classes of lands, was 33 square miles and 94 square miles, respectively. Under reserved lands, there was also another reduction of 845 square miles due to final reservation and 73 square miles to exclusion at settlement. The rectified figures now reported do not, however, exclude the area of the enclosures in the Salem reserves, wrongly taken into account in the returns furnished by the Survey of India, a party as, owing to press of other work, the survey of these small areas could not be undertaken before the close of the year under review. ~~The actual area of State forests~~ at the end of the year is therefore somewhat ~~is than~~ the figure given in the above statement, viz., 18,907 square miles.

Proof 29/3/98

To H.M. again

Then to H.E. the Governor

S.K. 29/4/98

H.M. 29/4/98

To H.E. the Governor

Have the goodness to carefully compare with Head 3 clean copies for signature & return the former duly corrected & initialled

Premature

H.M. 5/5/98

Obscure

The Rev. Bd. has a copy of the Report in hand. Then to the press

1/5/98

READ—C. No. 9871 of 1897.

ORDER—No. 273, Revenue, dated 16 …

Forest No. 71.

Department for the year ending 30th …

2. The preparation of the report … Mr. Popert, the Senior Conservator of … cases been curtailed in size and re-ar… tained in G.O., No. 370, Revenue, da… India Circular No. 12-F.—245-1, da… ments giving detailed information a… forests have also been inserted in the … tions issued by the Government of In… June 1897. The suggestions made in … June last quoted above were, howe… Governments and have not yet been fi… wrong, therefore, in having taken acti…

3. *Extension and constitution of S…* statement compares the areas of reser… and at the end of the year under revie…

—	Area on 1st July 1896	Area added during 1896-97.	Area excluded during 1896-97.	Net increase or decrease.	Area on 30th June 1897.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved forests	12,388	863	113	+ 750	13,138
Do. lands	6,690	333	1,254	— 921	5,769
Total ..	19,078	1,196	1,367	— 171	18,907

Of the area added during the yea… 302 square miles under reserved lands … remainder is due to rectification of are… vation in accordance with the policy … October 1894 was 80 square miles of re… lands, while the decrease, due to recti… square miles and 94 square miles, resp… a further reduction of 845 square miles … exclusion at settlement. The rectified … the area of the enclosures in the Sale… returns furnished by the Survey of In… survey of these small areas could not b… review. The actual area of State fores… less than the figure given in the above…

…, 845 square miles under reserved forests and represent the extent of new reserves, while the a. The area disafforested or freed from reser… enunciated by the Government of India in served forests and 242 square miles of reserved lication under the two classes of lands, was 33 ctively. Under reserved lands, there was also due to final reservation and 73 square miles to figures now reported do not, however, exclude reserves, wrongly taken into account in the a party as, owing to press of other work, the undertaken before the close of the year under at the end of the year is therefore somewhat tatement, viz., 18,907 square miles.

4. The total area under the co
was in the previous year, percen
ment lands (21·24) and to of u
portionate decrease as compared wit
1895–96. Abstract B, appended to
information on the above points is fu
but its completeness is marred by a
given in columns 2 and 3 and the
fact that the area for which returns a
previous year's figure by 250 square n
should be drawn to the matter.

5. The Board in paragraph 10
unreserved land is to be allowed for
cultivation, it will not be possible to
already brought under control, viz.,
~~forests in the Nilgiri district, 18,832~~
~~figure takes into account the leased f~~
~~In any case~~, making due allowance f
exclusion of areas at settlement, t
ultimately brought under control is
represents about 22 per cent. of the t

6. *Forest Settlement.*—The follo
ment work during the year under rev
reserved under section 16 of the Fores

Outturn	

Note.—The figures given above are the net area
area disafforested from the total area notified.

The actual extent constituted as
845 square miles as against 858 sq
respect of which final notifications we
miles and 808 square miles, respective
settlement work of the year must be
previous year. It has been pointed ou
that one of the main reasons for the slo
is that, while the blocks settled in for
free of rights and easy to deal with, t
and are situated in the neighbourho
encumbered with communal or private
extent, met by the appointment of an
Government must rely on the Board to
work perform their duties efficiently an
recommend the transfer to other duty o
energy and activity.

The outturn of settlement work b
any special remarks.

7. Including the leased forests
control of the Forest Department was
as follows:—

Notified under section 16 ...	
Do. do. 4 ...	
Reserved under section 26 ...	

itrol of the department having been less than it
tages of that area to the total extent of Govern-
occupied lands (36·46) also show an almost pro-
the figures (21·43 and 36·80, respectively), of
paragraph 2 of the report, in which detailed
rnished has been prepared with considerable care,
few unexplained variations between the figures
orresponding figures given last year, and by the
re reported to be not available is in excess of the
iles. The attention of the Settlement Department

of its report estimates that, if a liberal margin of
free grazing, local requirements and extension of
add more than 1,114 square miles to the area
~~18,907 square miles, or excluding the leased~~
~~square miles. It is not clear whether the latter~~
~~ests situated in districts other than the Nilgiris~~
r the rectification of Salem figures and for the
~~e Government considers that~~ the area to be
ot likely to exceed 20,000 square miles. This
tal area of Government lands.

ing table compares the outturn of Forest Settle-
ew as gauged by the area added to the forests
Act with that of the previous four years:—

1892-93 (fifteen months).	1893–94.	1894–95.	1895–96.	1896–97.
SQ. MLS. 2,261	SQ. MLS. 1,350	SQ. MLS. 680	SQ. MLS. 922	SQ. MLS. 750

rrived at, after allowing for rectification and after deducting the

forest reserve during the year was, however,
are miles in 1895–96, while the extent in
e issued during the two years was 656 square
y. Judged by either criterion, therefore, the
considered to have fallen short of that of the
in the reviews of the previous years' reports
progress made of late in settlement operations
ner years were large hill areas comparatively
ose which have now to be settled are smaller
d of cultivated tracts and are more or less
rights. These difficulties have been, to some
additional Forest Settlement-officer. But the
ee that the officers employed on this important
promptly. The Board should not hesitate t
any officer who is found to lack the necessa

Revenue Divisional officers does not ca

the Nilgiri district, the total area un
out 20,021 square miles classified a

	SQ. MILES.
... ...	13,138
... ...	4,030
... ...	1,739
... ...	1,114

Of the area notified under secti… …n 4 of the Act, settlement work connected with 1,453 square miles was practically … …omplete; by the close of the year under review 970 square miles was settled, but not … …eported on, and operations were being proceeded with in the case of 1,607 square miles … …. Making allowance for leased forests and future rectification, it is observed that, at t… …e rate of outturn during the year under review, forest settlement work will take an… …ther six years to complete. The Government hopes, however, that no effort will b… …spared by all officers concerned to push on the work to as speedy a termination … …consistent with good and careful administration.

8. *Demarcation and Survey.*—A… …esired by the Government of India in its review of the report for 1895–96, the … …oard has, in its present report, dealt with the preliminary demarcation and survey … …of proposed reserves separately from the final demarcation and survey of settled … …reserves. In return No. 47, however, the distinction between the two classes o… …survey has not been maintained so far as they have reference to the work of the Sur… …y of India parties. The Board has explained in a separate Proceedings that this is du… …to the plan found convenient in this Presidency, whereby a party when dealing with set… …led areas takes up at the same time any adjoining tracts recently added to the reserve… …area though not as yet settled. Preliminary surveys made by departmental officers … …ave been excluded from the statement in accordance with the instructions of the Gov… …rnment of India.

9. *Preliminary demarcation and s… …rvey of proposed reserves.*—The work of preliminary survey done in the several distri… …ts is reviewed by the Board in paragraph 12 of its report. The information given i… …not very full; but the Government is glad to note that the outturn of work in prepa… …ring and revising the sketch-maps to accompany notifications under sections 4 and 16 … …was satisfactory. As regards demarcation, the outturn during the year under revie… …(1,671 miles) showed an increase over that of the previous year (1,47… miles). Th… …average rate per mile, however, for the whole Presidency rose at the same time f… …om Rs. 2–13–6 to Rs. 3–9–10. The cost per mile varied from As. 10–6 in South … …anara to Rs. 15–10–8 in North Coimbatore. The latter rate is double that repor… …ed for the same division in the previcus year. The Board explains that this increas… …as well as that observed in Tinnevelly was justified by the nature of the forests … …n which the work had to be done. The work and consequently the cost of demar… …tion must, of course, vary with the particular locality; but the Government trusts … …hat the expenditure in each case is carefully scrutinized by the District Forest-offic… …rs and ~~Conservators~~.

10. *Final demarcation and survey … settled reserves.*—The work of final demarcation during the past three years is com… …ared in the subjoined statement:—

	Perma…	…nt demarcation.		Re-clearing old lines, &c.		
	1894–95.	1895–96.	1896–97.	1894–95.	1895–96.	1896–97.
	MLS.	MLS.	MLS.	MLS.	MLS.	MLS.
Northern Circle	499	855	509	270	597	1,150
Central ,, ...	1,542	1,117	629	991	2,834	1,327
Southern ,, ...	230	217	238	171	193	549
Total ..	2,271	2,189	1,376	1,432	3,624	3,026
	RS. A. P.	…S. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Average cost per mile	9 0 10	… 8 6	12 2 5	6 3 11	2 14 4	4 12 0

The abnormal increase in the nu… …r of miles re-cleared in 1895–96 was ascribed by the Board to short work in previou… …ears and the decreased cost was explained by the fact that the work was carried ou… …ostly by guards and watchers. The fall in outturn and increase in cost in the ye… …under review is apparently accounted for by the omission from the statement of lin… …re-cleared by subordinates. A portion of the enhanced cost has, however, to be asc… …d to the special difficulties of clearing and erecting cairns in certain localities an… …Kistna to bad work. It is presumed that

the Board has taken suitable notice of the conduct of the officers responsible for the original wrong demarcation in Kistna. It is noted that only 1,376 miles of boundary were permanently demarcated during the year, and that 301 miles remained to be demarcated at the end of the year. The work is thus in arrear and should be pushed on.

11. The area topographically surveyed by the Survey of India Party No. 19 during the year under review was 745 square miles, and the cost incurred per square mile Rs. 84 as against 964 square miles and Rs. 66, respectively, in the previous year. The main cause of the decrease in outturn and increase in cost is reported to be the difficult nature of the country and the dense forests in the Kurnool district. The new Party No. 9 surveyed about 66 square miles only at a cost of about Rs. 354 per square mile. The abnormally high rate is attributed to the fact that the party was unable to work throughout the season owing to bad weather and the inefficiency of the subordinate staff, and that the cost of its transfer from the Central Provinces for work in Madras was very heavy. The Government is glad to note that arrangements have since been made to combine the two parties under the charge of one officer and to give the necessary training to the subordinates employed, and trusts that future operations will be more efficiently conducted. As regards departmental surveys, the report mentions the work done in Bellary and Salem only; but from statement No. 47 appended to the report, it appears that a considerable amount of work was also done in Kistna, Trichinopoly, Ganjám, Vizagapatam, Kurnool, South Canara and North Malabar. In the absence of detailed information, however, it cannot be ascertained how far the outturn in the several districts was commensurate with the strength of the staff employed or with the work that had to be done. In future reports the matter should be more fully dealt with. The reports abstracted in Appendix D show that due attention was paid by District officers in all districts to the importance of having the maps maintained in accordance with the provisions of section 81 of the Forest Code. From Appendix E it appears that the area of reserves for which final maps had been prepared was 6,812 square miles as against 5,248 square miles at the end of the previous year. Maps have still to be prepared for 6,426 square miles of reserves.

* *Vide* paragraph 23 (4) *infra*.

12. *Management of State forests*—*Working plans and annual plans of operations*:—The total area of forests for which working plans were completed by the close of the year under review was 317 square miles and plans for another 769 square miles were under preparation. The corresponding figures for the previous year were 183 and 808 square miles, respectively. In several of the districts, the plans already approved were adhered to, while in others it would appear that, owing to press of other work, the famine and a variety of minor causes, deviations from the sanctioned schemes were found to be necessary. The total area for which plans had already been prepared, or were under preparation, being only 1,086 square miles, the area that remained to be dealt with at the close of the year was 17,821 square miles. Of the two main causes which have hitherto retarded progress, viz., delay in the completion of settlement work and inadequacy of establishments, the latter has since been remedied to a great extent, and the Government trusts that it will be found possible in future to accelerate progress in the preparation of working plans. The annual plans of operations are reported to have been fairly adhered to except in the Southern Circle, where forest surveys and settlements, weakness of demand and altered conditions appear to have interfered with their enforcement in most districts. It is stated that no information on the subject was furnished in the reports received from Bellary and South Coimbatore. This was not satisfactory.

13. *Communications and Buildings*—The expenditure incurred during the year in the construction and repair of communications and buildings (Rs. 99,833) was in excess of that of previous year by Rs. 750. It is satisfactory to note that of this sum, Rs. 18,955 represents the increased expenditure on roads and bridges. The tramways in Cuddapah and South Coimbatore are reported to have worked at a loss, while those in Nellore worked at a profit. As pointed out in last year's review, the

reported profit or loss is based on a… …stimate of what transport by country cart would have cost. As regards the Nellore… …mways, no information as to the data on which this estimate is calculated is gi… …in spite of the instructions issued in the previous reviews. In the case of the… …South Coimbatore lines, the estimate of the cost of transport by cart is apparently mea… …ingless as it is reported that the real advantage gained by working the tramway is th… …wood is extracted which, under other circumstances, it would be impossible to w… …rk out. The Board should consider whether some more satisfactory way of estim… …g the usefulness of these tramways could not be devised.

14. *Protection of forests from i…* …*y.*—The subjoined statement shows the number and disposal of cases relating to for… …offences during the past three years :—

Years.	Number of cases for disposal.			Nu… …er of cases disposed of.			Number of acquittals.	Percentage of cases compounded to cases disposed of.	Percentage of acquittals to cases dealt with by the magistracy.
	Cases pending	New cases.	Total.	With-drawn.	Com-pounded.	Dealt with by the magis-tracy.	Total			
1894–95 ..	1,604	9,883	11,487	904	5,109	4,039	10,052	750	51·8	18.6
1895–96 ..	1,365	9,610	10,975	1,869	4,531	3,862	9,402	796	48·2	20·6
1896–97 ..	1,580	11,638	13,218	1,624	5,793	4,025	11,442	672	50·63	16·7

It will be seen that there was an …crease of 2,028 cases during the year under review. The number of cases pros… …ted, however, increased by only 287. Much the greater proportion of the addition… …cases therefore were either withdrawn or compounded. Withdrawals show an incr… …se of 615 or of 60·7 per cent. over the figure for the previous year. It is unsatisfa… …tory to note that so many petty or doubtful cases are reported and more careful i… …truction of the subordinate staff seems to be required. The number of cases com… …nded increased by 1,262, an increase of 27·8 per cent. The amount of compensat… …realised was the largest yet attained, viz., Rs. 45,279. The increase was most… …arked in the Northern and Southern Circles. The Board has not furnished any adeq… …ate explanation of these figures. The ~~Conservator~~ ~~has~~ reported care should be taken that the principles repeated… …y laid down in the reviews of previous reports both by this Government and the Gov… …nment of India as to the composition of forest offences ~~have been~~ overlooked in pra… …ice. District Forest-officers should carefully scrutinise every case proposed to be c… …pounded and satisfy themselves that the case is a *bonâ fide* one clearly proved and … …at the compensation is not offered merely to escape the worry of a vexatious pros… …ution. The fall in the percentage of cases acquitted is satisfactory as showing th… …more care was exercised in ordering prosecutions and it is noted that several of th… …acquittals were due to a mistake of law which has been since rectified by a ruling of … …he High Court.

The number of cases of injury by … …re remained practically stationary. The prevalence of illicit goat browsing in Sou… …Arcot and North Arcot suggests the need for making some further provision for goa… …browsing in these districts. The Government regrets to note a recrudescence of the … …less violence which marked forest offences in Cuddapah a few years back. It is h… …ed that the preventive measures taken will prove successful.

15. The results of the measures … …opted for the protection of forests from fire during the past three years are exhibi… …in the following statement :—

Years.	Area in which fire protection was attempted.	Percentage area successfully protected.	Average cost of protection per square mile.
	SQ. MLS.		RS. A. P.
1894–95	4,979	94	8 7 11
1895–96	5,594	94	7 8 10
1896–97	5,363	99	7 5 6

It is noted that the action of t yots themselves in abstaining from causing in- tentional fires through fear of sc of fodder contributed largely to the satisfactory result attained during the past ar.

16. The total areas closed pen to grazing during the past two years are compared in the following statem at

Year.	Total area under control.	Closed to all animals.		Closed to goats or sheep.		Open to all animals.
		Whole year.	Part of year.	Whole year.	Part of year.	Whole year.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
1895-96	19,078	2,348	281	17,319	..	729
1896-97	18,907	1,767	226	18,081	96	744

The figures for 1896–97 in the st three columns of the statement above (taken from form No. 52) total up to 18, square miles or more than the area under control and are therefore apparently incorrect. It is, however, clear from the figures furnished that sheep and goats were ctically excluded from Government reserves. In the review of the report for 189 the Government desired that the scheme of goat browsing advocated by Mr. Po t should be given as extensive an applicatio as might be practicable and "that localities where they are really wanted by the people and free grazing areas are in equate, goat browsing should, in the absence of very strong reasons to the contrary, permitted within reasonable limits and subject to proper control." The Govern takes this opportunity of reiterating these instructions.

17. *Improvement of forest gro* —The attempts made at natural reproduction appear to have been fairly satisfacto except in the Northern and some parts of the Central Circle where owing to famin and the damage done to reserves by cattle and grass-cutters the results obtained re disappointing. The area under regular plantations rose from 18,067 acres 1895–96 to 23,186 acres in 1896–97 and the expenditure from Rs. 34,070 to Rs. ,865. There was a small decrease in the area where cultural operations were carri on and a very small increase in that of topes. The progress made in experiments c ducted with seeds and seedlings is reported to have been somewhat slow, but in reg to such of these as were carried out during the year some interesting informatio is furnished in paragraph 33 of the Board's report. In accordance with the wish of the Government of India expressed in its review of the annual administration port for 1895–96 a special report has been called for from the Board in regar the feasibility of growing forests of ccara rubber in this Presidency. A repo is also due from the Board on the subject of the ravages made by caterpillars in e sâl tracts of Ganjám in May 1896. From the fact that the report now under re w merely states that the natural reproduction of the tree in the district left nothing be desired it may presumably be inferred that the attack was not repeated. The su ission of the reports called for should, however, be expedited.

18. *Exploitation of major and mi forest produce.*—The operations connected with the exploitation and removal of majo rest produce have been fully reviewed by the Board in paragraphs 34 to 38 of t resent report and do not call for any special remarks. As regards minor produ e Government notes that notwithstanding the throwing open of the reserves in seve f the districts on account of famine the grazing revenue of the year reached the highe gure yet attained and amounted to Rs. 3,76,354 or nearly Rs. 36,000 more than i e previous year. The revenue was as usual the highest in Kistna (Rs. 70,3 Salem (Rs. 50,943) and North Coimbatore (Rs. 35,914) coming next. As com with 1895–96 the increase in the two districts last mentioned was alone Rs. 27,7 d has been ascribed in Salem to revision of rates and in North Coimbatore to y large addition to the number of licensed animals admitted into the reserves. hough the revenue was highest in Kistna yet there was a fall in this district from revenue realised in the previous year. The Board remarks that "Kistna under arcellaire system again shows a reduction of

revenue"; but it is observed that the dec
of some of the reserves to free grazing an
tion of professional herdsmen to better pa
increase of grazing revenue is ascribed in
Board should report the circumstances wh
time of scarcity. As regards the smaller i
from paragraph 51 of the report that du
preventing the collection being monop
the ryot.

19. *Gross yield and outturn of forest*
during the past five years are compared in

Years, &c.							
1892-93	..	..	..	..	..	..	..
1893-94	..	..	..	..	..	..	..
1894-95	..	..	..	..	..	..	..
1895-96	..	..	..	..	..	..	..
1896-97	..	..	..	..	..	..	..
Increase or decrease in 1896-97 as against 1895-96	..						
Percentage of the increase or decrease above mentioned.							

The causes of the variations in the
removals by Government and private agenc
43 and 44 of its report. The prevailing s
The removals under free grants at the same
ing of the forests in the affected districts.
help to the people in their distress during t

20. The profit derived from the workin
and private agencies during the past tw
table:—

Departmental working—		
Timber per cubic foot	...	...
Fuel do.	...	...
Bamboos each	...	...
Sandalwood per cubic foot	...	...
Minor produce per maund	...	...
Private working—		
Timber per cubic foot	...	...
Fuel do.	...	...
Bamboos each	...	...
Net profit ...	Grazing	...
	Minor produce	...

Excluding sandalwood and minor produc
the results obtained under the two systems
ment notes that departmental working had t
matter of the collection of both timber and
have been due to the sale of a large quantity
superior quality of bamboos by departmental

ase has to be attributed to the throwing open
free removal of grass and also to the migra-
tures. In Bellary as well as in Salem the
part to the enhancement of the rates. The
ich led to an enhancement of the rates at a
ems of minor produce, the Government notes
ttention is being paid to the importance of
ased by the contractors to the detriment of

roduce.—The particulars under this head
he following statement:—

Timber including sandalwood.	Fuel.	Bamboos.	Minor produce (gross value).
C. FT.	C. FT.	NO.	RS.
2,966,556	12,138,565	20,779,393	8,03,255
3,072,496	12,184,996	25,304,261	7,89,661
2,777,658	12,025,734	29,793,193	8,81,070
2,907,046	13,739,385	33,725,819	10,79,886
2,642,276	12,182,192	30,°46,684	9,42,739
— 264,770	— 1,557,193	— 2,879,135	— 1,37,147
— 9·1	— 11·3	— 8·5	— 12·7

ove figures in the case of collections and
are set forth by the Board in paragraphs
city restricted the demand of purchasers.
ime greatly increased owing to the open-
e forests have thus proved a substantial
year.

of the forest produce by departmental
years is compared in the sub-joined

1895-96.			1896-97.		
RS.	A.	P.	RS.	A.	P.
0	2	7	0	3	2
0	0	1	0	0	2
0	0	5	0	0	3
3	13	10	5	11	4
0	5	1	0	3	7
0	1	4	0	1	6
0	0	5	0	0	4
0	0	1	0	0	1
3,330	0	0	2,88,797	0	0
4,740	0	0	3,69,557	0	0

s regards which a comparison between
orking cannot be made, the Govern-
vantage over private working in the
boos. This is however reported to
aluable timber to the extraction of a
ney. As indicated in several of the

previous reports and reviews, however, no definite conclusion can be arrived at from a comparison of figures as to the relative advantages of the departmental and private systems of extracting forest produce. Where competition is freely encouraged and monopolies thus guarded against, private working is, perhaps, less liable to abuse and more likely to meet the ryots' wants. In accordance with the views of the Government of India, instructions have been issued for the gradual introduction of private working in place of departmental agency wherever possible without detriment to the interests of the public.

21. *Financial results.*—The financial result of the year's working is compared with that of the previous year in the following statement:—

	Rts.	Charges.	Surplus.	Proportion of surplus to gross revenue.
		Rs.	Rs.	
1895–96*—				
Northern Circle	13,859	3,83,877	+ 3,39,982	47
Central "	19,733	5,60,995	+ 3,78,738	40
Southern "	04,038	5,24,116	— 20,078	..
Total ..	7,630	14,68,988	+ 6,98,642	32
1896–97*—				
Northern Circle	,422	4,65,280	+ 1,32,142	22
Central "	,547	5,84,782	+ 3,63,765	38
Southern "	,948	5,37,815	+ 1,05,133	16
Total ..	8,917	15,87,877	+ 6,01,040	27
Increase or decrease in 1896–97*—				
Northern Circle	— 6,437	+ 81,403	— 2,07,840	..
Central "	+ 8,814	+ 23,787	— 14,973	..
Southern "	+ 8,910	+ 13,699	+ 1,25,211	..
Total ..	+ 1,287	+ 1,18,889	— 97,602	..
Average* for the four years ending 30th June 1896	,302	14,08,318	5,25,984	27

* year.

The surplus of revenue over charges was Rs. 6,01,040, *i.e.*, about one lakh less than the surplus in the previous year. In so far as the decrease has to be ascribed to the free concessions made in the affected districts of the Northern Circle, the result must be considered very satisfactory.

22. *Forest Administration.*—The Government notes with satisfaction that the working of the rules under section 26 of the Forest Act has been generally successful. The Collectors of Vizagapatam and Ganjam should carefully enquire into the reasonableness or otherwise of the complaints reported from their districts, viz., that only worthless trees are excluded from the classified lists. No allusion is made in the report to the working of the rules which have been framed under the Act for the management of forests and waste lands in certain private estates.† The Collectors of the districts where these estates are situated should be instructed to report, for incorporation in the report, brief notes on any question of interest that may have arisen in the working of such forests during the year.

Complaints usually of a general character and largely based on misapprehension having been frequently made against the administration of the department, the Government in July last issued a general order reviewing and re-affirming the principles of forest policy so often enunciated by this Government and the Government of India. His Excellency in Council observe the rules and principles therein laid down, that all Forest officers will consistently, order will lead to a better understanding between the people and the officers of the Dept

† Viz., Jeypore, Vizianagram and Sapt
vide Forest Manual for the rules.

The conduct of the subordinat tive staff is not favourably reported on. The improvement in the pay and pro of this branch of the department which has been effected by the recent re-organiza will, it is hoped, in time remedy matters.

The Government is pleased to ob the testimony borne by the Conservators to the good work done by the Superior rs of the department.

23. The following minor discrepan are noticed :—

(i) The area of the forests fina tled during the year, as given in statement No. 45, totals up to 796·8 square mile ile from abstract A in paragraph 1 and the statement in paragraph 5, it appears to been 656 square miles or making allowance for rectification and rounding off 673 e miles. Even supposing that the whole area disafforested (80 square miles) w ed during the year, the total comes up only to 753 square miles.

(ii) In abstract F, attached to graph 10 of the report, against Ganjam, either the figure 85 given in column 4 istake for 93 or the figure 649 given is a mistake for 641. In the latter case, ho r, the percentages given in columns 6 and 7 against the district will have to b ered. It is observed that the heading of column 7 is slightly misleading as in ulating the percentages given therein the area of lands for which returns are not able has also been taken into account.

(iii) The figures for 1895–96 in abstract G, appended to paragraph 14 of the present report, in a few cases do r ree with those given in the corresponding statement attached to the report for 189

(iv) In columns 23 and 24 of ement No. 47, the outturn of boundary surveys is shown in "miles", while in mns 15 and 16 of the same statement, as well as in the corresponding columns e previous year's statement, it is shown in "square miles". Apparently the figu ven in columns 15 and 16 represent the area of the reserves of which the boundarie e been surveyed.

(v) The figures given in append relating to the area for which final maps have been prepared, total up to 6,812 a ot 6,712 as given by the Board.

24. *Conclusion.*—The ~~slow progress~~ settlement work has impeded the development of the forests to some extent by erting the time and attention of a large portion of the forest staff. Neverthe the Government considers that much has been done towards the improvement of est growth. The amounts of timber, fuel and grass removed—a great portion, ally in the affected districts, on free grants, —prove that the department has sati fully met the wants of the people.

To the Board of Revenue (Land Revenu
" the Accountant-General.
Copy to the Government of India, Re and
Agural Department.

Secy

With reference to the Hon members note on para 16 of the draft review, the draft has been altered so as to put the positive side of the case viz. to show the extent to which & sheep were admitted instead of the negative side viz. the extent to which they were excluded.

The Hon member notes that from forest it would appear that sheep were admitted to 7451 sq. miles. It is not known how the H.C. arrived at this figure. The correct figure seen it is submitted to 11,578 sq miles as ~~recorded~~ shown in margin.

page xlix

Area to which sheep admitted — sq miles

Fig in col 7	764
Fig from 52	764
Fig in col 6 & do.	96
Items marked (a) in col 5 of do.	556
	2353
	1064
	715
	1434
	242
	1109
	456
	1623
	657
	627
Total	10,690
Item marked (c) in col 5 of do.	65
Total	11535
Deduct 17 sq miles alluded to in footnote (d)	17
Total	11,518

The Hon member note that Goalpara admitted to 1216 sq miles. This figure is arrived at by adding together the areas mentioned by the Bd in para 29 of the report (page 30) viz 661 + 78 + 236 + 151 + 70 + 20 = 1216. But the areas 661 sq m & 78 sq m. are not exclusive of the other areas mentioned. The correct area as stated in from No 52 is 840 sq miles as shown in margin.

It will be seen that according to them 87 of form 52 there were 83 sq miles open to all animals throughout the year in the Central Circle. But in para 29 of the Report, the Bd states that 78 sq miles are so open. The position is as the (VI)th "minor" Survey in para 28 of the

Area open to goats

	Sq miles
As in col 7 of form No 52	744
As in col 6 of do.	96
Viz	Total 840 sq
By	

It is reported in a recent Pro that certain areas in Cuddapah have been allotted to goats, & the Sec would like to be informed on this point

29
3/1/98

Noted 29/4/98

Mr 29/4/98

H.D.

Please see the para as

Received

Government {1898} of Madras.
REVENUE.

Recd. } 1898. Enclosures
Regd. } Spare copies

G.O., No. 273-273A 16th May 1898.

MAY.

Forest Administration.

Reviewing the progress report of — in the Madras Presidency for the year ending 30th June 1897.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue (Land Revenue), Forest No. 486, dated 13th November 1897:—

Read—file of reports received from Collectors and Conservators on the progress of Forest Administration during 1896–97.

Resolution—Forest No. 486, dated 13th November 1897.

The Board resolves to submit to Government the progress report of Forest Administration in the Madras Presidency for the year ending 30th June 1897.

2. The suggestions of Government as regards the arrangement of the appendices have been adopted and the length of all the returns except Forest No. 45 has, in anticipation of sanction, been curtailed in accordance with the circular from the Government of India referred to the Board for remarks in Government Order, Mis. No. 3431, Revenue, dated 7th July 1897.

3. Complete statistical returns from Kistna and Ganjám were not received in the Board's office till the 28th September and 5th October, respectively, and the revised timber returns called for on the 25th September from the Collector of Vizagapatam were not submitted by him till the 11th October.

4. The report has, as usual, been prepared by Mr. Popert, the Senior Conservator of Forests.

(True Extract.)

(Signed) R. C. C. CARR,
Secretary.

To the Secretary to Government, Revenue Department,
with three copies of the Administration Report.

ORDER—No.273, Revenue, dated 16th May 1898.

Forest No. 71.

With its Proceedings read above, the Board of Revenue submits its report on the administration of the Madras Forest Department for the year ending 30th June 1897.

2. The preparation of the report was, as in the previous two years, entrusted to Mr. Popert, the Senior Conservator of Forests. The statements appended have in some cases been curtailed in size and re-arranged in accordance with the suggestions contained in G.O., No. 370, Revenue, dated 31st May 1897, and in the Government of

India Circular No. 12-F.—245–1, dated 25th June 1897. Revised forms of statements giving detailed information as to the origin and results of injuries done to forests have also been inserted in the present report in accordance with the instructions issued by the Government of India in its Circular No. 9-F.—171–1, dated 10th June 1897. The suggestions made in the Government of India Circular of the 25th June last quoted above were, however, merely referred for the opinion of Local Governments and have not yet been finally adopted and prescribed. The Board was premature, therefore, in having taken action thereon at the present stage.

3. *Extension and constitution of State Forests—alteration of area.*—The subjoined statement compares the areas of reserved forests and reserved lands at the beginning and at the end of the year under review:—

—	Area on 1st July 1896.	Area added during 1896-97.	Area excluded during 1896-97.	Net increase or decrease.	Area on 30th June 1897.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved forests	12,388	863	113	+ 750	13,138
Do. lands	6,690	333	1,254	— 921	5,769
Total ..	19,078	1,196	1,367	— 171	18,907

Of the area added during the year, 845 square miles under reserved forests and 302 square miles under reserved lands represent the extent of new reserves, while the remainder is due to rectification of area. The area disafforested or freed from reservation in accordance with the policy enunciated by the Government of India in October 1894 was 80 square miles of reserved forests and 242 square miles of reserved lands, while the decrease, due to rectification under the two classes of lands, was 33 square miles and 94 square miles, respectively. Under reserved lands, there was also a further reduction of 845 square miles due to final reservation and 73 square miles to exclusion at settlement. The rectified figures now reported do not, however, exclude the area of the enclosures in the Salem reserves, wrongly taken into account in the returns furnished by the Survey of India party as, owing to press of other work, the survey of these small areas could not be undertaken before the close of the year under review. The actual area of State forests at the end of the year is, therefore, somewhat less than 18,907 square miles, the figure given in the above statement.

4. The total area under the control of the department having been less than it was in the previous year, the percentages of that area to the total extent of Government lands (21·24) and to that of unoccupied lands (36·46) also show an almost proportionate decrease as compared with the figures, 21·43 and 36·80, respectively, of 1895–96. Abstract B, appended to paragraph 2 of the report, in which detailed information on the above points is furnished has been prepared with considerable care, but its completeness is marred by a few unexplained variations between the figures given in columns 2 and 3 and the corresponding figures given last year, and by the fact that the area for which returns are reported to be not available is in excess of the previous year's figure by 250 square miles. The attention of the Settlement Department should be drawn to the matter.

5. The Board in paragraph 10 of its report estimates that, if a liberal margin of unreserved land is to be allowed for free grazing, local requirements and extension of cultivation, it will not be possible to add more than 1,114 square miles to the area already brought under control. The Government agrees that, making due allowance for the rectification of Salem figures and for the exclusion of areas at settlement, the area to be ultimately brought under control is not likely to exceed a total of 20,000 square miles. This represents about 22 per cent. of the total area of Government lands.

6. *Forest Settlement.*—The following table compares the outturn of Forest Settlement work during the year under review as gauged by the area added to the forests reserved under section 16 of the Forest Act with that of the previous four years:—

—	1892-93 (fifteen months).	1893-94.	1894-95.	1895-96.	1896-97.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Outturn	2,261	1,350	680	922	750

Note.—The figures given above are the net area arrived at, after allowing for rectification and after deducting the area disafforested from the total area notified.

The actual extent constituted as forest reserve during the year was, however, 845 square miles as against 858 square miles in 1895–96, while the extent in respect of which final notifications were issued during the two years was 656 square miles and 808 square miles, respectively. Judged by either criterion, therefore, the settlement work of the year fell short of that of the previous year. It has been pointed out in previous reviews that one of the main reasons for the slow progress made of late in settlement operations is that, while the blocks settled in former years were large hill areas comparatively free of rights and easy to deal with, those which have now to be settled are smaller and are situated in the neighbourhood of cultivated tracts and are more or less encumbered with communal or private rights. These difficulties have been, to some extent, met by the appointment of an additional Forest Settlement-officer. But the Government must rely on the Board to see that the officers employed on this important work perform their duties efficiently and promptly. The Board should not hesitate to recommend the transfer to other duty of any officer who is found to lack the necessary energy and activity.

The outturn of settlement work by Revenue Divisional officers does not call for any special remarks.

7. Including the leased forests in the Nilgiri district, the total area under the control of the Forest Department was about 20,021 square miles classified at present as follows:—

	SQ. MILES.
Notified under section 16	13,138
Do. do. 4	4,030
Reserved under section 26	1,739
Further Selections	1,114

Of the area notified under section 4 of the Act, settlement work connected with 1,453 square miles was practically complete; by the close of the year under review 970 square miles was settled, but not reported on, and operations were being proceeded with in the case of 1,607 square miles. Making allowance for leased forests and future rectification, it is observed that, at the rate of outturn during the year under review, forest settlement work will take another six years to complete. The Government hopes, however, that no effort will be spared by all officers concerned to push on the work to as speedy a termination as is consistent with good and careful administration.

8. *Demarcation and Survey.*—As desired by the Government of India in its review of the report for 1895–96, the Board has, in its present report, dealt with the preliminary demarcation and survey of proposed reserves separately from the final demarcation and survey of settled reserves. In return No. 47, however, the distinction between the two classes of survey has not been maintained so far as they have reference to the work of the Survey of India parties. The Board has explained in a separate Proceedings that this is due to the plan found convenient in this Presidency, whereby a party when dealing with settled areas takes up at the same time any adjoining tracts recently added to the reserved area though not as yet settled. Preliminary surveys made by departmental officers have been excluded from the statement in accordance with the instructions of the Government of India.

9. *Preliminary demarcation and survey of proposed reserves.*—The work of preliminary survey done in the several districts is reviewed by the Board in paragraph 12 of its report. The information given is not very full; but the Government is glad to note that the outturn of work in preparing and revising the sketch-maps to accompany notifications under sections 4 and 16 was satisfactory. As regards demarcation, the outturn during the year under review (1,671 miles) showed an increase over that of the previous year (1,479 miles). The average rate per mile, however, for the whole

Presidency rose at the same time from Rs. 2–13–6 to Rs. 3–9–10. The cost per mile varied from As. 10–6 in South Canara to Rs. 15–10–8 in North Coimbatore. The latter rate is double that reported for the same division in the previous year. The Board explains that this increase as well as that observed in Tinnevelly was justified by the nature of the forests in which the work had to be done. The work and consequently the cost of demarcation must, of course, vary with the particular locality; but the Government trusts that the expenditure in each case is carefully scrutinized by the District Forest-officers and Collectors.

10. *Final demarcation and survey of settled reserves.*—The work of final demarcation during the past three years is compared in the subjoined statement:—

—	Permanent demarcation.			Re-clearing old lines, &c.		
	1894–95.	1895–96.	1896–97.	1894–95.	1895–96.	1896–97.
	MLS.	MLS.	MLS.	MLS.	MLS.	MLS.
Northern Circle	499	855	609	270	597	1,150
Central ,, ...	1,542	1,117	629	991	2,834	1,327
Southern ,, ...	230	217	238	171	193	549
Total ..	2,271	2,189	1,376	1,432	3,624	3,026
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Average cost per mile	9 0 10	9 8 6	12 2 5	6 3 11	2 14 4	4 12 0

The abnormal increase in the number of miles re-cleared in 1895–96 was ascribed by the Board to short work in previous years and the decreased cost was explained by the fact that the work was carried out mostly by guards and watchers. The fall in outturn and increase in cost in the year under review is apparently accounted for by the omission from the statement of lines re-cleared by subordinates. A portion of the enhanced cost has, however, to be ascribed to the special difficulties of clearing and erecting cairns in certain localities and in Kistna to bad work. It is presumed that the Board has taken suitable notice of the conduct of the officers responsible for the original wrong demarcation in Kistna. It is noted that only 1,376 miles of boundary were permanently demarcated during the year, and that 304 miles remained to be demarcated at the end of the year. The work is thus in arrear and should be pushed on.

11. The area topographically surveyed by the Survey of India Party No. 19 during the year under review was 745 square miles, and the cost incurred per square mile Rs. 84 as against 964 square miles and Rs. 66, respectively, in the previous year. The main cause of the decrease in outturn and increase in cost is reported to be the difficult nature of the country and the dense forests in the Kurnool district. The new Party No. 9 surveyed about 66 square miles only at a cost of about Rs. 354 per square mile. The abnormally high rate is attributed to the fact that the party was unable to work throughout the season owing to bad weather and the inefficiency of the subordinate staff, and that the cost of its transfer from the Central Provinces for work in Madras was very heavy. The Government is glad to note that arrangements have since been made to combine the two parties under the charge of one officer and to give the necessary training to the subordinates employed, and it is hoped that future operations will be more efficiently conducted.

As regards departmental surveys, the report mentions the work done in Bellary and Salem only; but from statement No. 47 appended to the report, it appears that a considerable amount of work was also done in Kistna, Trichinopoly, Ganjám, Vizagapatam, Kurnool, South Canara and North Malabar. In the absence of detailed information, however, it cannot be ascertained how far the outturn in the several districts was commensurate with the strength of the staff employed or with the work that had to be done. In future reports the matter should be more fully dealt with. The reports abstracted in Appendix D show that due attention was paid by District officers in all districts to the importance of having the ma[illegible] maintained in accordance

with the provisions of section 81 of the Forest Code. From Appendix E it appears that the area of reserves for which final maps had been prepared was 6,812 square miles as against 5,248 square miles * at the end of the previous year. Maps have still to be prepared for 6,426 square miles of reserves.

* *Vide* paragraph 23 (4) *infra.*

12. *Management of State forests—Working plans and annual plans of operations.*—The total area of forests for which working plans were completed by the close of the year under review was 317 square miles and plans for 769 square miles more were under preparation. The corresponding figures for the previous year were 183 and 808 square miles, respectively. In several of the districts, the plans already approved were adhered to, while in others it would appear that, owing to press of other work, the famine and a variety of minor causes, deviations from the sanctioned schemes were found to be necessary. The total area for which plans had already been prepared, or were under preparation, being only 1,086 square miles, the area that remained to be dealt with at the close of the year was about 17,821 square miles. Of the two main causes which have hitherto retarded progress, viz., delay in the completion of settlement work and inadequacy of establishments, the latter has since been remedied to a great extent, and the Government trusts that it will be found possible in future to accelerate progress in the preparation of working plans. The annual plans of operations are reported to have been fairly well adhered to except in the Southern Circle, where forest surveys and settlements, slackness of demand and altered conditions appear to have interfered with their enforcement in most districts. It is stated that no information on the subject was furnished in the reports received from Bellary and South Coimbatore. This is not satisfactory.

13. *Communications and Buildings.*—The expenditure incurred during the year in the construction and repair of communications and buildings (Rs. 99,833) was in excess of that of previous year by Rs. 27,750. It is satisfactory to note that of this sum, Rs. 18,955 represents the increased expenditure on roads and bridges. The tramways in Cuddapah and South Coimbatore are reported to have worked at a loss, while those in Nellore worked at a profit. As pointed out in the previous year's review, the reported profit or loss is based on an estimate of what transport by country cart would have cost. As regards the Nellore tramways, no information as to the data on which this estimate is calculated is given in spite of the instructions issued in the previous reviews. In the case of the South Coimbatore lines, the estimate of the cost of transport by cart is apparently meaningless as it is reported that the real advantage gained by working the tramway is that wood is extracted which, under other circumstances, it would be impossible to work out. The Board should consider whether some more satisfactory way of estimating the usefulness of these tramways could not be devised.

14. *Protection of forests from injury.*—The subjoined statement shows the number and disposal of cases relating to forest offences during the past three years :—

Years.	Number of cases for disposal.			Number of cases disposed of.				Number of acquittals.	Percentage of cases compounded to cases disposed of.	Percentage of acquittals to cases dealt with by the magistracy.
	Cases pending	New cases.	Total.	Withdrawn.	Compounded.	Dealt with by the magistracy.	Total			
1894-95 ..	1,604	9,883	11,487	904	5,109	4,039	10,052	750	51·8	13.6
1895-96 ..	1,365	9,610	10,975	1,009	4,531	3,862	9,402	796	48·2	20·6
1896-97 ..	1,580	11,638	13,218	1,624	5,793	4,025	11,442	672	50·63	16 7

It will be seen that there was an increase of 2,028 cases during the year under review. The number of cases prosecuted, however, increased by only 287. Much the greater proportion of the additional cases therefore were either withdrawn or compounded. Withdrawals show an increase of 615 or of 60·7 per cent. over the figure for the previous year. It is unsatisfactory to note that so many petty or doubtful

cases are reported and more careful instruction of the subordinate staff seems to be required. The number of cases compounded increased by 1,262, an increase of 27·8 per cent. The amount of compensation realised was the largest yet reached, viz., Rs. 45,279. The increase was most marked in the Northern and Southern Circles. The Board has not furnished any adequate explanation of these figures. The greatest care should be taken that the principles repeatedly laid down in the reviews of previous reports both by this Government and the Government of India as to the composition of forest offences are not overlooked in practice. District Forest-officers should carefully scrutinise every case proposed to be compounded and satisfy themselves that the case is a *bonâ fide* one clearly proved and that the compensation is not offered merely to escape the worry of a vexatious prosecution. The fall in the percentage of cases acquitted is satisfactory as showing that more care was exercised in ordering prosecutions and it is noted that several of the acquittals were due to a mistake of law which has been since pointed out by a ruling of the High Court.

The number of cases of injury by fire remained practically stationary. The prevalence of illicit goat browsing in South Arcot and North Arcot suggests the need for making some further provision for goat browsing in these districts. The Government regrets to note a recrudescence of the lawless violence which marked forest offences in Cuddapah a few years back. It is hoped that the preventive measures taken will prove successful.

15. The results of the measures adopted for the protection of forests from fire during the past three years are exhibited in the following statement :—

Years.	Area in which fire protection was attempted.	Percentage area successfully protected.	Average cost of protection per square mile.
	SQ. MLS.		RS. A. P.
1894-95	4,979	94	8 7 11
1895-96	5,594	94	7 8 10
1896-97	5,363	99	7 5 6

It is noted that the action of the ryots themselves in abstaining from intentionally causing fires in order that old grass-stalks might be destroyed and new shoots produced through fear of scarcity of fodder contributed largely to the satisfactory result attained during the past year.

16. The total areas closed and open to grazing during the past two years are compared in the following statement :—

Year.	Total area under control.	Closed to all animals.		Closed to goats or sheep or both.		Open to all animals.
		Whole year.	Part of year.	Whole year.	Part of year.	Whole year.
	SQ. MLS	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
1895-96	19,078	2,348	281	17,319	..	729
1896-97	18,907	1,767	226	18,081	96	744

The figures for 1896-97 in the last three columns of the statement above (taken from form No. 52) total up to 18,921 square miles or more than the area under control and are therefore apparently incorrect. It is, however, clear from the figures furnished that sheep were admitted to 11,518 square miles of reserves and goats to 840 square miles. The Board has since reported that further provision for goats has been made in the Cuddapah district.

17. *Improvement of forest growth.*—Natural reproduction appear to have proceeded satisfactorily except in the Northern and some parts of the Central Circle where owing to famine and the damage done to reserves by cattle and grass-cutters the results obtained were disappointing. The area under regular plantations rose from

18,067 acres in 1895–96 to 23,186 acres in 1896–97 and the expenditure from Rs. 34,070 to Rs. 34,865. There was a small decrease in the area in which cultural operations were carried on and a very small increase in that of topes. The progress made in experiments conducted with seeds and seedlings is reported to have been somewhat slow, but in regard to such of these as were carried out during the year some interesting information is furnished in paragraph 33 of the Board's report. In accordance with the wishes of the Government of India expressed in its review of the annual administration report for 1895–96 a special report has been called for from the Board in regard to the feasibility of growing forests of *ceara* rubber in this Presidency. A report is also due from the Board on the subject of the ravages made by caterpillars in the sâl tracts of Ganjám in May 1896. From the fact that the report now under review merely states that the natural reproduction of the tree in the district left nothing to be desired it may presumably be inferred that the attack was not repeated. The submission of the reports called for should, however, be expedited.

18. *Exploitation of major and minor forest produce.*—The operations connected with the exploitation and removal of major forest produce have been fully reviewed by the Board in paragraphs 34 to 38 of the present report and do not call for any special remarks. As regards minor produce the Government notes that notwithstanding the throwing open of the reserves in several of the districts to free grazing on account of famine the grazing revenue of the year reached the highest figure yet attained and amounted to Rs. 3,76,354 or nearly Rs. 36,000 more than in the previous year. The revenue was as usual the highest in Kistna (Rs. 70,389), Salem (Rs. 50,943) and North Coimbatore (Rs. 35,914) coming next. As compared with 1895–96 the increase in the two districts last mentioned alone was Rs. 27,745 and has been ascribed in Salem to revision of rates and in North Coimbatore to a very large addition to the number of licensed animals admitted into the reserves. Although the revenue was highest in Kistna yet it was lower in this district than in the previous year. The Board remarks that "Kistna under the parcellaire system again shows a reduction of revenue"; but it is observed that the decrease has to be attributed to the fact that people were allowed to take some grass free and to the migration of professional herdsmen to better pastures. In Bellary as well as in Salem the increase of grazing revenue is ascribed in part to the enhancement of the rates. The Board should report the circumstances which led to an enhancement of the rates at a time of scarcity. As regards the smaller items of minor produce, the Government notes from paragraph 51 of the report that due attention is being paid to the importance of preventing the collection of such produce being monopolised by petty contractors to the detriment of the ryot.

19. *Gross yield and outturn of forest produce.*—The particulars under this head during the past five years are compared in the following statement:—

Years, &c.	Timber including sandalwood.	Fuel.	Bamboos.	Minor produce (gross value).
	C. FT.	C. FT.	NO.	RS.
1892–93 (15 months)	2,966,556	12,138,565	20,779,393	8,03,255
1893–94	3,072,496	12,184,996	25,304,261	7,89,661
1894–95	2,777,658	12,025,734	29,793,193	8,81,070
1895–96	2,907,046	13,739,385	33,725,819	10,79,886
1896–97	2,642,276	12,182,192	30,946,684	9,42,739
Increase or decrease in 1896–97 as against 1895–96 ..	— 264,770	— 1,557,193	— 2,879,135	— 1,37,147
Percentage of the increase or decrease above mentioned.	— 9·1	— 11·3	— 8·5	— 12·7

The causes of the variations in the above figures in the case of collections and removals by Government and private agencies are set forth by the Board in paragraphs 43 and 44 of its report. The prevailing scarcity restricted the demand of purchasers. The removals of grass under free grants at the same time greatly increased owing to the opening of the forests in the affected districts. The forests have thus proved a substantial help to the people in their distress during the year.

20. The profit derived from the working of the forest produce by departmental and private agencies during the past two years is compared in the sub-joined table:—

	1895–96. RS. A. P.	1896–97. RS. A. P.
Departmental working—		
Timber per cubic foot	0 2 7	0 3 2
Fuel do.	0 0 1	0 0 2
Bamboos each	0 0 5	0 0 3
Sandalwood per cubic foot	3 13 10	5 11 4
Minor produce per maund	0 5 1	0 3 7
Private working —		
Timber per cubic foot	0 1 4	0 1 6
Fuel do.	0 0 5	0 0 4
Bamboos each	0 0 1	0 0 1
Net profit ... Grazing	2,73,330 0 0	2,88,797 0 0
Net profit ... Minor produce ...	5,74,740 0 0	3,69,557 0 0

Excluding sandalwood and minor produce, as regards which a comparison between the results obtained under the two systems of working cannot be made, the Government notes that departmental working had the advantage over private working in the matter of the collection of both timber and bamboos. This is, however, reported to have been due to the sale of a large quantity of valuable timber and to the extraction of a superior quality of bamboos by departmental agency. As indicated in several of the previous reports and reviews, however, no definite conclusion can be arrived at from a comparison of figures as to the relative advantages of the departmental and private systems of extracting forest produce. If competition is freely encouraged and monopolies thus guarded against, private working is, perhaps, less liable to abuse and more likely to meet the ryots' wants. In accordance with the views of the Government of India, instructions have been issued for the gradual introduction of private working in place of departmental agency wherever possible without detriment to the interests of the public.

21. *Financial results.*—The financial result of the year's working is compared with that of the previous year in the following statement:—

—	Receipts.	Charges.	Surplus.	Proportion of surplus to gross revenue.
	RS.	RS.	RS.	
1895–96*—				
Northern Circle	7,23,859	3,83,877	+ 3,39,982	47
Central ,, ...	9,39,733	5,60,995	+ 3,78,738	40
Southern ,, ...	5,04,038	5,24,116	— 20,078	..
Total ..	21,67,630	14,68,988	+ 6,98,642	32
1896–97*—				
Northern Circle	5,97,422	4,65,280	+ 1,32,142	22
Central ,, ...	9,48,547	5,84,782	+ 3,63,765	38
Southern ,, ...	6,42,948	5,37,815	+ 1,05,133	16
Total ..	21,88,917	15,87,877	+ 6,01,040	27
Increase or decrease in 1896–97*—				
Northern Circle	— 1,26,437	+ 81,403	— 2,07,840	..
Central ,, ...	+ 8,814	+ 23,787	— 14,973	..
Southern ,, ...	+ 1,38,910	+ 13,699	+ 1,25,211	..
Total ..	+ 21,287	+ 1,18,889	— 97,602	..
Average* for the four years ending 30th June 1896	19,34,302	14,08,318	5,25,984	27

* Forest year.

The surplus of revenue over charges was Rs. 6,01,040, *i.e.*, about one lakh le[ss] than the surplus in the previous year. In so far as the decrease has to be ascribed to the free concessions made in the affected districts of the Northern Circle, the result must be considered very satisfactory.

22. *Forest Administration.*—The Government notes with satisfaction that the working of the rules under section 26 of the Forest Act has been generally successful. The Collector of Vizagapatam should carefully enquire into the reasonableness or otherwise of the complaint of the ryots, that only worthless trees are excluded from the classified lists. No allusion is made in the report to the working of the rules which have been framed under the Act for the management of forests and waste lands in certain private estates.* The Collectors of the districts where these estates are situated should be instructed to submit, for incorporation in the report, brief notes on any question of interest that may have arisen in the working of such forests during the year.

* Viz., Jeypore, Vizianagram and Sáptúr.

Complaints usually of a general nature and largely based on misapprehension having been frequently made against the administration of the department, the Government in July last issued a general order reviewing and re-affirming the principles of forest policy so often enunciated both by this Government and the Government of India. His Excellency in Council trusts that the publication of this order will lead to a better understanding of the policy of Government and heartier co-operation between the people and the officers of the department.

The conduct of the subordinate executive staff is not favourably reported on. The improvement in the pay and prospects of this branch of the department which has been effected by the recent re-organization will, it is hoped, in time remedy matters.

The Government is pleased to observe the testimony borne by the Conservators to the good work done by the Superior officers of the department.

23. The following minor discrepancies are noticed :—

(i) The area of the forests finally settled during the year, as given in statement No. 45, totals up to 796·8 square miles, while from abstract A in paragraph 1 and the statement in paragraph 5, it appears to have been 656 square miles or making allowance for rectification and rounding off 673 square miles. Even supposing that the whole area disafforested (80 square miles) was settled during the year, the total comes up only to 753 square miles.

(ii) In abstract F, attached to paragraph 10 of the report, against Ganjám, either the figure 85 given in column 4 is a mistake for 93 or the figure 649 given in column 5 is a mistake for 641. In the latter case, however, the percentages given in columns 6 and 7 against the district will have to be altered. It is observed that the heading of column 7 is slightly misleading as in calculating the percentages given therein the area of lands for which returns are not available has also been taken into account.

(iii) The figures for 1895–96 given in abstract G, appended to paragraph 14 of the present report, in a few cases do not agree with those given in the corresponding statement attached to the report for 1895–96.

(iv) In columns 23 and 24 of statement No. 47, the outturn of boundary surveys is shown in "miles", while in columns 15 and 16 of the same statement, as well as in the corresponding columns of the previous year's statement, it is shown in "square miles". Apparently the figures given in columns 15 and 16 represent the area of the reserves of which the boundaries have been surveyed.

(v) The figures given in appendix E, relating to the area for which final maps have been prepared, total up to 6,812 and not 6,712 as given by the Board.

(vi) In paragraph 29, the Board reports that 78 square miles were open in this Central Circle to all animals; but in the last column of form No. 52, the area so open is shown as 83 square miles.

24. *Conclusion.*—The continuance of Settlement work has impeded the develop[ment] [o]f the forests to some extent by diverting to that work the time and attention of a large portion of the forest staff and delaying the preparation of proper working plans. Nevertheless, the Government considers that much has been done towards the improvement of forest growth. The amounts of timber, fuel and grass removed—a great portion, especially in the affected districts, on free grants, — prove that the department has satisfactorily met the wants of the people.

(True Extract.)

(Sd) G.S. Forbes

Ag. Secretary to Government.

To the Board of Revenue (Land Revenue).
„ the Accountant-General.

Endorsement No. 2734

Copy to the Government of India, Revenue and Agricultural Department.

(Signed) N. E. MARJORIBANKS,
Ag. Under Secretary to Government.

Exd. Shaik Karim.

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