M.R.O. 1—77,006—8-6-37.

(1) Number of pages 90

(2) Date of repair 10. 8. 38

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 591 Press / ~~Mis.~~

Dated 6-6- 1882.

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following letter from Colonel R. H. BEDDOME, Conservator of Forests, to the Secretary to Government, Revenue Department, dated Madras, 5th November 1881, No. 720:—

I have the honor to forward herewith the Administration Report of the Government Chinchona Plantations on the Nílgiris for the official year 1880-81, together with eleven enclosures received from Lieutenant-Colonel R. S. Jago, Deputy Conservator of Forests, with letter dated Ootacamund, the 3rd November 1881, No. 403.

ENCLOSURES.

From Lieutenant-Colonel R. S. JAGO, Deputy Conservator of Forests, in charge of Chinchona Department, Nílgiris, to the Conservator of Forests, dated Ootacamund, 3rd November 1881, No. 403.

In forwarding the Chinchona Administration Report for 1880-81, I would beg to draw your attention to the fact that with the exception of the months of February and March of that year the Chinchona Department was not under the Forest. Consequently I can only forward such information as has been supplied me by the employés and records, the former of whom during that year were not under me. The delay in the said report being provided, arises from the difficulty in procuring the information required to frame the report on.

From Lieutenant-Colonel R. S. JAGO, Deputy Conservator of Forests, in charge of Chinchona Plantations, Nílgiris, to Colonel R. H. BEDDOME, Conservator of Forests, dated Ootacamund, 31st October 1881, No. 398.

I have the honor to forward the Administration Report on the Government Chinchona Plantations on the Nílgiris for the official year 1880-81.

2. On the 1st February last, the Chinchona Plantations were transferred from the charge of the Commissioner of the Nílgiris to that of the Conservator of Forests, the plantations being placed under the direct supervision of the local Forest officer—*vide* G.O., No. 1670, dated 8th December 1880.

3. *Season and Rainfall.*—The weather during the year was favorable for both the collection of crop and for the growth of Chinchona. The frost was severe, and on the Dodabetta plantation a few trees growing in the flats were killed. Young private plantations in Ootacamund did not suffer in winter so much as in the previous year, owing perhaps to the fact that their owners had raised five belts of Blue-gums to protect their plants. The belts afford protection from the cold east winds during this season, and it has been noticed where these have obtained a fair height that the temperature at night is not near so low as in exposed places. The rainfall at Naduvatam amounted to 89·70 inches against 100·92 inches in the previous year. There was only one month (January 1881) in which no rain fell on this plantation. The maximum fall occurred in June 1880, and the minimum in February 1881; 20·83 inches being gauged in the former and 35 cents in the latter; 51·09 inches of rain were gauged at Dodabetta during the year against 46·40 in 1879-80. It rained in every month of the year on this estate, the maximum fall (10·70 inches) being in October 1880, and the minimum (20 cents) in January 1881. The appearance of all the estates was generally satisfactory at the close of the year.

4. *Receipts and Expenditure.*—The receipts during the year amounted to Rs. 4,34,261-1-8 and the expenditure to Rs. 96,105-0-7, thus leaving as net profit to Government a sum of Rs. 3,38,156-1-1. Statements are enclosed showing the expenditure in detail on each plantation. Appendices Nos. 1 and 2 show the general expenditure and receipts.

5. *Permanent Plantations—(a) Number of Trees.*—The following statement shows the number of trees existing on the plantations on the 31st March 1881:—

	Number of Trees as per Major Walker's enumeration in 1878.	Number of Casualties, &c., since 1878.	Balance.	Number of Plants put out since 1878.	Number of Plants in permanent plantation on 31st March 1881.
Naduvatam	208,780	4,943	203,837	3,105	206,942
Hooker	87,557	34,999	52,558	112,560	165,118
Wood	45,758	5,355	40,403	11,800	52,203
Dodabetta	226,936	684	226,252	16,300	242,552
Total ...	569,031	45,981	523,050	143,765	666,815

The casualties referred to above are the odd trees which have died off from year to year, the coppice failures and the Red barks uprooted on the Hooker. The young plantings looked very well at the end of the year.

(b) Conservancy.—The Naduvatam and Pykara plantations were several times knifeweeded during the wet weather. In the dry season the whole were again gone over with the mamoty and the weeds were buried. Renovation was continued on these plantations. The Dodabetta plantation was also mamoty-weeded throughout. An attempt was made by repeated surface weeding to kill the braken fern in some plots, but without success. It has now been decided to eradicate them by uprooting. The terracing improved the trees very much. Roads, drains and water channels on all estates were kept in order.

(c) Manure.—Cattle manure was applied to 13 acres at Naduvatam, 40 acres at Hooker, 11 acres on the Wood, and about 25 acres on Dodabetta. Government recently sanctioned an experiment in patent manures, and my proposals for increasing the supply of cattle manure on the Naduvatam plantation are now before you. At Dodabetta also manuring operations will be extended in future.

6. *Propagation and Nurseries.*—Appendix No 10 shows the number of plants, seedlings and cuttings of the various sorts raised during the year and issued to the public. 1,711 pounds of seed were distributed, the greater portion going to Ceylon. The demands for plants of *C. Succirubra* fell very low during the year. In October 1880, Mr. Robert Cross arrived here with three plants of the Santa Fé variety of Chinchona and six of Carthagena. The latter were handed over to Mr. Jamieson, the Superintendent of the Botanical Gardens. Five of them damped off during the wet sunless weather of November last. Mr. Jamieson managed however to save a portion of the plants for cuttings. On the 31st March 1881, there were five rooted cuttings under his charge. The three plants of Santa Fé were retained by Mr. Cross, who had six established plants at the close of the year.

7. *Crop.*—The crop of the year amounted to 243,896 pounds.

The following gives that of each plantation :—

NADUVATAM.

Natural Crown Bark ...	6,728
Mossed do. ...	7,379
Renewed do. ...	19,830
Branch do. ...	4,402
Mixed do. ...	955
Natural Red Bark ...	40,049
Mossed do. ...	29,262
Renewed do. ...	40,307
Branch do. ...	10,350
Root do. ...	5,077
Dust do. ...	2,134
Natural Hybrid Bark ...	59
Do. Micrantha Bark ...	182
Total ...	166,714

PYKARA.

Natural Crown Bark ...	2,322
Mossed do. ...	502
Renewed do. ...	1,413
Branch do. ...	1,726
Dust do. ...	1,004
Natural Red Bark ...	11,332
Mossed do. ...	6,463
Renewed do. ...	13,315
Branch do. ...	5,172
Total ...	43,249

DODABETTA.

Natural Crown Bark ...	13,944
Mossed do. ...	12,574
Renewed do. ...	4,232
Branch Crown Bark ...	2,934
Natural Pubescens Bark ...	111
Mossed do. do. ...	138
Total ...	33,933
Grand Total ...	243,896
Add Balance in Store at beginning of year ..	6,375
Total ...	250,271

which was distributed as follows :—

Supplied to the Home Market ...	234,736
Do to Messrs. Dymes and Company ...	5,096
Do to Bombay Medical Department ...	2,000
Balance in Store on 31st March 1881 ...	8,439

The bark supplied to Messrs. Dymes and Company was supplied under orders of Government, No. 879, dated 26th July 1880, and realized net Rs. 12,827. No bark was supplied to the Madras Medical Department.

Appendix No. 7 gives the number of trees decorticated and the quantity of green bark obtained. Amongst the quantity sent for sale in London there was a quantity of "scraped" bark obtained by the Java slicing system. The highest price obtained on scraped Red from Naduvatam was 2*s.* 9*d.* per lb. which may be considered a fair price. The Dodabetta "scraped" Crown realized 6*s.* 8*d.* per pound, while natural Red and Crown taken under the stripping process fetched 2*s.* 5*d.* and 7*s.* 7*d.* per pound respectively. So far as the prices realized are concerned, the Java system is no loss; but considering the effect of the process on the trees, I am of opinion that no further scraping should be carried out. Of 4,723 Succirubra treated under this system, no less than 2,700 were killed, and had to be uprooted in the current year. At Dodabetta even some of the Crown barks died away. The Naduvatam trees were not covered after the operation, which may account for so many failures, but here the saving is lost. The trees operated on under Mr. McIvor's mossing (covering) system give almost double what scraped trees do. The most important point however to be considered is that scraped trees do not renew whether covered or not completely within a year, while under the stripping process Crown barks at least, and the majority of Red barks, are fit to strip again a year after the first decortication. At Ossington, a private estate, the slicing system was tried and the trees covered with grass although no casualties have happened; the trees this year are far from ready for cropping. I think that the climate of the Nilgiris between the months of December and March is too dry and bleak for this system. The trees during this season are at a standstill as regards growth, and as renewing cannot go on then, the remnant bark becomes so dry that in many cases it has been known to crack and separate from the tree. In the stripping process, there being complete alternate systems for circulation of sap, renewing goes on at all seasons. The grassing system tried at Naduvatam is a perfect success as regards Crown barks. I am unable just now to give an opinion as regards its effect on Red barks. Very many trees of this variety were noticed which had failed to renew their bark, but whether from the grassing or otherwise cannot be affirmed now. Alternate blocks have this year been tried with moss and grass at Naduvatam and the results will be carefully watched and reported in the next Administration Report. No analysis having as yet been made of bark renewed under grass, no comparison can be made between this and mossing as regards the quality of the bark.

8. *Buildings.*—A new bungalow for the Assistant Superintendent was erected at Naduvatam, also three lines, consisting of 50 huts, for the occupation of coolies. All these buildings were built with burnt brick set in mud and roofed with corrugated iron. Nothing was done towards the erection of the new bark store and drying shed.

9. *Repairs.*—The permanent buildings on all estates received their annual repairs. At Dodabetta the roof of the jail was removed, the walls repaired, and the roof reset with bolts, &c.

10. *Experiments.*—The results of the scraping and grassing system are given in paragraph 7 under "Crop." In Appendix 11 will be found information regarding the coppices. In all cases the shoots thrived very well, averaging 6 feet in height at the end of the year. It has been remarked that the coppices from barked trees have grown much better than those from unbarked trees. Two hundred Succirubra trees originally coppiced in 1871 were again felled in March last, yielding 1,312 pounds of dry bark, which were forwarded per S.S. *Booldana* to the Secretary of State.

11. *Labor.*—The supply was sufficient although the cost was generally more; principally at Dodabetta. To obviate the difficulty experienced during crop time by the Badagas absenting themselves to attend to their fields, &c., an attempt was made to get up low-country labor with perfect success. Although both the climate and work were quite new to them, they took kindly to the place and are fast becoming experts in barking, &c. They are a better class of labor than the Badagas, the latter being too independent.

12. *Subordinates.*—The conduct of the subordinates, I believe, was fairly satisfactory.

Statement showing the Receipts on account of Government Chinchona Plantations on the Nilgiris for the Official Year 1880-81.

Particulars.	Sanctioned Budget Allotment for 1880-81.	Actuals for 1880-81.	Actuals for 1879-80.
	RS. A. P.	RS. A. P.	RS. A. P.
Value of Bark sent Home (£34,667-5-2 at 1*s.* 8½*d.* per rupee) ...	4,20,000 0 0	4,05,860 9 4	3,21,963 2 10
Value of Bark supplied to Madras Medical Department	2,000 0 0	...	3,439 10 0
Value of Bark supplied to Bombay Medical Department	2,000 0 0	2,397 15 4	2,856 4 8
Value of Bark supplied to Private Parties...	...	12,827 4 4	93 5 0
Sale-proceeds of Plants and Seed	8,000 0 0	13,175 4 8	12,300 6 7
Miscellaneous	...	...	3,162 5 9
Total ..	4,32,000 0 0	4,34,261 1 8	3,43,815 2 10

Statement showing Expenditure on the Government Chinchona Plantations, Nilgiris, for the Official Year 1880-81.

Particulars.		Sanctioned Budget Allotment for 1880-81.	Actuals for 1880-81.	Actuals for 1879-80.
		RS. A. P.	RS. A. P.	RS. A. P.
Establishment ..	Establishment	11,568 0 0	11,879 1 0	10,092 0 0
Nurseries	Nurseries	4,000 0 0	4,210 4 8	4,394 1 9
	Propagation		506 2 0	529 2 0
Buildings	New	29,000 0 0	8,464 15 4	5,370 4 3
	Repairs	2,000 0 0	2,902 1 0	3,067 0 6
	Roads and Bridges	....	....	100 0 0
Up-keep	Weeding		12,621 3 3	11,193 6 2
	Roads		1,912 8 0	859 7 9
	Pitting and Planting	25,425 0 0	4,860 11 11	3,534 5 1
	Tools		....	2,476 7 0
	Various		4,614 14 1	4,534 3 11
Manure	Manure	5,000 0 0	4,957 6 2	2,266 8 8
Collection of Crop	Barking and Mossing		10,899 0 8	10,346 4 7
	Collection of Moss and Grass ...		6,621 7 6	5,042 4 0
	Packing		432 1 0	3,811 11 3
	Drying	41,500 0 0	1,099 1 3	1,022 0 10
	Storage and Carriage to Store ...		2,695 1 4	2,175 2 8
	Carriage to Mettupálaiyam ...		500 0 0	1,423 0 0
	Railway Charges, &c.		6,905 5 8	2,807 3 4
	Various		7,208 6 10	992 0 0
Miscellaneous	Contingencies	2,000 0 0	533 15 6	852 11 6
	Peons' Clothing	100 0 0	86 0 0	81 4 0
	Collecting Seed	....	....	1,850 14 3
	Fire-wood Plantation	1,600 0 0	763 1 3	....
Unforeseen Charges ..	Mailkonda Plantation	....	....	2,886 7 6
	Travelling Allowance and Batta ..	4,000 0 0	1,432 4 2	16 6 0
Total ..		1,26,193 0 0	96,105 0 7	79,724 5 0

Statement showing the Expenditure in Detail on the Dodabetta Chinchona Plantation for the Official Year 1880-81.

Months.	Establishment.	Nurseries. Labor.	Nurseries. Propagation House.	Nurseries. Collection of Seed.	Collection of Crop. Barking and Mossing.	Collection of Crop. Drying Bark.	Collection of Crop. Packing Bark.	Buildings. New.	Buildings. Repairs.	Manure.	Up-keep. Weeding.	Up-keep. Pitting and Planting.	Up-keep. Various.	Total.	Up-keep. Roads.	Contingencies.	Collection of Crop—(*continued*). Storage of Bark.	Collection of Crop—(*continued*). Collecting Moss.	Collection of Crop—(*continued*). Various.	Total.
	2	3	4	5	9	10	11	6	7	8	17	18	19	20	16	15.	12	13	14	20
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
April 1880 ..	1,353 5 4	46 11 6	20 0 0	4 2 6	0 14 0	.. ..	.. ..	150 13 0	104 9 0	172 12 6	973 10 0	71 2 0	139 3 0	2,891 13 4	16 3 6	15 0 0	15 0 0	.. ..	.. ..	.. ..
May " ..	215 0 0	66 7 0	20 0 0	133 7 0	.. ..	.. ..	.. ..	182 9 6	160 6 0	73 3 0	647 9 9	.. ..	176 12 6	2,629 15 9	8 2 0	20 0 0	20 0 0	.. ..	.. ..	10 4 0
June " ..	215 0 0	98 10 6	20 0 0	73 6 9	276 4 3	13 14 0	.. ..	337 12 0	111 13 6	127 6 6	674 2 3	45 1 0	132 6 9	3,041 11 9	8 2 0	20 0 0	20 0 0	.. ..	.. ..	2 8 0
July " ..	215 0 0	71 10 6	20 0 0	19 6 3	744 9 0	19 8 0	.. ..	.. ..	68 10 6	60 15 6	166 8 6	37 13 0	171 14 0	1,711 4 0	8 2 0	20 0 0	20 0 0	.. ..	.. ..	1 2 0
August " ..	215 0 0	32 1 0	20 0 0	13 10 6	369 1 0	17 14 0	23 8 0	.. ..	34 0 0	48 12 0	146 2 0	2 5 6	79 3 6	1,690 11 0	8 7 0	20 0 0	20 0 0	900 0 0	.. ..	900 0 0
September " ..	215 0 0	33 2 0	20 0 0	33 0 0	306 9 0	19 8 0	.. ..	.. ..	21 8 0	104 8 0	437 15 0	0 12 0	81 6 0	1,588 4 6	8 2 0	20 0 0	20 0 0	226 14 0	.. ..	.. ..
October " ..	215 0 0	33 12 0	20 0 0	23 14 0	532 11 6	24 14 0	6 8 0	83 11 0	.. ..	44 7 0	199 6 3	0 12 0	127 3 0	1,486 10 6	8 2 0	20 0 0	20 0 0	540 11 0	.. ..	.. ..
November " ..	215 0 0	53 7 0	20 0 0	9 3 0	222 3 0	17 14 0	.. ..	.. ..	.. ..	46 6 0	.. ..	2 12 0	98 1 0	1,309 8 6	8 2 0	20 0 0	20 0 0	278 0 0	.. ..	.. ..
December " ..	231 8 0	150 14 6	20 0 0	28 14 0	64 8 0	6 13 0	51 0 0	.. ..	102 15 0	102 15 0	.. ..	.. ..	338 1 9	1,805 9 8	9 3 6	20 0 0	20 0 0	182 1 6	.. ..	.. ..
January 1881 ..	200 0 0	86 14 6	20 0 0	27 14 0	20 1 0	.. ..	.. ..	.. ..	41 6 9	41 6 9	.. ..	.. ..	75 7 0	1,514 4 6	.. ..	15 0 0	20 0 0	351 5 3	.. ..	.. ..
February " ..	200 0 0	58 12 0	20 0 0	41 6 6	18 15 0	.. ..	.. ..	145 12 0	75 15 6	43 13 6	.. ..	.. ..	90 4 0	1,530 12 6	.. ..	.. ..	20 0 0	279 13 0	.. ..	.. ..
March " ..	200 0 0	59 3 0	20 0 0	5 14 0	.. ..	.. ..	.. ..	.. ..	.. ..	658 4 6	.. ..	.. ..	75 3 0	2,948 4 8	.. ..	.. ..	20 0. 0	365 7 0	.. ..	.. ..
Total ..	3,659 13 4	792 9 0	240 0 0	400 4 6	2,655 11 9	100 13 0	81 0 0	900 9 6	1,080 10 2	1,514 13 0	5,558 9 3	530 0 0	2,070 1 0	23,198 14 3	106 3 0	115 4 0	185 0 0	2,297 8 9	900 0 0	1,082 4 9

Statement showing the Expenditure in Detail on the Naduvatam Chinchona Plantation for the Official Year 1880-81.

Months.	Establishment.	Nurseries.				Buildings.		Collection of Crop.			Up-keep.				Collection of Crop.—(Contd.)					Total.
		Labor.	Propagation House.	Collection of Seed.	Postage and packing of Seed and Plants.	New.	Repair.	Manure.	Barking and Mossing.	Drying Bark.	Weeding.	Pitting.	Various.	Fuel Plantations.	Carriage.	Collection of Moss and Grass.	Various.	Roads.	Peons' Clothing.	Contingencies.	
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
April 1880	401 0 0	83 3 0	53 4 0	..	37 13 0	577 5 0	8 3 3	..	..	..	289 11 9	1 0 0	105 3 5	..	..	..	..	93 2 0	..	8 15 0
May "	401 0 0	87 0 0	10 0 0	..	..	2,093 15 5	66 9 2	..	..	..	29 14 0	..	140 10 8	..	..	..	..	29 4 0	..	2 0 0
June "	393 0 0	100 9 3	39 14 0	4 0 0	26 0 0	1,584 4 11	204 15 11	..	..	..	42 6 0	..	87 15 8	..	..	..	..	44 10 0	..	18 0 0
July "	394 3 8	80 13 0	10 0 0	81 14 0	49 0 0	401 4 9	211 12 8	..	..	..	110 10 0	..	64 14 5	..	..	..	..	32 1 0	..	9 9 0
August "	401 0 0	95 4 6	10 0 0	53 10 0	12 8 0	..	45 0 0	..	103 3 0	26 15 6	61 6 6	..	83 11 5	..	..	..	..	32 10 6	..	0 12 0
September "	401 0 0	147 3 1	34 0 0	9 13 0	30 7 0	2,010 0 0	..	..	507 10 6	68 6 3	200 14 0	..	91 2 3	..	..	..	..	34 10 0	..	9 11 0
October "	401 0 0	108 15 5	10 0 0	2 8 3	24 7 0	..	..	..	568 9 0	95 14 0	31 12 0	..	111 2 5	..	..	..	..	34 10 0	..	3 1 0
November "	401 0 0	82 11 9	10 0 0	14 15 0	30 12 0	..	..	..	694 3 6	96 6 0	347 7 0	..	81 11 6	17 9 3	..	..	..	34 10 0	..	1 7 0
December "	401 0 0	92 14 0	10 0 0	13 3 6	21 0 0	..	..	..	731 6 3	114 11 6	56 10 0	..	70 8 11	113 2 9	..	..	..	35 3 0	..	4 15 0
January 1881	401 0 0	87 0 6	10 0 0	4 15 0	39 8 0	732 8 0	..	..	734 4 6	115 13 6	654 9 0	..	139 0 8	343 5 6	..	..	..	20 0 0	..	6 15 0
February "	401 0 0	145 15 3	23 0 0	6 15 0	38 8 0	153 2 0	491 11 0	..	1,836 14 11	40 13 0	1,320 15 3	..	235 15 9	97 4 0	..	..	..	20 0 0	..	4 11 0
March "	401 0 0	66 1 0	10 0 0	8 7 0	..	..	467 3 7	..	208 10 6	13 4 6	887 1 6	..	147 2 11	191 11 9	..	..	..	20 0 0	..	3 11 6
Total ..	4,797 3 8	1,177 10 9	266 2 0	215 10 9	309 15 0	7,552 8 1	1,042 12 0	1,663 1 4	5,384 14 2	666 8 9	4,023 5 0	160 13 1	1,349 4 0	763 1 3	1,280 8 6	2,758 1 9	2,067 14 0	744 13 6	50 0 0	169 11 6

Months.	Buildings.		Total.
	New.	Repairs.	
	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1880	..	..	2,345 0 8
May "	..	..	3,012 4 5
June "	..	..	2,760 9 4
July "	..	..	2,124 2 8
August "	..	..	2,197 3 1
September "	..	..	2,513 4 5
October "	..	..	6,241 11 8
November "	..	..	2,933 9 3
December "	..	..	2,668 0 4
January 1881	..	..	4,287 9 7
February "	..	..	3,783 15 8
March "	..	..	3,337 4 10
Total ..	..	..	37,104 11 11

Statement showing the Expenditure in Detail on the Government Chinchona Plantation, Pykara, for the Official Year 1880-81.

Months.	Establishment.	Nurseries.	Up-keep.				Collection of Crop.	
		Labor.	Weeding.	Roads.	Pitting and Planting	Various.	Barking and Mossing.	Collection of Moss and Grass.
1	2	3	4	5	6	7	8	9
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1880 ..	120 0 0	115 1 11	31 15 6	29 5 6	315 6 6	120 0 7	251 12 9	..
May " ..	120 0 0	121 6 0	1 14 0	31 6 6	82 5 0	46 12 4	161 8 6	..
June " ..	120 0 0	116 3 7	65 6 0	79 2 0	104 9 0	68 2 2	23 8 0	..
July " ..	120 0 0	122 10 5	75 4 3	46 10 6	376 3 8	78 8 6	29 2 0	110 7 0
Aug. " ..	120 0 0	65 11 0	76 5 6	28 11 6	517 8 3	98 3 6	224 6 6	96 11 3
Sept. " ..	120 0 0	88 11 5	236 12 0	35 2 0	427 9 3	126 1 11	184 1 6	246 2 0
Oct. " ..	120 0 0	106 0 2	182 13 0	69 10 0	353 12 7	77 3 0	337 7 6	216 10 3
Nov. " ..	120 0 0	108 7 9	156 12 0	79 4 6	200 13 8	58 10 7	564 8 6	481 5 6
Dec. " ..	120 0 0	132 1 2	205 0 6	48 14 6	350 1 0	68 1 4	497 13 6	411 12 0
Jan. 1881 ..	120 0 0	107 12 3	1,126 9 9	74 10 6	287 1 3	164 14 11	221 6 6	2 13 0
Feb. " ..	120 0 0	127 1 3	615 1 0	214 4 6	530 6 6	153 1 2	329 2 6	..
March " ..	120 0 0	102 15 9	285 7 6	324 5 6	624 2 2	135 13 1	33 9 0	..
Total ..	1,440 0 0	1,314 2 8	3,059 5 0	1,061 7 6	4,169 14 10	1,195 9 1	2,858 6 9	1,565 13 0

Months.	Collection of Crop.—(Contd).					Buildings.		Manure.	Total.
	Drying Bark.	Packing Bark.	Carriage	Storage.	Various.	New.	Repairs.		
	10	11	12	13	14	15	16	17	18
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1880 ..	4 5 6	5 10 0	32 8 6	10 0 0	27 5 3	..	167 0 2	108 12 3	1,339 4 5
May " ..	4 3 0	2 8 6	12 1 6	..	18 0 6	..	1 10 5	27 3 7	630 15 10
June " ..	1 3 0	1 6 6	13 1 6	..	3 5 10	11 13 9	449 9 5	19 9 0	1,076 15 9
July " ..	2 0 0	..	8 11 6	..	15 0 5	..	18 5 2	20 15 6	1,023 14 11
Aug. " ..	36 4 6	0 10 0	26 0 0	..	56 6 5	..	..	120 10 11	1,467 9 4
Sept. " ..	39 7 0	12 8 0	54 14 0	..	63 15 11	..	..	32 12 9	1,668 1 9
Oct. " ..	47 12 0	10 5 6	72 15 6	..	605 3 1	..	76 4 0	156 12 4	2,432 12 11
Nov. " ..	59 9 0	22 0 0	89 3 6	17 13 0	547 9 1	..	..	87 1 7	2,593 2 8
Dec. " ..	59 6 6	18 14 0	110 13 6	17 8 0	102 13 11	..	..	27 13 6	2,171 1 5
Jan. 1881 ..	43 10 6	10 6 6	131 1 6	19 11 0	73 10 10	..	..	174 7 9	2,558 4 3
Feb. " ..	23 9 0	14 6 6	158 5 0	15 4 0	321 0 7	..	..	434 4 8	3,055 14 8
March " ..	10 5 6	3 11 6	17 6 0	10 0 0	6 0 0	..	65 13 8	569 0 0	2,308 9 8
Total ..	331 11 6	102 7 0	727 2 0	90 4 0	1,840 7 10	11 13 9	778 10 10	1,779 7 10	22,326 11 7

Statement showing in Detail the Expenditure on the Office Establishment and General Expenditure for the Official Year 1880-81.

Months.	Establishment.	Temporary Establishment.	Printing Charges.	Cost of Gunny Bags.	Carriage of Gunnies.	Carriage of Bark to Mettupálaiyam.	Railway and other Charges.	Shipping Charges.	Contingencies.	Peons' Clothing.	Total,
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1880	311 0 0	..	..	..	..	..	..	..	..	..	311 0 0
May „	111 0 0	..	132 0 0	..	..	..	..	..	..	..	243 0 0
June „	111 0 0	..	..	..	..	..	..	..	..	..	111 0 0
July „	111 0 0	..	..	..	..	..	..	..	..	..	111 0 0
August „	111 0 0	..	..	..	..	..	..	..	..	..	111 0 0
September „	111 0 0	..	..	..	..	..	..	..	..	..	111 0 0
October „	111 0 0	..	..	..	..	..	..	..	..	..	111 0 0
November „	111 0 0	232 4 2	..	..	..	500 0 0	..	..	..	..	611 0 0
December „	411 0 0	300 0 0	14 0 0	791 7 0	56 10 0	..	25 0 0	3 11 0	2 0 0	36 0 0	343 4 2
January 1881	151 0 0	300 0 0	..	..	..	..	2,689 8 0	3,684 3 8	4 0 0	..	6,828 11 8
February „	151 0 0	300 0 0	10 0 0	1,452 3 0	99 13 0	..	316 12 0	186 3 0	87 0 0	..	2,602 15 0
March „	151 0 0	300 0 0	..	..	..	..	..	..	..	..	451 0 0
Total ..	1,952 0 0	1,432 4 2	156 0 0	2,243 10 0	156 7 0	500 0 0	3,031 4 0	3,874 1 8	93 0 0	36 0 0	13,474 10 10

Statement showing the Number of Chinchona Trees barked and the Quantity of Bark taken at the Government Chinchona Plantations, Naduvatam, Pykara, during the Official Year 1880-81.

Plot.	Naduvatam.						Plot.	Hooker.					
	Red.		Crown.		Total.			Red.		Crown.		Total.	
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.		Trees.	Bark.	Trees.	Bark.	Trees.	Bark.
		lb.		lb.		lb.			lb.		lb.		lb.
I	199	3,365	1,877	4,050	2,076	7,415	I	2,488	9,820	2,026	10,710	4,514	20,530
II	4,211	22,680	1,173	2,440	5,384	25,120	II	3,625	17,740	1,781	5,260	5,406	23,000
III	3,385	12,260	33	70	3,418	12,330	III	7,413	24,410	..	..	7,413	24,410
IV	1,932	4,850	933	1,680	2,865	6,530	IV	..	..	2,005	3,930	2,005	3,930
V	480	1,080	457	840	945	1,920	V	..	..	271	480	271	480
VI	2,422	9,390	2,324	3,540	4,746	12,930	VI	..	..	4,293	7,190	4,293	7,190
VII	3,388	12,950	6,151	13,780	9,539	26,730	VII	1,417	5,040	2,174	4,080	3,591	9,120
VIII	3,503	16,440	2,375	5,570	5,878	22,010	VIII	2,609	9,490	951	1,890	3,560	11,380
IX	2,705	11,840	2,852	7,470	5,557	19,310	IX	602	2,110	674	960	1,276	3,070
X	7,091	25,950	680	1,600	7,771	27,550	X	471	1,320	737	1,580	1,208	2,900
XI	5,067	20,710	754	1,970	5,821	22,680	XI	1,671	10,560	202	400	1,873	10,960
XII	6,521	29,650	2,506	3,730	9,027	33,380	XII	..	..	293	570	293	570
XIII	289	1,400	1,850	3,670	2,139	5,070							
XIV	8,687	41,955	..	..	8,687	41,955							
XV	8,057	31,100	223	680	8,280	31,780							
XVI	540	1,300	266	500	806	1,800							
XVII	2,631	10,450	888	2,260	3,519	12,710							
XVIII	..	..	739	270	739	870							
XX	..	..	..	1,100	672	1,100							
XXIII	4,723	14,[illegible]	..	..	4,723	14,600							
XXIV	..	..	384	1,470	384	1,470							
XXV	..	..	319	300	819	300							
XXVI	882	2,740	..	..	882	2,740							
XXIX	4	..	721	950	721	950							
Total ..	66,721	274,710	28,178	58,540	94,899	333,250	Total ..	20,296	80,490	15,407	37,050	35,703	117,540

Statement showing the Number of Chinchona Trees barked and the Quantity of Bark taken at the Government Chinchona Plantations, Naduvatam, Pykara, during the Official Year 1880-81.—*(Continued).*

Plot.	Wood. Crown. Red. Trees.	Wood. Crown. Red. Bark.	Wood. Crown. Red. Total.	Wood. Crown. Trees.	Wood. Crown. Bark.	Wood. Crown. Total.	Dodabetta. — — Trees.	Dodabetta. — — Bark.	Grand Total. — — Trees.	Grand Total. — — Bark.
		LB.	LB.		LB.	LB.		LB.		LB.
I	..	..	..	319	1,090	1,090	621	1,690	7,430	30,625
II	3,163	9,685	12,848	1,283	4,005	5,288	1,915	4,600	17,151	66,410
III	4,266	10,820	15,086	2,642	6,490	9,132	2,090	4,892	19,828	68,942
IV	2,161	6,780	8,941	132	360	492	4,739	6,791	11,902	24,391
V	4,190	13,925	18,115	86	375	461	940	1,079	6,431	17,779
VI	2,826	7,345	10,171				928	1,327	12,793	28,792
VII	1,944	4,645	6,589				2,969	3,993	18,043	44,388
VIII	3,367	8,728	12,095				3,777	4,672	16,582	46,782
IX	255	450	705				3,004	4,072	10,092	26,902
							2,810	4,606	11,789	35,056
							724	1,308	8,418	34,948
							2,642	2,689	11,962	36,639
							3,852	3,984	6,991	9,054
							2,356	4,897	11,043	46,852
							1,138	2,036	9,418	33,816
							1,112	1,207	1,918	3,007
							100	246	3,619	12,966
							2,467	3,277	3,206	4,147
							4,610	5,827	5,283	6,927
							3,086	3,784	7,809	18,384
							2,446	3,351	2,830	4,821
							2,127	3,205	2,446	3,505
							1,684	1,767	2,666	4,497
							1,447	1,994	2,168	2,944
Total ..	22,171	62,270	84,441	4,461	12,320	16,781	55,484	77,184	210,718	602,564

Statement of Rainfall at Naduvatam for the Official Year 1880-81.

Months.		Rainfall.		Number of Wet Days.
		Inches.	Cents.	
April	1880	3	80	12
May	,, ...	2	93	13
June	,, ...	20	83	27
July	,, ...	19	62	29
August	,, ...	13	45	26
September	,, ...	8	47	21
October	,, ...	12	91	24
November	,, ...	6	33	17
December	,, ...	...	38	2
January	1881	...	...	...
February	,, ...	...	35	2
March	,, ...	...	63	2
	Total ...	89	70	175

Statement of Rainfall at Dodabetta for the Official Year 1880-81.

Months.		Rainfall.		Number of Wet Days.
		Inches.	Cents.	
April	1880	3	17	11
May	,, ...	5	10	20
June	,, ...	5	84	12
July	,, ...	3	97	21
August	,, ...	4	22	14
September	,, ...	1	90	10
October	,, ...	10	70	28
November	,, ...	10	45	19
December	,, ...	1	42	6
January	1881	...	20	2
February	,, ...	...	30	1
March	,, ...	3	82	7
	Total ...	51	09	151

Statement showing the Progress made in the Cultivation of Chinchona on the Government Plantations, Nilgiris, during the Official Year 1880-81.

Botanical Names.	Number of Plants, Seedlings and Cuttings raised during 1880-81.	Number issued to the Public.	Number permanently planted out.	Balance.
C. Succirubra	585,950	489,950	12,000	84,000
C. Officinalis	518,784	352,484	121,300	45,000
C. Calisaya (var. Ledgeriana) ...	13,560	50	...	13,510
Do. other varieties ...	1,305	...	*2,305	...
C. Pubescens	20,410	1,000	8,010	11,400
C. Pitayo	200	...	...	200
Total ...	1,140,209	843,484	143,615	154,110

* Including last year's balance.

Statement showing the Number of Chinchona Trees coppiced on the Government Chinchona Plantations in 1879, and the Number of Shoots living on the 31st March 1881.

Plantations.	Plots.	Acreage.	Number of Trees coppiced.	Number of Stools sprouted.	Number of Failures.	Remarks.
		ACRES.				
Naduvatam ...	VI	¼	56	43	13	Barked Plot.
Do. ...	VII	4¾	2,263	2,091	172	Do.
Do. ...	XXIII	5	2,628	1,655	973	Unbarked Plot.
Total ...	...	10	4,947	3,789	1,158	
Pykara {Hooker.	XI	5	2,226	847	1,379	Barked Plot.
{Wood ...	VIII	5	2,540	1,655	885	Do.
Total ...	...	10	4,766	2,502	2,264	
Dodabetta	XI	5	3,356	3,199	157	Barked Plot.
Do.	XXVIII	5	2,493	2,093	400	Unbarked Plot.
Total ...	...	10	5,849	5,292	557	
Grand Total ...	...	30	15,562	11,583	3,979	

ORDER—dated 6th June 1882, No. 591, Revenue.

Miscellaneous.

In accordance with the wishes of the Secretary of State the supervision of the Chinchona Plantations, hitherto entrusted to the Commissioner (now Collector) of the Nilgiris, was transferred during the latter part of the year to the Conservator of Forests, and the Local Forest Officer assumed charge of them on the 1st February 1881.

2. Deducting casualties, and adding plants put out, the total number of trees in the plantations had risen from 569,031 in 1878 to 666,815 on the 31st March 1881. During the year 1,140,209 plants, seedlings and cuttings were raised, of which 843,484 were issued to the public. Three plants of the Santa Fé and six of the Carthagena varieties were brought by Mr. Cross in October 1880. The three plants of the former variety were taken care of by Mr. Cross himself who had at the close of the year six established. The six Carthagena plants were handed over to the Superintendent of the Botanical Gardens, Ootacamund. Though five of these plants died, a portion of the plants was saved for cuttings, five of which had rooted on the last day of the year.

3. The yield of the year was 243,896 lb. of dry bark against 179,299 lb. in the previous year. The sale of bark realized the following amounts during the year :—

	RS.	A.	P.
Value of bark sent Home	4,05,860	9	4
Value of bark supplied to Bombay Medical Department.	2,397	15	4
Value of bark supplied to Private Parties ...	12,827	4	4

A further sum of Rs. 13,175-4-8 was received from the sale proceeds of plants and seed, the total receipts being Rs. 434,261-1-8 against an expenditure of Rs. 96,105-0-7.

4. Colonel Jago's remarks on the different systems of harvesting are interesting, and it is observed that coppices from *barked* trees have been found to grow much better than those from *unbarked* trees. The following table shows the percentage of stools that sprouted :—

Plantations.	No. of Trees coppiced. (1)	No. of Stools sprouted. (2)	Percentage of (2) to (1)
Naduvatam....	4,947	3,789	76·59
Pykara {Hooker	2,226	847	38·05
{Wood	2,540	1,655	65·15
Dodabetta	5,849	5,292	90·47

The Government note with satisfaction that manuring operations were about to be increased. The conservancy of the plantations was well attended to.

5. The financial results* from the commencement of the Chinchona enterprise up to the end of 1880-81 are as shown below :—

* *Vide* statement appended.

	RS.	A.	P.
Receipts	21,05,870	10	1
Outlay and interest thereon	20,47,618	3	4

which account exhibits a net profit of Rs. 58,252-6-9 at the close of that year.

(True Extract.)

(Signed) E. F. WEBSTER,
Acting Secretary to Government.

To the Conservator of Forests.
„ Board of Revenue.
„ Accountant-General.
„ Superintendent, Government Central Museum.

Exd. W. H. French.

100 Copies.

Statement showing the Capital and Revenue Account of the Government Chinchona Plantations, Nilgiris, from the commencement up to the Official Year 1880-81.

Years.	Receipts.					Charges.					
	Value of Bark supplied to the Quinologist.	Value of Bark sent to England and supplied to other Governments or Departments.	Sale of Plants, Seeds, &c.	Interest on Receipts.	Total.	Establishment including Superintendent's Salary.	Building and Plant.	Working Charges. Departmental Labor.	Working Charges. Convict Labor.	Interest on Charges.	Total.
1	2	3	4	5	6	7	8	9	10	11	12
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1860-61	..	..	..	..	..	..	..	4,821 15 0	..	..	4,821 15 0
1861-62	..	..	..	..	..	..	..	22,914 15 4	..	216 15 10	23,131 15 2
1862-63	..	..	..	..	..	..	..	48,390 0 0	..	1,257 14 9	49,647 14 9
1863-64	..	..	..	..	..	12,726 14 7	..	53,173 9 2	..	3,492 1 4	69,392 9 1
1864-65	..	..	..	..	..	24,444 8 11	..	69,666 12 0	..	6,614 11 11	90,726 0 10
1865-66	..	..	..	..	..	25,449 14 0	..	58,887 5 0	..	10,697 6 8	98,734 9 8
1866-67	..	..	2,450 0 0	..	2,450 0 0	23,803 9 10	3,700 0 0	52,632 0 0	48,666 10 8	15,140 7 7	1,43,267 12 1
1867-68	..	287 8 0	..	110 4 0	397 12 0	26,087 3 1	3,025 0 0	43,295 14 4	48,666 10 8	21,587 8 5	1,42,237 4 6
1868-69	..	..	1,680 0 0	128 2 5	1,808 2 5	25,671 7 10	2,600 0 0	30,636 1 0	48,666 10 8	27,988 3 3	1,34,992 6 9
1869-70	1,512 6 4	..	..	209 8 3	1,721 14 7	25,783 5 4	2,030 0 0	19,163 0 0	..	34,062 13 10	80,659 3 2
1870-71	4,364 14 8	..	323 14 0	287 0 0	4,975 12 8	23,730 5 4	1,650 0 0	6,143 0 0	..	37,692 8 5	67,865 13 9
1871-72	9,542 12 8	3,479 3 6	..	510 14 7	13,532 14 9	17,157 5 4	300 0 0	13,160 4 9	..	40,746 7 10	71,914 1 11
1872-73	16,806 15 8	4,388 2 1	227 1 4	1,119 14 3	22,542 1 4	12,724 0 0	850 0 0	16,441 0 0	..	43,982 10 0	73,697 10 0
1873-74	21,136 7 0	36,417 6 3	300 9 0	2,134 4 7	59,988 10 10	12,574 0 0	550 0 0	15,091 14 0	..	47,299 0 3	75,522 14 3
1874-75	8,576 0 0	..	273 4 0	4,833 12 5	13,683 0 5	16,406 8 0	558 0 0	17,417 0 0	..	50,697 8 9	86,221 0 9
1875-76	..	60,404 7 11	2,000 0 0	5,449 8 3	67,854 0 2	17,234 0 0	1,700 0 0	27,423 0 0	..	54,577 7 11	1,00,784 7 11
1876-77	..	1,07,878 4 0	2,679 3 10	8,502 15 1	1,18,960 6 11	8,064 5 4	1,550 0 0	44,850 3 0	..	59,112 12 9	1,18,742 14 0
1877-78	..	3,51,746 0 6	5,469 0 2	13,856 2 7	3,71,071 3 3	8,061 5 4	6,715 8 11	56,241 10 3	..	64,456 3 7	1,34,228 0 10
1878-79	..	3,92,217 10 1	8,136 9 2	30,554 5 11	4,30,908 9 2	9,637 2 8	5,468 13 8	53,954 10 8	..	70,496 7 10	1,44,179 3 3
1879-80	..	4,24,323 12 8	15,462 12 4	49,945 4 0	4,89,731 13 0	10,092 0 0	10,090 14 1	63,095 0 3	..	76,984 8 10	1,56,708 13 10
1880-81	..	4,08,258 8 8	26,002 9 0	71,983 2 11	5,06,244 4 7	13,931 4 8	6,537 4 9	59,562 14 10	..	84,036 7 3	1,80,141 7 10
Total ..	61,939 8 4	17,89,400 15 8	64,904 14 10	1,89,625 3 3	21,05,870 10 1	3,13,579 4 3	69,936 6 6	7,66,962 1 7	1,46,000 0 0	7,51,140 7 0	20,47,618 3 4
							22,610 13 1				

Net Result.

	Rs.	A.	P.
Receipts	21,05,870	10	1
Charges	20,47,618	3	4
	58,252	6	9

Plant 1883 1/10

Copied

Govt. of {1882} Madras.

REVENUE.

Order, dated 6th June 1882, No.

Government Chinchona Plantations—Report on the—for 1880-81.—Review.

No 398

Office of Deputy Conservator of [illegible]
Ootacamund 31st October 188[illegible]

From,

Lt Col R. S. Sago
Deputy Conservator of Forests
In charge of
Chinchona Plantations, Nilgiris

To

Col R. H. Beddome
Conservator of Forests
Madras

Sir,

I have the honor to forward the Administration Report on the Govt Chinchona Plantations on the Nilgiris for the Official year 1880-81.

2 On the 1st February last the Chinchona Plantations were transferred from the charge of the Commissioner of the Nilgiris to that of the Conservator of Forests; the plantations being placed under the direct supervision of the Local Forest Officer, vide G. O. No 16:10 dated 8th December 1880.

3

3 Seasons & Rainfall ——: The weather during the year was favorable for both the Collection of Crop and for the Growth of Chinchona. The frost was severe and on the Dodabetta Plantation a few trees growing in the flats were killed. Young private plantations in Ootacamund did not suffer in Winter, so much as in the previous year owing perhaps to the fact that their owners had raised fine belts of below Grass to protect their plants. The belts afford protection from the Cold East Winds during this Season, and it has been noticed where these have obtained a fair height, that the temperature at night is not near so low as in exposed places. The rainfall at Neddiwattum amounted to 89-70 Inches against 100-92 Inches in the previous year. There was only one Month (January 1881) in which no rain fell on this Plantation. The maximum fall occurred in June 1880, and the minimum in February 1881. 20-83 Inches being gauged in the former & 35 Cents in the latter. 51-09 Inches of rain were gauged at Dodabetta during the year against 46-40 in 1879-80. It rained in every Month of the year on this Estate, the maximum fall (10-70 Inches) being in October 1880, and the minimum (20 Cents) in January 1881. The appearance of all the Estates was generally satisfactory at the close of the year.

4 Receipts and Expenditure ——: The receipts during the year amounted to Rs 434,261—1—8, and the Expenditure to Rs 96,105—4—7, this leaving as net profit to Government a sum of Rs 338156—1—1. Statements are enclosed showing the expenditure in detail on each plantation. Appendices No 1 and 2, show the general Expenditure & Receipts

5 Permanent Plantations ——: (a) Number of Trees. The following Statement shows the number of trees existing on the plantations on the 31st March 1881.

	Number of trees as per Major Walker's Enumeration in 1878	Number of Casualties since 1878	Balance	Number of plants put out since 1878	Number of plants in permanent plantation on 31st March 1881.
Neddiwattum	208780	4943	203837	3105	206942
Hooker	87557	34999	52558	112560	165118
Wood	45758	5355	40403	11800	52203
Dodabetta	226936	684	226252	16300	242552
Total	569031	45981	523050	143765	666815

The Casualties referred to above are the odd trees which have died off from year to year, the Coffee failures

failures and the Red Barks uprooted in the Hookers. The young plantings looked very well at the end of the year. (b) Conservancy—: The Neddiatkum and Pykara Plantations were several times kuje weeded during the wet weather. In the dry season the whole were again gone over with the kramoty and the weeds were buried. Renovation was continued on these plantations. The Doobetta Plantation was also kramoty weeded throughout. An attempt was made by repeated surface weeding to kill the braken fern in some plots, but without success. It has now been decided to eradicate them by uprooting. The terracing improved the trees very much. Roads, drains, and water channels on all Estates were kept in order.

(C) Manure—: Cattle Manure was applied to 13 Acres at Neddiatkum, 40 acres at Hooker, 11 Acres on the Wood, and about 25 Acres on Doobetta. Government recently sanctioned an experiment in patent Manures, and my proposals for increasing the supply of Cattle Manure on the Neddiatkum plantation are now before you. At Doobetta also manuring operations will be extended in future

b Propagation & Nurseries—: Appendix No 10 Shows

Shows the number of plants, Seedlings & cuttings of the various sorts raised during the year and issued to the public. 1711 Pounds of Seed were distributed, the greater portion going to Ceylon. The demands for plants of C. Succirubra fell very low during the year. In October 1880 Mr. Robert Cross arrived here with 3 plants of the Santa Fé variety of Chinchona & 6 of Carthagena. The latter were handed over to Mr. Jamieson, the Superintendent of the Botanical Gardens. Five of them damped off during the wet Cimless weather of November last. Mr. Jamieson managed however to save a portion of the plants for cuttings. On the 31st March 1881 there were ..... rooted cuttings under his charge. The 3 plants of Santa Fé were retained by Mr. Cross who had six established plants at the close of the year

7 Crop—: The Crop of the year amounted to Two hundred & forty three thousand, eight hundred and Ninety Six pounds ——————

The following gives that of each plantation

Neddiwatkum

Natural Crown bark— 6728

Mossed — do — do — 7379

Carried over— 14107

Brought forward	14107
Renewed Crown bark	19830
Branch do do	4402
Natural Red do do	955
Mossed do do	40049
Renewed do do	29262
Branch do do	40307
Root do do	10350
Dust do do	5077
Natural Hybrid do	2134
Do Ledgeriana do	59
	182
Total	166714

Pykara

Natural Crown Bark	2322
Mossed do do	502
Renewed do do	1413
Branch do do	1726
Dust do do	1004
Natural Red do	11332
Mossed do do	6463
Renewed do do	13315
Branch do do	5172
Total	43249

Dodabetta

Natural Crown Bark	13944
Mossed do do	12574
Renewed do do	4232
Carried over	30750

23

Brought forward	30750
Branch Crown Bark	2934
Natural Pubescens do	111
Mossed do do	138
Total	33933
Ist and Total	243896
Add Balance in Store at beginning of year	6375
Total	250271

Which was distributed as follows —

Supplied to the Home Market	234736
Do to Messrs Dymes & Co	5096
Do to Bombay Medical Dept	2000
Balance in Store on 31st March 1881	8439

The bark supplied to Messrs Dymes & Co was supplied under orders of Government No 879 dated 26 July 1880 and realised Net Rs 12827. No bark was supplied to the Madras Medical Department.

Appendix No 7 gives the number of trees decorticated and the quantity of green bark obtained. Amongst the quantity sent for sale in London there was a quantity of "scraped" bark obtained by the Java Slicing System. The highest price obtained on Scraped Red from Neddiwattum was

25

2 s 9 d. per lb which may be considered a fair price. The Doddabetta "Scraped" Crown realized 6 s. 8 d. per pound, while natural Red & Crown taken under the stripping process fetched 2 s 5 d. and 7 s 7 d. per pound respectively. So far as the prices realized are concerned, the Dava System is no loss; but considering the effect of the process on the trees I am of opinion that no further Scraping should be carried out. Of 4723 Succumbed treated under this system no less than 2700 were killed, and has to be uprooted in the current year. At Doddabetta even some of the Crown barks died away. The Neddivattum trees were not covered after the operation, which may account for so many failures, but here the saving is lost. The trees operated on under Mr. Mc Ivor's Mossing (covering) system give almost double what scraped trees do. The most important point however to be considered is that scraped trees do not renew whether covered or not completely within a year, while under the Stripping process Crown barks at least, and the Majority of Red barks are fit to strip again a year after the first decortication. At Assupton a private Estate the slicing system was tried, & the trees covered with grass. Although no casualties have happened the trees this year are far from ready for cropping.

25
21

cropping. I think that the climate of the Nilgiris between the months of December and March is too dry and bleak for this system. The trees during this season are at a stand still as regards growth, and as renewing cannot go on then; the remnant bark becomes so dry that in many cases it has been known to crack and separate from the tree. In the stripping process there being complete alternate systems for circulation of sap renewing goes on at all seasons. The grassing system tried at Neddivattum is a perfect success as regards Crown barks. I am unable just now to give an opinion as regards its effect on Red barks. Very many trees of this variety were noticed which had failed to renew their bark, but whether from the grassing or otherwise cannot be affirmed now. Alternate blocks have this year been tried with moss & grass at Neddivattum and the results will be carefully watched & reported in the next Administration Report. No analysis having as yet been made of bark renewed under grass no comparison can be made between this & mossing as regards the quality of the bark.

8 Buildings ——: A new Bungalow

for the Apistant Superintendent was erected at Neddiattum, also three lines consisting of 50 huts for the occupation of coolies. All these buildings were built with burnt brick set in mud and roofed with corrugated iron. Nothing was done towards the erection of the new bark store & Drying Sheds

9 Repairs:— The permanent buildings on all Estates received their annual repairs. At Dodabetta the roof of the Dail was removed the walls repaired, and the roof reset with bolts &c.

10 Experiments:— The result of the Scraping and grassing system are given in para 7 under "crop". In Appendix 11 will be found information regarding the Coppices. In all cases the Shoots thrived very well averaging 6 feet in height at the end of the year. It has been marked that the coppices from barked trees have grown much better than those from unbarked trees. Two hundred Succubus trees originally coppiced in 1871 were again felled in March last yielding 1312 pounds of dry bark which were forwarded per S.S. "Booldana" to the Secretary of State —

11 Labor:— The Supply was sufficient although the cost was generally more; principally at Dodabetta. To obviate the difficulty experienced during crop time by the Badagas absenting themselves to attend to their fields &c. an attempt was made to get up low country labor with perfect Success. Although both the climate and work were quite new to them, they took kindly to the place and are fast becoming experts in barking &c. They are a better class of labor than the Badagas, the latter being too independent

12 Subordinates:— The Conduct of the Subordinates was fairly Satisfactory —

I have the honor to be
Sir
Your Most Obed. Servt.

N. I. Pep Lt. Col.
Deputy Conservator of Forests

906-6-82 vol 591
1881-82

Chinchona Departt.

From

The Dy Conservator of Forts-
Nilgiris

To

The Conservator of Forests
Madras

Dated 31st Oct: 1881
Despatched 3d Nov.
Recd Nov.

2

No 603 Rec 4/11/81

Enclosures 11

Subject Print 7/11

Submits Administration Report on the Govt Chinchona Plantations on the Nilgiris for the Official year 1880-81

Print Book 7/11/81

OOTACAMUND,

OFFICE OF GOVERNMENT CHINCHONA DEPARTMENT,

No 603 3d November 1881.

From

The Deputy Conservator of Forests,
in charge Chinchona Department,
Nilgiris.

To

The Conservator of Forests
Madras

Sir,

In forwarding the Chinchona Administration Report for 1880 and 81 I would beg to draw your attention to the fact that with the exception of the months of February and March of that year - the Chinchona Department was not under the Forest - Consequently I can only forward such information as has been supplied me by the employes and records ~~the persons~~ the former of labour during that year were not under me - The delay in the said Report being provided, arises from the difficulty in procuring the information required to frame the Report on.

I have the honor to be
Sir
Your most Obedt Servant
W. A. Iggo Lieutenant
Dy Conservator of Forests

188/-82.

CHINCHONA DEPARTMENT.

From

The Dy. Conservator of Forests,
in charge,
Ootacamund.

To

The Conservator of Forests
Madras

Dated 30th August 1881
Despatched
Received 1st September 1881.

No. 403

No. of Enclosures. -

SUBJECT.

Reporting on annual
of the duty in the ad
Decision of the extension
Kerkin Plants of the
for 1880-81

No 720

Madras,
5th November 1881.

From

Colonel R. H. Beddome,
Conservator of Forests.

To

C. G. Master Esquire,
Secretary to Government, R. D.,
Fort Saint George.

Sir,

I have the honor to forward herewith the Administration Report of the Government Chinchona Plantations in the Nilgiris for the Official year 1880-81, together with 11 enclosures received from Lieutenant Colonel R. S. Jago, Deputy Conservator of Forests, with letter dated Ootacamund the 30th November 1881, No. 403.

I have the honor to be,
Sir,
Your most obedient servant,

R. H. Beddome Colonel,
Conservator of Forests.

Revenue Department

No. 6148

1880-81.
Revenue - Forests.

From The Conservator of Forests
To The Secy: to Govt: M.P.

Dated 5th
Recd 7th } Novr 81
Read:

No: 720.

(Six Enclosures - 11)

Subject

Submitting Administration Report of the Govt: Cinchona Plantations on the Nilgiris for 1880-81.

From Lieutenant-Colonel R. S. JAGO, Deputy Conservator of Forests, in charge of Chinchona Plantations, Nílgiris, to Colonel R. H. BEDDOME, Conservator of Forests, dated Ootacamund, 31st October 1881, No. 398.

I HAVE the honor to forward the Administration Report on the Government Chinchona plantations on the Nílgiris for the official year 1880-81.

2. On the 1st February last, the Chinchona plantations were transferred from the charge of the Commissioner of the Nílgiris to that of the Conservator of Forests, the plantations being placed under the direct supervision of the local Forest officer—*vide* G.O., No. 1670, dated 8th December 1880.

3. *Season and Rainfall.*—The weather during the year was favorable for both the collection of crop and for the growth of Chinchona. The frost was severe, and on the Dodabetta plantation a few trees growing in the flats were killed. Young private plantations in Ootacamund did not suffer in winter so much as in the previous year, owing perhaps to the fact that their owners had raised five belts of Blue-gums to protect their plants. The belts afford protection from the cold east winds during this season, and it has been noticed where these have obtained a fair height that the temperature at night is not near so low as in exposed places. The rainfall at Naduvatam amounted to 89·70 inches against 100·92 inches in the previous year. There was only one month (January 1881) in which no rain fell on this plantation. The maximum fall occurred in June 1880, and the minimum in February 1881; 20·83 inches being gauged in the former and 35 cents in the latter; 51·09 inches of rain were gauged at Dodabetta during the year against 46·40 in 1879-80. It rained in every month of the year on this estate, the maximum fall (10·70 inches) being in October 1880, and the minimum (20 cents) in January 1881. The appearance of all the estates was generally satisfactory at the close of year.

4. *Receipts and Expenditure.*—The receipts during the year amounted to Rs. 4,34,261-1-8 and the expenditure to Rs. 96,105-0-7, thus leaving as net profit to Government a sum of Rs. 3,38,156-1-1. Statements are enclosed showing the expenditure in detail on each plantation. Appendices Nos. 1 and 2 show the general expenditure and receipts.

5. *Permanent Plantations—(a) Number of Trees.*—The following statement shows the number of trees existing on the plantations on the 31st March 1881:—

	Number of Trees as per Major Walker's enumeration in 1878.	Number of Casualties, &c., since 1878.	Balance.	Number of Plants put out since 1878.	Number of Plants in premanent plantation on 31st March 1881.
Naduvatam	208,780	4,943	203,837	3,105	206,942
Hooker	87,557	34,999	52,558	112,560	165,118
Wood	45,758	5,355	40,403	11,800	52,203
Dodabetta	226,936	684	226,252	16,300	242,552
Total ...	569,031	45,981	523,050	143,765	666,815

The casualties referred to above are the odd trees which have died off from year to year, the coppice failures and the Red barks uprooted on the Hooker. The young plantings looked very well at the end of the year.

(b) Conservancy.—The Naduvatam and Pykara plantations were several times knife-weeded during the wet weather. In the dry season the whole were again gone over with the mamoty and the weeds were buried Renovation was continued on these plantations. The Dodabetta plantation was also mamoty-weeded throughout. An attempt was made by repeated surface weeding to kill the braken fern in some plots, but without success. It has now been decided to eradicate them by uprooting. The terracing improved the trees very much. Roads, drains and water channels on all estates were kept in order.

(c) Manure.—Cattle manure was applied to 13 acres at Naduvatam, 40 acres at Hooker, 11 acres on the Wood, and about 25 acres on Dodabetta. Government recently sanctioned an experiment in patent manures, and my proposals for increasing the supply of cattle manure on the Naduvatam plantation are now before you. At Dodabetta also manuring operations will be extended in future.

6. *Propagation and Nurseries.*—Appendix No. 10 shows the number of plants, seedlings and cuttings of the various sorts raised during the year and issued to the public. 1,711 pounds of seed were distributed, the greater portion going to Ceylon. The demands for plants of *C. Succirubra* fell very low during the year. In October 1880, Mr. Robert Cross arrived here with three plants of the Santa Fé variety of Chinchona and six of Carthagena. The latter were handed over to Mr. Jamieson, the Superintendent of the Botanical Gardens. Five of them damped off during the wet sunless weather of November last. Mr. Jamieson managed however to save a portion of the plants for cuttings. On the 31st March 1881, there were five rooted cuttings under his charge. The three plants of Santa Fé were retained by Mr. Cross, who had six established plants at the close of the year.

7. *Crop.*—The crop of the year amounted to 243,896 pounds.

The following gives that of each plantation :—

NADUVATAM.

Natural Crown Bark	6,728
Mossed do.	7,379
Renewed do.	19,830
Branch do.	4,402
Mixed do.	955
Natural Red Bark	40,049
Mossed do.	29,262
Renewed do.	40,307
Branch do	10,350
Root do.	5,077
Dust do.	2,134
Natural Hybrid Bark	59
Do. Micrantha Bark	182
Total	166,714

PYKARA.

Natural Crown Bark	2,322
Mossed do.	502
Renewed do.	1,413
Branch do.	1,726
Dust do.	1,004
Natural Red Bark	11,332
Mossed do.	6,463
Renewed do.	13,315
Branch do.	5,172
Total	43,249

DODABETTA.

Natural Crown Bark	13,944
Mossed do.	12,574
Renewed do.	4,232
Branch Crown Bark	2,934
Natural Pubescens Bark	111
Mossed do. do.	138
Total	33,933
Grand Total	243,896
Add Balance in Store at beginning of year	6,375
Total	250,271

which was distributed as follows :—

Supplied to the Home Market	234,736
Do. to Messrs. Dymes and Company	5,096
Do. to Bombay Medical Department	2,000
Balance in store on 31st March 1881	8,439

The bark supplied to Messrs. Dymes and Company was supplied under orders of Government, No. 879, dated 26th July 1880, and realised net Rs. 12,827. No bark was supplied to the Madras Medical Department.

Appendix No. 7 gives the number of trees decorticated and the quantity of green bark obtained. Amongst the quantity sent for sale in London there was a quantity of "scraped" bark obtained by the Java slicing system. The highest price obtained on scraped Red from Naduvatam was 2*s.* 9*d.* per lb. which may be considered a fair price. The Dodabetta "scraped" Crown realized 6*s.* 8*d.* per pound, while natural Red and Crown taken under the stripping process fetched 2*s* 5*d.* and 7*s.* 7*d.* per pound respectively. So far as the prices realized are concerned, the Java system is no loss; but considering the effect of the process on the trees, I am of opinion that no further scraping should be carried out. Of 4,723 Succirubra treated under this system, no less than 2,700 were killed, and had to be uprooted in the current year. At Dodabetta even some of the Crown barks died away. The Naduvatam trees were not covered after the operation, which may account for so many failures, but here the saving is lost. The trees operated on under Mr. McIvor's mossing (covering) system give almost double what scraped trees do. The most important point however to be considered is that scraped trees do not renew whether covered or not completely within a year, while under the stripping process Crown barks at least, and the majority of Red barks, are fit to strip again a year after the first decortication. At Ossington, a private estate, the slicing system was tried and the trees covered with grass although no casualties have happened; the trees this year are far from ready for cropping. I think that the climate of the Nilgiris between the months of December and March is too dry and bleak for this system. The trees during this season are at a standstill as regards growth, and as renewing cannot go on then, the remnant bark becomes so dry that in many cases it has been known to crack and separate from the tree. In the stripping process, there being complete alternate systems for circulation of sap, renewing goes on at all seasons. The grassing system tried at Naduvatam is a perfect success as regards Crown barks. I am unable just now to give an opinion as regards its effect on Red barks. Very many trees of this variety were noticed which had failed to renew their bark, but whether from the grassing or otherwise cannot be affirmed now. Alternate blocks have this year been tried with moss and grass at Naduvatam and the results will be carefully watched and reported in the next Administration Report. No analysis having as yet been made of bark renewed under grass, no comparison can be made between this and mossing as regards the quality of the bark.

8. *Buildings.*—A new bungalow for the Assistant Superintendent was erected at Naduvatam, also three lines, consisting of 50 huts, for the occupation of coolies. All these buildings were built with burnt brick set in mud and roofed with corrugated iron. Nothing was done towards the erection of the new bark store and drying shed.

9. *Repairs.*—The permanent buildings on all estates received their annual repairs. At Dodabetta the roof of the Jail was removed, the walls repaired, and the roof reset with bolts, &c.

10. *Experiments.*—The result of the scraping and grassing system are given in paragraph 7 under "Crop." In Appendix 11 will be found information regarding the coppices. In all cases the shoots thrived very well, averaging 6 feet in height at the end of the year. It has been marked that the coppices from barked trees have grown much better than those from unbarked trees. Two hundred Succirubra trees originally coppiced in 1871 were again felled in March last, yielding 1,312 pounds of dry bark, which were forwarded per S.S. *Booldana* to the Secretary of State.

11. *Labor.*—The supply was sufficient although the cost was generally more; principally at Dodabetta. To obviate the difficulty experienced during crop time by the Badagas absenting themselves to attend to their fields, &c., an attempt was made to get up low-country labor with perfect success. Although both the climate and work were quite new to them, they took kindly to the place and are fast becoming experts in barking, &c. They are a better class of labor than the Badagas, the latter being too independent.

12. *Subordinates.*—The conduct of the subordinates, I believe, was fairly satisfactory.

ENCLOSURE No. 1.

STATEMENT showing the Receipts on account of Government Chinchona Plantations on the Nilgiris for the Official Year 1880-81.

Particulars.	Sanctioned Budget Allotment for 1880-81.	Actuals for 1880-81.	Actuals for 1879-80.
	RS. A. P.	RS. A. P.	RS. A. P.
Value of Bark sent Home (£34,667-5-2 at 1s. 8¼d. per rupee)	4,20,000 0 0	4,05,860 9 4	3,21,963 2 10
Value of Bark supplied to Madras Medical Department	2,000 0 0	...	3,439 10 0
Value of Bark supplied to Bombay Medical Department	2,000 0 0	2,397 15 4	2,856 4 8
Value of Bark supplied to Private Parties ...	...	12,827 4 4	293 5 0
Sale-proceeds of Plants and Seed	8,000 0 0	13,175 4 8	12,300 6 7
Miscellaneous	...	...	3,162 5 9
Total ...	4,32,000 0 0	4,34,261 1 8	3,43,815 2 10

OOTACAMUND,
31st October 1881.

(Signed) R. S. JAGO, Lieut.-Colonel,
Deputy Conservator of Forests.

ENCLOSURE No. 2.

STATEMENT showing Expenditure on the Government Chinchona Plantations, Nilgiris, for the Official Year 1880-81.

Particulars.		Sanctioned Budget Allotment for 1880-81.	Actuals for 1880-81.	Actuals for 1879-80.
		RS. A. P.	RS. A. P.	RS. A. P.
Establishment	Establishment	11,568 0 0	11,879 1 0	10,092 0 0
Nurseries	Nurseries	4,000 0 0	4,210 4 8	4,394 1 9
	Propagation		506 2 0	529 2 0
Buildings	New	29,000 0 0	8,464 15 4	3,370 4 3
	Repairs	2,000 0 0	2,902 1 0	3,067 0 6
	Roads and Bridges	....	....	100 0 0
Up-keep	Weeding		12,621 3 3	11,193 6 2
	Roads		1,912 8 0	859 7 9
	Pitting and planting	25,425 0 0	4,860 11 11	3,534 5 1
	Tools		....	2,476 7 0
	Various		4,614 14 1	4,534 3 11
Manure	Manure	5,000 0 0	4,957 6 2	2,266 8 8
Collection of Crop ..	Barking and Mossing		10,899 0 8	10,346 4 7
	Collection of Moss and Grass ..		6,621 7 6	5,042 4 0
	Packing		432 1 0	3,811 11 3
	Drying		1,099 1 3	1,022 0 10
	Storage and Carriage to Store ..	41,500 0 0	2,695 1 4	2,175 2 8
	Carriage to Mettupálaiyam		500 0 0	1,423 0 0
	Railway Charges, &c.		6,905 5 8	2,807 3 4
	Various		7,208 6 10	992 0 0
Miscellaneous	Contingencies	2,000 0 0	533 15 6	852 11 6
	Peons' Clothing	100 0 0	86 0 0	81 4 0
	Collecting Seed	....	....	1,850 14 3
	Firewood Plantation	1,600 0 0	763 1 3	....
Unforeseen charges ..	Mailkonda Plantation			2,886 7 6
	Travelling Allowance and Batta ..	4,000 0 0	1,432 4 2	16 6 0
	Total ..	1,26,193 0 0	96,105 0 7	79,724 5 0

OOTACAMUND,
31st October 1881.

(Signed) R. S. JAGO, Lieut.-Colonel,
Deputy Conservator of Forests.

Months.	1	2	3	4	5	6	7	Up-keep.				Collection of Crop—(Continued).				Total.
								Contingencies.	Roads.	Weeding.	Pitting and Planting.	Various.	Storage of Bark.	Collecting Moss.	Various.	
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	15	16	17	18	19	12	13	14	20
April 1880 ..		1,353 5 4	46 11 6	20 0 0	4 2 6	172 12 6	150 13 0	RS. A. P. ..	RS. A. P. 16 3 6	RS. A. P. 973 10 0	RS. A. P. ..	RS. A. P. 139 3 0	RS. A. P. 15 0 0	RS. A. P. ..	RS. A. P. ..	RS. A. P. 2,891 13 4
May „		215 0 0	66 7 0	20 0 0	7 0 0	73 3 0	182 9 6	..	8 2 0	647 9 9	71 2 0	176 12 6	20 0 0	..	..	1,629 15 9
June „		215 0 0	93 10 6	20 0 0	133 7 0	127 6 6	337 12 0	10 4 0	8 2 0	674 2 3	45 1 0	132 6 9	20 0 0	226 14 0	..	3,031 11 9
July „		215 0 0	71 10 6	20 0 0	73 6 9	50 15 0	..	2 8 0	8 2 0	166 8 6	37 13 0	171 14 0	20 0 0	540 11 0	..	1,711 4 0
August „		215 0 0	32 1 0	20 0 0	19 6 3	48 12 0	..	1 2 0	8 7 0	146 2 0	2 5 6	79 3 6	20 0 0	278 0 0	..	1,690 11 0
September „		215 0 0	34 2 0	20 0 0	13 10 6	104 8 0	..	..	8 2 0	437 15 0	0 12 0	81 5 0	20 0 0	182 1 6	..	1,588 4 6
October „		215 0 0	33 12 0	20 0 0	33 0 0	44 7 0	..	5 6 0	8 2 0	199 5 3	0 12 0	127 3 0	20 0 0	351 5 3	..	1,486 10 6
November „		215 0 0	53 7 0	20 0 0	28 14 0	46 6 0	..	8 4 0	8 9 0	..	..	98 1 0	20 0 0	279 13 0	..	1,309 8 6
December „		231 8 0	150 14 0	20 0 0	9 3 0	102 15 0	..	6 8 0	8 2 0	..	..	338 1 9	20 0 0	365 7 0	..	1,805 9 3
January 1881		200 0 0	86 14 6	20 0 0	27 14 0	41 6 0	..	8 0 0	8 2 0	731 0 6	..	90 4 0	20 0 0	73 5 0	..	1,514 4 6
February „		200 0 0	68 12 0	20 0 0	41 6 6	43 13 6	145 12 0	2 8 0	9 3 6	945 14 0	75 7 0	75 3 0	..	..	..	1,690 12 6
March „		200 0 0	59 3 0	20 0 0	5 14 0	18 15 0	..	..	15 0 0	716 6 0	296 11 6	560 7 6	..	..	..	2,948 4 8
Total ..		3,689 13 4	792 9 0	240 0 0	400 4 6	900 9 6	900 9 6	72 4 0	115 4 0	5,538 9 3	630 0 0	2,070 1 0	185 0 0	2,297 8 9	900 0 0	23,198 14 3

(Signed) R. S. JAGO, Lieut.-Colonel,
Deputy Conservator of Forests.

OOTACAMUND,
31st October 1881.

ENCLOSURE No. 4.

STATEMENT showing the Expenditure in Detail on the Naduvatam Chinchona Plantation for the Official Year 1880-81.

Months.	Nurseries. Establishment.	Nurseries. Labor.	Nurseries. Propagation House.	Nurseries. Collection of Seed.	Nurseries. Postage and packing of Seed and Plants.	Buildings. New.	Buildings. Repair.	Manure.	Collection of Crop. Barking and Mossing.	Collection of Crop. Drying Bark.	Collection of Crop. Packing Bark.	Collection of Crop. Storage.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1880	401 0 0	83 3 0	63 4 0	.. ..	37 13 0	577 5 0	8 3 3	636 14 0	..	..	..	49 6 3
May ,,	401 0 0	87 0 0	10 0 0	4 0 0	..	2,099 15 5	66 9 2	18 4 0	..	..	..	49 11 2
June ,,	393 0 0	100 9 3	39 14 0	81 14 0	..	1,584 4 11	204 15 11	19 2 11	..	..	..	38 13 11
July ,,	394 3 8	80 13 0	10 0 0	53 10 0	..	401 4 9	211 12 8	163 6 8	103 3 0	26 15 6	25 0 6	32 10 6
August ,,	401 0 0	96 4 6	10 0 0	9 13 0	..	..	45 0 0	59 10 8	507 10 6	66 6 3	41 3 8	27 14 0
September ,,	401 0 0	147 3 1	34 0 0	2 8 3	..	..	..	29 13 5	568 9 0	95 14 0	41 3 8	34 10 0
October ,,	401 0 0	108 15 5	10 0 0	14 15 0	..	..	14 8 0	44 12 8	694 3 6	96 6 0	38 8 6	34 10 0
November ,,	401 0 0	82 11 9	10 0 0	13 3 6	..	2,010 0 0	..	39 1 11	731 6 3	114 11 6	42 12 0	34 10 0
December ,,	401 0 0	92 14 0	10 0 0	4 15 0	..	..	..	55 1 0	734 4 6	115 13 6	48 6 0	34 10 0
January 1881	401 0 0	87 0 6	46 0 0	6 15 0	..	..	..	19 2 11	1,836 14 11	94 4 6	32 2 0	35 3 0
February ,,	401 0 0	145 15 3	23 0 0	15 6 0	..	732 8 0	..	110 7 7	..	40 13 0	16 14 0	20 0 0
March ,,	401 0 0	66 1 0	10 0 0	8 7 0	..	153 2 0	491 11 0	467 3 7	208 10 6	13 4 6	3 11 6	20 0 0
Total ..	4,797 3 8	1,177 10 9	266 2 0	215 10 9	309 15 0	7,562 8 1	1,042 12 0	1,663 1 4	5,384 14 2	666 8 9	248 10 0	412 2 10

Months.	Up-keep. Roads.	Up-keep. Weeding.	Up-keep. Pitting.	Up-keep. Various.	Fuel Plantations.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1880	93 2 0	289 11 9	1 0 0	105 3 6	..	2,345 0 8
May ,,	29 4 0	29 14 0	..	140 10 8	..	3,012 4 6
June ,,	14 10 0	42 6 0	..	87 15 8	..	2,760 9 4
July ,,	32 1 0	110 10 0	..	54 14 5	..	2,124 2 8
August ,,	43 0 6	51 6 6	37 13 3	83 11 5	..	2,097 3 1
September ,,	40 3 6	200 14 0	121 15 10	91 2 3	..	2,513 4 5
October ,,	44 2 6	31 12 0	..	111 2 6	..	6,241 11 8
November ,,	71 3 0	347 7 0	..	81 11 6	17 9 3	2,933 9 3
December ,,	46 2 0	56 10 0	..	70 8 11	113 2 9	2,668 0 4
January 1881	43 0 6	654 9 0	..	139 0 8	343 5 6	4,287 9 7
February ,,	121 14 0	1,320 15 3	..	235 15 9	97 4 0	3,783 15 8
March ,,	166 2 6	887 1 6	..	147 2 11	191 11 9	3,337 4 10
Total ..	744 13 6	4,023 5 0	160 13 1	1,349 4 0	763 1 3	37,104 11 11

Months.	Peons' Clothing.	Contingencies.	Collection of Carriage.	Collection of Moss and Grass.	Collection of Various.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1880	..	8 15 0	..	..	80 0 0	80 0 0
May ,,	..	2 0 0	..	..	43 9 9	43 9 9
June ,,	..	18 5 0	65 0 0	176 4 3	102 15 0	343 9 3
July ,,	..	9 9 0	73 0 0	424 10 9	106 1 2	612 0 11
August ,,	..	0 12 0	50 0 0	378 0 3	119 8 8	547 9 11
September ,,	..	9 11 0	241 14 0	494 10 9	956 15 11	1,702 1 8
October ,,	..	3 1 0	131 4 0	470 15 9	264 1 10	869 7 7
November ,,	..	1 7 0	132 8 0	517 4 3	145 1 5	800 0 8
December ,,	..	15 14 0	132 8 0	570 1 3	71 11 4	789 8 7
January 1881	..	6 15 0	210 0 0	220 12 9	146 10 4	583 2 1
February ,,	50 0 0	67 6 0	199 6 6	..	81 2 7	280 8 7
March ,,	..	25 12 6	45 0 0	..	..	45 0 0
Total ..	50 0 0	169 11 6	1,280 8 6	2,758 1 9	2,067 14 0	8,321 11 11

OOTACAMUND,
31st October 1881.

(Signed) R. S. JAGO, Lieut.-Colonel,
Deputy Conservator of Forests.

ENCLOSURE No. 5.

STATEMENT showing the Expenditure in Detail on the Government Chinchona Plantation, Pykara, for the Official Year 1880-81.

Months.	Establishment.	Nurseries. Labor.	Up-keep. Weeding.	Up-keep. Roads.	Up-keep. Pitting and Planting.	Up-keep. Various.	Collection of Crop. Barking and Mossing.	Collection of Crop. Collection of Moss and Grass.
	1	2	3	4	5	6	7	8	9
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1880..	120 0 0	115 1 11	31 15 6	29 5 6	315 6 6	120 0 7	251 12 9	....
May ,, ..	120 0 0	121 6 0	1 14 0	31 6 6	82 5 0	46 12 4	161 8 6	....
June ,, ..	120 0 0	116 3 7	65 6 0	79 2 0	104 9 0	68 2 2	23 8 0	....
July ,, ..	120 0 0	122 10 5	75 4 3	46 10 6	376 3 8	78 8 6	29 2 0	110 7 0
Aug. ,, ..	120 0 0	65 11 0	76 5 6	28 11 6	517 8 3	98 3 6	224 6 6	96 11 3
Sept. ,, ..	120 0 0	88 11 5	236 12 0	35 2 0	427 9 3	126 1 11	184 1 6	246 2 0
Oct. ,, ..	120 0 0	106 0 2	182 13 0	69 10 0	353 12 7	77 3 0	337 7 6	216 10 3
Nov. ,, ..	120 0 0	108 7 9	156 12 0	79 4 6	200 13 8	58 10 7	564 8 6	481 5 6
Dec. ,, ..	120 0 0	132 1 2	205 0 6	48 14 6	350 1 0	68 1 4	497 13 6	411 12 0
Jan. 1881 ..	120 0 0	107 12 3	1,126 9 9	74 10 6	287 1 3	164 14 11	221 6 6	2 13 0
Feb. ,, ..	120 0 0	127 1 3	615 1 0	214 4 6	530 6 6	153 1 2	329 2 6	....
March ,, ..	120 0 0	102 15 9	285 7 6	324 5 6	624 2 2	135 13 1	33 9 0	....
Total ..	1,440 0 0	1,314 2 8	3,059 5 0	1,061 7 6	4,169 14 10	1,195 9 1	2,858 6 9	1,565 13 0

Months.	Collection of Crop.—Contd. Drying Bark.	Collection of Crop.—Contd. Packing Bark.	Collection of Crop.—Contd. Carriage.	Collection of Crop.—Contd. Storage.	Collection of Crop.—Contd. Various.	Buildings. New.	Buildings. Repairs.	Manure.	Total.
	10	11	12	13	14	15	16	17	18
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1880..	4 5 6	5 10 0	32 8 6	10 0 0	27 5 3	....	167 0 2	103 12 3	1,339 4 5
May ,, ..	4 3 0	2 8 6	12 1 6	....	18 0 6	....	1 10 5	27 3 7	630 15 10
June ,, ..	1 3 0	1 6 6	13 1 6	....	3 5 10	11 13 9	449 9 5	19 9 0	1,076 15 9
July ,, ..	2 0 0	....	8 11 6	....	15 0 5	....	18 5 2	20 15 6	1,023 14 11
Aug. ,, ..	36 4 6	0 10 0	26 0 0	....	56 6 5	....	....	120 10 11	1,467 9 4
Sept. ,, ..	39 7 0	12 8 0	54 14 0	....	63 15 11	....	....	32 12 9	1,668 1 9
Oct. ,, ..	47 12 0	10 5 6	72 15 6	....	605 3 1	....	76 4 0	156 12 4	2,432 12 11
Nov. ,, ..	59 9 0	22 0 0	89 3 6	17 13 0	547 9 1	....	....	87 1 7	2,593 2 8
Dec. ,, ..	59 6 6	18 14 0	110 13 6	17 8 0	102 13 11	....	....	27 13 6	2,171 1 9
Jan. 1881 ..	43 10 6	10 6 6	131 1 6	19 11 0	73 10 10	....	....	174 7 9	2,558 4 3
Feb. ,, ..	23 9 0	14 6 6	158 5 0	15 4 0	321 0 7	....	....	434 4 8	3,055 14 8
Mar. ,, ..	10 5 6	3 11 6	17 6 0	10 0 0	6 0 0	....	65 13 8	569 0 0	2,308 9 8
Total ..	331 11 6	102 7 0	727 2 0	90 4 0	1,840 7 10	11 13 9	778 10 10	1,779 7 10	22,326 11 7

OOTACAMUND,
31st October 1881.

(Signed) R. S. JAGO, Lieut.-Colonel,
Deputy Conservator of Forests.

ENCLOSURE No. 6.

STATEMENT showing in Detail the Expenditure on the Office Establishment and General Expenditure for the Official Year 1880-81.

Months.	Establishment.	Temporary Establishment.	Printing Charges.	Cost of Gunny Bags.	Carriage of Gunnies.	Carriage of Bark to Mettupálaiyam.	Railway and other Charges.	Shipping Charges.	Contingencies.	Peons' Clothing.	Total.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
April 1880	311 0 0	..	..	..	..	..	..	..	..	..	311 0 0
May "	111 0 0	..	132 0 0	..	..	..	..	..	..	..	243 0 0
June "	111 0 0	..	..	..	..	..	..	..	..	..	111 0 0
July "	111 0 0	..	..	..	..	..	..	..	..	..	111 0 0
August "	111 0 0	..	..	..	..	..	..	..	..	..	111 0 0
September "	111 0 0	..	..	..	..	..	..	..	..	..	111 0 0
October "	111 0 0	..	..	..	..	500 0 0	..	..	..	..	611 0 0
November "	111 0 0	232 4 2	..	..	..	..	..	..	..	..	343 4 2
December "	411 0 0	300 0 0	14 0 0	791 7 0	56 10 0	..	25 0 0	3 11 0	2 0 0	36 0 0	1,639 12 0
January 1881	151 0 0	300 0 0	..	..	..	..	2,689 8 0	3,684 3 8	4 0 0	..	6,828 11 8
February "	151 0 0	300 0 0	10 0 0	1,452 3 0	99 13 0	..	316 12 0	186 3 0	87 0 0	..	2,602 15 0
March "	151 0 0	300 0 0	..	..	..	..	..	..	..	..	451 0 0
Total ..	1,952 0 0	1,432 4 2	156 0 0	2,243 10 0	156 7 0	500 0 0	3,031 4 0	3,874 1 8	93 0 0	36 0 0	13,474 10 10

NILGIRIS,
31st October 1881.

(Signed) R. S. JAGO, Lieut.-Colonel,
Deputy Conservator of Forests.

ENCLOSURE No. 7.

STATEMENT showing the Number of Chinchona Trees barked and the Quantity of Bark taken at the Government Chinchona Plantations, Naduvatam, Pykara, during the Official Year 1880-81.

Plot.	Naduvatam.						Plot.	Hookeр.					
	Red.		Crown.		Total.			Red.		Crown.		Total.	
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.		Trees.	Bark.	Trees.	Bark.	Trees.	Bark.
		LB.		LB.		LB.			LB.		LB.		LB.
I	199	3,365	1,877	4,050	2,076	7,415	I	2,488	9,820	2,026	10,710	4,514	20,530
II	4,211	22,680	1,173	2,440	5,384	25,120	II	3,625	17,740	1,781	5,260	5,406	23,000
III	3,385	12,260	33	70	3,418	12,330	III	7,413	24,410	..	..	7,413	24,410
IV	1,932	4,850	933	1,680	2,865	6,530	IV	..	..	2,005	3,930	2,005	3,930
V	488	1,080	457	840	945	1,920	V	..	..	271	480	271	480
VI	2,422	9,390	2,324	3,540	4,746	12,930	IV	..	..	4,293	7,190	4,293	7,190
VII	3,388	12,950	6,151	13,780	9,539	26,730	VII	1,417	5,040	2,174	4,080	3,591	9,120
VIII	3,503	16,440	2,375	5,570	5,878	22,010	VIII	2,609	9,490	951	1,890	3,560	11,380
IX	2,705	11,840	2,852	7,470	5,557	19,310	IX	602	2,110	674	960	1,276	3,070
X	7,091	25,950	680	1,600	7,771	27,550	X	471	1,320	737	1,580	1,208	2,900
XI	5,067	20,710	754	1,970	5,821	22,680	XI	1,671	10,560	202	400	1,873	10,960
XII	6,521	29,650	2,506	3,730	9,027	33,380	XII	..	..	293	570	293	570
XIII	289	1,40	1,850	3,670	2,139	5,070							
XIV	8,687	41,95.	..	..	8,687	41,955							
XV	8,057	31,100	223	680	8,280	31,780							
XVI	540	1,300	266	500	806	1,800							
XVII	2,631	10,450	888	2,260	3,519	12,710							
XVIII	..	..	739	870	739	870							
XX	..	..	673	1,100	673	1,100							
XXIII	4,723	14,600	..	..	4,723	14,600							
XXIV	..	..	384	1,470	384	1,470							
XXV	..	..	319	300	319	300							
XXVI	882	2,740	..	..	882	2,740							
XXIX	..	..	721	950	721	950							
Total ..	66,721	274,710	28,178	58,540	94,899	333,260	Total ..	20,296	80,490	15,407	37,050	35,703	117,540

Statement showing the Number of Chinchona Trees barked and the Quantity of Bark taken at the Government Chinchona Plantations, Naduvatam, Pykara, during the Official Year 1880-81.—*(Continued.)*

Plot.	Wood.						Plot.	Dodabetta.		Grand Total.	
	Red.		Crown.		Total.			—	—	—	—
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.		Trees.	Bark.	Trees.	Bark.
		LB.		LB.		LB.			LB.		LB.
I	..	..	319	1,090	319	1,090	IV	521	1,590	7,430	30,625
II	3,163	9,685	1,283	4,005	4,446	13,690	V	1,915	4,600	17,151	66,410
III	4,265	10,820	2,642	6,490	6,907	17,310	VI	2,090	4,892	19,828	58,942
IV	2,161	6,780	132	360	2,293	7,140	VIII	4,739	6,791	11,902	24,391
V	4,190	13,925	85	375	4,275	14,300	IX	940	1,079	6,431	17,779
VI	2,826	7,345	..	..	2,826	7,345	X	928	1,327	12,793	28,792
VII	1,944	4,545	..	..	1,944	4,545	XVII	2,969	3,993	18,043	44,388
VIII	3,367	8,720	..	..	3,367	8,720	XVIII	3,777	4,672	16,582	46,782
IX	255	450	..	..	255	450	XIX	3,004	4,072	10,092	26,902
							XX	2,810	4,606	11,789	35,056
							XXI	724	1,308	8,418	34,948
							XXIII	2,642	2,689	11,962	36,639
							XXIV	3,852	3,984	5,991	9,054
							XXV	2,356	4,897	11,043	46,852
							XXVI	1,138	2,036	9,418	33,816
							XXVII	1,112	1,207	1,918	3,007
							XXVIII	100	246	3,619	12,956
							XXIX	2,467	3,277	3,206	4,147
							XXX	4,610	5,827	5,283	6,927
							XXXI	3,086	3,784	7,809	18,384
							XXXII	2,446	3,351	2,830	4,821
							XXXIII	2,127	3,205	2,446	3,505
							XXXIV	1,684	1,757	2,566	4,497
							XXXVII	1,447	1,994	2,168	2,944
Total ..	22,171	62,270	4,461	12,320	26,632	74,590	Total ..	55,484	77,184	210,718	602,564

OOTACAMUND,
31st October 1881.

(Signed) R. S. JAGO, Lieut.-Colonel,
Deputy Conservator of Forests.

ENCLOSURE No. 8.

STATEMENT of Rainfall at Naduvatam for the Official Year 1880-81.

Months.			Rainfall.		Number of Wet Days.
			Inches.	Cents.	
April	1880	...	3	80	12
May	,,	...	2	93	13
June	,,	...	20	83	27
July	,,	...	19	62	29
August	,,	...	13	45	26
September	,,	...	8	47	21
October	,,	...	12	91	24
November	,,	...	6	33	17
December	,,	...	...	33	2
January	1881	...	...	...	...
February	,,	...	...	35	2
March	,,	...	...	63	2
	Total	...	89	70	175

OOTACAMUND,
31st October 1881.

(Signed) R. S. JAGO, Lieut.-Colonel,
Deputy Conservator of Forests.

ENCLOSURE No. 9.

STATEMENT of Rainfall at Dodabetta for the Official Year 1880-81.

Months.			Rainfall.		Number of Wet Days.
			Inches.	Cents.	
April	1880	...	3	17	11
May	,,	...	5	10	20
June	,,	...	5	84	12
July	,,	...	3	97	21
August	,,	...	4	22	14
September	,,	...	1	90	10
October	,,	...	10	70	28
November	,,	...	10	45	19
December	,,	...	1	42	6
January	1881	...	...	20	2
February	,,	...	...	30	1
March	,,	...	3	82	7
	Total	...	51	09	151

OOTACAMUND,
31st October 1881.

(Signed) R. S. JAGO, Lieut.-Colonel,
Deputy Conservator of Forests.

ENCLOSURE No. 10.

STATEMENT showing the Progress made in the Cultivation of Chinchona on the Government Plantations, Nilgiris, during the Official Year 1880-81.

Botanical Names.	Number of Plants, Seedlings and Cuttings raised during 1880-81.	Number issued to the Public.	Number permanently planted out.	Balance.
C. Succirubra	585,950	489,950	12,000	84,000
C. Officinalis	518,784	352,484	121,300	45,000
C. Calisaya (var. Ledgeriana) ...	13,560	50	...	13,510
Do. other varieties ...	1,305	...	*2,305	...
C. Pubescens	20,410	1,000	8,010	11,400
C. Pitayo	200	...	...	200
Total	1,140,209	843,484	143,615	154,110

* Including last year's balance.

OOTACAMUND,
31st October 1881.

(Signed) R. S. JAGO, Lieut.-Colonel,
Deputy Conservator of Forests.

ENCLOSURE No. 11.

STATEMENT showing the Number of Chinchona Trees coppiced on the Government Chinchona Plantations in 1879, and the Number of Shoots living on the 31st March 1881.

Plantations.	Plots.	Acreage.	Number of Trees coppiced.	Number of Stools sprouted.	Number of Failures.	Remarks.
		ACRES.				
Naduvatam ...	VI	¼	56	43		
Do. ...	VII	4¾	2,263	2,091	13	Barked Plot.
Do. ...	XXIII	5	2,628	1,655	172	Do.
					973	Unbarked Plot.
Total	..	10	4,947	3,789	1,158	
Pykara { Hooker.	XI	5	2,226	847	1,379	Barked Plot.
Pykara { Wood...	VIII	5	2,540	1,655	885	Do.
Total ...	...	10	4,766	2,502	2,264	
Dodabetta	XI	5	3,356	3,199	157	Barked Plot.
Do.	XXVIII	5	2,493	2,093	400	Unbarked Plot.
Total ...	...	10	5,849	5,292	557	
Grand Total ...	...	30	15,562	11,583	3,979	

OOTACAMUND,
31st October 1881.

(Signed) R. S. JAGO, Lieut.-Colonel,
Deputy Conservator of Forests, in charge.

Forest

47 9

Revenue Departt.

Draft G. O. No 591 dy 6 June 1882.

Letter from the Conservator of Forests, dated 5th November 1881, No 720.

C. No 6148.

In accordance with the wishes of the Secretary of State the Superintendence of the Chinchona plantations, hitherto entrusted to the Commissioner (now Collector) of the Nilgiris, was transferred during the latter part of the year to the Conservator of Forests, and the Local Forest officer assumed charge of them on the 1st February 1881.

2. Deducting casualties and adding plants put

put out, the total number of trees in the plantations had risen from 569,031 in 1878 to 666,815 on the 31st March 1881. During the year 1,140,209 plants, seedlings and cuttings were raised, of which 843,484 were issued to the public. Three plants of the Santa Fé and six of the Cartharjena varieties were brought by Mr. Cross in October 1880. The three plants of the former variety were taken care of by Mr. Cross himself who had at the close of the year six established. The six Carthagena plants were handed

1,140,209
843,484
296,725

over

over to the Superintendent of the Botanical Gardens Ootacamund. Though five of these plants died, a portion of the plants was saved for cuttings of which five had rooted on the last day of the year.

3. The yield of the year was 243,896 lbs of dry bark against 179,299 lbs in the previous year. The sale of bark realized the following amounts during the year:

Value of bark sent home.	Rs. as. p. 40,580-9-4
Value of bark supplied to Bombay Medical Departt.	2,397-15-4
Value of bark supplied to private parties.	12,527-4-4

A

A further sum of Rs 13,175-4-8 was received from the sale proceeds of Plants and seed, the total Receipts being Rs 434261-1-8 against an expenditure of Rs 96,105-4-4.

4. Colonel Jago's remarks on the different systems of harvesting are interesting, and ~~the comparative results of the massing and grassing processes that have been tried at Ladrumattam should be read in connection with it.~~ It is observed. reported that coppices from barked trees have been found to grow much better than those from

434261-1-8
[illegible]

51 11

unbarked trees.

The following table shows the percentage of stools that sprouted:-

Plantations-	No of trees coppiced. (1)	No of stools sprouted. (2)	Percentage of (2) to (1)
Naduvattam-	4944	3289	46·59
Pykara { Hooker-	2226	847	38·05
Pykara { Wood-	2540	1655	65·15
Dodabetta-	5849	5292	90·44

The Government note with satisfaction that manuring operations were about to be increased.

The Conservancy of the plantations was well attended to.

5. The financial results from the commencement of the Cinchona enterprize up to the end of 1880-81 are as shown below:-

	Rs	as	P.
Receipts———	2,05,840	10	1
Outlay & interest thereon }	2,01,618	3	4

which account exhibits

statement ended.

STATEMENT showing the Capital and Revenue Account of the Government Chinchona Plantations, Nilgiris, from the commencement up to the Official year 1879-80.

Years.	RECEIPTS.					CHARGES.					
	Value of Bark supplied to the Quinologist.	Value of Bark sent to England and supplied to other Governments or Departments.	Sale of Plants, Seeds, &c.	Interest on Receipts.	Total.	Establishment including Superintendent's Salary.	Building and Plant.	Working Charges. Departmental Labor.	Working Charges. Convict Labor.	Interest on Charges.	Total.
1	2	3	4	5	6	7	8	9	10	11	12
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1860-61	..	..	..	..	..	..	..	4,821 15 0	..	..	4,821 15 0
1861-62	..	..	..	..	..	..	..	22,914 15 4	..	216 15 10	23,131 15 2
1862-63	..	..	..	..	..	..	..	48,390 0 0	..	1,257 14 9	49,647 14 9
1863-64	..	..	..	..	..	12,726 14 7	..	53,173 9 2	..	3,492 1 4	69,392 9 1
1864-65	..	..	..	..	..	24,444 8 11	..	59,666 12 0	..	6,614 11 11	90,726 0 10
1865-66	..	..	..	..	..	25,449 14 0	3,700 0 0	58,987 5 0	..	10,697 6 8	98,734 9 8
1866-67	..	..	2,450 0 0	..	2,450 0 0	23,803 9 10	3,025 0 0	52,632 0 0	48,666 10 8	15,140 7 7	1,43,267 12 1
1867-68	..	287 8 0	..	110 4 0	397 12 0	26,087 3 1	2,600 0 0	43,295 14 4	48,666 10 8	21,587 8 5	1,42,237 4 6
1868-69	..	..	1,680 0 0	128 2 5	1,808 2 5	25,671 7 10	2,030 0 0	30,636 1 0	48,666 10 8	27,988 3 3	1,34,992 6 9
1869-70	1,512 6 4	..	..	209 8 3	1,721 14 7	25,783 5 4	1,650 0 0	19,163 0 0	..	34,062 13 10	80,659 3 2
1870-71	4,364 14 8	..	323 14 0	287 0 0	4,975 12 8	23,730 5 4	300 0 0	6,143 0 0	..	37,692 8 5	67,865 13 9
1871-72	9,542 12 8	3,479 3 6	..	510 14 7	13,532 14 9	17,157 5 4	850 0 0	13,160 4 9	..	40,746 7 10	71,914 1 11
1872-73	16,806 15 8	4,388 2 1	227 1 4	1,119 14 3	22,542 1 4	12,724 0 0	550 0 0	16,441 0 0	..	43,982 10 0	73,697 10 0
1873-74	21,136 7 0	36,417 6 3	300 9 0	2,134 4 7	59,988 10 10	12,574 0 0	558 0 0	15,091 14 0	..	47,299 0 3	75,522 14 3
1874-75	8,576 0 0	..	273 4 0	4,833 12 5	13,683 0 5	16,406 8 0	1,700 0 0	17,417 0 0	..	50,697 8 9	86,221 0 9
1875-76	..	60,404 7 11	2,000 0 0	5,449 8 3	67,854 0 2	17,234 0 0	1,550 0 0	27,423 0 0	..	54,577 7 11	1,00,784 7 11
1876-77	..	1,07,878 4 0	2,579 3 10	8,502 15 1	1,18,960 6 11	8,064 5 4	6,715 8 11	44,850 3 0	..	59,112 12 9	1,18,742 14 0
1877-78	..	3,51,746 0 6	5,469 0 2	12,856 2 7	3,71,071 3 3	8,061 5 4	5,468 13 8	56,241 10 3	..	64,456 3 7	1,34,228 0 10
1878-79	..	3,92,217 10 1	8,136 9 2	30,554 5 11	4,30,908 9 2	9,637 2 8	10,090 14 1	53,954 10 8	..	70,496 7 10	1,44,179 3 3
1879-80	..	4,24,323 12 8	15,462 12 4	49,945 4 0	4,89,731 13 0	10,092 0 0	6,537 4 9	63,095 0 3	..	76,984 8 10	1,56,708 13 10
Total ..	61,939 8 4	13,81,142 7 0	38,902 5 10	1,17,642 0 4	15,99,626 5 6	2,99,647 15 7	47,325 9 5	7,07,399 2 9	1,46,000 0 0	6,67,103 15 9	18,67,476 11 6
1880-81 ..	"	40825.8.8	2602.9.0	1183.2.11	50624.4.	13951.4.9	2210.13.1	57582.14.10		8436.7.3	18044.7.10
Total	61939.8.4	17,89,400.15.8	64904.14.10	1,89,825.3.3	21,05,870.10.1	3,13,599.4.3	69,936.6.6	7,66,962.1.7	1,46,000.0.0	7,51,148.7.0	20,47,618.3.4

Net Result.

	RS. A. P.
~~Charges .. ..~~	~~18,67,476 11 6~~
~~Receipts .. ..~~	~~15,99,626 5 6~~
~~Balance of Capital due .. ..~~	~~2,67,850 6 0~~

Net Result.

Receipts. 21,05,870 . 10 . 1
Charges. 20,47,618 . 3 . 4
58,252 . 6 . 9

* G.O., 21st July 1877, No. 2,359.
„ 28th Jan. 1878, „ 145.
„ 15th Nov. „ „ 1,828,
page 6, Statement 2.
† G.O., 28th April 1879, No. 933.
„ 10th June „ „ 1,259.
„ 8th July „ „ 1,438.
„ 3rd Jan. 1880, „ 1.
„ 20th Feb. „ „ 227.
„ 4th Mar. 1881, „ 398.

Moreover the receipts for the years 1877-78* and 1879-80† as recorded in the orders noted in the margin are incorrectly given. These and other minor errors have now been rectified, and an abstract of the corrected statement is appended to this order.

9. The financial results are as follows:—

	RS.
Outlay	12,00,372
Interest thereon	5,49,462
Total ...	17,49,834
Receipts ...	14,81,984

and show a debit of Rs. 2,67,850 at the close of 1879-80. The receipts from so much of the crop of that year as was sold after its close, and will therefore appear to the credit of the current year, have already extinguished the debt and established the success of the enterprise. Its whole cost with interest has now been recouped.

(True Extract.)

(Signed) O. G. MASTER,
Secretary to Government.

To the Commissioner of Nilgiris.
„ the Conservator of Forests.
„ the Accountant-General.
„ the Board of Revenue.
„ the Superintendent of Government Central Museum.

Exd. W. H. French.

70 Copies.

G.O.

Review of the Chinchona Report for 1880-81.

Encl 6/6/82

Recd 12/6

Recd 6-6-82.
R.B. 6-6-82

Original

61
81

of Rainfall at Dodabetta for the

Rec/1882/Sept-

1881-82.

Chinchona Department

Statement showing the trees coppiced in 1879 on the Govt. Chinchona Plantations and the shoots living on the 31st March 1881.

Dated 31st October
Rec'd November } 1881.

Read-

13
Rev. 6148/81.

1 Govt 6-6-82 No. 591. Circ.

Deputy Conservator of Forests

G.O.

Review of the Chinchona Report for 1880-81

61
62

Rainfall at Dodabetta for the

Statement showing the number of Chinchona trees coppiced on the Government Chinchona Plantations in 1879 and the number of shoots living on the 31st March 1881.

Plantations		Plots	Acreage	Number of trees coppiced	Number of Stools sprouted	Number of Failures	Remarks
Neddivattam		VI	acre 1/4	56	43	13	Barked Plot
do		VII	4 3/4	2263	2091	172	— do —
do		XXIII	5	2628	1655	973	Unbarked Plot
	Total	—	10	4947	3789	1158	
Pykarra	Hooker	XI	5	2226	847	1379	Barked Plot
	Wood	VIII	5	2540	1655	885	— do —
	Total	—	10	4766	2502	2264	
Dodabetta		XI	5	3356	3199	157	Barked Plot
do		XXVIII	5	2493	2093	400	Unbarked Plot.
	Total	—	10	5849	5292	557	
Grand Total		—	30	15562	11583	3979	

Dt Conservators Office
Ootacamund
31st October 1881

M. I. Fls Lieut Colonel
Dt Conservator of Forests
in charge

Deputy Conservator of Forests

c 3-6-82.
R. 6. 6. 82.

Original

61
61

- of Rainfall at Dodabetta for the

Enclosure No 10 of
1880-81
Chinchona Departt.

Statement showing the
Progress made in the
Cultivation of Chinchonas
on the Nilgiris during the
Offl. year 1880-81

Dated 31st Oct. } 1881
Recd Nov. }

Print-
12
Rev: 6148/81.
In Go 76-6-82: 591 Encl.

Deputy Conservator of Forests

C 3-6-82.
R. 6. 6. 82

Read 1-

Cinchona

61

G

Re

- of Rainfall at Dodabetta for the

59

Statement Showing the Progress made in the Cultivation of Cinchona on the Govt. Plantations, Nilgiris, during the Official year 1880-81

Botanical names	Number of Plants Seedlings & Cuttings raised during 1880-81	Number issued to the Public	Number permanently planted out	Balance	
C. Succirubra	585,950	489,950	12000	84000	
C. Officinalis	518784	352,484	121,300	45000	
C. Calisaya (Var: Ledgeriana)	13560	50		13510	
Do Other varieties	1305	"	2305	"	x Including last year's balance
C. Pubescens	20410	1000	8010	11400	
C. Pitayo	200	"	"	200	
Total	1140209	843484	143615	154110	

Office of Deputy Conservator of Forests
Ootacamund 31st October 1881

R. J. Pigou Lt Col.
Deputy Conservator of Forests

Deputy Conservator of Forests

C 3-6-82.
R. 6. 6-82.

Read

G.

Enclosure

61
Cal

Statement of Rainfall at Dodabetta for the Official year 1880-81

Months	Rainfall Inches	Cents	Number of wet days	Remarks
April— 1880	3	17	11	
May "	5	10	20	
June "	5	84	12	
July "	3	97	21	
August "	4	22	14	
September "	1	90	10	
October "	10	70	28	
November "	10	45	19	
December "	1	42	6	
January— 1881	"	20	2	
February "	"	30	1	
March "	3	82	7	
Total	51	09	151	

Office of Dy Conservator of Forests
Ootacamund, 31st October 1881

H. L. Fyfe Lt Col.
Deputy Conservator of Forests

C3-6-82.
R.6.6.82.

Read

Statement of Rainfall at Neddiwattuwa for the Official year 1880-81

Months	Rainfall Inches	Rainfall Cents	Number of wet days	Remarks
April 1880	3	80	12	
May	2	93	13	
June	20	83	27	
July	19	62	29	
August	13	45	26	
September	8	47	21	
October	12	91	24	
November	6	33	17	
December	"	38	2	
January 1881	"	"	"	
February	"	35	2	
March	"	63	2	
Total	89	70	175	

(Office of Deputy Conservator of Forests
Dotacamund 31st October 1881

H. L. Pte 2d Lt Col.
Deputy Conservator of Forests

1880-81

Statement of Rainfall at Doddabetta for the Official year 1880-81

Dated 31st October 1881

Rec'd

Rain-

Ins.

Rec'd 6-11-81

Enclosure No 8

1880-81.

Khirchand Departt.

Statement of Rainfa
at Neddiattum fo
the Offl. year 1880-8

Dated 31st Oct.
Rec'd Nov. } 188

Print

10

Rev: 6148/81

Ind 96-6-82: bgiad

Statement showing the Number of Cinchona Trees barked and the quantity of bark taken at the Govt Cinchona Plantations Neddiwattum. Pykara during the Official year 1880-81

Plot	Neddiwattum Red Trees	Neddiwattum Red Bark lbs	Neddiwattum Crown Trees	Neddiwattum Crown Bark lbs	Neddiwattum Total Trees	Neddiwattum Total Bark lbs	Plot	Hooker Red Trees	Hooker Red Bark lbs	Hooker Crown Trees	Hooker Crown Bark lbs	Hooker Total Trees	Hooker Total Bark lbs	Plot	Woods Red Trees	Woods Red Bark lbs	Woods Crown Trees	Woods Crown Bark lbs	Woods Total Trees	Woods Total Bark lbs
I	199	3365	1877	4050	2076	7415	I	2488	9820	2026	10710	4514	20530	I	-	-	319	1090	319	1090
II	4211	22680	1173	2440	5384	25120	II	3625	17740	1781	5260	5406	23000	II	3163	9685	1283	4005	4446	13690
III	3385	12260	33	70	3418	12330	III	7413	24410	-	-	7413	24410	III	4265	10820	2642	6490	6907	17310
IV	1932	4850	933	1680	2865	6530	IV	-	-	2005	3930	2005	3930	IV	2161	6780	132	360	2293	7140
V	488	1080	457	840	945	1920	V	-	-	271	480	271	480	V	4190	13925	85	375	4275	14300
VI	2422	9390	2324	3540	4746	12930	VI	-	-	4293	7190	4293	7190	VI	2826	7345	-	-	2826	7345
VII	3388	12950	6151	13780	9539	26730	VII	1417	5040	2174	4080	3591	9120	VII	1944	4545	-	-	1944	4545
VIII	3503	16440	2375	5570	5878	22010	VIII	2609	9490	957	1890	3566	11380	VIII	3367	8720	-	-	3367	8720
IX	2705	11840	2852	7470	5557	19310	IX	602	2110	674	960	1276	3070	IX	253	450	-	-	253	450
X	7091	25950	680	1600	7771	27550	X	471	1320	737	1580	1208	2900							
XI	5067	20710	754	1970	5821	22680	XI	1671	10560	202	400	1873	10960							
XII	6521	29650	2506	3730	9027	33380	XII	-	-	293	570	293	570							
XIII	289	1400	1850	3670	2139	5070														
XIV	8687	41955	-	-	8687	41955														
XV	8057	31100	223	680	8280	31780														
XVI	540	1300	266	500	806	1800														
XVII	2631	10450	888	2260	3519	12710														
XVIII	-	-	739	870	739	870														
XX	-	-	673	1100	673	1100														
XXIII	4723	14600	-	-	4723	14600														
XXIV	-	-	384	1470	384	1470														
XXV	-	-	319	300	319	300														
XXVI	882	2740	-	-	882	2740														
XXIX	-	-	21	950	721	950														
Total	66421	274410	29270	58540	94877	333250	Total	20296	80490	15407	37050	35703	117540	Total	22171	62270	4461	12320	26632	74590

Plot	Woodabetta Trees	Woodabetta Bark lbs	Grand Total Trees	Grand Total Bark lbs
IV	521	1590	7430	30625
V	1916	4600	17151	66410
VI	2090	4892	19828	58942
VIII	4739	6791	18902	24591
IX	940	1079	6431	17779
X	928	1327	12795	28792
XVII	2969	3993	18043	44388
XVIII	3777	4672	16582	46782
XIX	3004	4072	10092	26902
XX	2810	4606	11789	35056
XXI	724	1308	8418	34948
XXIII	2642	2689	11962	36639
XXIV	3852	3984	5991	9057
XXV	2356	4897	11043	46852
XXVI	1138	2036	9418	33811
XXVII	1112	1207	1918	3007
XXVIII	100	246	3619	12950
XXIX	2467	3277	3206	4447
XXX	4610	5827	5283	6927
XXXI	3086	3784	7809	18384
XXXII	2446	3357	2830	4821
XXXIII	2127	3205	2446	3505
XXXIV	1684	1757	2566	4497
XXXVII	1447	1994	2168	2944
Total	53484	77184	210718	602564

Office of Deputy Conservator of Forests
Ootacamund 31st October 1881

A. J. Mc Lel
Deputy Conservator of Forests

Statement Showing in Detail the Expenditure on the Office Establishment and General Expenditure for the Official year 1880-81

(Original)

Months	Establishment	Temporary Establishment	Printing Charges	Cost of Gunny bags	Carriage of Gunnies	Carriage by bank to Nettapalliam	Railway and other charges	Shipping charges	Contingencies	Plows Clothing	Total
April 1880	311										311
May "	111		132								243
June "	111										111
July "	111										111
August "	111										111
September "	111										111
October "	111					500					611
November "	111	232	42								343 42
December "	411	300	14	791 7	56 10		25	3 11	2	36	1639 12
January 1881	151	300					2689 8	3684 3 8	4		6828 11 8
February "	151	300	10	1452 3	99 13		316 12	186 3	87		2602 15
March "	151	300									451
Total	1952	1432 42	156	2243 10	156 7	500	3031 4	3874 1 8	93	36	13474 10 10

Office of the Deputy Conservator of Forests
Nilgiris, 31st Octacamund
1881

Deputy Lt-Col
Deputy Conservator of Forests

Statement showing the Expenditure in detail on the Govt Chinchona Plantation Pykara for the Official year 1880-81

Months	Establishment	Up Keep — Nurseries: Labor	Up Keep — Nurseries: Weeding	Up Keep — Roads	Up Keep — Pitting & Planting	Up Keep — Various	Collection of Crop — Barking and Drying	Collection of Crop — Collection of Moss and Grass	Collection of Crop — Drying Bark	Collection of Crop — Packing Bark	Buildings — Carriage	Buildings — Storage	Buildings — Various	Buildings — New	Buildings — Repairs	Manure	Total
April 1880	120	115 7 11	31 15 6	29 5 6	315 6 6	120 - 7	251 12 9	- - -	4 5 6	5 10 -	32 8 6	10 - -	27 5 3	- - -	167 - 2	108 12 3	1339 4 5
May	120	121 6 -	1 14 -	31 6 6	82 5 -	46 12 4	161 8 6	- - -	4 3 -	2 8 6	12 1 6	- - -	18 - 6	- - -	1 10 5	27 3 7	630 15 10
June	120	116 3 7	65 6 -	79 2 -	104 9 -	68 2 2	23 8 -	- - -	1 3 -	1 6 6	13 1 6	- - -	3 5 10	11 13 9	449 9 5	19 9 -	1076 15 9
July	120	116 3 7	65 6 -	79 2 -	104 9 -	68 2 2	23 8 -	- - -	1 3 -	1 6 6	13 1 6	- - -	15 - 5	- - -	18 52	20 15 6	1023 14 11
August	120	122 10 5	75 4 3	46 10 6	376 3 8	78 8 6	29 2 -	110 7 -	2 - -	- - -	8 11 6	- - -	56 6 5	- - -	- - -	120 10 1	1467 9 4
September	120	65 11 -	76 5 6	28 11 6	517 8 3	98 3 6	224 6 6	96 11 3	36 4 6	- 10 -	26 - -	- - -	63 13 11	- - -	- - -	32 12 9	1668 1 9
October	120	88 11 5	236 12 -	35 2 -	427 9 3	126 1 11	184 1 6	246 2 -	39 7 -	12 8 -	57 4 4	- - -	605 3 1	- - -	764 -	156 12 4	2432 12 11
November	120	106 - 2	182 13 -	69 10 -	353 12 7	77 3 -	337 7 6	216 10 3	47 12 -	10 5 6	72 15 6	- - -				87 1 7	2593 2 8
December	120	108 7 9	156 12 -	79 4 6	200 13 8	58 10 7	564 8 6	481 5 6	59 9 -	22 - -	89 3 6	17 13 -	547 9 1	- - -	- - -	27 13 6	2171 1 5
January	120	132 1 2	205 - 6	48 14 6	350 1 -	68 1 4	497 13 6	411 12 -	59 6 6	18 14 -	110 13 6	17 8 -	102 13 11	- - -	- - -	174 7 9	2558 4 3
February	120	107 12 3	112 6 9	74 10 6	287 1 3	164 14 11	221 6 6	2 13 -	43 10 6	10 6 6	131 1 6	19 11 -	73 10 10	- - -	- - -	434 4 8	3055 14 8
March	120	127 13 -	615 1 -	214 14 6	530 6 6	153 1 2	329 2 6	- - -	23 9 -	14 6 6	158 5 -	15 4 -	321 - 7	- - -	- - -	65 13 8	569 - - 2308 9 8
Total	1440	1314 2 8	3059 5 -	1061 7 6	4169 14 10	1195 9 1	2858 6 9	1565 13 -	331 11 6	102 7 -	727 2 -	90 4 -	1840 7 10	11 13 9	778 10 10	1779 7 6	22326 11

Office of Deputy Conservator of Forests
Ootacamund 31st October 1881

H. H. Rice Lt
Deputy Conservator of Forests

Statement showing the Expenditure in detail on the Neddiwattum Chinchona Plantation for the Official year 1880-81

Months	Establishment	Nurseries: Labor	Nurseries: Propagation Materials	Nurseries: Collection & Seed	Nurseries: Postage and packing of seed & plants	Buildings: New	Buildings: Repairs	Manure	Collection of Crop: Barking and Crossing	Collection of Crop: Drying Bark	Collection of Crop: Packing Bark	Collection of Crop: Storage	Collection of Crop: Carriage	Collection of Crops and grass	Collection of Crop: Various	Contingencies	Peons Clothing	Up Keep: Roads	Up Keep: Weeding	Up Keep: Pitting	Up Keep: Various	Land Plantation	Total
1880																							
April	401	83 3	53 4		37 13	57 7 5	8 3 3	636 14				49 6 3				8 15		93 2	289 1 9	1	105 3 5		2345 8
May	401	87	10	4		209 3 5 5	66 9 2	184				47 11 2			80	2		29 4	29 14		140 10 8		3012 4 5
June	393	100 9 3	39 14	81 14	26	158 4 14	204 15 11	19 2 11				38 13 11	65		439 9	18 5		14 10	42 6		87 15 8		2760 9 4
July	394 3 8	80 13	10	53 10	49	401 4 9	211 12 8	163 6 8	103 3	26 15 6		32 10 6	73	176 4 3	102 15	9 9		32 1	110 10	37 13 3	54 4 5		2124 2 8
August	401	95 4 6	10	9 13	12 8		45	59 10 8	507 10 6	68 6 3	25 6	27 4	50	378 3	106 1 2	12		43 6	57 6 6	21 15 10	83 11 5		2097 3 1
September	401	147 3 1	34	2 8 3	30 7			29 13 5	568 9	95 14	41 3 6	34 10	241 14	424 10 9	119 8 8	9 11		40 3 6	200 14		91 2 3		2573 4 5
October	401	108 15 5	10	14 15	24 7	201 0	14 8	44 12 8	694 3 6	96 6	38 8 6	31 10	131 4	470 15 9	95 6 15 11	3 1		44 2 6	31 12		111 2 5		5241 11 8
November	401	82 11 9	10	13 3 6	30 12			39 11	731 6 3	114 11 6	42 12	31 10	132 8	517 4 9	264 1 10	1 7		71 3	347 7		81 11 6	17 7	2933 7 3
December	401	92 14	10	4 15	21			55 1	734 4 6	115 13 6	48 6	34 10	132 8	570 1 3	145 1 5	15 14		46 2	56 10		70 8 11	113 2 9	2668 4
1881 January	401	87 6	46	6 15	39 8			192 11	1836 4 11	94 4 6	32 2	35 3	210	220 12 9	71 11 4	6 15		43 6	65 4 9		139 8	343 5 6	4287 9 7
February	401	145 15 3	23	15 6	38 8	732 8		110 7 7		40 13	16 4	20	199 6 6		146 10 4	67 6	50	121 4	320 15 3		235 15 9	97 4	3783 15 8
March	401	66 1	10	8 7				153 2	491 11	467 3 7	208 10 6	13 4 6	3 11 6	20	45			31 2 7	25 12 6		166 2 6	88 7 16		3337 4 10
Total	4794 3	1177 10 9	266 2	215 10 9	309 15	755 2 8	1042 12	1663 1 4	5384 14 2	666 8 9	248 10	412 2 10	1280 8 6	2758 1 9	2067 14	164 11 6	50	744 3 6	402 3 5	160 13 1	1349 4	463 1 3	37104 11 11

Officer in charge of Government Chinchona Plantations

Dated 31st October 1881

Deputy

Statement - Showing the Expenditure in detail on the Dodabetta Chinchona Plantations for the Official year 1880-81

Months	Establishment	Nurseries: Labour	Nurseries: Propagation Houses	Nurseries: Collection of Seed	Buildings: New	Buildings: Repairs	Manure	Collection of Crop: Barking & Drossing	Drying Bark	Packing Bark	Storage of Bark	Collecting Barks	Various	Contingencies	Roads	Up Keep: Weeding & Planting	Up Keep: Various	Total
April 1880	353 5 4	46 11 6	20 - -	4 2 6	150 13 -	- - -	172 12 6	- - -	- - -	- - -	15 - -	- - -	- - -	- - -	16 3 6	973 10 -	- - - 139 3 -	289 1 34
May -	215 - -	66 7 -	20 - -	133 7 -	182 9 6	104 9 -	73 3 -	- - 14 -	- - -	- - -	20 - -	- - -	- - -	104 -	8 2 -	547 9	71 2 - 176 12 6	162 3 59
June -	215 - -	98 10 6	20 - -	73 6 9	337 12 -	150 6 -	127 6 6	- - -	- - -	- - -	20 - -	226 14 -	900 -	28 -	8 2 -	6742	3451 - 32 6 9	303 1 19
July -	215 - -	71 10 6	20 - -	19 0 3	- - -	111 13 6	50 15 -	276 4 3	- - -	- - -	20 - -	540 11 -	- - -	12 -	8 2 -	1868	637 13 - 171 14 -	171 4 -
August -	215 - -	32 1 -	20 - -	13 10 6	- - -	68 10 6	48 12 -	744 9 -	13 14 -	- - -	20 - -	278 - -	- - -	- - -	8 7 -	446	2 5 6 79 3 6	1690 11 -
September	215 - -	34 2 -	20 - -	33 - -	- - -	34 - -	104 8 -	369 1 -	19 8 -	23 8 -	20 - -	182 1 6	- - -	5 6 -	8 2 -	457 5 -	12 - 81 5 -	1588 4 6
October	215 - -	53 12 -	20 - -	20 14 -	83 11 -	- - -	46 6 -	532 11 6	24 14 -	6 8 -	10 - -	279 13 -	- - -	5 - -	8 9 -	- - -	- - -	1486 6 6
November	215 - -	53 7 -	20 - -	9 3 -	- - -	- - -	192 10 6	102 15 -	322 3 -	14 14 -	- - -	20 - -	365 7 -	- - -	8 - -	8 2 -	- - -	1307 8 6
December	231 8 -	160 14 -	20 - -	27 14 -	- - -	- - -	75 15 6	41 6 6	- - -	64 8 -	6 13 -	57 - -	20 - -	73 5 -	- - -	2 8 -	9 3	6731 - 6 - - 98 1 -
January 1881	200 - -	86 14 6	20 - -	41 6 6	- - -	75 15 6	41 6 -	64 8 -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	1805 9 3
February	200 - -	68 12 -	20 - -	5 14 -	145 12 -	- - -	43 3 6	20 1 -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	1514 4 6
March -	200 - -	59 3 -	20 - -	10 - -	- - -	321 1 2	658 4 6	18 15 -	- - -	- - -	- - -	- - -	- - -	72 4 -	15 - -	716 6 -	296 11 6	1590 12 6
Total	3891 3 4	792 9 -	240 - -	400 4 6	900 9 6	1080 10 2	1514 13 -	2655 11 9	15 13 -	81 - -	185 - -	2297 8 9	900 - -	115 4 -	106 3 -	5538 9	3530 - - 2070 1 -	23198 14 3

Officiating Deputy Conservator of Forests
Ootacamund, 31st October 1881

A. T. Pate Lt Col
Deputy Conservator of Forests

Enclosure No 2

1880-82

Chinchona Department

Statement showing the Expenditure on the Govt. Chinchona Plantations, Nilgiris for the Offl. year 1880-81

Dated 31st Oct. } 1881
Recd. Nov. }

Print

4

Rev. 6148/81.

L Govt 6-6-82 No. 571 Encl.

Statement Showing Expenditure on the Govt. Chinchona Plantations, Nilgiris for the Official year 1880-81

Particulars		Sanctioned Budget allotment for 1880-81 Rs. A. P.	Actuals for 1880-81 Rs. A. P.	Actuals for 1879-80 Rs. A. P.
Establishment	Establishment	11568 " "	11879 1 "	10092 " "
Nurseries	Nurseries		4210 4 8	4394 1 9
	Propagation	4000 " "	506 2 "	529 2 "
Buildings	New	29000 " "	8464 15 4	3370 4 3
	Repairs	2000 " "	2902 1 "	3067 " 6
	Roads & Bridges	" " "	" " "	100 " "
Up-Keep	Weeding		12621 3 3	11193 6 2
	Roads		1912 8 "	859 7 9
	Pitting & Planting	25,425 " "	4860 11 11	3534 5 1
	Tools			2476 7 "
	Various		" " "	4614 14 1
Manure	Manure	5000 " "	4957 6 2	4534 3 11
Collection of Crop	Barking & Moss'g		10899 " 8	2266 8 8
	Collection of Moss & grass		6621 7 6	10346 4 7
	Packing		432 1 "	5042 4 "
	Drying		1099 1 3	3811 11 3
	Storage & Carriage to store	41500 " "	2695 14 "	1022 " 10
	Carriage to Metta & Calicut		500 " "	2175 2 8
	Railway charges &c		6905 5 8	1423 " "
	Various		7208 6 10	2807 3 4
Miscellaneous	Contingencies	2000 " "	533 15 6	992 " "
	Peons clothing	100 " "	86 " "	852 11 6
	Collecting Seed		" " "	81 4 "
	Firewood Plantations	1600 " "	763 1 3	1850 14 3
Unforeseen Charges	Nail Konda Plantation			" " "
	Travelling allowance & Batta	4000 " "	1432 42	2886 7 6
				16 6 "
	Total Rs	126193 " "	96105 " 7	79724 5 "

Office of Deputy Conservator of Forests
Ootacamund, 31st October 1881

H. I. Mc
Lt. Col.
Deputy Conservator of Forests

Enclosure No 1

1880-81

Chinchona Department

Statement showing the Receipts on account of Govt. Chinchona Plantations Nilgiris for the Official year 1880-81.

Dated 31st October 1881
Recd. Nov.

Print

3

Rev: 6748/81

L. Gov. 6-6-82 No. 571 Acd.

Tm
LS

Statement Showing the Receipts on account of Govt. Chinchona Plantations on the Nilgiris for the Official year 1880-81

Particulars	Sanctioned Budget Allotment for 1880-81 Rs	A.	P.	Actual for 1880-81 Rs	A.	P.	Actual for 1879-80. Rs	A.	P.
Value of Bark sent Home (£ 34667-5-2 @ 1s 8½d per Rupee	420,000	"	"	405,860	9	4	321963	2	10
Value of Bark Supplied to Madras Medical Department	2000	"	"	"	"	"	3439	10	"
Do Bombay	2000	"	"	2397	15	4	2856	4	8
Do Private parties	"	"	"	12827	4	4	93	5	"
Sale proceeds of Plants & Seed	8000	"	"	13175	4	8	12300	6	7
Miscellaneous	"	"	"	"	"	"	3162	5	9
Total Rs	432,000	"	"	434,261	1	8	343815	2	10

Office of Deputy Conservator of Forests
Ootacamund 9th October 1881

H. J. Price Lt Col.
Deputy Conservator of Forests