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MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 1862 A Press / Mis.

Dated 12-9-1879.

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

12th September 1879, No. 1,862-A.

READ THE FOLLOWING PAPERS :—

No. 168-A. From R. W. BARLOW, Esq., Commissioner of Nilgiris, to the Under-Secretary to Government, Revenue Department, dated Ootacamund, 21st July 1879, No. 163.

WITH reference to your Official Memorandum, No. 332 of 17th instant, I have the honor to enclose copies of valuation invoice for bark supplied to the Bombay and Madras Medical Departments, showing the method of calculation adopted for fixing the value of the bark. The following statement shows the calculation by which the value of the bark sent to London has been arrived at :—

Particulars.	Amount. Rs. A. P.
Sale-proceeds of 1877-78.—Crop, £ 33,231-12-0, at 1*s.* 9*d.* per rupee	3,79,789 11 5

The Government Orders in which the amount realized was communicated are given in the margin.

G.O., 29th June 1878, No. 998.
„ 5th July „ „ 1,025.
„ 25th Sept. „ „ 1,552.

2. With reference to paragraph 3, I have the honor to state that no credit was taken for the 100 lbs. of bark sent to Calcutta, nor for the 1,311 lbs—the result of the drying experiment reviewed in G.O., 9th May 1879, No. 1,022, which were sent to Government office; I, however, now enclose a revised statement of receipts which I beg may be substituted for the one sent in with my letter, No. 150, of 10th instant. Appendix D shows the method of calculating the value of the bark supplied to Dr. Irving and of the experimental bark.

STATEMENT showing the Receipts on account of the Government Chinchona Plantations for the Year 1878-79.

Particulars.	Sanctioned Budget Allotments for 1878-79.	Actuals for 1878-79.	Actuals for 1877-78.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Sale-proceeds of Crop	2,54,000 0 0	3,79,789 11 5	3,41,272 0 0
Value of Bark supplied to the Madras Medical Department	...	10,240 6 8	9,689 3 8
Do. Bombay do.	...	1,770 13 4	2,321 11 9
Do. Calcutta do.	...	416 10 8	...
Rent of Tea Estate	300 0 0	...	183 13 11
Sale-proceeds of Plants and Seeds	6,249 0 0	8,136 9 2	2,821 2 3
Miscellaneous	451 0 0	...	2,464 0 0
Total ...	2,61,000 0 0	4,00,354 3 3	3,58,751 15 7

OOTACAMUND,
21st July 1879.

(Signed) R. W. BARLOW,
Commissioner.

VALUATION Invoice of 3,511 lbs. of Chinchona Bark supplied to the Madras Medical Department.

Particulars.	Quantity.	Amount.	Remarks.
	LBS.	RS. A. P.	
Renewed Red Bark	3,511	11,703 5 4	At 5*s.* 10*d.* per lb., at 1*s.* 9*d.* per rupee exchange.
Bales and Packings	...	43 12 0	
Carriage from Neddivuttum to Mettapolliem ...	...	42 0 0	
	...	11,789 1 4	
Deduct carriage to London	...	365 11 8	
Balance ...	...	11,423 5 8	

OOTACAMUND,
21st July 1879.

(Signed) R. W. BARLOW,
Commissioner.

VALUATION Invoice of Chinchona Bark supplied to the Medical Department, Bombay.

Particulars.	Quantity.	Amount.	Remarks.
	LBS.	RS. A. P.	
Mossed Chinchona Bark (Red)	1,000	1,523 12 11	At 2*s.* 8*d.* per lb.*
Natural Bark (Red)	500	500 0 0	At 1*s.* 9*d.* „ *
Cases and Packings	...	21 1 6	
Carriage to Ootacamund	...	7 8 0	
Do. to Mettapolliem...	...	7 8 0	
	...	2,059 14 5	
	...	144 8 6	
Balance...	...	1,915 5 11	

* At 1*s.* 9*d.* per rupee exchange.

OOTACAMUND,
21st July 1879.

(Signed) R. W. BARLOW,
Commissioner.

STATEMENT showing the detailed Calculation of Amount realized by Chinchona Bark.

	RS. A. P.
Value of experimental bark, 523¾ lbs. of Red bark, at 3*s.* 9¼*d.* per lb. at 1*s.* 9*d.* per rupee exchange...	1,133 0 4
602 lbs. of Crown bark, at 10*s.* 1*d.* per lb. at 1*s.* 9*d.* per rupee	3,468 10 8
Total 1,130¾ lbs. of bark	4,601 11 0
Deduct carriage to London	115 11 6
Balance ...	4,485 15 6
Value of bark supplied to Dr. Irving. 100 lbs. of Natural Crown bark, at 8*s.* 4*d.* per lb. at 1*s.* 9*d.* per rupee exchange.	476 3 0
Deduct carriage to London	9 10 2
	466 8 10

OOTACAMUND,
21st July 1879.

(Signed) R. W. BARLOW,
Commissioner.

No. 168-B. From R. W. BARLOW, Esq., Commissioner of Nilgiris, to J. H. GARSTIN, Esq., Acting Secretary to Government, Revenue Department, dated Ootacamund, 10th July 1879, No. 150.

I HAVE the honor to forward the Administration Report on the Government Chinchona Plantations on the Nilgiris for the official year 1878-79.

2. SEASON AND RAINFALL.—The season was on the whole favorable for Chinchona cultivation, although unfavorable for collecting the crop. The year was noticeable for an almost entire absence of the usual storms which prevail during the South-West Monsoon, particularly at the Neddivuttum and Pykarra plantations. The rains of the South-West Monsoon on which these plantations are almost entirely dependent for the collection of bark were much below the average, but the weather was unusually mild, and, although against collection of a large crop, was beneficial to the trees, which have recovered the injury sustained during the high winds which prevailed in the latter months of the year 1877-78,—*vide* Administration Report for that year. The rainfall at Neddivuttum was about 80 inches against 116·89 inches in the previous year and an average of 10·2 inches for the past eight years. Fifty-one inches fell at Dodabetta during the year against 61 inches in 1877-78. This plantation also was unable to give the estimated crop owing to the scanty rainfall. On the night of 31st December and on one or two subsequent dates, the district was visited with a severe frost; at Dodabetta a few small plants were killed but it did no harm to any of the other Government estates, although the damage done on private estates was considerable, plants of ten and twelve years of age having been killed. In some places even tea plants were severely injured. I can only account for this by the more favored localities selected for the Government plantations.

The appearance of all the plantations at the close of the year was satisfactory, particularly Neddivuttum, where the Red bark trees which had had a favorable season for growth and renewal of foliage presented a very fine appearance. The Pykarra Plantations which are not so flourishing as the others, also presented an improved appearance.

3. RECEIPTS AND EXPENDITURE.—Enclosed are statements showing the detailed expenditure on each plantation and the total receipts for the year.

Receipts.—The receipts for the year are Rs. 4,01,265 against Rs. 3,58,751 for 1877-78.

Expenditure.—The expenditure amounted to Rs. 73,682 against Rs. 69,771 in the previous year. The net profit is therefore Rs. 3,27,583.

4. PERMANENT PLANTATIONS—(*a*) *Number of Trees.*—No addition was made to the number of trees in permanent plantation, but some of the failures were planted up, and all vacancies will be filled by next year. An enumeration of the trees on the abandoned Mailkoondah plantation was made in January last by Captain Walker, who found 8,947 trees alive on the place—3,264 averaging 12 to 15 feet, and 5,683 stunted; but these figures do not, I understand, include old roots from which small shoots only are now springing, but from which I expect to realize a large amount. The Government have recently ordered the felling and grubbing of all these trees, but, owing to the South-West Monsoon, operations will not be commenced till next month.

(*b*) *Conservancy.*—The whole of the plantations were as usual thoroughly weeded. The Pykarra estates were once knife-weeded during the monsoon in addition to the usual mamooty weeding. The Neddivuttum estate received two knife-weedings throughout, and some plots, where the growth of weeds was rapid, were knife-weeded five times, besides receiving the annual mamooty hoeing during spring. The weeds were as usual buried. Renovation pits have been dug all over the Neddivuttum plantation. The Dodabetta plantation received one weeding with the mamooty during the year. Portions which were very weedy were cleaned twice,

but the growth of weeds here is slight compared with the other plantations. Renovation pits were also dug on this plantation and the weeds buried.

(*c*) *Manure.*—Twenty-two thousand trees on the Neddivuttum plantation were manured with cattle manure. Owing to the difficulty of procuring manure nothing was done on the Pykarra plantations. Attempts were made to hire Toda and Badagar cattle for herding on the estates as is often done in Coffee plantations, but without success; only one herd was secured in the Hooker estate. There is not much difficulty in obtaining manure for the Dodabetta estate, but the Badagars dislike sending their cattle to the Neddivuttum and Pykarra estates on account of the distance and heavy monsoon, and the most satisfactory plan will be to purchase a herd of cattle for each estate, and I shall address Government shortly on the subject.

Lime was applied to 4,000 trees at Neddivuttum in June 1878, but without any result as regards outward appearance. At Dodabetta 23,000 trees were manured with cattle manure. The trees manured in 1877-78 have made vigorous growth during the year under report.

5. NURSERIES.—Six hundred and four thousand and eight hundred and fifty-five plants were distributed to the public during the year against 187,350 in the previous year. The quantity of seed distributed was 1,322 lbs. against 326 lbs. in 1877-78. Most of this seed was sent to Ceylon where, I believe, it is sown broadcast amongst old Coffee, but I doubt whether this process will be attended with success. The difficulty hitherto experienced by private planters in the Wynad and on the Hills in raising plants from seed has been overcome, and several gentlemen now have extensive nurseries stocked up with good plants raised by themselves. A small parcel of seed of *C. calisaya* (*var*: *Ledgeriana*) was received from Java in October last. A portion (4 tolahs) was sown in the propagating house at Neddivuttum. The seed germinated freely and made a fair start, but from some unexplained cause the greater portion rotted away and only 276 plants now remain, but are doing well. I hope to increase the number by propagation from cuttings. A tolah of this seed was also tried in the propagating house at Dodabetta where it germinated freely and about 1,000 plants were raised, none of which died, but there growth in comparison with those at Neddivuttum appears slow. The quantity of seed received was too small to allow of any distribution. A further indent was therefore forwarded to the authorities at Java in March last, and I have just received a small parcel (about 30 tolahs) which I am issuing in 1-tolah packets to various parts of the district, Wynad and Travancore. At the Dodabetta propagating house, 8,320 plants of *C. lanceolata* were raised from cuttings during the year, but this variety is not received with favor either by the public or the department, while *C. calisaya* (*var*: *Ledgeriana*) is eagerly sought after, and I therefore intend to devote special attention in future to its propagation and cultivation.

6. CROP.—The crop consisted of 114,320¾ lbs. of dry bark as shown below :—

Dodabetta.

		lbs.
Mossed Crown Bark		10,380
Natural	do.	10,688
Renewed	do.	4,398
Branch	do.	1,200
Mixed	do.	196
Dust		200
	Total ...	27,062

Neddivuttum.

		lbs.
Mossed Crown Bark		9,227
Natural	do.	7,819
Renewed	do.	9,556
Mossed Red	do.	8,801
Natural	do.	12,097 5/16
Branch	do.	8,185
Renewed	do.	13,780 1/16
Dust	do.	306
Mixed Red	do.	173 8/16
	Total ...	69,945¾

Pykarra.

		lbs.
Mossed Crown Bark		1,958
Natural	do.	2,069
Renewed	do.	1,448
Mossed Red	do.	2,685
Natural	do.	5,760
Renewed	do.	3,393
	Total ...	17,313
	Grand Total ...	114,320¾

The following statement shows how the crop was distributed :—

	lbs.
Sent to England	103,444
Do. Madras Medical Department	3,511
Do. Bombay do.	1,500
Do. Calcutta do.	100
Do. Madras (Government Office)	1,130¾
In Store	4,635
Total ...	114,320¾

The crop of the year under report was estimated at 140,000 lbs., but owing to the insufficiency of rainfall and the difficulty in procuring adequate labor the estimated quantity of bark was not harvested. The experiment of drying bark at Coimbatore directed in G.O., No. 95, dated 18th January 1878, was carried out in November last. The delay in carrying it out was due to their having been as continuous wet during 1878. The bark had to be despatched to Coimbatore in fine weather and under circumstances which cannot be expected to recur, and the results therefore cannot be received as a sure criterion for future guidance. The experiment is fully described in G.O., 9th May 1879, No. 1,022.

One hundred pounds of Natural Crown Bark were supplied to Dr. James Irving, Surgeon-General, Calcutta, under orders of Government, *vide* G.O., 27th November 1878, No. 1,925.

The Madras and Bombay Medical Departments were supplied with 3,511 and 1,500 lbs. Red Bark, respectively. That supplied to Madras was all "Renewed" and that to Bombay consisted of 1,000 lbs. "Mossed" and 500 "Natural." Statements are attached showing the number of trees barked with their yield.

7. BUILDINGS.—(*a*) *New Works.*—Two small cottages were erected on the Pykarra estates for the overseers. The thirty-one huts referred to in paragraph 8 (*a*) of my letter recorded in G.O., 15th November 1878, No. 1,828, were erected during the year under report and not in 1877-78, as erroneously stated therein. Four blocks of cutcha cooly huts were built on the Denison estate. The ragi store sanctioned in G.O., 12th February 1878, No. 209, was completed during the year under report. The propagating house was also completed and flues erected therein. At Dodabetta a line of fourteen cooly huts was erected and flues were added to the drying shed. The drying sheds at Neddivuttum and Dodabetta are still in an unsafe condition, and a further consideration of the question of erecting new drying sheds is advisable.

(*b*) *Repairs.*—The usual annual repairs to the permanent buildings were carried out.

8. ROADS AND BRIDGES.—The old bridle-path from Neddivuttum to the Hooker estate was opened out for cart traffic, and the Macowichi river which in the monsoons was almost impassable has been spanned by a substantial bridge. Estate roads and bridges on all the plantations have been kept in order.

9. EXPERIMENTS.—As systematic experiments on a large scale for comparing the results from the mossing and coppicing systems of harvesting bark are now being carried out, I consider it unnecessary to continue noticing the few so-called experiments which have in former administration reports been brought to the notice of Government. The progress of the experiments now going on will be reported in future administration reports.

10. LABOR.—The labor difficulty was as great as ever. At Neddivuttum and Pykarra plantations only half the required number of laborers could be collected. Every inducement was held out to coolies to come and work, and a trial was made of increased wages and issuing grain at market rates without success, and many of the Canarese who had been supported throughout the famine ran away as soon as prospects became better in Mysore. The chief maistry who had a gang of 200 coolies died during the year, and in consequence many of his coolies made off. I am trying to make arrangements to get a gang of coolies from Chingleput. At Dodabetta a sufficiency of labor was obtained by increasing the usual rate of wages.

11. GENERAL REMARKS.—During the year the report of Captain Walker on the plantations and that of the Chinchona Committee on the question of local manufacture of a febrifuge were submitted to Government. These reports were reviewed by Government in their Proceedings, No. 463, of 24th February 1879. Among other things Government directed that coppicing experiments on a large scale are to be carried out on all the plantations. The experiments are in progress and careful statistics of the results are being kept and reports will be sent to Government in due course.

12. SUBORDINATES.—The Assistant Superintendent (Mr. Rowson) at Neddivuttum and the Head Overseer (Narrainswamy) at Dodabetta, as well as my office Manager (Mr. Hillier) continue to give me satisfaction. In the absence of a Superintendent their responsibilities are considerably increased. I reported of them very favorably last year and have had no reason to change my opinion since.

STATEMENT of Rainfall at Neddivuttum for the Official Year 1878-79.

Months.	Rainfall.	Number of Wet Days.
	IN. C.	
April 1878	1 30	Not registered.
May „	5 44	
June „	11 34	
July „	12 98	
August „	27 62	
September „	13 50	
October „	5 80	
November „	0 60	
December „	0 75	
January 1879	... ...	
February „	... ..	
March „	1 50	
Total ...	80 83	

OOTACAMUND,
10th July 1879.

(Signed) R. W. BARLOW,
Commissioner.

STATEMENT of Rainfall at Dodabetta for the Official Year 1878-79.

Months.	Rainfall.	Number of Wet Days.
	IN. C.	
April 1878 ...	2 39	5
May „	6 23	13
June „	4 19	14
July „	6 41	17
August „	10 69	29
September „	9 13	23
October „	4 37	14
November „	3 14	16
December „	2 31	13
January 1879 ...	0 03	1
February „	0 26	3
March „	1 96	5
Total ...	51 11	153

OOTACAMUND,
10th July 1879.

(Signed) R. W. BARLOW,
Commissioner.

STATEMENT showing the Number of Chinchona Trees barked and the Quantity of Bark taken at the Government Chinchona Plantations of Neddivuttum, Pykarra, and Dodabetta during the Official Year 1878-79.

Plots.	NEDDIVUTTUM.						HOOKER.						
	Crown.		Red.		Total.		Plots.	Crown.		Red.		Total.	
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	—	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.
		LBS.		LBS.		LBS.			LBS.		LBS.		LBS.
I	2,239	4,178	1,701	14,290	3,940	18,468	I	2,403	4,585	...	...	2,403	4,585
II	1,507	3,144	4,671	37,600	6,178	40,744	II	1,539	3,544	2,099	7,982	3,638	11,526
VI	2,531	5,319	2,503	7,350	5,034	12,669	IV	2,258	3,105	...	...	2,258	3,105
VII	6,329	12,826	4,616	17,440	10,945	30,266	V	116	125	...	...	116	125
VIII	3,691	7,566	593	2,080	4,284	9,646	VI	4,604	6,502	...	...	4,604	6,502
IX	3,579	7,016	...	...	3,579	7,016	VII	2,088	3,329	2,153	5,017	4,241	8,346
XII	2,392	5,078	3,631	14,930	6,023	20,008	VIII	1,121	1,699	...	...	1,121	1,699
XIII	2,040	4,048	...	...	2,040	4,048	IX	790	788	...	...	790	788
XV	160	255	...	...	160	255	X	672	1,149	430	1,194	1,102	2,343
XVII	1,123	2,084	...	...	1,123	2,084	XI	186	198	...	...	186	198
XVIII	498	700	...	...	498	700	XII	422	383	...	...	422	383
XX	506	680	...	...	506	680	...	...	...	...	...	...	...
XXV	610	594	...	...	610	594	...	...	...	...	...	...	...
XXIX	851	460	...	...	851	460	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	28,056	53,948	17,715	93,690	45,771	1,47,638	...	16,199	25,407	4,682	14,193	20,881	39,600

STATEMENT showing the Number of Chinchona Trees barked and the Quantity of Bark taken at the Government Chinchona Plantations of Neddivuttum, Pykarra, and Dodabetta during the Official Year 1878-79—(*Continued*).

Plots.	WOOD.						DODABETTA.			GRAND TOTAL.	
	Crown.		Red.		Total.		Plots.	Crown.			
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	—	Trees.	Bark.	Trees.	Bark.
		LBS.		LBS.		LBS.			LBS.		LBS.
III	2,548	4,768	3,179	9,848	5,727	14,616	XIII	2,018	2,857	...	...
IV	238	374	1,912	6,230	2,150	6,604	X	2,175	3,842	...	...
VI	...	...	3,026	8,128	3,026	8,128	XI	1,701	2,846	...	...
...	...	...	...	...	...	...	XII	1,374	2,440	...	...
...	...	...	...	...	...	...	XIV	1,007	1,791	...	...
...	...	...	...	...	...	...	XIX	985	1,676	...	...
...	...	...	...	...	...	...	XXI	1,034	1,799	...	...
...	...	...	...	...	...	...	XXXVIII	6,886	11,760	...	...
...	...	...	...	...	...	...	XXXIX	6,532	10,948	...	...
...	...	...	...	...	...	...	III	531	2,190	...	...
...	...	...	...	...	...	...	IV	664	2,355	...	...
...	...	...	...	...	...	...	XX	1,836	3,420	...	...
...	...	...	...	...	...	...	VII	3,159	9,580	...	...
...	...	...	...	...	...	...	II	747	1,910	...	...
...	...	...	...	...	...	...	XVIII	1,093	2,000	...	...
...	...	...	...	...	...	...	XXVIII	910	1,518	...	...
...	...	...	...	...	...	...	XXII	682	1,343	...	...
...	...	...	...	...	...	...	...	...	*1,480	...	* Twig.
Total ...	2,786	5,142	8,117	24,206	10,903	29,348	...	33,334	65,755	110,889	282,341

OOTACAMUND,
10th July 1879.

(Signed) R. W. BARLOW,
Commissioner.

STATEMENT showing the Expenditure on the Government Chinchona Plantations for the Officia Year 1878-79.

Particulars.	Sanctioned Budget Allotment for 1878-79.	Actuals for 1878-79.	Actuals for 1877-78.
	RS. A. P.	RS. A. P.	RS. A. P.
Establishment	9,564 0 0	9,637 2 8	8,173 13 4
Nurseries.			
Nurseries	2,940 0 0	2,881 4 5	2,686 13 6
Propagation		254 0 0	776 10 4
Buildings.			
New Works	12,000 0 0	5,439 7 0	1,548 6 6
Repairs		1,840 4 4	3,920 7 2
Roads and Bridges		2,811 2 9	...
Up-keep.			
Weeding	24,125 0 0	14,110 0 11	7,342 9 10
Roads		527 4 9	838 14 8
Pitting and Planting		306 8 6	143 9 2
Tools		158 11 0	611 5 0
Various		8,428 2 8	4,088 12 3
Manure.			
Manure	1,400 0 0	2,306 4 7	696 7 1
Collection of Crop.			
Barking and Mossing	...	5,663 6 6	6,646 13 10
Collection of Moss	40,200 0 0	7,236 2 11	8,738 0 6
Do. Fibre		1,871 12 0	365 14 0
Packing		2,421 4 4	1,892 5 2
Drying		712 8 6	892 6 0
Storage and Carriage to Stores ...		1,879 6 5	1,401 14 2
Carriage to Mettapollium		746 3 5	836 0 0
Railway Charges, &c., ...		1,186 12 0	16,629 6 5
Miscellaneous.			
Peons' clothing	100 0 0	61 8 0	72 13 9
Contingencies	1,000 0 0	859 12 6	303 3 0
Collecting Seeds		170 3 0	39 3 0
Chinchona Enumeration		635 8 3	405 15 1
Bells and Clocks	500 0 0	326 8 0	...
Unforeseen Charges.			
Miscellaneous...	...	...	519 1 6
Mailkondah Plantation	...	399 0 0	...
Travelling allowance to Committee Members	...	812 6 0	...
Total ...	91,829 0 0	73,682 11 5	69,770 13 3

OOTACAMUND,
10th July 1879.

(Signed) R. W. BARLOW,
Commissioner.

STATEMENT showing the Receipts on account of the Government Chinchona Plantations for the Year 1878-79.

Particulars.	Sanctioned Budget Estimate for 1878-79.	Actuals for 1878-79.	Actuals for 1877-78.
	RS. A. P.	RS. A. P.	RS. A. P.
Sale-proceeds of Crop	2,54,000 0 0	3,79,739 11 5	3,41,272 0 0
Value of Bark supplied to the Madras Medical Department	...	11,423 5 8	9,689 3 8
Value of Bark supplied to the Bombay Medical Department	...	1,915 5 11	2,321 11 9
Rent of Tea Estate	300 0 0	...	183 13 11
Sale-proceeds of Plants and Seeds ...	6,249 0 0	8,136 9 2	2,821 2 3
Miscellaneous	451 0 0	...	2,464 0 0
Total ...	2,61,000 0 0	4,01,265 0 2	3,58,751 15 7

OOTACAMUND,
10th July 1879.

(Signed) R. W. BARLOW,
Commissioner.

STATEMENT showing the Expenditure in Detail on the Neddivuttum Chinchona Plantation for the Official Year 1878-79.

Months.	Establishment.	Nurseries.	Buildings.		Manure.	Barking and Mossing.	Collection of Moss.	Packing Bark.	Fibre or Nar for Mossing.	Drying Bark.
			New.	Repairs.						
	Rs.	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 1878	368	233 9 9	..	109 7 0	24 3 6	59 10 0	..	..	..	..
May ,, ...	368	76 11 3	277 5 0	..	96 3 3	..	..	..	..	..
June ,, ...	368	136 14 0	452 0 0	..	366 3 6	..	..	..	..	49 0 0
July ,, ...	403	167 6 0	657 8 3	..	116 1 0	..	369 11 0	20 0 0	480 0 0	..
August ,, ...	403	93 8 9	669 0 0	81 3 6	32 13 0	416 14 0	1,065 10 3	31 8 0	..	46 4 0
September ,, ...	403	139 13 1	..	..	31 15 6	486 2 0	455 11 3	..	..	61 6 0
October ,, ...	403	129 3 4	..	..	30 15 0	354 8 6	295 5 3	49 2 0	861 8 0	67 4 0
November ,, ...	401	142 2 1	..	..	31 11 6	585 5 9	377 5 1	116 5 4	..	65 11 6
December ,, ...	401	136 9 3	..	4 0 0	27 3 0	500 14 0	486 10 6	68 8 6	..	108 14 0
January 1879	401	157 12 6	..	..	113 0 6	68 2 0	165 4 1	62 5 0	..	23 4 0
February ,, ...	401	158 15 3	..	15 5 0	57 4 6	191 8 0	84 6 0	6 14 0	248 4 0	..
March ,, ...	401	175 10 9	..	18 13 11	192 1 2	76 0 1	67 8 0	..	..	..
Total ..	4,721	1,748 4 0	2,055 13 3	228 12 11	1,119 11 5	2,739 0 4	3,367 7 5	354 10 10	1,589 12 0	421 11 6

STATEMENT showing the Expenditure in Detail on the Neddivuttum Chinchona Plantation for the Official Year 1878-79—(*Continued*).

Months.	Up-keep.			Contingencies.	Carriage of Bark to Store.	Tools.	Storage of Bark.	Peons' Clothing.	Propagating House.	Counting Chinchona Trees.	Bells and Clocks.	Bridges.	Total.
	Roads.	Weeding.	Various.										
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1878	..	1,776 0 6	112 14 6	..	..	..	..	..	438 0 6	22 0 6	..	..	3,148 14 3
May ,, ...	..	612 8 6	281 10 8	..	..	70 8 0	100 0 0	..	..	..	11 6 0	25 0 0	1,919 4 8
June ,, ...	..	674 9 3	454 14 4	..	..	26 0 0	81 8 0	..	..	..	..	89 14 9	2,698 15 10
July ,, ...	3 12 0	128 14 9	113 12 3	10 0 0	..	..	201 3 6	..	..	2 8 0	315 2 0	40 2 6	3,029 1 3
August ,, ...	58 5 6	65 15 0	314 1 10	42 9 0	15 0 0	..	63 4 0	..	..	..	..	87 0 0	3,486 0 4
September ,, ...	40 8 0	99 11 0	338 13 6	..	..	..	17 7 0	..	..	..	..	..	2,074 7 4
October ,, ...	35 11 6	65 15 0	544 3 2	..	70 8 0	..	14 9 0	..	..	..	..	..	2,921 12 9
November ,, ...	20 4 0	92 10 0	270 4 2	8 0 0	121 4 0	..	31 3 6	25	..	..	..	..	2,288 2 11
December ,, ...	21 9 0	80 13 0	771 11 8	0 14 0	96 11 0	..	20 7 3	..	..	..	..	..	2,725 13 2
January 1879	25 5 0	1,090 2 1	972 3 3	323 10 0	130 0 0	..	27 1 0	..	49 7 5	..	..	..	3,603 8 10
February ,, ...	29 0 0	1,236 5 3	82 14 6	..	90 0 0	..	..	..	96 0 0	..	..	..	2,697 12 6
March ,, ...	..	597 13 9	577 15 11	1 13 6	..	..	9 0 0	..	..	..	..	2,569 1 6	4,686 14 7
Total ..	234 7 0	6,521 6 1	4,835 7 9	386 14 6	523 7 0	96 8 0	565 11 3	25	583 7 11	24 8 6	326 8 0	2,811 2 9	35,280 12 5

OOTACAMUND,
10th July 1879.

(Signed) R. W. BARLOW,
Commissioner.

STATEMENT showing the Expenditure in Detail on the Dodabetta Chinchona Plantation for the Official Year 1878-79.

Month.	Establishment	Nurseries.	Propagation.	Buildings.		Manure.	Barking and Mossing.	Collecting Moss.	Packing Bark.	Fibre or Nar for Mossing.	Drying Bark.
				New.	Repairs.						
	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.
April 1878 ...	150 0 0	46 3 0	20	...	147 11 6	18 6 6	10 0 0	...	...	...	...
May ,, ...	146 10 8	30 10 0	20	...	87 8 6	218 7 6	...	...	...	...	...
June ,, ...	200 0 0	34 2 6	20	...	226 9 10	384 7 8	...	63 0 6	...	...	...
July ,, ...	213 8 0	25 8 6	20	...	103 13 6	33 12 0	5 8 0	354 13 9	...	190	...
August ,, ...	215 0 0	14 12 6	20	637 8 10	...	17 8 0	75 13 0	244 7 6	...	...	...
September ,, ...	215 0 0	8 7 0	20	236 4 2	81 10 6	17 13 0	502 5 6	...	...	...	...
October ,, ...	215 0 0	...	20	...	34 8 0	16 4 0	346 0 0	246 7 6	...	...	27 8 0
November ,, ...	205 0 0	3 4 6	34	51 7 6	...	18 12 0	278 8 0	396 8 6	...	...	21 6 0
December ,, ...	215 0 0	32 4 6	20	...	...	18 12 0	245 9 0	109 9 0	39 15 0	92	7 3 0
January 1879 ...	215 0 0	34 6 0	20	...	...	15 15 0	10 7 0	...	...	...	...
February ,, ...	215 0 0	40 10 0	20	...	71 4 0	19 6 0	...	...	...	...	...
March ,, ...	215 0 0	30 2 6	20	...	153 1 0	367 0 0	...	...	...	...	...
Total ...	2,420 2 8	300 7 0	254	925 4 6	906 2 10	1,146 7 8	1,474 2 6	1,414 14 9	39 15 0	282	56 1 0

STATEMENT showing the Expenditure in Detail on the Dodabetta Chinchona Plantation for the Official Year 1878-79—(*Continued*).

Month.	Up-keep.				Contingencies.	Carriage of Bark to Store.	Collecting Seeds.	Tools.	Counting Chinchona Trees.	Total.
	Roads.	Weeding.	Pitting and Planting.	Various.						
	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 1878	21 13 6	710 13 3	...	126 2 6	1 0 0	...	6 4 0	...	26 11 6	1,285 1 9
May „	20 0 0	366 10 0	...	86 14 0	...	...	...	...	51 3 0	1,027 15 8
June „	20 0 0	...	...	74 9 0	...	...	5 5 0	...	...	1,028 2 6
July „	20 0 0	185 9 0	2 8 0	107 9 6	...	...	8 12 0	...	...	1,271 6 3
August „	20 0 0	343 8 3	11 9 0	152 9 0	...	...	...	...	...	1,752 12 1
September „	20 0 0	63 9 0	220 7 6	51 2 6	55 0 0	...	...	...	...	1,491 11 2
October „	20 0 0	...	...	44 14 0	12 8 0	...	52 10 6	...	...	1,035 12 0
November „	18 0 0	...	...	133 13 0	8 12 0	8 4 0	42 5 6	...	...	1,220 1 0
December „	...	124 0 0	...	392 1 6	3 0 0	15 14 6	27 0 0	36 3 0	...	1,378 7 6
January 1879	...	640 2 0	...	89 15 0	...	23 4 0	...	26 0 0	...	1,075 1 0
February „	...	830 7 6	...	212 7 6	3 8 0	3 1 0	13 8 0	...	36 4 0	1,465 8 0
March „	...	1,373 14 0	72 0 0	481 4 0	0 8 0	...	14 6 0	...	...	2,727 3 6
Total ...	159 13 6	4,638 9 0	306 8 6	1,953 5 6	84 4 0	50 7 6	170 3 0	62 3 0	114 2 6	16,759 2 5

OOTACAMUND,
10th July 1879.

(Signed) R. W. BARLOW,
Commissioner.

STATEMENT showing the Expenditure in Detail on the Pykara Chinchona Plantation for the Official Year 1878-79.

Month.	Establishment.	Nurseries.	Propagation.	Buildings.		Manure.	Barking and Mossing.	Collecting Moss.	Packing Bark.	Fibre or Nar for mossing Trees.	Drying Bark.
				New.	Repairs.						
	RS.	RS. A. P.	RS.	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 1878 ...	70	55 8 7	...	...	362 6 2	...	...	...	...	...	...
May „ ...	70	48 5 3	...	357 13 5	197 10 0	...	...	...	...	...	...
June „ ...	70	62 14 2	...	420 0 6	...	...	...	...	...	...	...
July „ ...	70	59 7 6	...	167 1 10	...	40 1 6	27 14 3	192 5 1	...	...	2 10 6
August „ ...	120	62 11 5	...	763 6 10	115 4 5	...	174 9 6	496 3 0	...	...	29 9 3
September „ ...	120	66 4 11	..	...	...	...	429 11 8	194 12 3	...	...	55 4 0
October „ ...	120	69 7 0	...	...	...	...	223 15 6	495 0 5	8 10 0	...	40 3 0
November „ ...	120	66 12 7	...	...	...	...	225 4 6	517 13 5	...	...	51 12 6
December „ ...	120	67 13 8	...	...	...	...	233 4 6	424 13 6	...	...	41 3 0
January 1879 ...	120	73 7 10	...	8 12 9	...	...	58 9 6	132 13 1	17 14 6	...	14 1 9
February „ ...	120	96 8 11	...	14 0 0	30 0 0	...	38 5 9	...	...	...	...
March „ ...	120	103 8 7	...	143 10 0	...	...	38 8 6	...	...	...	...
Total ...	1,240	832 9 5	...	1,874 13 4	705 4 7	40 1 6	1,450 3 8	2,453 12 9	26 8 6	...	234 12 0

STATEMENT showing the Expenditure in Detail on the Pykarra Chinchona Plantation for the Official Year 1878-79—(*Continued*).

Month.	UP-KEEP.				Storage of Bark.	Carriage of Bark to Store.	Tools.	Collecting Seeds.	Counting Chinchona Trees.	Total.
	Roads.	Weeding.	Pitting and Planting.	Various.						
	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 1878	...	191 12 4	...	61 13 9	...	...	...	...	3 7 3	744 11 1
May „	...	260 2 6	...	397 14 7	12 10 1	...	...	...	...	1,344 7 10
June „	...	273 0 0	...	287 15 8	32 1 1	...	...	...	...	1,145 15 5
July „	1 12 0	146 0 0	...	165 13 2	308 3 0	...	...	...	...	1,181 4 10
August „	24 11 9	36 14 9	...	60 8 2	91 6 6	...	...	...	...	1,975 5 7
September „	18 7 0	98 1 3	...	111 2 0	...	...	...	...	...	1,093 11 1
October „	6 11 6	11 4 0	...	46 1 8	55 1 6	...	...	...	...	1,076 6 7
November „	8 12 6	16 12 0	...	66 3 8	42 10 6	11 8 0	...	...	...	1,127 9 8
December „	13 8 0	19 10 0	...	64 3 4	35 13 6	...	...	...	...	1,020 0 6
January 1879	21 1 0	474 9 9	...	112 12 7	23 7 6	57 8 0	...	...	...	1,115 2 3
February „	15 13 0	583 11 6	...	182 14 10	27 7 0	...	...	...	...	1,108 13 0
March „	22 8 6	838 3 9	...	81 14 0	10 0 0	32 0 0	...	...	...	1,390 5 4
Total ...	133 0 3	2,950 1 10	....	1,639 5 5	638 12 8	101 0 0	...	...	3 7 3	14,323 13 2

OOTACAMUND,
10th July 1879.

(Signed) R. W. BARLOW,
Commissioner.

STATEMENT showing in Detail the Expenditure on the Office Establishment and General Expenditure for the Year 1878-79.

Months.	Establishment.	Batta.	Printing.	Contingencies.	Marking Sub-division.	Surveying Sub-division.	Carriage of Bales.	Cost of Bales.	Travelling Allowance to Members of Chinchona Committee.	Carrying Records.	Peons' Clothing.	Despatch of Bark to Mettapolliem.	Charges on Mailkondah Plantation.	Railway Charges on Bales.	Total.
	RS.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS.	RS. A. P.	RS. A. P.	RS. A. P.	RS.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
April 1878 ..	98	4 14 0	..	130 0 0	..	140	..	..	..	2	..	..	..	..	374 14 0
May „ ..	98	3 2 0	10 0 0	..	100 0 0	..	65 0 0	..	..	..	..	..	..	..	276 2 0
June „ ..	98	..	..	..	113 4 0	..	94 14 0	1,840 4 0	..	..	..	..	..	..	2,146 6 0
July „ ..	98	..	..	..	112 12 0	..	..	..	..	..	..	..	..	..	210 12 0
August „ ..	98	..	..	..	..	..	..	..	695 1 0	..	..	..	..	..	793 1 0
September „ ..	98	..	..	..	..	..	..	..	117 5 0	..	36 8 0	..	..	..	251 13 0
October „ ..	113	..	..	..	..	..	..	..	..	..	..	..	..	..	113 0 0
November „ ..	111	..	191 8 0	..	..	..	..	..	..	..	..	300 0 0	200 0 0	..	802 8 0
December „ ..	111	..	..	25 8 0	..	..	..	..	..	..	..	300 0 0	10 10 0	..	447 2 0
January 1879 ..	111	13 0 0	..	..	..	..	..	..	..	..	..	..	100 0 0	533 12 0	757 12 0
February „ ..	111	..	..	..	..	..	..	..	..	..	..	..	..	653 0 0	764 0 0
March „ ..	111	8 10 0	..	..	27 6 0	..	..	..	..	..	..	146 3 5	88 6 0	..	381 9 5
Total ..	1,256	29 10 0	201 8 0	155 8 0	353 6 0	140	159 14 0	1,840 4 0	812 6 0	2	36 8 0	746 3 5	399 0 0	1,186 12 0	7,318 15 5

OOTACAMUND,
10th July 1879.

(Signed) R. W. BARLOW,
Commissioner.

No. 168-C. ORDER THEREON, 12th September 1879, No. 1,862-A.

Miscellaneous.

THE report of the Commissioner shows that satisfactory efforts were made to maintain the condition of the Government Chinchona plantations during the year 1878-79.

The seasons were favorable to the growth of the trees, but the rainfall was too limited and infrequent to allow of the bark "rising" freely and continuously.

Labour was still scarce at Neddivattum and Pykara, but out of the allotment of Rs. 24,125 for the general upkeep and conservancy of the plantations Rs. 23,530 were utilized.

Manuring was also carried out more extensively than usual except at Pykara where there is always a difficulty in procuring manure.

This defect demands prompt attention and the Commissioner's promised proposals on the matter should be submitted at a very early date.

2. The yield of the year was 114,320 lbs. of dry bark, and the Commissioner has appended to his report a statement of the plots, and number of trees in each, from which bark was taken.

The trees it appears are barked, not by plots but according to their growth and individual capacity to yield. Under the "mossing" system of barking therefore the yield is necessarily calculated per tree and the results for each plantation are shown in the following abstract statement prepared from that above referred to, and the figures given in paragraph 6 of the report.

Plantation.	Trees barked.		Weight of Bark.		Average Yield per Tree.			
	Kind	Number.	Wet.	Dry.	Wet.		Dry.	
			lbs.	lbs.	lbs.	oz.	lbs.	oz.
Dodabetta	Crown ...	33,334	65,755	27,062	1	15	0	12
Neddivattum ...	Crown ...	28,056	53,948	26,602	1	14	0	15
	Red	17,715	93,690	43,343	5	4	2	7
Pykara...	Crown ...	18,985	30,549	5,475	1	9	0	4
	Red	12,799	33,399	11,838	3	0	0	14
	Total ...	1,10,889	2,82,341	1,14,320	2	8	1	0

These results are very satisfactory, especially for the Neddivattum and Dodabetta Plantations.

3. Dr. Bidie, in his notes* on the Pykara Plantations which he visited while this crop was being taken, remarked that the bark would be very light when dried and his prediction is fully borne out by the figures given above, which make it evident that very careful treatment and cultivation are imperatively demanded to maintain the trees on this plantation.

* *Vide* Appendix C to Chinchona Committee's Report, page 41.

4. From the year's crop of dry bark, 103,444 lbs. were sent to England and being there sold at prices which showed an advance on those of the previous year— realized £26,159†; but as only a portion was sold before the end of the year this amount does not appear in its assets.

† *Vide* G.O., 28th April 1879, No. 933.
Do. 10th June " " 1,259.
Do. 8th July " " 1,438.

5. The receipts of the year as returned by the Commissioner, Rs. 406,217-8-6, are made up of the sum obtained in England for the bark of 1877-78 and the value of so much of the 1878-79 crop as was supplied to departments, &c. in this country *plus* gain by exchange at 1*s*. 9*d*. the rupee.

It is presumed that in adopting this rate the Commissioner, as directed in the order noted in the margin, ascertained that it was that fixed for the adjustment of transactions between England and India in the year under report.

G.O., 6th Jan. 1879, No. 20, paragraph 2 (*a*).

6. The valuation of the bark departmentally supplied seems fair, but the Government do not consider that credit should be taken for the gain by exchange that would have accrued if the bark had been sold in England as, though a debit allowance for carriage and freight is made, the broker's charges and other expenses incidental to the English sales cannot be accurately estimated.

Moreover no credit should be taken for the bark that was the subject of the experiments recorded in G.O., 9th May 1879, No. 1,022, as it has been sent to England for sale and the proceeds will appear in the receipts of the present year.

After these deductions are made, the receipts of 1878-79 will stand at Rs. 400,354-3-3

7. The public demand for seeds and plants was abnormally large, but appears to have been fully met.

The sales of 1877-78, viz., plants 187,350, seeds 326 lbs., were in excess of anything previously known, but were far below those of 1878-79—

Plants 604,855
Seeds ... ... 1,322 lbs.,

showing the rapid progress recently made in Chinchona cultivation in this Presidency and Ceylon.

8. The Government regret to learn that so large a number of the young plants raised at Neddivattum from the *Calisaya Ledgeriana* seed received from Java have died. The larger measure of success obtained at Dodabetta would indicate that the nurture of this delicate variety is there better understood or is conducted under more favorable conditions.

It would be well therefore that a larger proportion of any further supply of this seed should be sown in its propagating houses.

The second parcel of seed which has only recently arrived contains a far smaller consignment than that which was stated to be required for Government purposes and distribution in the Wynad, and under these circumstances it is not understood why a portion of it has been sent to planters in Travancore.

Vide G.O., 1st March 1879, No. 511.

9. The erection of new drying houses must await the report from England as to the comparative chemical and commercial value of the samples of bark sent home under G.O., 9th May 1879, No. 1,022.

(True Extract.)

(Signed) J. H. GARSTIN,
Acting Secretary to Government.

To the Commissioner of Nilgiris.
" the Superintendent, Government Central Museum.

Exd. W. H. French.

Copy of Govt. of India.
REVENUE.

To

THE COMMISSIONER OF NILGIRIS,
&c. &c. &c.

Dated September 12th.
Printed October 27th.
Read.

Ind.

G.O., 12th September 1879, No. 1502-A.

SEPTEMBER.
Nos. 168-A—168-C.

Chinchona Plantations.—Reviewing report of the Commissioner of Nilgiris on the — for the year 1878-79.

Vide ent 5-24-2/80.

12 Oct 1882

Read the above

No 1684

COMMISSIONER'S OFFICE,
Ootacamund, 21st July 1879.

No. 163

FROM

The COMMISSIONER, NILGIRIS.

To.

The Under Secretary to Government
Revenue Department
Octacamund

SIR,

With reference to your Official Memorandum No. 332 of 17th Instant, I have the honor to enclose Copies of valuation invoice for bark supplied to the Bombay and Madras Medical Departments, showing the method of calculation adopted for fixing the value of the bark. The following statement shows the calculation by which the value of the bark sent to London has been arrived at.

Particulars	Amount	Remarks
Sale proceeds of 1877-78. Crop £ 33231-12-0 at 1-9 per Rupee	379.789 11 5	

The G. Os in which the amount realized was Communicated are given in the margin-

2 With reference to para 3 I have the honor to state that no credit was taken for the 100 lbs of bark sent to Calcutta

Rose

G.O. 29th June 1880 No 999
5th July " 1035
25th September 1533

nor for the 1311 lbs, – the result of the drying experiment reminded in G. C – 9th May 1879 No. 1022 – which were sent to Government Office; I however now enclose a revised statement of receipts which I beg may be substituted for the one sent in with my letter No. 150 of 10th Instant. Appendix D. shows the method of Calculating the value of the bark supplied to Dr. Irving and of the experimental bark.

I have the honor to be
Sir
Your most obedient Servant

W. Wallace
Commissioner

Valuation Invoice of Chinchona Bark supplied to the Medical Department - Bombay.

Particulars	Quantity	Amount		Remarks.
	lbs	Rs	As	
Mixed Chinchona Bark (Red)	1000	1523	12 11	at 2-8 per lbs *
Natural — " —	500	500	..	at 1-9 -- *
Cases and packing	.	21	16	
Carriage to Ootacamund	.	7	8.	
Bottle pollicue	.	7	8.	
		2059	14 5.	
Deduct Carriage to London	.	144	8 6	
Balance Rs		1915	11	

* at 1-9 per rupee exchange

Commissioner's Office
Ootacamund
21st July 1879

W. Baillie
Commissioner

Revenue Dept
No. 1637 Dated 25th July 1879.

Commissioner's Office,
Ootacamund.

Rec'd 28th July
Rec'd 29 Oct: 79

The Under Secretary
to Government
Revenue Department
Ootacamund

Enclosures. 1, —
1 Ord. 18/20. 12 Feb. 1879

SUBJECT.

Cinchona Bark
Valuation for
Invoices for Land
Carriage
Bottle pollicue
& Bombay
& Road Carriage
Despatch

Rec'd 3 Oct 1879

3/1879

Valuation Invoice of 3511 lbs of Chinchona bark Supplied to the Madras Medical Department

Particulars	Quantity lbs	Amount Rs	A.	P.	Remarks
Renewed Red Bark	3511	11703	5	4	@ 5-10 per lbs
Bales and Packing		43	12	0	@ 1-9 per lb as per exchange
Carriage from Neddiseltand to Metterpolliem		42	0	0	
		11789	1	4	
Deduct Carriage to London		365	11	8	
	Balance Rs	11423	5	8	

Commissioner's office
Ootacamund
21st July 1879

W W Bailey
Commissioner

Statement Showing the detailed Calculations of Amount realized by Cheichona Bark

Value of Experimental Bark			
528 3/4 lbs of Red bark at 3-9½ per lbs at 1-9 per rupee exchange	1133	0	4
602 lbs of Crown bark at 10-1 per lb at 1-9 per Rupee	3468	10	8
Total 1130 3/4 lbs of bark Rupees	4601	11	0
Deduct Carriage to London	115	11	6
Balance	4485	15	6
Value of Bark supplied to Dr Irving —			
100 lbs of Natural crown bark at 8-4 per lbs at 1-9 per rupee exchange	476	3	0
Deduct Carriage to London	9	10	2
	468	8	10

Commissioners Office
Calcutta
21st July 1849.

W Theobald
Commissioner

P 4
Dec 1878/79
Jan 1879

Statement Showing the Receipts on account of the Government Cinchona Plantations for the year 1878-79.

Particulars.	Sanctioned Budget Estimate for 1878-79	Actuals for 1878-79	Actuals for 1877-78.
Sale proceeds of Crop	254,000	379789 11 5	341272
(A) Value of Bark supplied to the Madras Medical Department		44823 5 8	9689 3 8
		10240 6 8	
(B) Do. Do. Do. Bombay Do.		4915 5 11	2321 11 9
		1770 13 4	
(C) Do. Do. Do. Calcutta Do.		4466 8 10	
		416 10 8	
(D) Do of Experimental Bark		44485 15 6	
Rent of Tea Estate	300		183 13 11
Sale proceeds of plants & seeds	6249	8136 9 2	2821 2 3
Miscellaneous	451		2464
		400354 3 3	
	261000	406217 8 6	358751 15 7

(A) Cost of Bark supplied to the Calcutta Medical College Hospital by the Government Plantations

Commissioner's Office
Ootacamund
21st July 1879

Commissioner

No 150

Commissioners office
Ootacamund 33
10th July 1879

No 1681 from

R. W. Barlow Esq
Commissioner Nilgiris

To

I. H. Garstin Esq
Secretary to Government
Revenue department

Ootacamund

Sir

I have the honor to forward the Administration Report on the Government Chinchona Plantations in the Nilgiris for the official year 1878/79.

2. Season and Rainfall. The season was on the whole favorable for chinchona cultivation, although unfavorable for collecting the Crop. The year was noticeable for an almost entire absence of the usual Storms which prevail during the S. W. Monsoon, particularly at the Seddivettum & Pykara Plantations. The rains of the S. W Monsoon on which these Plantations are almost entirely dependent for

the

the collection of bark were much below the average, but the weather was unusually mild and, although against collection of a large crop, was beneficial to the trees, which have recovered the injury sustained during the high winds which prevailed in the latter months of the year 1877-78.— vide Administration Report for that year. The Rainfall at Neddiveltiem was about 80 inches against 116·89 inches in the previous year and an average of 102 inches for the past 8 years. Fifty one inches fell at Dodabetta during the year against 61 inches in 1877-78.— This plantation also was unable to give the estimated crop owing to the scanty Rainfall. On the night of 31st December and on one or two subsequent dates the district was visited with a severe frost; at Dodabetta a few small plants were killed but it did no harm to any of the other Government Estates, although the damage done on private Estates was considerable, plants of two & twelve years of age having been killed. In some places even tea plants were severely injured. I can only account for this by the more favored localities selected for the Government plantations.

The appearance of all the plantations at the close of the year was satisfactory, particularly at Neddiveltiem, where the Red bark trees which had had a favorable season for growth and renewal of foliage, presented a very fine

fine appearance. The Sykara Plantations which are not so flourishing as the others, also presented an improved appearance

3. Receipts and Expenditure. Enclosed are statements showing the detailed expenditure on each plantation and the total Receipts for the year.

Receipts. The receipts for the year are Rupees 411,265 against Rs 358,751 for 1877-78.

Expenditure. The expenditure amounted to Rs 73,682 against Rs 69,771 in the previous year. The net profit is therefore Rupees 327,583.

4. Permanent Plantation (a) Number of trees. No addition was made to the number of trees in permanent plantation, but some of the failures were planted up, and all vacancies will be filled by next year. An enumeration of the trees in the abandoned Mailkoondah Plantation was made in January last by Captain Walker who found 8947 trees alive on the place; 3264 averaging 12 to 15 feet and 5683 stunted; but these figures do not I understand include old roots from which small shoots only are now springing but from which I expect to realize a large amount. The Government have recently ordered the felling and grubbing of all these trees, but owing to the S. W. monsoon, operations will not be commenced till next month.

Permanent Plantations (b) Conservancy. The whole of the plantations were as usual thoroughly

thoroughly weeded. The Pykara Estates were once Knife weeded during the monsoon in addition to the usual ~~monsoon~~ weeding. The Seddivattam Estate received two Knife weedings throughout and some plots where the growth of weeds was rapid, were Knife weeded five times, besides receiving the annual Mamooty hoeing during spring. The weeds were as usual buried. Renovation pits have been dug all over the Seddivattam plantation. The Dodabetta plantation received one weeding with the Mamooty during the year. Portions which were very weedy were cleaned twice but the growth of weed here is slight compared with the other plantations. Renovation pits were also dug on this plantation and the weeds buried.

(c) Manure. Twenty two thousand trees on the Seddivattam plantation were manured with Cattle Manure. Owing to the difficulties of procuring Manure nothing was done on the Pykara Plantations. Attempts were made to hire Toda & Budagar Cattle for herding on the Estates as is often done in Coffee plantations, but without success; only one herd was secured in the Hooker Estate. There is not much difficulty in obtaining manure for the Dodabetta Estate, but the Badagers dislike sending their Cattle to the Seddivattam & Pykara Estates on account of the distance & heavy monsoon; & the most satisfactory plan will be to purchase a herd of cattle for each Estate and

and I shall address Government shortly on the subject.

Lime was applied to 4000 trees at Seddavattam in June 1878 but without any result as regards outward appearance. At Dodabetta 23000 trees were manured with Cattle Manure. The trees manured in 1877-78 have made vigorous growth during the year under report.

5. Nurseries. 604.858 Plants were distributed to the public during the year against 87,350 in the previous year. The quantity of seed distributed was 1392 ℔ against 326 ℔ in 1877-78. Most of this seed was sent to Ceylon where I believe it is sown broad-cast amongst old Coffee, but I doubt whether this process will be attended with success. The difficulty hitherto experienced by private planters in the Wynaad and on the Hills in raising plants from seed has been overcome and several gentlemen now have extensive nurseries stocked up with good plants raised by themselves. A small parcel of seed of C. Calisaya (Var Ledgeriana) was received from Java in October last. A portion (4 Tolahs) was sown in the propogating house at Seddivattam. The seed germinated freely and made a fair start, but from some unexplained cause the greater portion rotted away and only 276 plants now remain, but are doing well. I hope to increase the number by propogation from Cuttings. A tolah of this seed was

also

also tried in the propagating house at Dodabetta where it germinated freely and about 1000 plants were raised, none of which died, but their growth in comparison with those at Neddivattum appears slow. The quantity of seed received was too small to allow of any distribution. A further indent was therefore forwarded to the Authorities at Java in March last, and I have just received a small parcel (about 30 tolahs) which I am issuing in 1 tolah packets to various parts of the district, Wynaad and Travancore. At the Dodabetta propagating house 8320 plants of C. lanceolata were raised from cuttings during the year, but this variety is not received with favor either by the public or the department, while C. Calisaya (Var. Ledgeriana) is eagerly sought after and I therefore intend to devote special attention in future to its propagation and cultivation.

6. Crop. The crop consisted of 114320 3/4 ℔ of dry bark as shown below

Dodabetta

Mossed Crown bark	℔	10380
Natural	do	10688
Renewed	do	4398
Branch	do	1200
Mixed	do	196
Dust		200
Total		27062

Neddivattum

Neddivattum

Mossed Crown Bark	℔	9227
Natural do	"	7819
Renewed do	"	9556
Mossed Red. do	"	8801
Natural do	"	12097 25/16
Branch do	"	8185
Renewed do	"	13780 15/16
Dust do	"	306
Mixed Red bark	"	173 8/16
Total		69945 3/4

Pykara

Mossed Crown bark	℔	1958
Natural	"	2069
Renewed	"	1448
Mossed Red bark	"	2685
Natural	"	5760
Renewed	"	3393
Total		17313
Grand Total		114320 3/4

The following statement shows how the Crop was distributed.

Sent to England	℔	103464
" Madras Medical dept	"	3511
" Bombay	"	1500
" Calcutta	"	100
" Madras Government office	"	1130 3/4
In Store	"	4635
		114320 3/4

The crop of the year under report was estimated at 140000 ℔ but owing to the insufficiency of rainfall & the difficulty

in procuring adequate labor the estimated quantity of bark was not harvested.

The experiment of drying bark at Coimbatore directed in G. O no: 95 dated 18th January 1878 was carried out in November last. The delay in carrying it out was due to there having been no continuous wet during 1878. The bark had to be despatched to Coimbatore in fine weather and under circumstances which cannot be expected to occur and the results therefore cannot be relied as a sure criterion for future guidance. The experiment is fully described in G.R. 9th March 1879 No 1022.

One hundred pounds of natural crown bark was supplied to Dr James Irving Surgeon General Calcutta under orders of Government vide G.O. 27th November 1878 No 1925.

The Madras and Bombay Medical Departments were supplied with 3511 & 1500 lbs of Red bark respectively. That supplied to Madras was all "Renewed" and that to Bombay consisted of 1000 lbs "Mossed" and 500 "Natural." Statements are attached showing the number of trees barked with their yield.

7. Buildings (a) New works. Two small cottages were erected on the Sykara Estate for the overseers. The thirty one huts referred to in para 8/a/ of my letter recorded in G.O 15th November 1878 No: 1828 were erected during the year under report and not in 1877-78 as erroneously stated therein. Four blocks of Cutcha Cooly huts were built on the Denison Estate. The Raggie store sanctioned in G.O 12th February 1878 No: 209 was completed during the year under report. The proposed house was also completed and flues erected therein. At Doddabetta a line of 14 Cooly huts was erected and flues were added to the drying shed. The drying sheds at Neddavattum and Doddabetta are still in an unsafe condition and a further consideration of the question of erecting new drying sheds is advisable.

(b) Repairs. The usual annual repairs to the permanent Buildings were carried out

8. Roads & Bridges. The old bridle path from Neddavattum to the Nookes Estate was opened out for Cart traffic, and the Macoorchi river which in the monsoons was almost impassable has been spanned by a substantial bridge. Estate roads and bridges on all the plantations have been kept in order

9. Experiments As systematic experiments on a large scale for comparing the results from the Mossing & Coppicing systems of Harvesting

harvesting bark, are now being carried out, I consider it unnecessary to continue noticing the few so called experiments which have in former Administration Reports been brought to the notice of Government. The progress of the experiments now going on will be reported in future Administration Reports

10. Labor. The labor difficulty was as great as ever. At Neddiwattum & Syllawa Plantations only half the required number of laborers could be collected. Every inducement was held out to Coolies to come and work, and a trial was made of increased wages and issuing grain at Market rates without success, and many of the Canarese who had been supported throughout the famine ran away as soon as prospects became better in Mysore. The chief Maistry who had a gang of 200 Coolies died during the year, and in consequence many of his Coolies Made off. I am trying to make arrangements to get a gang of Coolies from Chingleput. At Bodabetta a sufficiency of labor was obtained by increasing the usual rate of wages

11. General Remarks. During the year the Reports of Captain Walker on the Plantations and that of the Chinchona Committee on the question of local Manufacture of a febrifuge were submitted to Government These reports were reviewed by Government in their Proceedings No: 463 of 24th February 1879. Among other things Government directed that Cropping experiments on a large scale are to be carried out on all the plantations. The experiments are in progress and careful statistics of the results are being kept and reports will be sent to Government in due course.

12. Subordinates. The Assistant Superintendent (Mr Rowson) at Neddiwattum and the Head Overseer (Narrainswamy) at Bodabetta as well as my office Manager (Mr Killier) continue to give me satisfaction. In the absence of a Superintendent their responsibility are considerably increased: I reported of them very favorably last year and have had no reason to change my opinion since.

I have the honor to be
Sir
Your Most obedt Servt

W Morgan
Commissioner

Statement of Rainfall at Neddivattam for the Official Year 1878-79.

Months	Rainfall Inches	Rainfall Cents	Number of wet days	Remarks
April 1878	1	30		
May "	5	44		
June "	11	34		
July "	12	98		
August "	27	62		
September "	13	50		
October "	5	80		
November "	0	60		
December "	0	75		
January 1879	"	"		
February "	"	"		
March "	1	50		
Total	80	83		

Commissioner's Office
Ootacamund
10th July 1879

V. P. Wardlaw
Commissioner.

Statement of Rainfall at Dodabetta for the Official Year 1878-79. 47

Months	Rainfall Inches	Rainfall Cents	Number of wet days	Remarks
April 1878	2	39	5	
May —"—	6	23	13	
June —"—	4	19	14	
July —"—	6	41	17	
August —"—	10	69	29	
September —"—	9	13	23	
October —"—	4	37	14	
November —"—	3	14	16	
December —"—	2	31	13	
January 1879 —	"	03	1	
February —"—	.	26	3	
March —"—	1	96	5	
Total	51	11	153	

Commissioner's Office
Ootacamund
10th July 1879

J. W. Bailey
Commissioner

Rs 28/4/4

3/1414/M

R 3/7059/53

R 2/5089/53

Statement showing the number of Chinchona trees barked the quantity of bark taken at the Government Chinchona Plantations of Neddivattam Pykara and Otta during the Official Year 1878-79.

Plots	Neddivattam Crown Trees	Neddivattam Crown Bark lbs	Neddivattam Red Trees	Neddivattam Red Bark lbs	Neddivattam Total Trees	Neddivattam Total Bark lbs	Hook Plots	Hook Crown Trees	Hook Crown Bark lbs	Hook Total Bark lbs	Wood Plots	Wood Crown Trees	Wood Crown Bark lbs	Wood Red Trees	Wood Red Bark lbs	Wood Total Trees	Wood Total Bark lbs	Dodabetta Plots	Dodabetta Crown Trees	Dodabetta Crown Bark lbs	Grand Total Trees	Grand Total Bark lbs
I	2239	4178	1701	14290	3940	18468	I	2403	4585	4585	III	2548	4768	3179	9848	5727	14616	XIII	2018	2857		
II	1507	3144	4671	37600	6178	40744	II	1539	351		IV	238	374	1912	6230	2150	6604	X	2175	3842		
VI	2531	5319	2503	7350	5034	12669	IV	2258			VI	"	"	3026	8128	3026	8128	XI	1701	2846		
VII	6329	12826	4616	17440	10945	30266	V	116			"	"	"	"	"	"	"	XII	1374	2440		
VIII	3691	7566	593	2080	4284	9646	VI	4604	6		"	"	"	"	"	"	"	XIV	1007	1791		
IX	3579	7016	"	"	3579	7016	VII	2088	33		"	"	"	"	"	"	"	XIX	985	1676		
XII	2392	5078	3631	14930	6023	20008	VIII	1121	16		"	"	"	"	"	"	"	XXI	1034	1799		
XIII	2040	4048	"	"	2040	4048	IX	790	488	488	"	"	"	"	"	"	"	XXXVIII	6886	11760		
XV	160	255	"	"	160	255	X	672	1149	4	2343	"	"	"	"	"	"	XXXIX	6532	10948		
XVII	1123	2084	"	"	1123	2084	XI	186	198	198	"	"	"	"	"	"	"	III	531	2190		
XVIII	498	700	"	"	498	700	XII	422	383	383	"	"	"	"	"	"	"	IV	664	2355		
XX	506	680	"	"	506	680	"	"	"	"	"	"	"	"	"	"	"	XX	1836	3420		
XXV	610	594	"	"	610	594	"	"	"	"	"	"	"	"	"	"	"	VII	3159	9580		
XXIX	851	460	"	"	851	460	"	"	"	"	"	"	"	"	"	"	"	II	747	1910		
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	XVIII	1093	2000		
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	XXVIII	910	1518		
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	XXII	682	1343		
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	—	1480		* Twig
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"					
Total	28056	53948	17715	93690	45771	147638	—	16199	25407	481	39600	—	2786	5142	8117	24206	10903	29348	—	333346	575110889	2823411

14

2786 5142 8117 24206 10903 29348 — 333346 575110889 2823411

4332 14143 — 11.4.321

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Commrs Office
Ootacamund
10th July 1879

Commissioner

Statement showing the Expenditure in the Government Chinchona Plantations for the official year 1878/79. 53

Particulars	Sanctioned Budget allotment for 1878-79	Actuals for 1878-79	Actuals for 1877-78
Establishment	9564	9637 2 8	8173 13 4
Nurseries			
Nurseries	2940	2881 4 5	2686 13 6
Propogation		254	776 10 4
Buildings			
New Works	12000	5439 7 ..	1548 6 6
Repairs		1840 4 4	3920 7 2
Roads & Bridges		2811 2 9	.. .. ..
Up. Keep			
Weeding	24125	14110 .. 11	7342 9 10
Roads		527 4 9	838 14 8
Pitting & Planting		306 8 6	143 9 2
Tools		158 11 ..	611 5 ..
Various		8428 2 8	4088 12 3
Manure.			
Manure	1400	2306 4 7	696 7 1
Collection of Crop.			
Barking & Mossing	40200	5663 6 6	6646 13 10
Collection of Mols		7236 2 11	8738 .. 6
do Fibre		1871 12 ..	365 14 ..
Packing		2421 4 4	1892 5 2
Drying		712 8 6	892 6 ..
Storage and Carriage to Stores		1879 6 5	1401 14 2
Carriage to Mettapollium		746 3 5	836 .. ..
Railway Charges &c		1186 12 ..	16629 6 5
Miscellaneous			
Peons Clothing	100	61 8 ..	72 13 9
Contingencies	1000	859 12 6	303 3 ..
Collecting Seed		170 3 ..	39 3 ..
Chinchona Enumeration		635 8 3	405 15 1
Bells & Clocks	500	326 8 ..	.. .. ..
Unforeseen Charges			
Miscellaneous	.. .. ..	.. .. ..	379 1 6
Malkoondah Plantation	.. .. ..	399	.. .. ..
Travelling allowance to Committee Members	.. .. ..	812 6 ..	.. .. ..
	91829	73682 11 5	69770 13 3.

Commissioners Office
Octacamund
10 July 1879

W W Bourdillon
Commissioner

Statement showing the Receipts on account of the Government Chinchona Plantations for the Year 1878-79

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Particulars	Sanctioned Budget Allotment for 1878-79			Actuals for 1878-79			Actuals for 1877-78		
Sale proceeds of Crop	254000	"	"	379.739	11	5	341272	"	"
Value of Bark supplied to the Madras Medical Dep^t	"	"	"	11,423	5	8	9689	3	8
Do Do Bombay Do	"	"	"	1,915	5	11	2321	11	9
Rent of Tea Estate	300	"	"	"	"	"	183	13	11
Sale proceeds of plants and Seeds	6249	"	"	8136	9	2	2821	2	3
Miscellaneous	451	"	"	"	"	"	2464	"	"
Total Rupees.	261,000	"	"	401,265	"	2	358751	15	7

Commissioners Office
Ootacamund
10 July 1879

J.M.N.

J. M. Nelson
Commissioner

Statement showing the Expenditure in detail on the Neddivattam Cinchona Plantation for the Official year 1878-79.

Months.	Establishment	Nurseries	Building New	Building Repairs	Manure	Barking and Mossing	Collection of Moss	Packing Bark	Fibre for Moss	Drying Bark	Up Keep Roads	Up Keep Weeding	Up Keep various	Contingencies	Carriage of Bark to Store	Tools	Storage of Bark	Stores Clothing	Purchasing Stock	Counting Cinchona Trees	Bills & Closets	Bridges	Total
April 1878	368	233 9 9		109 7	24 3 6	59 10						1776 6	112 14 6						438 6	22 6			3143 14 3
May	368	76 11 3	277 5		96 3 3							612 8 6	281 10 8			70 8	100				11 6	25	1919 4 8
June	368	136 14	452		366 3 6					49		674 9 3	454 14 4			26	81 8					89 14 9	2698 15 10
July	403	167 6	657 8 3		116 1		369 11	20	480		3 12	128 14 9	113 12 3	10			201 3 6		2 8	315 2	40 2 6		3029 1 3
August	403	93 8 9	669	81 3	32 13	416 14	1065 10 3	31 8		46 4	58 5 6	65 15	314 1 10	42 9	15		63 2					87	3486 4
September	403	139 13 1			31 15 6	486 2	455 11 3			61 6	40 8	99 11	338 13 6				17 7						2074 7 4
October	403	129 3 4			30 15	354 8 6	295 5 3	49 2	861 8	67 4	35 11 6	65 15	544 3 2			70 8	14 9						2921 12 9
November	401	142 2 1			31 11 6	585 5 9	377 5 1	115 5 4		65 11 6	20 4	92 10	270 4 2	8		121 4	31 3 6	25					2288 2 11
December	401	136 9 3		4	27 3	500 14	486 10 6	68 8 6		108 14	21 9	80 13	771 11 8	14		96 11	20 7 3						2725 13 2
January 1879	401	157 12 6			113 6	68 2	165 4 1	62 5		23 4	25 5	1090 2 1	972 3 3	323 10		130	27 1		49 5				3608 8 10
February	401	158 15 3		15 5	57 4 6	191 8	84 6	6 4	248 4		29	1238 5 3	82 14 6			90			96				2697 12 6
March	401	175 10 9		18 13 11	192 1 2	76 1	678					597 13 9	577 15 11	1 13 6			9					2569 1 6	4686 13 1
Total	4721	1748 4	2055 13 3	228 12 11	1119 11 5	2739 4	3367 7 5	354 10 10	1589 12	421 11 6	234 7	6521 6 1	4835 7 9	386 14 6	523 7	96 8	585 11 3	25	583 7 11	24 8 6	3268	2811 2 9	35280 12 5

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10th July 1879

Commissioner

13 63 65

Statement showing the Expenditure on detail on the Dodabetta Chinchona Plantation for the Official Year 1878/79.

Months	Establishment	Building: Nurseries	Building: Propagating	Building: New	Building: Repairs	Manure	Barking & Sweating	Collecting Barks & Moss	Packing Bark	Fibre for tying	Drying Bark	Roads	Weeding	Pitting & Planting	Various	Carriage of Bark & Stores	Collecting Seeds	Total	Contingencies & Miscellaneous Items	Total
April 1878	150	46 3	20		147 11 6	18 6 6	10				21 13 6	710 13		126 2 6	1		6 4	26 11 6	1285 1 9	
May	146 10 8	30 10	20		87 8 6	21 8 7 6					20	366 10		86 14				513	1027 15 8	
June	200	34 2 6	20		226 9 10	38 4 7 8		63 6			20			74 9			55		1028 2 6	
July	213 8	25 8 6	20		103 13 6	33 12	5 8	364 3 9		190	20	185 9	2 8	107 9 6			8 12		1271 6 3	
August	215	14 12 6	20		63 7 8 10		17 8	75 13	244 7 6		20	343 8 3	11 9	152 9					1752 12 1	
September	215	87	20		236 4 2	81 10 6	17 13	502 5 6			20	63 9	220 7 6	51 2 6	55				1491 11 2	
October	215		20		34 8	16 4	34 6	241 7 6		27 8	20			44 14	12 8		52 10 6		1035 12	
November	205	3 4 6	34		51 7 6		18 12	278 8	391 8 6		21 6	18		133 13	8 12	8 4	42 5 6		1220 1 1	
December	215	32 4 6	20				18 12	245 9 0	109 9	39 15	92	7 3 0		124			39 2 1 6 3	15 14 6 2 7	363	1378 7 6
January 1879	215	34 8	20				15 15	10 7						64 0 2 0			89 15	23 4	28	1975 1 0
February	215	40 10	20		71 4	19 6								83 17 6			212 7 6 3	8 3 1	138	364 14 5 8
March	215	31 2 6	20		153 1	36 7								137 3 4	72		48 14	8	146	2727 3 6
Total	2420 2 8	310 7	264		925 4 6	90 8 2 10	114 6 7 8	1474 2 6	1414 14 9	391 5	282	56 1	159 13 6	4 4 3 8 9	308 8 6	195 3 5 6	84 4	57 7 6	1703	623	1142 6 1 6	7592 5

Comm's Office
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10th July 1879

11th body

Commissioner

Statement showing the Expenditure in detail on the Pyhara Chinchona Plantation for the Official Year 1878/79.

Month	Establishments	Servants	Professional	Buildings New	Buildings Repairs	Manure	Barking & Rossing	Collecting Seeds	Packing Barks	Fisheries for putting Trees	Drying Barks	Roads	Weeding	Pitting & Planting	Various	Storage of Barks	Carriage of Barks & Stores	Tools	Collecting Seeds	Government Chinchona Trees	Total
April 1878	70	55 3 7			362 62								191 24		61 139					3 73	744 11 1
May	70	48 5 3		35 13 5	197 10								260 26		397 147	12 10 1					1344 7 10
June	70	62 14 2		420 6									273		287 158	32 1 1					1145 15 5
July	70	59 7 1		167 10		40 1 6	27 14 3	192 5 1					210 6 1 12	146	165 132	308 3					1181 4 10
August	120	62 11 5		763 6 10	115 4 5		174 9 6	498 3					299 324	119 36 14 9	60 82 9	16					1975 5 7
September	120	66 4 11					429 11 8	194 12 3					554	187 09 8 13	111 2 0						1093 11 1
October	120	69 7 0					223 15 6	495	5 8 10				403	6 11 6 11 4 0	46 1 8 5 5 1	6					1076 6 7
November	120	66 12 7					225 4 6	517 13 5					51 12 6	8 12 6 16 12 0	66 38 4 2	10 6 11 8 0					1127 9 8
December	120	67 13 8					233 4 6	424 13 6					413	13 30 19 10 0	64 34 3 5	13 6					1020 0 6
January 1879	120	73 7 10		8 12 9			58 9 6	132 13 1	17 14 6				147 9 2 1	0 4 9 4 99	112 12 7	23 7 6 5 7 8					1115 2 3
February	120	96 8 11		14	30		38 5 9						15	130 58 3 11 6	182 14	10 27 7 0					1108 13 0
March	120	103 8 7		114 3 10			38 8 6						22	8 6 8 38 3 9	81 14 0	10	32 0 0				1390 5 4
Total	1245	832 9 5		1874 13 4	705 4 7	40 1 6	1450 3 8	2453 12 9	26 8 6				2341	20 13 30 3 29	1634	5 6 3 8	12 8 10	7 0 0		3 7 3	14323 13 2

Commrs. Office
Ootacamund
10 July 1879.

Commissioner

Statement shewing in detail the Expenditure on the Office Establishment and general Expenditure for the year 1878-79.

Months	Establishment	Butter	Printing	Contingencies	Marking sub divisions	Surveying sub divisions	Carriage of Bales	Cost of Bales	Travelling allowance to Members of Chinchona Committee	Carrying records	Peons clothing	Despatch of Bark to Mettapalliam	Charges on Maikomark Plantation	Railway Charges on Bales	Total
April 1878	98	4 14		130	1	140				2					374 14
May	98	3 2	10		100		65								276 2
June	98				113 4		94 14	1840 4							2146 6
July	98				112 12										210 12
August	98								695 1						793 1
September	98								117 5		36 8				251 13
October	113														113
November	111		191 8									300	200		802 8
December	111			25 8								300	101 10		447 2
January 1879	111	13											100	533 12	757 12
February	111													653	764
March	111	8 10			27 6							146 3 5	88 6		381 9 5
Total	1256	29 10	201 8	155 8	353 6	140	159 14	1840 4	812 6	2	36 8	746 3 5	399	1186 12	7318 15 5
	8	5	5	5	6	5	5	6	5	5	5	5	5	6	5

Commissioners Office
Ootacamund
10th July 1879

Commissioner

Proof for Secretary's perusal - 75

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

12th September 1879, No. 1,862-A.

No. 168-A. READ THE FOLLOWING PAPERS:—

No. 168-C. ORDER THEREON, 12th September 1879, No. 1,862-A.

Miscellaneous.

THE report of the Commissioner shows that satisfactory efforts were made to maintain the condition of the Government Chinchona plantations during the year 1878-79.

The seasons were favorable to the growth of the trees, but the rainfall was too limited and infrequent to allow of the bark "rising" freely and continuously.

Labour was still scarce at Neddivattum and Pykara, but out of the allotment of Rs. 24,125 for the general upkeep and conservancy of the plantations Rs. 23,530 were utilized.

Manuring was also carried out more extensively than usual except at Pykara where there is always a difficulty in procuring manure.

This defect demands prompt attention and the Commissioner's promised proposals on the matter should be submitted at a very early date.

2. The yield of the year was 114,320 lbs. of dry bark, and the Commissioner has appended to his report a statement of the plots, and number of trees in each, from which bark was taken.

The trees it appears are barked, not by plots but according to their growth and individual capacity to yield. Under the "mossing" system of barking therefore the yield is necessarily calculated per tree and the results for each plantation are shown in the following abstract statement prepared from that above referred to, and the figures given in paragraph 6 of the report.

Plantation.	Trees barked.		Weight of Bark.		Average Yield per Tree.			
	Kind	Number.	Wet.	Dry.	Wet.		Dry.	
			lbs.	lbs.	lbs.	oz.	lbs.	oz.
Dodabetta	Crown ...	33,334	65,755	27,062	1	15	0	12
Neddivattum ...	Crown ...	28,056	53,948	26,602	1	14	0	15
	Red	17,715	93,690	43,343	5	4	2	7
Pykara...	Crown ...	18,985	30,549	5,475	1	9	0	4
	Red	12,799	38,399	11,838	3	0	0	14
	Total ...	1,10,889	2,82,341	1,14,320	2	8	1	0

These results are very satisfactory, especially for the Neddivattum and Dodabetta Plantations.

3. Dr. Bidie, in his notes* on the Pykara Plantations which he visited while this crop was being taken, remarked that the bark would be very light when dried and his prediction is fully borne out by the figures given above, which make it evident that very careful treatment and cultivation are imperatively demanded to maintain the trees on this plantation.

* *Vide* Appendix C to Chinchona Committee's Report, page 41.

4. From the year's crop of dry bark, 103,444 lbs. were sent to England and being there sold at prices which showed an advance on those of the previous year— realized £26,159†; but as only a portion was sold before the end of the year this amount does not appear in its assets.

† *Vide* G.O., 28th April 1879, No. 933.
Do. 10th June „ „ 1,259.
Do. 8th July „ „ 1,438.

5. The receipts of the year as returned by the Commissioner, Rs. 406,217-8-6, are made up of the sum obtained in England for the bark of 1877-78 and the value of so much of the 1878-79 crop as was supplied to departments, &c. in this country *plus* gain by exchange at 1*s.* 9*d.* the rupee.

It is presumed that in adopting this rate the Commissioner, as directed in the order noted in the margin, ascertained that it was that fixed for the adjustment of transactions between England and India in the year under report.

G.O., 6th Jan. 1879, No. 20, paragraph 2 (*a*).

6. The valuation of the bark departmentally supplied seems fair, but the Government do not consider that credit should be taken for the gain by exchange that would have accrued if the bark had been sold in England as, though a debit allowance for carriage and freight is made, the broker's charges and other expenses incidental to the English sales cannot be accurately estimated.

Moreover no credit should be taken for the bark that was the subject of the experiments recorded in G.O., 9th May 1879, No. 1,022, as it has been sent to England for sale and the proceeds will appear in the receipts of the present year.

After these deductions are made, the receipts of 1878-79 will stand at Rs. 400,354-3-3

7. The public demand for seeds and plants was abnormally large, but appears to have been fully met.

The sales of 1877-78, viz., plants 187,350, seeds 326 lbs., were in excess of anything previously known, but were far below those of 1878-79—

Plants	...	...	...	...	604,855
Seeds	...	...	...	...	1,322 lbs.,

showing the rapid progress recently made in Chinchona cultivation in this Presidency and Ceylon.

8. The Government regret to learn that so large a number of the young plants raised at Neddivattum from the *Calisaya Ledgeriana* seed received from Java have died. The larger measure of success obtained at Dodabetta would indicate that the nurture of this delicate variety is there better understood or is conducted under more favorable conditions.

It would be well therefore that a larger proportion of any further supply of this seed should be sown in its propagating houses.

The second parcel of seed which has only recently arrived contains a far smaller consignment than that which was stated to be required for Government purposes and distribution in the Wynad, and under these circumstances it is not understood why a portion of it has been sent to planters in Travancore.

Vide G.O., 1st March 1879, No. 511.

9. The erection of new drying houses must await the report from England as to the comparative chemical and commercial value of the samples of bark sent home under G.O., 9th May 1879, No. 1,022.

(True Extract.)

(Signed) J. H. GARSTIN,
Acting Secretary to Government.

Exd. W. H. French.

Chinchona Plantations.—Reviewing report of the Commissioner of Nilgiris on the — for the year 1878-79.

SEPTEMBER.
Nos. 168-A—168-C.

G.O., 12th September 1879, No. 1,862-A.

Dated September 12th.
Printed October 1st.
Read. *Encl.*

To
The

Govt. of Madras.
REVENUE.

FROM CIRCULATION
WITH
REMARKS.

79

1820

dy 12 September 1879

The Report of the Commissioner shows that satisfactory Efforts were made to maintain the Quarantine of the Cinchona Plantations during the year 1879.

The Returns were favourable to the growth of trees but the rainfall was too limited & irregular to allow of the usual "Pitting" freely & extensively.

Labour

was still Share
at Weddiwattum &
Pyllara but out of
the allotment
Rs 24125 for the
General purposes
Conservancy of the
Plantations Not
23530 were

Mudaliyar has
also carried out
more extensively
than usual except
at Pyllara where
there is always
a difficulty in
procuring labour

This defect [illegible]
as the Report of
Capt. C. Walker the
Chairman Committee
shows that the
Pyllara Plantations
Esquire special
attention and the
Commissioners

promised proposals
on the matter should
be submitted at a
very early date.

2. The yield of the year
was 11320 lbs of
very dusty and the
Commissioner has
suspended [illegible]
Report a Valuation of
the plots, and
timber stores in
each, from which
basis was taken.
The fires it appears
were lighted not long
after but according
to their growth
& individual appear-
ance. Under the
"Cooperage" system
providing [illegible]
the yield is calculated
per tree and the
result for each
Plantation are shown

Comparative Statement
Appended to Capt
Walker's report shewing
Extent E.G. Plot I at
Weddiwattum contained
3197 Red beetles & 2325 Crown
Hill 1761 — + 2239
above were booked
to also in plot XI at
Pyllalatte only 1701 out
of 1761 were booked
[illegible] early enough

in the following abstract statement prepared from that above referred to and the figures given in para 6 of the report.

Plantation	Trees barked: Kind	Trees barked: No:	Weight of Bark: wet lbs	Weight of Bark: dry lbs	Average yield per tree: wet (lbs-oz)	Average yield per tree: dry (lbs-oz)
Doddabetta	Crown	33334	65755	27062	1..15	..12
Naddiwattam	Crown	28056	53948	26602	1..14	..15
	Red	17715	93690	43343	5..4	2..7
Pykara	Crown	18985	30549	5475	1..9	..4
	Red	12799	38399	11838	3..0	..14
		110889	282341	114320	2..8	1..

These results are very satisfactory especially for the Naddiwattam and ~~[illegible]~~ Doddabetta plantations ~~are~~ ~~considered~~ by Dr. Bidie,

3. In his notes T on the Pykara plantations which he visited while this crop was being taken Dr. Bidie remarked that the bark would be very light when dried & his prediction is fully borne out by the figures given above, which make it evident that very careful treatment & cultivation are imperatively demanded to ~~prevent~~ maintain the trees ~~dying out~~. [A] If it is proposed to take any bark from these plantations during the current year this should only be done under the close supervision of the Asst. Supt. from Naddiwattam who ~~will~~ shall allow no tree to be barked until satisfied by personal

T Vide Appendix C of Cinchona Committee's Report - page 41.
Note I was present at the time & feel sure that [illegible] Brown

had seen the trees with the moss off he would have allowed a large number of them to remain unbarked. He went by the fact that it was the year to bark them in this rotation & barked them. The Overseer was quite new to the work & place.

A on this plantation

I would give no further directions - but leave the responsibility on the officer in charge.

It is probable that the Asst. Supt. may find it necessary to give these trees a longer rest.

inspection that
it can bear the
operation & will
yield back the
sufficient stricken off Mr Murdoch for duty
4. The quantity
of dry Cask
103464 lbs were
sent to England
and Australia, being Mauritius
at which
should an advance
on those of the previous
year realized
£26159 - 10s - 2d, but as
only a portion was
sold before the
end of the year
this amount
does not appear
in its apers.
5. The result of the
year as returned
by the Commissioner
£26,217-8-6
are made up of

Trade P.O.s 28th April 79 No: 4
" 16th June 79 No: 125
" 8th July 79 No: 1438

5

the Mauritius obtained
for England
for the cask £.7/3/8
And the value of
do much of the 78/79
crop as was supplied
to Departments in
this Colony plus
gain by exchange
at 1/9 the Rupee.
It is presumed
that in adopting this
rate the Commissioner
has acted in
strict accordance with
the order contained in
the margin, ascer-
taining that it
was that fixed for
the adjustment of
transactions between
England & India in
the year under
report.
6. The valuation of the
Cask depart entirely
from official sources for
but the Government
do not consider that
credit should be taken

1/9

L.O. 6th Jan 79
No 20 para 2.(a)

for the family
Exchange that
would have accrued
if the Seeds had been
sold in England as,
Except a debit allowance
for Carriage Freight
is made, the Brokers
Charges & other
Expences incidental
to the Imports Sales
cannot be accurately
Estimated.
Moreover no credit
should be taken
for the Seeds that
were the Subject of
the Experiment
Recorded in fol. 9 &
Inasmuch as 6 to 22 &
it does not appear
to England for Sale
and the proceeds
will appear in the
Receipts of the present
year
After these deductions
are made the
Receipts for 78/79 &
Stand at £40354-3

3

1647 350

0 4 Plants first were
made over before Bombay
"Observable from 276 plants sown
Remain
Total 280 over

7. The public demand
for seeds & plants was
abundantly large
but appears to have
been fully met.
The sales of seeds 926 lbs
plants 1835 were
were in seeds & plants
previously known
but were for below
those of plants 604,855
of 1878 } seeds 1322 lbs
showing the rapid
progress recently made
in Cinchona Cultivation
in this Presidency
and Ceylon.
8. The forest to
be kept to large
a proportion of the
young plants raised
at Nedivattam
from the Cinchona
Ledgeriana seed
received from Java
has died. The
larger measure

Success obtained at Rodalla would indicate that the nurture of this delicate variety is better understood or is conducted under more favourable conditions. It would be well therefore that a larger proportion of any further supply of this seed should be sown in shade & again hoed. The parcel of seed which has only recently arrived contains a far smaller proportion of plants which will flower & the 2 lbs stated to be required for sowing must be considered for the present & this limited in the ground. Under these circumstances it

Sown in the Rodalla houses - two plants were raised & were duly died. The fact is that with how long been carried out in the Colony the cultivation of Liberia & Arabian coffee is practically unknown

Vide f.o. 1st March 79 No 511.

2 lbs seed have been required for Plantations alone before 1303. Came L.

it was understood only a portion of the seed would be sent to plants in Travancore

2nd One object of sending home seeds was to obtain from England as to the comparative Botanical & Commercial value of the Liberia & the Arabian coffee & to learn what steps should be taken for 1880 & 81 No 1022.

L

7 Folio Communications of Nilgiri Board.
2 The Supt Botanical Gardens

50/4

L.O
Annual Report
of Cuddalore Municipality