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MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No.	1427	Press / ~~Mis.~~
Dated	19-11-1883.	

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following letter from H. A. GASS, Esq., Deputy Conservator of Forests, in charge of Cinchona Plantations, Nílgiris, to the Collector of Nílgiris, dated Ootacamund, 13th June 1883, No. 148-C:—

I beg to submit, herewith, the Administration Report of the Chinchona Plantations in the Nílgiri district for the official year 1882-83, and request that it may be sent on to the Revenue Secretary to Government as early as possible with any remarks you may wish to offer.

ENCLOSURE.

From H. A. GASS, Esq., Deputy Conservator of Forests, in charge of the Chinchona Plantations, Nílgiris, to the Collector of Nílgiris, dated Ootacamund, 13th June 1883.

I have the honor to submit the Administration Report (with 14 enclosures) of the Government Chinchona Plantations in the Nílgiri District for the year 1882-83.

2. I took charge of the plantations on the 1st June 1882, and continued to hold charge during the remainder of the official year. I devoted much attention to the plantations and visited them frequently and as often as my other work permitted me to do so, and spent in all about forty days in inspection of the different estates, and when unable to go out myself, I had the Assistant Superintendent and Head Overseer into office for personal inquiry.

3. During the year some changes took place in the management of the plantations. Colonel Jago, who was in charge of them, went on leave and I relieved him. The plantations of Naduvatam and Hooker were inspected by Major Walker, Conservator of Forests, accompanied by Dr. Brandis, C.I.E, in August. The plantations were visited by Dr. Bidie, C.I.E., in November 1882, for the purpose of collecting specimens of Chinchona bark, with reference to G.O., dated 5th May 1882, No. 464 Mr. M. A. Lawson was appointed to be Superintendent of Chinchona Plantations, &c., and arrived in the country in February, but up to the 1st April had not taken charge. Among the subordinates some changes took place; Mr. Rowson resigned his appointment on the 1st July. The Manager of the two offices, Forest and Chinchona, Mr. Parthasarathy Mudaliar, was transferred to the office of the Conservator of Forests, and Mr. B. Venkatarutnum Naidu from the Conservator's office to the Acting Managership of this office. Mr. Macdonald, the Assistant Overseer of Naduvatam, was dismissed for continued intemperance. One Mr. Samuels was subsequently appointed to this post on probation. Mr. Narrainasawmy Naidu obtained promotion on Mr. Rowson resigning his appointment and became Assistant Superintendent. He was placed in charge of Dodabetta and Wood estates. Mr. Hillier was made Head Overseer and left in charge of Naduvatam and Hooker. Mr. Burrows was transferred from Hooker to Wood, and Mr. Bonjour from Wood to Hooker. A new clerk was brought from the Tinnevelly Forest office, one Subramania Pillai, and placed under the Head Overseer's orders, and Arulanundum Pillai, transferred from Naduvatam, was placed under the orders of the Assistant Superintendent as his clerk.

4. SEASON AND RAINFALL.—The year was a most unfavorable one both for cultivation and also for collection of crop, and the mousoon was altogether unprecedented. The rainfall at Dodabetta gauged 61·35 inches distributed over 158 days against 48·71 inches distributed over 136 days in the previous year; at Naduvatam 194·93 inches and 178 wet days against 73·73 inches and 150 wet days in the previous year; at Wood it was gauged at 155·1 inches and 173 wet days; and at Hooker 143·53 distributed over 163 days. The maximum fall occurred in July when it amounted to—

	INCHES.
Dodabetta	11·22
Naduvatam	102·11
Hooker	61·87
Wood	71·9

The minimum fall was in January and February, when at Dodabetta 0·1 inch was gauged and in the other three estates nothing at all during the two months. Statements 1, 2, 3 and 4 give details of rainfall, and I have added a column in the case of Dodabetta and Naduvatam, to enable a comparison to be drawn between this and the previous year, month by month.

5. Very high winds occurred on all four estates during the months of June, July and August, more especially in June and July, and a very large number of trees were blown down, and coppice shoots were broken off in spite of precautions taken to protect them. The foliage was beaten off even the Officinalis trees by the wind and rain, and in the case of the Succirubras the trees presented a most wretched appearance, large numbers having been entirely killed. There was hardly any frost at Dodabetta till the 12th January last, when a severe frost took place which affected 2,000 of the trees—300 large ones 18 and 19 years old, and 1,700 young ones from 1 to 3 years old. Some of the trees were coppiced at once and the remainder left in the hope of their recovering, but latterly all but 50 of the large ones were coppiced also, as they showed signs of dying out altogether. Very mild frost occurred at Naduvatam, and no damage was done. A hailstorm occurred at Naduvatam in May 1882, which damaged two young Carthagenas, and the tail end of a severe thunderstorm passed over this estate and Hooker on the 29th March of this year. In addition to the fearful havoc that was caused amongst the trees on the several estates, enormous damage was done to our roads, bridges, &c., and also buildings. Great inconvenience was caused both to the subordinates and to coolies engaged on the estates by having to go a long way round by the main road past the travellers' bungalow to their work, in consequence of the plantation bridges having been washed away. The bridge on the road leading from Hooker to Naduvatam was injured, but fortunately held. The Pykara bridge was carried away. Landslips occurred in all directions, and many of them of large size. As our Chinchona estate coolies were the only Government ones on the Naduvatam side, we used a number of them in working a raft on the Pykara river in bringing over the mails and in clearing away the worst of the landslips, and I venture to think they were of considerable assistance.

6. As regards buildings, the old jail which had to be used again throughout the year as a drying-shed, became, in spite of money (Rs. 500) spent on it to put it in repair, quite dangerous, in consequence of the centre wall being saturated, and for a time we had to stop all drying operations for fear of the building collapsing altogether. The Clerk's quarters and the Assistant Overseer's house were both damaged, the walls of the former being cracked and the end walls of the latter having fallen out. During the dry weather in December and January all these things were put in repair, and all traces of the damage caused to roads, drains, bridges and buildings were removed.

7. The harvesting of crop was naturally rendered extremely difficult. In the beginning of the monsoon the usual stripping process was resorted to This had, however, to be abandoned as it was not found possible to "lift" the bark without permanent injury to the trees, and it therefore became necessary to coppice and uproot. This was done in Plot No. X* principally, as the trees there first showed signs of dying out altogether. The coolies in collecting bark had a very bad time of it, as being obliged to remain on the same spot exposed to wind and rain, their limbs became quite numbed, and they frequently had to be carried home after a few hours' work. We had, however, no deaths among our coolies, though many corpses of travellers were buried by our people.

* Naduvatam.

8. RECEIPTS AND EXPENDITURE.—Statements Nos. 5 and 6 show the receipts from sale-proceeds of seeds, plants, &c., bark sold locally, value of bark sent to England, and it should be understood that the receipts refer only to the crop harvested during the year under report and not to the crop of 1881-82; the receipts are calculated both in accordance with the orders of the Secretary of State contained in Despatch No. 31, dated 14th September 1882, embodied in G.O., dated 23rd October 1882, No. 1163, and also according to market value of the bark. The budget estimate for 1882-83, as sanctioned by Government in G.O., No. 1955, dated 21st December 1881, paragraph 7, amounted to Rs. 5,09,000, while the regular estimate, as sanctioned in paragraph 2 of G.O., No. 1409, of 14th December 1882, amounted to Rs. 6,28,000. Of these estimates, however, the first referred to the value of the crop of 1881-82, and the latter to the same crop, *plus* the value of bark sold locally in 1882-83. The budget estimate for 1883-84, as sanctioned in paragraph 5 of G.O., No. 1409, dated 14th December 1882, amounts to Rs. 4,10,000; this estimate is based on value of crop taken and sent home during 1882-83, the year under report; and in drawing a comparison between the budget estimate and the receipts, this figure should be taken and not Rs. 5,00,000.† This has been done accordingly by me in the statements, as the receipts now given by me are those obtained from value of bark sent home, sold locally, &c., during the year under report.

† See General Remarks.

The crop of the year consisted of 135,016¾ lb. of dry bark, instead of 165,000 as budgeted for. Of this, 62,518 lb. were sent to the Secretary of State and 69,611¾, including 281¼ lb. of samples, were sold in Madras by public auction, and the balance 2,887 lb. remained in store.

The receipts are therefore as follows :—

		RS.	A.	P.
First—				
Receipts by Treasury accounts for seed, plants, &c. ...		4,200	7	10
Book adjustment		100	0	0
Miscellaneous		45	0	0
Value of 129,712¾ lb.* of bark calculated in accordance with the Secretary of State's despatch...		83,350	15	11
		87,696	7	9
Budget Estimate†		1,16,000	0	0
	—	28,303	8	3
Second—				
Receipts by Treasury accounts		4,200	7	10
Book adjustment		100	0	0
Miscellaneous		45	0	0
Receipts from 69,611¾ lb. by local sale		1,06,396	0	0
Market value of 62,518 lb.‡ calculated roughly ...		97,684	6	0
		2,08,425	13	11
Budget Estimate		4,10,000	0	0
	—	2,01,574	2	1 §

The sanctioned expenditure (G.O., dated 21st December 1881, No. 1955) was Rs. 1,08,533, whereas the actual total expenditure has amounted only to Rs. 83,350-15-11. The difference is thus Rs. 25,182. This is to be accounted for partly by the smallness of the crop, also because a sum of Rs. 10,000 shown in our budget for the new drying-shed does not appear on our debit side in the year's accounts, and, lastly, because Rs. 5,000 sanctioned for a drying-shed at Hooker has not been expended.

Statements 7, 8 and 9 show the expenditure in detail in all four estates.

9. In connection with this subject the permanent advance may be mentioned. At the commencement of the year this advance for all four estates stood at Rs. 7,500. Out of this by the 31st March 1883 Rs. 2,165-15-9 had been refunded into the Treasury by the Head Overseer and the advance stood as under —

	RS.	A.	P.
Recoverable advances	3,998	1	0
Irrecoverable advances certified by Assistant Superintendent.	336	15	0
Do. do. do. by Head Overseer	999	0	3
Total ...	5,334	0	3 §

It will thus be seen that the advance is now in a much more satisfactory state, and there can be no reason why it should not be cleared off altogether by the end of the current official year, provided Government sanction the writing off from the accounts of the bad debts and irrecoverable advances which have in some cases been carried on from year to year for a long time. Regarding this I have written separately for orders. Advances are, of course, a necessity and must be made every year; labor is otherwise impossible to obtain, but there can be no reason why the advances should not be made smaller ones and be cleared off *in toto* by the end of each official year.

10. PERMANENT PLANTATIONS.—At the close of the year the plantations of Naduvatam, Hooker and Wood presented a wretched appearance in consequence of the effects of the monsoon, while Dodabetta looked as well as ever. At Naduvatam thousands of the old Succirubras had to be cut down to save the bark. All over the estate the trees suffered immensely and became stagheaded and threw out suckers all down the stems. Even in "Napier," the best part of the plantation, this was the case, and coppicing and uprooting had to be resorted to

* 129,712¾ lb. of bark above quoted consist of 135,016¾, less 5,304 lb. (balance of last year's crop).
† Calculated according to the wishes of the Secretary of State, *i.e.*, the cost of production.
‡ The value of 62,518 lb. has been calculated at the average rate obtained at Madras, viz., Rs. 1-2-0.
§ See General Remarks.

very extensively, notably in Plots III, V, X, XI, XXIV, XXV and XXVI, and this work had to be kept up till the close of the official year as the trees continued to show the effects of the monsoon long after it was over. During the dry weather the bark was sun-dried, and we obtained in all 59 bales of dry bark which has since been despatched to England. Much more would have been got ready, as there were still a large number of dying trees, but our supply of labor was very small, most of the coolies having gone down to the plains as usual. The uprooting of dying trees has been going on steadily since the 1st April. Statements 11 and 12 give the number of trees operated on during the year under different systems of harvesting.

11. The bark-yielding capabilities of Naduvatam are of course very much reduced now, and it should be brought to the notice of Government that the estate is in a very different state to what it was when the report called for in G.O., No. 2105, dated 13th August 1881, was submitted to the Conservator. The estate is supposed to be 318 acres planted. From this must be deducted—

50	acres	uprooted in 1881-82.
36	„	„ in 1882-83.
10	„	of 1879 coppice.
16	„	of Plot XXVIII which failed.
5	„	of trees scraped in 1880 in Plot XXIII of 1869 which have died off.
117		

And what with trees that have died out, or are dying out, and which are now being uprooted or will be uprooted hereafter, another 50 acres may be added on to the 117, making 167 acres in all, or rather more than half of the whole estate; so that there are not more than 150 acres carrying mature trees, at about 500 to the acre, which can be looked to for the next five years to yield crop. There will be no difficulty in getting a sufficient crop of bark this year, but for the next year and few succeeding ones, it will be very small from Naduvatam, and after the dying Succirubras are uprooted on Hooker and Wood, scarcely anything at all from these two estates. Of course there are our hybrids now planted and to be continued this year, but we must give them another five or six years, by which time they ought to be in splendid condition. There can be no doubt as to the hardiness of these trees, that is, those we have been in the habit of calling *C. magnifolia* and *C. pubescens* according as they are glabrous or hairy. They show no signs of having suffered in the monsoon either from rain or wind. One glance at a mass of Chinchona trees is sufficient to enable one to recognize these trees by their robustness, healthy appearance, and straight stems. In all the uprooted Succirubra plots, we have left these Magnifolia or Pubescens trees standing, and their vigorous appearance is very striking. There will, of course, be no falling off in crop at Dodabetta, for I am glad to report that the trees on that estate are looking remarkably well.

12. During the year under report 87,902 plants were permanently put out at Naduvatam in Plots XVIII, XIX, XX and XXI, which were uprooted in 1881-82 to the extent of about 40 acres, consisting of 77,000 *C. pubescens*, 10,000 *C. officinalis*, 900 *C. calisaya*, and two Carthagena. The young plants at the close of the year looked remarkably well, and the planting has been a very great success. I think I may say that not more than 5 per cent. have failed and the plants are now well established and growing vigorously and not likely to fail. This success is due to our having waited till the worst of the storms were over before we commenced our planting, which will compare very favorably with any private planting on neighbouring estates. The number of mature trees on the whole estate was reduced by 21,376, partly by uprootal and partly by coppicing. The whole land denuded of its trees has been repitted 4 × 4, and we have 20 acres of this year and about 10 acres from last year, or in all 30 acres; and plants are now ready in our nurseries, and at the proper season the whole of the available land will be planted up principally with *C. pubescens*. Of the six Carthagenas received last year at Naduvatam, two were planted out in Plot XXIII and two in Nursery No. I; these last two were killed by hail in May 1882. Two more were subsequently put out in Plot XV and made good progress; the height of the tallest on the 31st March was 3 feet 7 inches. The Calisayas in Plot XV made good growth and show the true type of Ledgeriana.

13. On the Hooker estate the number of bark-yielding trees is enormously reduced, partly on account of uprootals and coppicings, and partly on account of trees dying out, &c.; and at the close of the year the remaining trees presented so sickly an appearance that we must uproot some acres this year or we shall lose all the bark, and next year I am afraid this estate will yield no crop at all. In this plantation 70,020 plants, mostly *C. officinalis*, were put out. Of this number 43,600 were renewals and are therefore not included in the balance sheet at the close of the year. The planting was, I regret to state, almost entirely a failure owing to the effects of the monsoon. The plantings on this estate during the last few years have been so unsuccessful that I should question the advisability of continuing them, and would rather concentrate all efforts on the two principal plantations of Naduvatam and Dodabetta. The number of mature trees on the estate was reduced by 7,489.

14. At Dodabetta 84,860 plants were put out, consisting of *C. officinalis* and *C. magnifolia*, in the marginally-noted plots, some as renewals, and the remainder between the original rows of trees as the lines are sufficiently far apart to allow of interplanting. The planting has been very successful, and at the close of the year the plants all looked very healthy and had made satisfactory growth. The number of mature trees was reduced by 960, of which 131 trees were uprooted and 829 were coppiced as they showed signs of dying out. Of the two original *Santa Fé* plants put out in Plot VII in 1881-82, one had to be removed to the Propagating House as it was very small and looked sickly, the other has made but little progress in growth though it looks fairly healthy. There are two other plants of this variety in the Propagating House, one looking healthy and the other sickly. The six Carthagena plants put out in the same Plot VII have not made much progress though they look sturdy enough. Dodabetta is no doubt too high for this variety, as the same plants at Naduvatam have grown much more satisfactorily. 13,300 *Eucalyptus globulus* plants were planted out round the boundary of the estate, which will be useful as a protection against the force of the wind and also serve for the supply of fuel hereafter.

	PLANTS.
Plot No. 7	12,140
„ „ 8	1,750
„ „ 9	7,800
„ „ 11	4,350
„ „ 12	210
„ „ 13	7,330
„ „ 16	3,300
„ „ 23	10,980
„ „ 27	10,900
„ „ 30	2,500
„ „ 31	3,700
„ „ 32	6,470
„ „ 36	2,730
„ „ 37	10,450
„ „ 39	250
Total ..	84,860

New Zealand flax was planted in rows, one foot apart, in the steeper places where necessary, to prevent the soil being washed away.

15. The Wood estate at the close of the year looked very unhappy; the trees, with the exception of a small portion, all looked very sickly with a very meagre show of foliage. A very large number must necessarily be uprooted this year. This estate will yield little or no crop after this year for the next few years to come. 61,500 plants were put out, principally *C. officinalis*, and about 8,000 Succirubras as renewals in Plot I, put there because the whole plot consisted of *C. succirubra* and it lies too low for *C. officinalis*, and there were no more hybrid plants ready for planting out available. In addition to these, about 3,000 Ledgeriana plants were put out in Plots VII and IX. The planting was, however, rather unsuccessful, and at the close of the year there were many failures, also with the Ledgeriana plants both of this, last year and of the previous year It should be mentioned also that Sambur do much damage in this estate, and undoubtedly did much injury to the young Ledgeriana plants which we have had now to fence in as well as we can. The planting on this estate, too, seems destined to be a failure; the subsoil is, I am afraid, much against it. Of the mature trees, 5,418 were cut out, partly dying and partly dead ones.

The following statement shows the present state of the four plantations as compared with that at the close of last official year, and the number of trees uprooted and coppiced, and also the number planted out during the official year under report:—

Plantations.	Number of Trees on 31st March 1882.	Number of Trees uprooted.	Number of Trees coppiced.	Number of Plants planted out.	Balance on 31st March 1883.
Naduvatam	170,054	12,624	8,752	87,902	236,580
Pykara { Hooker ...	236,551	705	6,784	26,420	255,482
Pykara { Wood ...	46,902	3,467	1,951	61,500	102,984
Dodabetta	288,849	131	829	84,860	372,749
Total ...	742,356	16,927	18,316	260,682	967,795 *

In the column of plants put out during the year, only those are shown which have been freshly put out, and renewals are not taken into consideration in the statement, and it should be clearly understood that although of the number of plants shown as planted out in 1882-83 many may now be dead, yet inasmuch as such casualties will all be renewed this monsoon, and such renewals not afterwards taken into account, the number now given may be accepted as perfectly correct.

16. UPKEEP OF PLANTATIONS—CONSERVANCY—*Naduvatam and Hooker.*—Both estates were sufficiently mamooty-weeded and the weeds buried in renovation pits dug for the purpose near the trees in all plots. All the roads, drains and bridges which were destroyed and washed

* See General Remarks.

away during the monsoon were repaired and rebuilt. A new road was cut through Plot X at Naduvatam, as it was found that the plot could not be worked with one road only; and in this estate also the road leading from the cattle-sheds to the public road, cutting in at the 9th milestone, was widened out and very nearly finished by 1st April. The object of this is to render it serviceable for carts (which was not the case before) to bring manure down to the lower plots in the estate. A saving of about two miles per trip each way will be effected by this. In all places where landslips had occurred, rough-stone revetments were constructed to support the road. At *Hooker* the cart-road leading from Ossington lines, which had been much cut up in the rains, was put into thorough repair, catch-drains were opened out, and new side drains were cut. The Macoorchy river bridge was thoroughly repaired. The escape of this bridge from destruction was most fortunate, as two bridges, both above it, were carried away. A small piece of road near our new chattram was cut, as the old piece was taken up by the building-site of the chattram.

Dodabetta.—The whole plantation, with the exception of a few small plots where it was not necessary, was weeded, and many plots were weeded two or three times, especially those in which young plants had been put out. Plots Nos. VII, VIII, XXXVI and XXXVII and portions of Plots XXIV, XXX, XXXIII, XXXIV and XXXV, where the soil is in parts gravelly and in others hard and poor, were dug up deep. All roads, drains and bridges and water-channels were kept in good order. 4,112 yards of rough-stone revetment were constructed, partly along the upper road sides and partly in some of the plots, where it was necessary to prevent the soil from being washed away.

Wood.—The whole of this estate, with the exception of a part of Plot IX where there are no trees, was well weeded. In all cases the weeds were buried in renovation pits, of which 42,336 were dug in Plots II, VI and VII. 492 yards of rough-stone revetment were constructed along the sides of the roads and in the plots to prevent wash. All roads, drains, bridges, &c., were kept in proper order.

17. MANURE—*Naduvatam.*—Cattle-manure was largely collected and applied to trees growing in Plots VIII, IX, XII, XIV, XV, XX and XXIII, and *Hooker* in Plot III. A quantity of manure was collected at our new chattram. No beneficial effects arising from manure previously applied were noticeable, all trees having suffered so much from wind and rain that they all looked the same, and it was not possible to distinguish between those that had been manured and those that had been left alone. The same remark applies exactly to trees which were manured in April of the official year under report with patent manures, as crushed bones, poonac, poudrette, &c., which were ordered to be tried in G.O., No. 962, dated 21st June 1881, and which, as reported in paragraph 6 of last year's Administration Report, arrived too late to be used during the official year 1881-82.

These manures were applied in all to 3,211 trees, Officinalis and Succirubra, in Plots XX, XXV and XXIX. In January the Head Overseer reported that no beneficial results were apparent and the same in March, when it was found that the manures were not sufficiently decomposed to justify our collecting specimens of bark for analysis. I recommend, therefore, that another six or eight months be allowed to elapse before such a collection be made, when the result might be reported on in the next Administration Report.

Dodabetta and Wood.—Manure was largely collected from cattle-sheds and kraals on both estates. At *Wood* estate Toda buffaloes were kraaled at the mund for three months. Fifty-one tons of poudrette were purchased from the Ootacamund Municipality, forty of which were applied at Dodabetta during the year, the remainder being kept for use during the current official year.

The number of trees manured at Dodabetta was as follows:—

Plot	XII	5,060 trees with poudrette.
„	XVIII	7,000 „ „
„	XXXVI	5,100 trees with cattle-manure.
	Total ...	17,160

The results of this application should be carefully investigated before long and conclusions arrived at as to the effects produced on the bark by the various manures. This might be reported on in next year's Administration Report.

18. NURSERIES—*Naduvatam and Hooker.*—In addition to the seed, &c., shown as distributed in Statement No. 13, 2 lb. of Succirubra seed were given to Mr. Jamieson in exchange for 2 lb. of *Acacia melanoxylon*. Five pounds of *C. pubescens* seed were sent to the Ceylon Government, and 42 lb. of Pubescens and 46½ lb. of Officinalis seed were sent to the Head-quarter Office for distribution to the public, and 4 7/16 oz. of seed of different varieties were exhibited at various shows and finally handed over to Dr. Bidie, C.I.E. Two hundred and thirty-one thousand plants as under—

C. officinalis	96,000
C. pubescens	132,000
Other varieties	2,902

were actually used up, some for the public and the rest for Government during the year. Two thousand Calisaya plants were transferred to Wood estate. The crop of seed this year will be far below the average, as the trees have suffered so much from the monsoon; but this is rather a matter for congratulation as the trees are all so sickly and not equal to the drain of a large quantity of seed.

Dodabetta and Wood.—A very large number of plants and seedlings was raised during the year, and 69,056 plants and 134,252 seedlings, principally Officinalis and Magnifolia, were distributed to the public, and the balance in stock on 31st March was as follows:—

I. Propagating House.

C. Crispa,	seedlings	1,000
„ Magnifolia	„	1,500
„ Augustifolia	„	1,500
„ Calisaya	„	15
„ Pitayo	„	8
	Total ...	4,023
C. Carthagena,	rooted cuttings	40
„ Pitayo	„	25
„ Ledgeriana	„	5
„ Santa Fé	„	1
	Total ...	71
C. Carthagena	plant	1
„ Santa Fé	„	2
„ Calisaya	„	2
	Total ...	5

II. Nurseries.

C. Magnifolia plant	50,000
„ Condaminia „	300,000
„ Uritusinga „	5,000
Total ...	355,000

Wood Nurseries.

C. Ledgeriana plant	1,700
„ Hybrid „	500
„ Condaminia „	120,500
Total ...	122,700

Four hundred and sixty pounds of seed, principally Officinalis, were collected, and 379 were distributed to the public, including what was sent in to the Head Office* for the same purpose. About 80 lb. of seed, *C. Officinalis*, remained in stock on the 31st March.

	lb.	oz.
* C. Officinalis seed	55	0
„ Pata	4	9
Total ..	59	9

Statement No. 13 shows the number of plants and seedlings and the quantity of seed sold to the public during the year. There was a very large demand for seed during the last few months of the year under report, and that for hybrid seed of the glabrous variety was far in excess of the possible supply. People are again very anxious to get *C. Succirubra* seed, but little could be supplied before the close of the year, although much has been sent out since. The permission to issue seed, &c., was taken away from the subordinates for various reasons, and it is now issued direct from this office, and though this has added much to the work of the office, the results are, I think, on the whole much more satisfactory. At the close of the year, the nurseries on all four estates were well stocked with plants and seedlings of *C. officinalis*, *C. pubescens*, *C. magnifolia* and a few thousand *C. Ledgeriana*.

19. CROP.—The total crop for all four estates amounted to 135,016¾ lb. of dry bark including 5,304 lb. of bark, the balance in stock on the 31st March 1882. In paragraph 11 of the Budget Estimate for 1882-83, embodied in G.O., No. 1955, dated 21st December 1881, the collection of crop is put down at 165,000 lb., viz., 50,000 lb. Dodabetta and 115,000 lb. Naduvatam and Pykara. We have fallen short of this amount by nearly 30,000 lb. This was unavoidable, owing to the difficulties we had to deal with during the exceptionally heavy monsoon as explained in paragraph 7.

The crop was distributed over the four estates as under—

Naduvatam.

	LB.
*Natural Red Mossed	23,225
Renewed "	15,225
Branch "	14,320
Root "	10,313
Dust "	5,500
Natural Crown Mossed	1,300
Renewed "	1,400
Branch "	300
Mixed "	600
	100
	161¼
Total ...	72,444¼

Dodabetta.

	LB.
Natural Crown Mossed	11,440
Renewed "	12,039¼
Branch "	11,078
Root "	4,178
Dust "	111
Natural Pata Mossed	100
Renewed "	41
	206
	111
Total ...	39,304¼

Pykara.

	LB.
Natural Red Mossed	9,631
Renewed "	1,805
Branch "	6,088
Root "	2,346
Natural Crown Mossed	92
Renewed "	1,124
Branch "	409
Root "	1,114
Dust "	244
	105
	310
Total ...	23,268
Grand Total ...	135,016¼

The bark collected was on the whole of an inferior kind, having been taken from dying trees for the most part. It will be observed from Statements Nos. 11 and 12, showing the number of trees decorticated under different systems during the year, that the proportion of green to dry bark is greater than 3 to 1, which is generally speaking the average. The reason for this is that the bark taken from felled trees during the rains got so saturated and unavoidably mixed with mud and foreign matter, which made the weight of the green material higher than it otherwise would have been. It is becoming more and more difficult to procure moss. During the year we sustained a heavy loss in grass for covering barked trees, by the road on which a large stack was placed having given way under it during the rains.

20. The bark was disposed of as follows:—

	LB.
Shipped to the Home market *	62,518
Sold locally	69,327¼
Samples	284¼
Balance in store on 31st March 1883	2,887
Total ...	135,016¼

* The crop of Hooker estate was dried at both Wood and Naduvatam drying houses, and 1,900 lb. of Chinchona bark included under Naduvatam properly belongs to Pykara.

Among that shipped to England I include 59 bales, the contents of which were cropped during the official year under report, but could not be despatched till soon after the 1st April of this year. I believe I am right in doing this. The value of these bales has also been shown under "Receipts." Of the bark left in store on 31st March, viz., 2,887 lb., the details of which are as marginally noted, I have to say that it is all "refuse" bark and of little or no value, at the outside 4 annas a pound. It may, during this year, either be sold locally or shipped to England. As regards the local sales as noted above, 69,327¼ lb. of bark with 284¼ lb. of samples were offered for sale by public auction by Messrs. Oakes and Co., realising in all Rs. 1,06,396-0-1, or Rs. 1-9-0 a pound all round. Government have recorded their satisfaction at the result of the sales in the marginally-noted Government Orders. I have nothing to add here to that which I previously reported on the subject beyond expressing my opinion that in the event of any further sales being held, only the inferior kinds of bark (principally Red) should be offered for sale, and I consider that the results of the sales justify this conclusion.

	LB.
Dodabetta Crown	450
Pykara do.	1,180
Do. Red	1,257

G.O., 23rd November 1882, No. 1307.
" 5th March 1883, " 323.
" 24th April " " 1662.

21. BUILDINGS, NEW.—A good deal was done during the year towards the completion of the new drying shed at Naduvatam. By the 31st March all the outside brickwork was finished, and there remained the furnaces and flues to complete together with the roof and inner fittings. The roof could of course be put on, but nothing could be done with the inner fittings till the furnaces and flues were completed. There then appeared no reason whatever why the whole building should not be ready before the monsoon set in, but the slow progress that has been made since the 1st April, first turned the certainty into a hope, and the hope is now an almost certain disappointment. The packing-store was got up to the basement long before the 31st March, and nothing more was done to it up to the close of the official year and nothing has been done to it since.

The chattram at Naduvatam, sanctioned by Government in G.O., 2nd May 1882, No. 452, Revenue Department, was built during the year and opened to the public in February last.†

† See General Remarks.

Two new huts were erected at Dodabetta, constructed out of some surplus stone and zinc-sheeting remaining over from the two cattle-sheds which were erected in the previous year, and a small room close to the new nursery adjoining the drying shed at Wood was built and roofed with corrugated iron.

22. REPAIRS—*Naduvatam and Hooker.*—The roof of No. I Bungalow was taken off and refitted, and tiles put over the corrugated iron. The roofs of the Clerk's and Overseer's quarters, which formerly consisted of thatch, were taken off and corrugated iron substituted. In addition to this, the end walls of both had to be thoroughly repaired, those of one having twice collapsed altogether; and of the other, the walls were so cracked and considered so unsafe that they had to be pulled down and rebuilt, but fell down again and had to be a second time rebuilt. Repairs were done to the old drying and packing sheds, as in consequence of the new ones not having been got ready we had to make use of the old buildings again. As almost every building suffered in a greater or less degree during the monsoon, repairs had to be undertaken largely, and at the close of the year all buildings were in good order and thoroughly white-washed and clean. At *Dodabetta* and *Wood* necessary repairs were done to all buildings on both estates.

23. EXPERIMENTS—*Naduvatam and Hooker.*—The growth of the block coppice of 1879, particularly in Plots VI and VII below No. I Bungalow, at the close of the year was superb, and I think some of it ought to be cut over again this year, certainly next year.

The 1871 *Coppice, Plot I, Naduvatam.*—Two hundred trees which were cut for the second time in March 1881 made good growth; at the close of the last official year 151 stools had thrown up suckers. The maximum height was 8 feet and girth 5 inches.

The upper unbarked portions of the stems of trees which had been previously barked in Plot XII were sliced and 1,900 lb. of dry bark was obtained. Slicing or scraping was also resorted to in Plot No. XX, and 323 trees previously unbarked were treated in this manner; the yield of bark was 500 lb. Fifty-one trees were mossed and 239 were grassed, 17 were sliced in strips and not covered at all, while 16 trees treated in the same way were covered. The result of this experiment was most satisfactory The Head Overseer kept careful notes on the subject and was able to report that the bark had renewed in about three months, and that the

	lb.
*G.O., No. 631 of 15th June 1882	5,304
" " 1087 of 9th October "	8,500
" " 1376 of 7th December "	17,133
" " 223 of 6th February 1883	9,100
" " 430 of 10th April "	16,581
" " 552 of 4th May "	5,900
Total ..	62,518

trees looked remarkably well. Some of them should, in my opinion, be barked again this year and the bark analysed, and the difference, if any, between scraped trees, mossed trees, and trees left unmossed, noted.

Dodabetta and Wood.—The 500 trees which were treated under the scraping process in Plots V and XXVIII in 1881-82 are doing well. The bark is well renewed and will be sliced again this year.

The application of New Zealand flax, as a covering to barked trees, proved a success, and the bark renewed satisfactorily. The following statement shows the present condition of the 1879 coppicing on all four estates with maximum heights and girths :—

Plantations.	Plot.	Acreage.	Number of Trees coppiced.	Number of Trees which sprouted.	Number of failures.	Maximum height.	Maximum girth.
Dodabetta ...	XI	5·00	3,356	3,201	155	8½′	6¾″
	XXVIII	5·00	2,493	2,096	397	8′	6″
Total ...		10·00	5,849	5,297	552	...	...
Wood	VIII	5·00	2,540	1,302	1,238	15′	11¼″
Naduvatam ...	VI	0·25	56	56	...	15½′	12″
	VII	4·75	2,265	2,215	48	15′	12″
	XXIII	5·00	2,628	1,663	965	15½′	11″
Total ...		10·00	4,947	3,934	1,013	...	..
Hooker	XI	5·00	2,226	977	1,249	13′	12″

24 Firewood Plantations—*Naduvatam.*—An extensive nursery containing over 100,000 of *Eucalyptus globulus* seedlings was completely destroyed by the rain, the seedlings having all rotted off, and out of 9,400 Eucalyptus plants permanently put out, only about 1,000 are living, the rest having died off. Even the *Acacia melanoxylon* plants, put out in the previous year, looked sickly and made but poor progress. The planting of Australian trees for firewood and other purposes will, however, be actively carried on this year, and we have formed good nurseries and sown 2 lb. of *Acacia melanoxylon* and 3 lb. of *Eucalyptus globulus* and 1 lb. of *Acacia decurrens* seed, all of which will be permanently planted out this year. On the boundaries of the estate the land is already pitted to the extent of 50 acres.

The *Acacia decurrens* is to be planted at Naduvatam to give it a trial in that locality, in the same way as it is to be tried in other parts of the hills under different conditions. There is no more land available at Dodabetta for firewood planting, and failures only will be planted up. The firewood for the furnaces * during the year was obtained partly from the stumps of uprooted trees and partly from junglewood cut within the boundaries of the estate, and for the current year the supply has been obtained by cutting in a small sholah within the estate boundaries near the Macoorchy bridge.

* Of Naduvatam.

25. Labor.—The supply of labor on the Dodabetta side was scanty owing to the number of private plantations which were opened out, the proprietors of which pay the Badagas more than we do, while on the Naduvatam side it was excessive, as there we depend almost entirely on contract labor, and the number of coolies contracted for by the Head Overseer at the suggestion of Mr. Rowson, proved to be too many for one estate's requirements. No loss, however, ensued in consequence of this, as by employing them on repairing the public road during the monsoon full work was given to them all. Care has been taken to prevent this trouble arising again, and in the new agreements I have contracted with the Maistries for the smallest number possible, casual daily labor to be employed in cases of emergency, and I have also inserted a clause in the agreements to the effect that, if necessary, the Maistries must work on the Dodabetta side. This was not done last year, and they refused to go to Dodabetta in consequence. The labor this year at Dodabetta, too, will be in a much more satisfactory state, as the Assistant Superintendent has arranged with new Maistries to bring their gangs of coolies to Dodabetta whenever required.

26. General Remarks.—The health of the subordinates during the year was satisfactory on the whole, and no one was absent on sick leave. As regards conduct, I have no complaints to make. Mr. MacDonald was dismissed, but this was for misbehavior before my time. Mr. Narrainasawmy Naidu did his work in the most excellent manner as he always does, and Mr. Hillier carried on his work at Naduvatam, in spite of many hardships, in a very praiseworthy way. The outturn of work for the year will show that there was nowhere any neglect of duty.

27. The new chattram near Naduvatam, as stated in paragraph 21, was built during the year and thrown open to the public in February last. It is a capital chattram, well designed, well built and clean. The situation is good, and during March the Head Overseer reports that the average daily attendance of carts was 20 and the maximum 37. In the first days cart-men were induced to halt there by having grass and firewood supplied free to them. After a time, this was stopped almost entirely, and grass is now only given in special cases. The building and management of the chattram reflect much credit on the Head Overseer.

28. In G.O., No. 1286, dated 20th November 1882, the land immediately adjoining the chattram, and between it, and the plantation boundary was made over to the Chinchona Department, and the land lying between the Naduvatam and Hooker estates was included in a notification submitted to Government, of land proposed to be reserved and the reservation of this land will give the Chinchona Department control over a very important stretch of land outside the plantation boundaries, connecting all plantations on this side one with the other.

29. It may be brought here to the notice of Government that the position of the Head Overseer's bungalow is about as bad a one as could be selected. It stands near the Ossington boundary of our plantation, and very much out of the way and being far removed both from the Superintendent's bungalow and the drying shed, the distance from the latter having proved a serious inconvenience during the monsoon when the bridges were destroyed and the Head Overseer had to go long rounds to his work; and in case of fire, it would be most serious for the Head Overseer to be so far away, and great loss might follow to Government. There can be no doubt that the Head Overseer's house should be on the same ground, and as close as possible, to the drying shed, in the same way as the house at Dodabetta is, for this is the very centre of operations in the plantation. The question of a proper water-supply for the Superintendent's bungalow should be considered. This has been separately written about, for orders. At present, water has to be brought from a distance in a cart. As Mr. Lawson will no doubt spend much of his time at Naduvatam, it would be more convenient and less expensive in the long run to have water brought to the bungalow by means of a cut-water channel.

30. As regards the receipts of the year, it may be thought that they compare very unfavorably with the budget estimate. It is true that there is a very considerable difference, but it should be borne in mind that our crop is much smaller than was expected, and in my opinion the value of the crop when the budget estimate was framed was taken at too high a figure, and one which would seldom be realised at home. I have taken the value of the whole crop to be Rs. 1-9-0 per pound all round, and this I hold to be reasonable, inasmuch as it is an average obtained in an open market at four different auctions from the sale of about 85,000 lb. of bark, realising in all about Rs. 124,000. This average is really the present market value, for the bark we sold consisted of all kinds from the very best to the worst, and our sales were spread over fifteen months, during which time the prices at home fluctuated very considerably. If I had now taken the value of the bark all round to be roughly Rs. 2-8-0 per pound, our receipts would have been about Rs. 3,40,000, which brings us very close to the budget estimate. Even as they stand, however, they compare very favorably with the expenditure.

31 Some objections may be taken to my having substituted Rs. 4,10,000 for Rs. 5,00,000 as the budget estimate. This is however unavoidable. It has, as I have before shown, always been the custom for the crop of one year to be taken into consideration as the receipts of the following year; this is a very confusing way of keeping accounts, and as the change has to be made whereby the crop of a year becomes the basis on which the receipts of the same year are calculated, a change in the budget estimate figures is also necessary; this estimate Rs. 4,10,000 refers to the crop, &c., of 1882-83, and as this crop appears in the receipts of 1882-83, the estimate referring to that crop must be taken. I am aware that no estimated receipts from local sales are included in the Rs. 4,10,000 and that such receipts are included in our statement for 1882-83; this is, however, of no importance as the whole crop is worked out at its market value, viz., Rs. 1-9-0 per pound all round. To set the matter quite right, it remains only to alter the figures of the sanctioned Budget Estimate for 1883-84 from Rs. 4,10,000 to Rs. 2,35,000, the market value of 150,000 lb. of bark, the estimated crop for this year. In the preparation of a balance sheet for the plantations, the value of 232,467 lb. of bark sent home during 1881-82, and which is not shown in the receipts of 1882-83, must be included. The value of that crop was estimated to be Rupees 5,00,000 * and this figure may be adhered to, or the present estimated value of crop, viz., Rs. 1-9-0 a pound all round, may be taken. I should think the original estimated value in this case as given above is the proper one. This is the only item that requires to be included under Receipts in the balance sheet, everything else has been accounted for.

* *Vide* paragraph 2 of G.O., No. 1409, dated 14th December 1882.

32. The amount shown under Permanent Advance as recoverable, viz., Rs. 3,998-1-0, consists of all new advances which have been made this year, and old advances not yet cleared off, for which fresh agreements have been entered into, all of which are good debts and will be gradually paid off during the current year.

33. It will be observed that the stock during the year has increased by about 2,25,000 plants. I have recorded my opinion above, that the crop for the next few years will be much reduced in quantity. The estates of Hooker and Wood are in a particularly poor condition, and are apparently getting worse year by year. When our present plantings, which consist so largely of hybrids, are fit to bark a few years hence, then the value of the estates will have enormously increased both in quantity and quality of bark. It is a great satisfaction to note the good growth of our young Pubescens, and looking to the very excellent condition of the old hybrids, consider what a good future is before them.

34. I regret that but little progress has been made towards opening plantation books. It is an exceedingly difficult thing to do for the past, as the accounts are all mixed up in such away that it is not possible to ascertain what particular expenditure was incurred on particular objects. For the present and for the future, it will be an easy task as the system of accounts is now much more detailed and improved, and careful notes on all points are kept as well as diaries by all subordinates. I should think it would be a good plan to appoint some intelligent extra writer to undertake the work of opening plantation books and getting at the details as well as possible, from the materials available, for the first ten years of the plantations, for I am sure that none among the subordinates have time to do it, and the Superintendent certainly has not.

The writer would work under the orders of the Superintendent.

35. The abstract statement of receipts, expenditure, &c., &c., ordered by Government in G.O., No. 3137, dated 25th September 1882, is appended and forms Statement No. 14.

36. It is much regretted that the Chinchona Administration Report for 1881-82 was not as carefully put together and with as much detail, as it doubtless would have been, if the officer who was in charge of the plantation for the year had written it himself. I had the preparation of it, and was dealing with facts, concerning which I know nothing personally. The remarks and questions put by Government, in their Order, No. 66, dated 17th January 1883, I will now briefly answer :—

Paragraph 4.—The receipts for 1882-83 refer to crop shipped and sold locally of the same year.

Paragraph 4.—The excess over the sanctioned budget estimate was due to the uprooting of Succirubra at Naduvatam.

Paragraph 4.—Mr. Hillier, the Head Overseer, explains that the balance in store at the close of 1880-81 was partly at Ootacamund and partly at Naduvatam; that at the former place was in bales and had been weighed, while at the latter it was all loose and was roughly estimated and included in the closing balance, and that subsequently having been shipped to England with other bark of 1881-82, it was left out of the opening balance though included in the year's crop. The opening balance of 1881-82 was then given at the actual amount in store at Ootacamund. Though it is clear that there was considerable carelessness in keeping the accounts, still I see no reason to doubt the accuracy of the Head Overseer's statement.

Paragraph 6.—The discrepancy referred to as existing between the Conservator's figures and the crop actually shipped home is due to an error on the part of Government in their enumeration. The 488 bales of bark referred to in G.O., 16th May 1881, No. 771, should not have been included, as they formed part of the crop of 1880-81. The first consignment of crop for 1881-82 begins with G.O., No. 1079, dated 15th July 1881, and the last ends with G.O., No. 443, dated 1st May 1882, which Government have omitted altogether. The consignments are as marginally noted, and the total agrees exactly with the figures given by the Conservator.

			lbs.
G.O., 15th July	1881,	No. 1079	5,697
,, 2nd November	,,	,, 1029	44,186
,, 19th ,,	,,	,, 1738	32,414
,, 17th December	,,	,, 1945	23,534
,, 16th January	1882,	,, 53	15,929
,, 6th February	,,	,, 154	20,400
,, 21st ,,	,,	,, 223	14,521
,, 8th March	,,	,, 271	36,720
,, 1st May	,,	,, 443	39,066
		Total ..	2,32,467

Paragraph 7.—The renewals both at Hooker and Dodabetta consisted of *C. officinalis*.

Paragraph 7.—The planting at "Wood" of 20,000 Succirubras as renewals was done by order of Mr. Rowson, and probably long before the receipt of G.O., dated 29th August 1881, No. 1280. They were put out in Plot I which consisted of pure Succirubra and lies low, and too much so for *C. officinalis*, and, as I am informed, there were then no hybrids available. These were, I do not doubt, Mr. Rowson's reasons for falling back on *C. succirubra*.

Paragraph 7.—As regards the Succirubra seedlings raised and thrown away, I can only say that it was most unfortunate. The seedlings were raised because it was thought there would be a demand for them. The taste of the public changes from year to year very much, and this year if we had had them in our nurseries we could have sold them largely, for the demand for *C. succirubra* seed has this year been very great. Now we have no Succirubra plants or seedlings, but we have Officinalis, and from my experience of the last few months, I think it probable that a very large number of them will have to be grubbed up and thrown away.

13D

No. 1.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Dodabetta*, during the Official Year 1882-83.

Months.	For 1881-82.		For 1882-83.	
	Rainfall.	Number of Wet days.	Rainfall.	Number of Wet days.
April ...	1·16	3	4·87	8
May ...	13·14	18	6·48¾	11
June ...	1·30	18	8·12	22
July ...	3·02½	13	11·22	29
August ...	9·24	24	4·40	24
September	3·34	17	3·34	16
October ...	3·67	11	10·29	18
November	7·69	20	8·90	16
December	3·09	6	0·35	4
January ...	2·58	4	0·01½	2
February	...	...	...	...
March ...	0·49	2	3·36	10
Total ...	48·71½	136	61·35¼	160

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 2.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Naduvatam*, during the Official Year 1882-83.

Months.	For 1881-82.		For 1882-83.	
	Rainfall.	Number of Wet days.	Rainfall.	Number of Wet days.
April ...	0·50	2	1·21	4
May ...	3·77	14	6·54	19
June ...	9·87	26	34·70	25
July ...	24·13	22	102·11	30
August ...	17·90	28	16·94	27
September	4·54	20	12·61	25
October ...	3·55	13	12·20	21
November	7·02	16	5·71	14
December	1·40	4	0·11	2
January	0·84	4	...	...
February	...	...	...	...
March ...	0·21	1	2·80	11
Total ...	73·73	150	194·93	178

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 3.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Hooker*, during the Official Year 1882-83.

Months.	Rainfall.	Number of Wet days.	Remarks.
	IN. C.		
April 1882	0 25	1	
May "	8 23½	19	
June "	29 03	21	
July "	61 87	31	
August "	13 16	25	
September "	10 21	19	
October "	11 56	20	
November "	6 50	16	
December "	0 01	1	
January 1883	...	...	
February "	...	...	
March "	2 71	10	
Total ..	143 53½	163	

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 4.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Wood*, during the Official Year 1882-83.

Months.	Rainfall.	Number of Wet days.	Remarks.
	IN C.		
April 1882	0 86	5	
May "	9 07	18	
June "	26 08	22	
July "	71 09	31	
August "	13 74	27	
September "	10 01	22	
October "	14 16	20	
November "	7 22	18	
December "	0 12	1	
January 1883	...	...	
February "	...	...	
March "	2 66	9	
Total ...	155 01	173	

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 5.

STATEMENT showing the Receipts on account of the Government Chinchona Plantations, Nilgiris, for 1882-83, calculated in accordance with orders of the Secretary of State—*vide* G.O., No. 1163, dated 23rd October 1882.

Particulars.	Actuals for 1882-83.	Sanctioned Budget Estimate for 1882-83.	Remarks.
	RS. A. P.	RS. A. P.	
Value of Bark cropped (129,712¾lb)...	*83,350 15 11	†1,08,500 0 0	
Sale-proceeds of Seeds and Plants ...	4,200 7 10	7,500 0 0	
Miscellaneous	145 0 0	...	
Total ...	87,696 7 9	1,16,000 0 0	

* Actual charges incurred in collecting the crop of 1882-83.
† Sanctioned expenditure for collecting 165,000 lb. of bark, the estimated crop of 1882-83.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

OOTACAMUND,
13th June 1883.

No. 6.

STATEMENT showing the Receipts on account of the Government Chinchona Plantations, Nilgiris, for 1882-83, calculated according to the Market value of the Bark.

Particulars.	Actuals for 1881-82.*	Actuals for 1882-83.	Sanctioned Budget Estimate for 1882-83.	Sanctioned Budget Estimate for 1883-84.	Remarks.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Value of Bark sent home.	5,00,000 0 0	†97,684 6 0			* *Vide* paragraph 2 of G.O., No. 1409, dated 14th December 1882.
Value of Bark sent to Bombay.	1,531 2 4	..			
Value of Bark sold locally.	15,660 1 7	1,06,396 0 1	5,00,000 0 0	4,10,000 0 0	
Sale proceeds of Seeds and Plants.	6,048 1 5	4,200 7 10			
Miscellaneous	1,605 1 4	145 0 0			
Total ..	5,24,844 6 8	2,08,425 13 11	5,00,000 0 0	4,10,000 0 0	

* Entered for the sake of comparison.—"The value of bark sent Home," is actually the value of crop taken during 1881-82.
† Value of 62,518 pounds of bark sent Home during 1882-83.

Explanation for the above Statement of Receipts.

The Budget Estimate for 1882-83, viz. Rs. 35,00,000, refers to the crop of 1881-82. The Budget Estimate for 1883-84, viz., Rs. 4,10,000, refers to the crop of 1882-83. The receipts here given are the crop of 1882-83; therefore the Budget Estimate referring to that crop, viz., Rs. 4,10,000, should be considered in reviewing the financial results of the year.

The Regular Estimate of 1882-83 was Rs. 6,28,000. This is made up of value of crop sent home during 1881-82, viz., Rs. 5,00,000 *plus* value of bark sold locally during 1882-83 and other minor receipts. The comparison is very favorable.

Under the old system of keeping accounts, *Rs.* 97,684-6-0, the value of crop sent home during 1882-83, would have formed the receipts for 1883-84. This is no longer the case, therefore the Budget Estimate for 1883-84, viz., Rs. 4,10,000, which refers to the crop of 1882-83, will have to be discarded, and fresh figures substituted. This has been explained elsewhere.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

OOTACAMUND,
13th June 1883.

No. 7.

STATEMENT showing the Expenditure in Detail on the *Dodabetta* Chinchona Plantations for the Official Year 1882-83.

Months.	Establishment.	Nurseries.				Working Charges.				Manure.
		Labor.	Propagation.	Collection of Seed.	Postage on Seed.	Roads.	Weeding.	Pitting and Planting.	Various.	
1	2	3	4	5	6	7	8	9	10	11
	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 1882	220 7 9	70 0 0	23 0 0	98 1 6	...	9 11 0	291 7 6	207 8 6	96 8 0	639 3 0
May „	176 0 0	73 14 6	23 0 0	26 1 6	13 8 0	14 1 0	228 10 0	197 2 0	96 3 0	378 7 0
June „	160 0 0	49 5 0	23 0 0	12 13 6	37 15 0	32 5 6	375 4 6	69 7 0	93 9 0	127 14 0
July „	166 12 5	40 11 6	23 0 0	9 0 0	16 12 0	71 13 0	64 9 6	44 11 0	78 10 0	30 0 0
August „	320 0 0	48 7 0	23 0 0	2 3 0	9 12 0	14 5 0	4 7 0	50 11 6	52 2 0	35 5 0
September „	294 0 6	51 3 6	23 0 0	10 4 6	9 0 0	17 14 0	18 14 0	45 11 0	57 5 6	30 1 0
October „	285 0 0	120 15 0	23 0 0	9 8 0	5 8 0	13 0 0	70 15 0	4 15 6	54 13 0	30 6 0
November „	293 0 0	40 15 0	23 0 0	14 5 0	0 8 0	14 9 0	29 13 0	75 8 0	117 7 0	23 7 0
December „	293 0 0	48 5 6	23 0 0	8 1 0	...	16 2 0	147 8 9	116 6 6	104 3 0	134 10 0
January 1883	293 0 0	97 5 6	23 0 0	6 9 6	...	12 8 0	530 13 9	99 0 6	98 7 0	23 15 0
February „	293 0 0	46 3 0	52 8 0	4 4 0	...	13 15 0	872 13 0	27 11 0	201 1 4	145 2 0
March „	293 0 0	135 15 0	23 0 0	15 9 6	...	11 5 0	564 7 1	16 14 0	794 1 0	307 3 0
Total ...	3,067 4 8	823 4 6	305 8 0	216 13 0	92 15 0	241 8 6	3,199 11 1	955 10 6	1,844 5 10	1,905 9 0

Statement showing the Expenditure in Detail on the *Dodabetta* Chinchona Plantations for the Official Year 1882-83—(*Continued*).

Months.	Buildings.		Collection of Crop.							Contingencies.	Total.
	New.	Repairs.	Barking and Mossing.	Collection of Moss.	Drying Bark.	Packing Bark.	Storage of Bark.	Carriage of Bark.	Various.		
	12	13	14	15	16	17	18	19	20	21	22
	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 1882 ...	...	...	...	...	9 11 0	...	...	...	...	13 0 0	1,658 10 3
May „ ...	...	6 14 0	...	60 5 0	5 15 0	...	...	...	50 0 0	10 13 6	1,360 14 6
June „ ...	...	71 9 0	60 6 0	326 15 0	5 5 0	...	...	...	22 0 0	7 4 0	1,475 0 6
July „ ...	...	...	494 7 6	242 3 6	17 9 6	...	...	...	34 0 0	...	1,334 3 11
August „ ...	...	...	365 11 0	205 6 3	11 14 0	5 15 6	25 10 0	...	52 0 0	...	1,226 13 3
September „ ...	...	...	432 9 0	432 15 9	22 3 6	0 15 0	20 0 0	...	76 7 0	...	1,543 8 3
October „ ...	...	...	380 15 9	433 14 0	31 14 0	40 0 0	27 4 0	...	40 0 0	22 5 0	1,594 5 3
November „ ...	...	20 8 11	356 14 0	374 1 9	31 3 0	8 4 0	5 4 0	...	1,092 6 0	12 8 0	2,533 9 8
December „ ...	...	30 15 0	320 13 3	148 3 0	22 4 6	17 12 0	...	...	34 0 0	10 10 0	1,475 14 6
January 1883 ...	...	132 15 6	34 4 6	...	6 5 6	36 12 0	3 2 0	...	260 8 0	13 8 0	1,672 2 9
February „ ...	...	141 15 9	9 5 0	...	0 15 0	4 5 0	1 4 0	...	40 8 0	9 4 0	1,864 2 1
March „ ...	...	24 0 8	3 15 0	...	22 2 0	1 12 0	3 2 0	501 10 0	20 0 0	8 6 6	2,746 6 9
Total ...	...	428 14 10	2,459 5 0	2,224 0 3	187 6 0	115 11 6	85 10 0	501 10 0	1,721 13 0	107 11 0	20,484 11 8

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 8.

STATEMENT showing the Expenditure in Detail on the *Naduvatam* Chinchona Plantations for the Official Year 1882-83.

Months.	Establishment.	NURSERIES.				UPKEEP.					BUILDINGS.	
		Labor.	Propagation.	Collection of Seed.	Various.	Pitting and Planting.	Weeding.	Roads and Bridges.	Various.	Manure.	New.	Repairs.
1	2	3	4	5	6	7	8	9	10	11	12	13
	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 1882	411 0 0	116 4 8	30 0 0	4 8 0	..	490 3 0	268 9 6	29 13 0	156 13 4	99 6 1	..	253 4 2
May ,, ...	461 0 0	130 7 1	30 0 0	55 9 9	..	178 11 5	3 12 6	28 2 0	198 8 9	122 7 10	..	1,636 9 9
June ,, ...	446 7 9	129 6 7	30 0 0	..	..	1,199 9 1	122 7 6	43 9 6	150 13 4	107 4 3	..	316 8 0
July ,, ...	436 0 0	91 0 8	28 0 0	..	..	27 15 0	20 5 0	35 7 0	173 2 1	619 12 2	418 9 4	931 3 4
August ,, ...	251 0 0	91 15 10	32 0 0	..	..	236 4 0	40 0 0	145 9 6	166 8 9	189 3 2	..	..
September ,, ...	251 0 0	112 6 6	32 0 0	31 12 0	2 4 0	297 9 6	44 15 0	178 13 3	648 6 10	328 11 2	6 8 0	559 5 9
October ,, ...	251 0 0	111 1 7	12 0 0	7 0 0	..	190 2 0	95 12 6	29 9 6	174 2 2	182 1 11	..	0 13 2
November ,, ...	243 0 0	114 11 11	12 0 0	65 6 0	..	392 13 4	197 1 9	285 2 5	238 11 0	184 15 9	639 12 9	646 13 2
December ,, ...	123 0 0	117 0 9	32 0 0	246 0 0	..	239 6 10	198 12 6	146 10 9	267 14 2	117 15 8	40 8 0	5 14 1
January 1883	193 0 0	131 0 7	32 0 0	..	103 3 6	632 9 0	394 11 0	389 4 2	243 14 4	100 12 1	834 0 5	115 11 5
February ,, ...	213 0 0	115 11 0	32 0 0	..	..	39 6 0	763 1 3	50 14 6	255 4 7	209 15 4	..	7 0 2
March ,, ...	213 0 0	91 10 7	32 0 0	..	3 7 0	..	116 10 9	109 9 0	36 9 10	207 5 8	..	4 8 0
Total ..	3,482 7 9	1,352 13 9	334 0 0	410 3 9	108 14 6	3,924 9 2	2,266 3 3	1,472 8 7	2,710 13 2	2,469 15 1	1,939 6 6	4,513 11 0

Statement showing the Expenditure in Detail on the *Naduvatam* Chinchona Plantations for the Official Year 1882-83—(*Continued*).

Months.	Peon's Clothing.	COLLECTION OF CROP.							Firewood Plantation.	Contingencies.	Total.
		Barking and Mossing.	Collections of Moss and Grass.	Drying Bark.	Packing Bark.	Storage.	Carriage of Bark.	Various.			
	14	15	16	17	18	19	20	21	22	23	24
	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 1882	..	142 10 6	..	59 11 6	5 10 0	35 3 0	..	84 14 2	78 1 1	10 4 0	2,276 5 0
May ,, ...	..	..	..	10 4 6	433 13 0	48 15 6	5 0 0	24 8 10	21 15 5	..	3,391 14 4
June ,, ...	..	10 0 0	226 11 0	..	..	51 8 0	46 0 0	610 11 8	..	13 6 0	3,504 6 8
July ,, ...	..	493 0 0	471 6 11	47 15 0	..	39 11 2	..	157 14 6	34 10 11	44 8 0	4,070 9 1
August ,, ...	..	323 5 6	149 4 9	296 14 9	23 12 3	28 2 0	..	452 10 9	9 1 9	15 2 0	2,450 15 1
September ,, ...	..	367 3 0	93 7 0	108 14 6	..	30 6 0	115 5 6	897 3 6	..	20 1 0	4,126 4 6
October ,, ...	..	905 1 9	77 1 0	175 8 6	11 14 0	39 1 2	44 8 6	218 1 6	75 0 0	5 3 3	2,605 2 6
November ,, ...	48 0 0	775 5 2	35 11 5	260 1 0	29 8 6	38 4 6	363 5 0	144 8 5	..	8 0 0	4,723 4 1
December ,, ...	..	371 14 9	..	131 10 9	7 14 0	35 15 6	10 0 0	154 1 2	..	18 6 0	2,265 0 11
January 1883	..	19 8 0	51 0 0	246 5 8	50 1 0	76 6 0	40 0 0	250 2 9	107 15 1	74 1 0	4,111 10 6
February ,, ...	..	..	..	51 5 6	18 9 0	64 13 6	102 8 0	38 8 6	46 9 10	39 1 10	2,098 11 6
March ,, ...	..	..	..	6 14 6	0 9 0	45 10 0	188 7 6	11 4 11	81 14 2	..	1,198 10 5
Total ..	48 0 0	3,408 2 2	1,104 10 1	1,395 10 2	583 10 9	534 0 4	915 2 6	3,044 10 8	455 4 3	248 1 1	36,722 14 6

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 9.

STATEMENT showing the Expenditure in Detail on the *Pykara* Chinchona Plantations for the Official Year 1882-83.

Months.	Establishment.	Nurseries.			Working Charges.				Manure.	Buildings.	
		Labor, &c.	Collection of Seed.	Various.	Pitting and Planting.	Weeding.	Roads and Drains.	Various.		New Works.	Repairs.
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.
April 1882 ...	120	139 6 3	...	...	339 15 8	197 0 3	8 11 6	86 5 8	74 8 7	...	18 4 7
May „ ...	120	124 6 6	58 9 6	18 4 9	71 7 3	2 11 0	10 13 3	61 11 4	77 7 2	...	152 2 10
June „ ...	120	145 10 4	...	...	56 7 0	80 5 6	25 6 0	154 6 7	39 6 10	...	150 11 4
July „ ...	120	78 12 10	...	...	58 6 0	...	19 2 6	38 9 5	22 7 8	...	...
August „ ...	120	84 12 0	...	...	16 10 0	29 7 0	66 13 6	123 5 1	25 13 1	...	0 9 11
September „ ...	120	104 1 8	1 0 0	...	300 10 0	208 15 6	91 0 0	160 5 5	56 1 9	...	4 7 6
October „ ...	120	109 7 2	...	...	293 6 9	133 11 6	42 14 0	107 14 7	64 2 4	...	12 3 10
November „ ...	120	136 4 2	13 4 6	...	213 5 6	281 2 6	30 11 9	141 11 10	64 5 1	9 4 6	0 9 4
December „ ...	120	141 0 1	9 10 6	...	282 1 6	232 13 0	36 3 0	164 9 11	139 5 5	2 7 7	0 8 9
January 1883 ...	120	129 2 4	...	24 0 0	421 14 7	320 13 9	74 13 6	272 2 0	148 9 1	...	8 9 8
February „ ...	120	107 10 10	0 8 0	...	338 15 0	202 3 9	17 8 9	225 0 8	91 7 0	...	145 7 10
March „ ...	120	87 15 1	1 8 0	...	167 13 0	89 12 0	16 2 0	157 1 9	174 9 1	...	22 10 5
Total ...	1,440	1,388 9 3	84 8 6	42 4 9	2,561 0 3	1,778 15 9	440 3 9	1,693 4 3	978 3 1	11 12 1	517 6 0

Statement showing the Expenditure in Detail on the *Pykara* Chinchona Plantations for the Official Year 1882-83—*(Continued)*.

Months.	Collection of Crop.							Total.
	Barking and Mossing.	Collection of Moss and Grass.	Drying Bark.	Packing Bark.	Storage.	Carriage of Bark.	Various.	
	13	14	15	16	17	18	19	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.
April 1882	14 1 0	...	3 14 6	0 9 0	10 0 0	36 0 0	25 5 10	1,074 2 10
May „	...	...	26 7 6	5 5 6	...	...	23 4 4	752 10 11
June „	2 4 0	178 14 6	26 13 0	3 6 0	10 0 0	21 6 0	30 0 10	1,045 1 11
July „	388 1 0	87 15 0	71 0 6	...	10 0 0	12 10 0	134 5 2	1,041 6 1
August „	257 12 0	100 2 6	81 9 6	7 14 0	10 0 0	31 2 0	62 14 7	1,018 13 2
September „	74 6 3	17 10 3	82 8 6	0 15 0	10 0 0	38 1 6	672 1 9	1,942 5 1
October „	166 6 0	6 8 6	86 8 0	...	10 5 0	14 8 6	54 6 10	1,222 7 0
November „	112 0 6	...	49 9 9	10 0 0	10 0 0	97 3 0	53 7 2	1,342 15 7
December „	66 4 6	...	33 3 6	4 6 0	10 0 0	2 2 0	35 5 2	1,281 1 11
January 1883	...	...	26 11 9	3 15 0	10 4 6	...	130 0 9	1,691 0 11
February „	...	19 7 6	1 11 0	21 9 0	8 11 4	51 14 3	35 2 11	1,387 5 10
March „	...	...	...	...	10 0 0	1 8 0	22 9 4	871 8 8
Total ...	1,081 3 3	410 10 3	490 1 6	57 15 6	109 4 10	306 7 3	1,279 0 8	14,670 14 11

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

OOTACAMUND,
13th June 1883.

No. 10.

STATEMENT showing the Expenditure in Detail of Office Establishment and General for the Official Year 1882-83.

Months.	Establishment.	Deputy Conservator's Allowance.	Superintendent's pay.	Assessment on Plantation.	Cost of Gunny Bags.	Carriage of Bark to Mettupalaiyam.	Railway Charges.	Shipping Charges.	Batta and Travelling Allowance.	Contingencies.	Peons' Clothing.	Passage Money of Mr. Cross.	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.	Rs. A. P.	Rs. A. P.
April 1882 ..	131 0 0	200 0 0	..	..	..	..	..	44 2 11	..	8 7 0	..	682 0 0	1,065 9 11
May ,, ..	131 0 0	200 0 0	..	..	..	..	597 6 0	79 2 0	..	122 8 6	..	..	1,129 15 6
June ,, ..	131 0 0	200 0 0	..	..	..	..	..	711 14 3	..	17 10 6	..	..	1,060 8 9
July ,, ..	131 0 0	200 0 0	..	..	..	32 8 0	80 13 0	35 14 6	33 14 0	42 0 0	..	..	556 1 6
August ,, ..	149 11 4	200 0 0	..	180 0 0	1,795 4 0	..	..	6 12 0	..	35 12 0	..	..	2,367 7 4
September ,, ..	131 0 0	200 0 0	..	..	..	..	..	14 14 0	153 0 0	23 12 0	..	..	522 10 0
October ,, ..	131 0 0	200 0 0	..	..	..	..	..	9 13 0	..	29 6 0	..	..	370 13 0
November ,, ..	123 0 0	200 0 0	..	..	..	..	258 13 0	23 3 9	..	29 8 0	..	..	639 8 9
December ,, ..	127 12 10	200 0 0	..	..	..	..	..	2 11 0	67 14 9	37 0 0	..	..	425 6 7
January 1883 ..	139 11 4	200 0 0	..	..	..	..	..	16 14 0	23 14 4	131 12 0	..	..	507 3 8
February ,, ..	122 0 8	200 0 0	..	..	..	111 10 4	753 6 0	0 10 11	..	67 13 10	35 0 0	..	1,280 8 9
March ,, ..	131 0 0	200 0 0	514 4 7	..	..	82 14 6	260 8 0	1 3 2	307 12 10	49 8 0	..	..	1,547 3 1
Total ..	1,569 4 2	2,400 0 0	514 4 7	180 0 0	1,795 4 0	227 0 10	1,950 12 0	952 3 6	681 7 11	555 1 10	35 0 0	682 0 0	11,472 6 10

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

STATEMENT showing the Number of Trees barked and the Quantity of Bark obtained under various systems of Coppicing on the Government Chinchona Plantation, *Hooker*, during the Official Year 1882-83.

Number of Plot.	Stripping and Mossing Process.				Coppicing Process.				Uprooting Process.				Grand Total.	
	Red.		Crown.		Red.		Crown.		Red.		Crown.			
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.
I ..	1,953	5,859	537	805	200	1,797	155	385	..	..	..	..	9,445	9,898
II ..	..	..	298	384	..	..	103	385	..	..	25	80	426	848
III ..	448	1,054	..	..	264	1,717	20	20	..	..	..	..	732	2,791
IV ..	..	..	200	318	..	..	364	962	..	..	53	212	617	1,492
V ..	..	..	..	..	..	..	22	78	..	..	..	..	22	78
VI ..	..	..	295	401	636	3,207	1,196	4,422	..	..	461	1,463	1,657	5,885
VII ..	..	..	12	36	1,567	11,267	740	2,142	..	..	77	215	1,748	5,965
VIII ..	..	..	..	..	96	223	160	402	..	..	..	..	1,739	11,705
IX ..	..	..	172	229	96	566	257	514	..	..	50	326	403	1,063
X ..	..	..	83	54	682	5,581	157	436	10	80	29	115	464	1,426
XI ..	1,191	3,301	..	..	..	..	38	76	..	..	..	..	1,994	9,012
XII ..	..	..	1,028	1,257	..	..	25	68	..	..	..	..	25	68
XIII ..	..	..	..	..	..	..	6	38	..	..	..	..	1,034	1,295
Total ..	3,592	10,214	2,625	3,484	3,541	24,358	3,243	9,928	10	80	695	2,411	13,706	50,475

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 11.

STATEMENT showing the Number of Trees barked and the Quantity of Bark obtained under various systems of harvesting on the Government Chinchona Plantation, *Naduvatam*, during the Official Year 1882-83.

Number of Plot.	STRIPPING AND MOSSING PROCESS. Red. Trees.	Red. Bark.	Crown. Trees.	Crown. Bark.	COPPICING PROCESS. Red. Trees.	Red. Bark.	Crown. Trees.	Crown. Bark.	UPROOTING PROCESS. Red. Trees.	Red. Bark.	GRAND TOTAL. Trees.	GRAND TOTAL. Bark.
I	378	3,142	..	..	11	491	..	..	..	..	389	3,633
II	..	..	..	..	21	434	..	..	..	..	21	434
III	..	..	..	..	103	672	..	..	..	..	103	672
IV	..	..	..	..	..	..	..	..	..	..	..	..
V	..	..	..	..	625	6,118	..	..	58	749	683	6,867
VI	..	..	..	..	68	1,043	15	192	..	..	73	1,235
VII	..	..	..	..	..	..	..	..	..	..	..	..
VIII	..	..	..	..	125	1,924	56	442	..	..	181	2,306
IX	..	..	..	..	66	1,069	8	64	..	..	74	1,073
X	..	..	..	..	437	5,573	..	..	10,922	96,153	11,381	101,950
XI	..	..	..	..	4,608	28,583	13	155	..	..	4,621	23,733
XII	..	..	..	..	176	2,673	..	..	15	66	2,294	9,079½
XIII	..	..	..	..	..	..	..	..	..	..	..	..
XIV	..	..	..	..	131	1,706	7	56	162	1,597	300	3,358
XV	..	..	..	..	20	369	..	..	..	..	20	369
XVI	..	..	..	..	..	..	..	..	345	2,140	345	2,140
XVII	..	..	..	..	..	..	..	..	..	..	..	..
XVIII	..	..	..	..	..	..	..	..	..	..	..	..
XIX	..	..	..	..	..	..	..	..	..	..	323	2,036
XX	..	..	..	..	..	..	..	..	..	..	..	..
XXI	..	..	..	..	..	..	..	..	..	..	4,004	20,886
XXII	4,004	20,886	..	..	16	975	12	110	..	..	28	1,085
XXIII	6,804	32,379	..	..	917	9,155	4	70	..	..	7,725	41,604
XXIV	..	..	..	..	1,069	9,396	2	28	..	..	1,071	9,334
XXV	..	..	..	..	218	2,372	27	163	1,098	10,730	1,343	13,265
XXVI	..	..	..	..	..	..	..	..	..	..	..	..
XXVII	..	..	..	..	..	..	..	..	..	..	..	..
XXVIII	..	..	..	..	..	76	..	..	..	..	8	76
XXIX	..	..	..	..	8	..	..	..	..	..	..	..
Total ..	11,186	56,407	..	..	8,609	72,378	144	1,280	12,600	111,435	35,037	250,439½

FOR SAMPLES. Crown. Bark.	FOR SAMPLES. Crown. Trees.	JAVA PROCESS. Red. Bark.	JAVA PROCESS. Red. Trees.	JAVA PROCESS. Crown. Bark.	JAVA PROCESS. Crown. Trees.
339	50	6,340½	2,103	224	22
		2,036	323		
339	50	8,376½	2,426	224	22

No. 12.

STATEMENT showing the Number of Chinchona Trees barked and the Quantity of Bark taken at the Government Chinchona Plantation, *Dodabetta*, during the Official Year 1882-83.

Plot.	CROWN. Trees.	CROWN. Bark.	PATA DE GALINAZO OR MAGNIFOLIA. Trees.	PATA DE GALINAZO OR MAGNIFOLIA. Bark.	GRAND TOTAL. Trees.	GRAND TOTAL. Bark.	Remarks.
		LB.		LB.		LB.	
IX	12,091	12,949	4	19	12,095	12,968	
XIV	3,001	6,485	..	..	3,001	6,485	
XV	1,856	3,299	2	7	1,858	3,306	
XXIII	5,226	5,173	17	86	5,243	5,259	
XXVIII	542	830	13	60	555	890	
XXIX	5,257	7,868	15	65	5,272	7,933	
XXX	6,685	8,796	..	..	6,685	8,796	
XXXI	4,013	5,139	32	152	4,045	5,291	
XXXII	3,657	6,889	28	105	3,685	6,994	
XXXIII	4,328	7,051	40	215	4,368	7,266	
XXXIV	1,731	5,920	..	..	1,731	5,920	
XXXVI	951	1,453	10	42	941	1,495	
XXXVII	1,162	1,133	2	9	1,164	1,142	
XXXVIII	2,479	4,689	2	9	2,481	4,698	
XXXIX	158	217	..	..	158	217	Under slicing system.
	..	13,883	..	..	..	13,883	From cut trees and branches.
Total ..	53,117	91,774	165	769	53,282	92,543	

STATEMENT showing the Number of Trees barked and the Quantity of Bark obtained under various systems of coppicing on the Government Chinchona Plantations, *Wood*, during the Official Year 1882-83.

Sub-Division.	UNDER STRIPPING AND MOSSING SYSTEM.				COPPICING PROGRESS.				UPROOTING PROCESS.				JAVA PROCESS.		FOR SAMPLES.		Grand Total.	
	Red.		Crown.		Red.		Crown.		Red.		Crown.		Red.		Of all varieties.			
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.
I	185	740	...	...	11	65	...	..	...	...	...	...	...	...	...	...	196	805
II	2,777	8,331	...	...	573	4,254	...	...	...	...	...	...	...	...	...	...	3,350	12,585
III	...	...	...	...	214	2,805	44	450	...	...	...	...	...	...	...	...	258	3,255
IV	...	...	...	...	404	3,005	14	90	...	...	...	...	...	...	...	...	418	3,095
V	1,235	4,940	...	...	558	3,060	...	...	...	...	...	...	...	...	...	...	1,793	8,000
VI	...	...	...	...	182	785	...	...	...	...	...	...	...	...	...	...	182	785
VII	...	...	...	...	60	290	...	...	...	...	...	...	...	...	...	...	60	290
VIII	...	...	...	...	793	5,845	...	...	...	...	...	...	...	...	...	...	793	5,845
IX	...	...	...	...	30	190	...	...	...	...	...	...	...	...	...	...	30	190
Total ...	4,197	14,011	...	...	2,825	20,299	58	540	...	...	...	...	...	...	...	...	7,080	34,850

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 13.

STATEMENT showing the Quantity of Seed and the Number of Plants sold to the Public during the Official Year 1882-83.

Particulars.	Seed.		Plants.	Seedlings.
	LB.	OZ.		
Naduvatam.				
C. Officinalis	35	6½	16,000	...
C. Succirubra	160	0	...	...
C. Pubescens	78	5½	...	15,000
Dodabetta.				
C. Officinalis	287	1	52,000	80,000
C. Uritisinga	12	7	...	10,000
C. Pita de Galinazo	20	2¾	...	43,000
C. Augustifolia	0	8	4,000	...
C. Ledgeriana	...		1,156	1,252
Total ...	593	14¾	73,156	149,252

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 14.

A.—Statement showing the total Yield of the Government Chinchona Plantations, Nilgiris, for the Official Year 1882-83.

1	2	3 Bark.													4	5 Propagation.		
		a Under Stripping and Mossing System.			b Uprooting.			c Coppicing.			d Scraping.			Total Quantity of Green Bark collected during the Month.	Quantity when dry.	Seed.	a Plants.	b Seedlings.	c Rooted Cuttings.
Name of Plantation.	Species of Produce.	No. of Plots.	No. of Trees decorticated.	Outturn of Green Bark.	No. of Plots.	No. of Trees decorticated.	Outturn of Green Bark.	No. of Plots.	No. of Trees decorticated.	Outturn of Green Bark.	No. of Plots.	No. of Trees decorticated	Outturn of Green Bark.					
				LB.			LB.			LB.			LB.			LB.	NO.	NO.	NO.
	Add last year's balance.	..	..	..	..	..	..	..	..	..	..	..	..	..	5,304	..	..	..	..
Dodabetta ..	Crown Bark	14	52,959	77,674	..	..	..	branches		13,883	1	158	217	91,774	38,946½	..	..	..	..
	Various	11	165	769	..	..	..	..	..	..	..	..	..	769	358	..	..	..	..
Naduvatam ..	Red Bark	3	11,186	56,407	6	12,600	111,435	17	8,609	72,378	2	2,426	8,376½	248,596½	69,883	..	..	..	..
	Crown Bark	..	..	..	1	22	224	9	144	1,280	..	..	..	1,504	500	..	..	..	..
	Various for samples, &c.	..	30	339	..	..	..	..	..	..	..	..	..	339	161¼	..	..	..	..
Pykara ..	Red Bark	6	7,789	34,353	1	10	80	7	3,541	43,811	..	..	..	78,244	14,968	..	..	..	..
	Crown Bark	8	2,625	3,484	6	695	2,411	..	..	..	13	3,243	10,468	16,363	4,896	..	..	..	..
	Total ..	..	..	173,026	..	..	114,150	..	..	131,352	..	..	19,061¼	437,589½	135,016¾	..	..	..	..

B.—Statement showing the disposal of Bark and other Produce collected in the Government Chinchona Plantations during the Official Year 1882-83.

1	2	3 Bark.								4 Seed.			5 Propagated Plants and Seedlings.						
		a Sent to Madras for shipment to London.		b Sold in the Country.		c Samples.		d Total.		a Sold to the Public.	b Used for Nurseries.	c Total.	a Plants.		b Seedlings.		c Rooted Seedlings.	Remarks.
Name of Plantation.	Name of Species.	Bales.	Quantity.	Bales.	Quantity.	Bales.	Quantity.	Bales.	Quantity.				Sold to Public.	Permanently put up in the Plantations.	Sold to Public.	Transplanted.	Transplanted to Nurseries.	
		NO.	LB.	NO.	LB.	NO.	LB.	NO.	LB.	LB.	LB.	LB.						
Dodabetta ..	Crown Bark	155	20,156	748	18,257½	..	83	303	(a) 38,946½	..	..	..	..	..	..	..	..	..
	Various	4	358	..	..	..	..	4	358	..	..	..	..	..	..	..	..	..
Naduvatam ..	Red Bark	304	30,400	394	39,400	..	..	698	69,800	..	..	..	..	..	..	..	..	..
	Crown Bark	24	2,400	..	..	..	..	24	2,400	..	..	..	..	..	..	..	..	..
	Various	1	100	..	..	..	144½	1	244¼	..	..	..	..	..	..	..	..	..
Pykara ..	Red Bark	90	9,104	98	9,870	..	41	188	(b) 20,272	..	..	..	..	..	..	..	..	..
	Crown Bark	..	..	18	1,800	..	16	18	(c) 2,996	..	..	..	..	..	..	..	..	..
	Total ..	579	62,518	658	69,327½	..	284½	1,236	135,016¾	..	..	..	..	..	..	..	..	..

(a) Including 450 lb. in store on 31st March 1883. (b) Including 1,257 lb. in store on 31st March 1883. (c) Including 1,180 lb. in store on 31st March 1883.

C.—Statement showing the Receipts and Expenditure of the Government Chinchona Plantations, Nilgiris, for the Official Year 1883-84.

Name of Plantation.	Receipts.		Expenditure.						Grand Total of all Expenditure.	
			A. Conservancy and Works.			B. Establishment.				
	Budget Estimate.	Total.	Budget stimate.	Amount.	Total.	Budget Estimate.	Amount.	Total.	Budget Estimate.	Total.
	RS.	RS. A. P.	RS.	RS. A. P.	RS. A. P.	RS.	RS. A. P.	RS. A. P.	RS.	RS. A. P.
Dodabetta	5,00,000	2,08,425 13 11	91,816	17,309 12 0	68,256 1 10	16,684	3,174 15 8	15,094 14 1	1,08,500	83,350 15 11
Naduvatam				32,944 5 8			3,778 8 10			
Pykara				13,230 14 11			1,440 0 0			
Office and General				4,771 1 3			6,701 5 7			

	RS. A. P.
Outstanding advance of previous years to be accounted for in this official year	7,500 0 0
Value of cheques issued in this month	
Deduct—	
Cheques issued in this month, but not cashed within the month	
Portions remaining unaccounted for out of the advances received in this month	2,165 15 9
Amount accounted for out of the advance received	
Balance ..	5,324 0 3

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

OOTACAMUND,
13th June 1883.

ORDER—dated 19th November 1883, No. 1427, Revenue.

Miscellaneous.

G.O., 26th September 1883, No. 1189.

The Right Honorable the Governor in Council has recently passed orders on reports by Dr. Trimen and Mr. Lawson on the present condition of the Nilgiri Cinchona plantations and does not accordingly propose to review in any detail the report read above, which however evidences care and attention on the part of Mr. Gass, the officer who was in charge until Mr. Lawson took up the duties of his appointment.

2. The season of 1882-83 was a singularly unfavorable one, and Mr. Gass' account of the unsatisfactory condition of the Naduvatam and Pykara plantations coincides with that of Mr. Lawson. The crop was 135,016½ lb. of dry bark, of which 62,518lb. were sent home and 69,611½lb. sold in Madras by public auction, the balance remaining in store. The results of the sales held are shown by the various proceedings of Government noted in the margin.* The bad debts and irrecoverable advances referred to in paragraph 9 of the Deputy Conservator's report have been written† off.

* G.O., 23rd Nov., 1882, No. 1307.
„ 5th March 1883, No. 323.
„ 24th April „ „ 1662.
† G. O., 14th July 1883, No. 2906, Mis.

3. It is noted that only a small crop is expected from the Naduvatam estate for the next few years, and that extensive plantings have been made, chiefly of the hardy and valuable hybrids. The condition of the Dodabetta plantation is satisfactory. The *Santa Fé* and *Carthagena* varieties should receive special attention.

4. The future of the Wood and Hooker estates, which are described by Dr. Trimen and Messrs. Gass and Lawson as being in a wretched condition, is under the consideration of Government.

5. The total number of trees in all the plantations on the 31st March 1883 was 967,795, as against 742,356 on the 31st March in the preceding year.

6. It is observed that the results of slicing or scraping at Naduvatam were satisfactory, the bark renewing in three months and the trees looking remarkably well after the operation. The Government attach great importance to such experiments, the results of which will always be made public.

7. Orders have been passed for the provision of a water-supply to the Director's bungalow at Naduvatam, and the question of erecting a new bungalow for the overseer must lie over for the present as the Department of Public Works, has on its hands just now as much work as it can cope with.

8. The preparation of plantation books should receive continued attention. The answers given in paragraph 36 of the report to the remarks made and questions put by Government in their review of last year's report are satisfactory.

9. The actual receipts of the year are, as shown in the margin, Rs. 1,10,741, and the charges Rs. 83,351, an amount less than the sanctioned and revised estimate by Rs. 25,182 and Rs. 22,763, respectively.

	Rs.
Value of bark locally sold	1,06,396
Sale of plants and seed	4,200
Value of bark supplied to Military Department	100
Miscellaneous	45
Total ...	1,10,741

G.O., 23rd October 1882, No. 1163.

10. With reference to paragraphs 8 and 31 of the Deputy Conservator's report, it is observed that the Secretary of State's Despatch No. 31, dated 14th September 1882, referred only to the manner in which the value of the products manufactured in England is brought to account and did not prescribe a wholesale credit of all bark at the cost of production as he supposes.

11. Pending the decision of a question referred as to the credit of the proceeds of bark sent home, its market value will, as heretofore, be entered in the statement of capital and revenue account which is appended. This statement shows the total

receipts since the commencement of the enterprise to be Rs. 33,87,767, and the total charges Rs. 24,38,087. The total of receipts in this statement is arrived at by crediting the value of the products manufactured from the 268 bales sent home in 1882-83 at market rates as ascertained from the Examiner of Medical Accounts, and the value of products manufactured from bark for which no particulars of account had been received but which has been despatched to England at various dates between the 8th November 1881 and 22nd May 1883. It has been necessary to follow this course in order to keep the capital and revenue account of the plantations up to date, as, since the practice of disposing of the bark by sale in England has been abandoned, no money receipts by the Secretary of State have been reported.

12. At the same time a statement of receipts and expenditure for the year has been drawn up, in which the value of the products of bark sent home in the year and of crop sent home but not worked up, has been taken credit for at its actual cost to Government as directed by the Secretary of State's Despatch No. 31, dated 14th September 1882.

(True Extract.)

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

To the Director, Government Cinchona Plantations, Parks and Gardens, Nilgiris.
„ the Board of Revenue.
„ the Director of Agriculture.
„ the Superintendent, Government Central Museum.
„ the Collector of Nilgiris.
„ the Accountant-General.
„ the Public Works Department.
„ H. A. Gass Esqr.

No. I.

STATEMENT showing the Capital and Revenue Account of the Government Cinchona Plantations, Nilgiris, from the commencement up to the Official Year 1882-83.

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.		Interest on Charges.	Total.
								Departmental Labor.	Convict Labor.		
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 13 10	23,131 13 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	58,887 5 0	..	10,697 6 8	98,734 9 8
1866-67	..	..	2,450 0 0	..	2,450 0 9	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	..	34,063 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	2,009 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	13,856 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	6,637 4 9	63,095 0 3	..	76,984 8 10	1,56,708 13 10
1880-81	..	3,33,295 1 3	13,175 4 8	71,983 2 11	4,18,453 8 10	11,879 1 0	11,367 0 4	72,858 15 3	..	84,036 7 3	1,80,141 7 10
1881-82	..	5,64,236 3 11	7,653 2 9	90,813 9 6	6,62,703 0 2	16,375 14 6	6,278 4 9	90,921 2 1	..	92,142 13 2	2,05,718 2 6
1882-83	..	5,82,003 10 1	4,345 7 10	1,20,635 3 8	7,06,984 5 7	15,094 14 1	9,206 6 5	59,049 11 5	..	1,01,400 2 3	1,84,751 2 2
Total ..	61,939 8 4	28,60,677 6 3	64,076 5 1	4,01,074 0 5	33,87,767 4 1	3,42,597 13 2	74,177 4 11	9,30,228 15 6	1,46,000 0 0	9,41,683 6 5	24,38,087 8 0

Net Result.

	Rs. A. P.
Receipts	33,87,767 4 1
Charges	24,38,087 8 0
	9,49,679 12 1

No. II.

STATEMENT showing the Receipts and Charges on account of the Government Cinchona Plantations, Nilgiris, for 1882-83, calculated in accordance with orders of the Secretary of State—*vide* G.O., No. 1163, dated 23rd October 1883.

DR.	Rs. A. P.	CR.	Rs. A. P.
To value of stock at 31st March 1882 of 5,304 lb. of bark at 7 annas 7·144 pies per lb.	2,617 13 8	* By value of stock at 31st March 1883 of 2,887 lb. at 10 annas 3·375 pies per lb.	1,855 2 0
To establishment and working	83,550 15 11	By value of 30,937 lb. of bark at cost price, freight and charges of the manufacture of product	25,606 15 0
To value of 605¼ lb. of bark yielded by Kuttálam and Pápanásam Hills, Tinnevelly District, at cost price of 10 annas 3·375 pies per lb.	324 13 2	By value of 605¼ lb. of bark at cost price, from Kuttálam, &c.	617 11 7
† Profit on the year's working	72,920 11 11	By value of 21,581 lb. of bark at cost price awaiting disposal at home ..	20,293 2 2
		By value of 69,611¼ lb. of bark disposed off by local sales	1,06,396 0 1
		By sale proceeds of seed and plants ..	4,200 7 10
		By miscellaneous receipts	145 0 0
Total ..	1,59,114 6 8	Total ..	1,59,114 6 8

* In 1882-83 the cost price of 1 lb. of bark is 10 annas 3·375 pies—*i.e.* Rs. 83,550-15-11 expenditure÷1,29,719¼ lb. of bark crop of the year.

† If the produce had been taken credit for at its market value an additional sum of Rs. 61,066-14-2 would have been realised and the whole profit for the year would be Rs. 72,920-11-11+61,066-14-2=1,33,987-10-1.

Exd. W. H. French.

160 Copies.

1195 V

Original

Govt. of {1883} Madras.

REVENUE.

Issued

Encl.

Recd.

G.O., 19th November 1883, No. 1427.

NOVEMBER.

Cinchona Report for 1882-83.

Reviewing —.

Government Cinchona
Plantations
Ootacamund 13th June 1883

250

From,

The Deputy Conservator of Forests,
in charge of the Cinchona Plantations
Nilgiris

To

The Collector of Nilgiris
Ootacamund

Sir,

I have the honor to submit the Administration Report, (with 14 Enclosures) of the Government Cinchona Plantations, in the Nilgiri District, for the year 1882-83.

2.— I took charge of the plantations on the 1st June 1882, and continued to hold charge during the remainder of the Official year. I devoted much attention to the plantations, and visited them frequently, and as often as my other work permitted me to do so, and spent in all, about 40 days in inspection of the different Estates - and when unable to go out myself, I had the Asst: Superintendent and Head Overseer into Office for personal enquiry

becaime chief Superintendent. He was placed in charge of Dodabetta and Wood Estates. Mr. Skellies was made Head Overseer and left in charge of Neddiwattam and Hooker. Mr. Burrows was transferred from Hooker to Wood and Mr. Bonjour from Wood to Hooker. A new clerk was brought from the Tinnevelly Forest Office, one Subramania Pillay, and placed under the Head Overseer's orders and Arulanandam Pillay transferred from Neddiwattam, was placed under the orders of the Assistant Superintendent as his clerk.

4.— Season and Rainfall.

The year was a most unfavorable one both for Cultivation

Cultivation and also for Collection of crops, and the monsoon was altogether unprecedented. The rainfall at Dodabetta guaged 61.35 inches distributed over 158 days against 48.71 inches, distributed over 136 days, in the previous year. at Neddiwattam 194.93 inches and 178 wet days against 73.73 inches and 150 wet days in the previous year. at Wood it was guaged at 155.1 inches and 173 wet days, and at Hooker 143.53 distributed over 163 days. The maximum fall occurred in July when it amounted to:—

Dodabetta 11.22 inches
Neddiwattam 102.11 —
Hooker 61.87 —
Wood 71.9 —

The minimum fall was in January and February when at Dodabetta 0.1 inches was guaged and

and in the other 3 stations nothing at all, during the 12 months. Statements 1, 2, 3 and 4, give details of rainfall and I have added a column in the case of Doddabetta and Keddiwattam, to enable a comparison to be drawn between this and the previous year, month by month.

5.— Very high winds occurred on all four stations during the months of June, July and August. More especially in June and July, and a very large number of trees were blown down, and cotpiced shoots were broken off in spite of precautions taken to protect them. The foliage was beaten off even the Officinalis trees, by the wind and rain, and in the case of the Succirubras the trees presented a most wretched

wretched appearance— Large numbers having been entirely killed.— There was hardly any frost at Doddabetta till the 12 January last, when a severe frost took place which affected 2000 of the trees.— 300 large ones 18 and 19 years old, and 1700 young ones from 1 to 3 years old.— Some of the trees were coppiced at once, and the remainder left in the hope of their recovering, but latterly all but 50 of the large ones were coppiced also, as they showed signs of dying out, altogether. Very mild frosts occurred at Keddiwattam, and no damage was done. A hailstorm occurred at Keddiwattam in May 1882, which damaged two young Cinchonas and the

tail

tail end of a severe thunderstorm passed over this estate and Stroke on the 29th March of this year. In addition to the fearful havoc that was caused amongst the trees in the several estates enormous damage was done to our roads, bridges and also buildings.— Great inconvenience was caused both to the subordinates and to Coolies employed on the estates by having to go a long way round by the main road, past the travellers bungalow to their work, in consequence of the plantation bridges having been washed away. The bridge on the road leading from Stroker to Neddrawatte, was injured but fortunately held. The Pykara bridge was carried away.—

Landslips

Landslips occurred in all directions and many of them of large size. As our Chinchona estate Coolies were the only Government ones on the Neddrawatte side, we used a number of them in working a raft on the Pykara River, in bringing over the mails, and in clearing away the worst of the landslips, and I venture to think they were of considerable assistance.

6.— As regards buildings, the old Jail which had to be used again throughout the year as a drying shed, because, in spite of money (500 £) spent on it to put it in repair, quite dangerous, in consequence of the centre wall being saturated, and for a time we had to stop all drying operations for fear of the building

Collapsing

collapsing altogether.
The Clerk's quarters, and
the Asst: Overseers house
were both damaged,
the walls of the former
being cracked, and the
end walls of the latter
having fallen out.—
During the dry weather
in December and January
all these things were put
in repair, and all traces
of the damage caused
to roads, drains, bridges
and buildings were
removed.

7. — The harvesting of crop
was naturally rendered
extremely difficult. On
the beginning of the monsoon,
the usual stripping process
was resorted to, this had
however to be abandoned
as it was not found possible
to "lift" the bark without
permanent injury to the
trees and it therefore
became

became necessary to
coppice and uproot
This was done in plot
No X principally, as
the trees there, first
showed signs of dying
out altogether. The
Coolies in Collecting
bark, had a very
hard time of it, as
being obliged to
remain on the same
spot exposed to
wind and rain, their
limbs became quite
numbed, and they
frequently had to
be carried home after a
few hours' work. We
had however no deaths
among our Coolies, though
many Corpses of tra-
-vellers were buried
by our people.—

× Red dewatttum.

Receipts

8.— Receipts and Expenditure.

Statements B, Nos 5 and 6, show the receipts from sale proceeds of seeds, plants &c, bark sold locally, value of Bark sent to England — and it should be understood that the receipts refer only to the crop harvested during the year under report, and not to the crop of 1881-82 — the receipts are calculated both in accordance with the orders of the Secretary of State Contained in Despatch No 31 dated 11th September 1882 embodied in G. O dated 23rd October 1882 as 1163 — and also according to market value of the bark. The Budget Estimate for 1882-83 as sanctioned by

by Government in G. O No 1955 dated 21st December 1881 para 7, amounted to Rs 5.00,000 while the regular Estimate as sanctioned in para 2 of G O. No 1409 of 14th December 1882, amounted to Rs 6.28.000. Of these Estimates however, the first referred to the value of the Crop of 1881-82, and the latter to the same crop plus the value of bark sold locally in 1882-83. The Budget Estimate for 1883-84 as sanctioned in para 5. of G. O No 1409 dated 14 December 1882 amounts to Rs 4.10.000, this Estimate is based on value of Crop taken and sent home during 1882-83, the year under report, — and in drawing a Comparison between the Budget Estimate and the receipts, this figure

figure should be taken and not Rs 5,00,000 ×. This has been done accordingly by one - in the Statement b. As the Receipts now given by me, are those obtained from value of bark and stone, sold locally &c. During the year under report.

The Crop of the year consisted of 135,016¾ pounds of dry bark, instead of 165,000 as budgetted for. Of this 62,518 pounds were sent to the Secretary of State and 69 6 11 3/4, including 282½ pounds of samples, were sold in Madras by public Auction, and the balance 2,887 pounds remained in stock.

The Receipts are thereon as follows:-

First

Receipts by Treasury accounts for cash Rs As P
Remittances - - - 420-7-10

Book adjustment 100-—
Miscellaneous 45-—
Value of 129 12 3/4 lbs of bark calculated in accordance with the Secretary of State's despatch - - - 83350-15-11
87696-7-9
Budget Estimate ° 1,06,000-—-—
- 28303-8-3

× 129,12 3/4 lbs of bark above quoted Consist of 135,016 3/4 less 5,314 lbs (balance of last year's crop).

° Calculated according to the terms of the Secretary of State - i.e., the Cost of production.

Second

Receipts by Treasury accounts } 420-7-10
Book adjustment 100-—
Miscellaneous 45-—
Receipts from 69 6 11 3/4 lbs by local sale - - 10696-—-—
Market value of × 62518 lbs Calculated roughly, 97688-6-—
208,425-13-11
Budget Estimate 1,10,000-—-—
* - 20,574-2-1

× The value of lbs 62,518 has been calculated at the average rate obtained at Madras viz Rs 1-9-—.

* see General Remarks.

The sanctioned expenditure (Go dated 21st December 1931 for 1955) was Rs 108,533 whereas the actual total expenditure has amounted only to Rs 83,350-15-11. The difference is thus Rs 25182. This is to be accounted for partly by the smallness of the crop, also because a

Same

sum of $5,000 shown in our Budget for the new Drying shed, does not appear on our debit side, in the year's accounts, And lastly because $5,000 sanctioned for a drying shed at Hooker has not been expended.

Statements B 7, 8 and 9 show the expenditure in detail on all 4 Estates.

9. In connection with this subject the Permanent Advance may be mentioned. At the commencement of the year this advance for all 4 Estates stood at $7,500. Out of this by the 31st March 1883, $2,165-15-9 had been refunded into the Treasury by the Head Overseer and the advance stood as under. —

Recoverable advances	$3,998-0-0
Irrecoverable — do certified by Asst. Supt	336-15-0
— do — do — or by Head Overseer	999-0-3
	$5336-0-3

* see General Remarks

do

It would thus be seen that the advance is now in a much more satisfactory state, and there can be no reason why it should not be cleared off altogether by the end of the current Official year, provided Government sanction the working of from the accounts, the bad debts and irrecoverable advances which have in some cases been carried on from year to year, for a long time. — Regarding this I have written separately for orders. Advances are of course a necessity, and must be made every year. Labor is otherwise impossible to obtain, but there can be no reason why the advances should not be made smaller ones, and be cleared off in toto by the end of each Official year. —

10. — Permanent Plantations

At the close of the year the Plantations

plantations of Neddiwatta
Hooker and Ward presented
a wretched appearance,
in consequence of the effects
of the monsoon, while
Dodabetta looked as
well as ever. At Neddiwatta
thousands of the old Succirubra
had to be cut down to save
the bark. All over the Estate
the trees suffered immensely,
and became stag headed
and threw out suckers
all down the stems. Even
in Kupier, the best part
of the plantation, this
was the case, and topping
and uprooting had to be
resorted to, very extensively
notably in plots III, V. X
XI, XXIV, XXV and XXVI, and
this work had to be kept
up till the close of the Official
Year as the trees continued
to show the effects of the
monsoon long after it was
over. During the dry weather
the bark was sun dried,
and we obtained in all

59

59 bales of dry bark which
has since been despatched
to England. Much more
would have been got
ready, as there were still
large numbers of dying
trees, but our supply of
labor was very small, most
of the Coolies having gone
down to the plains as usual.
Re-uprooting of dying trees
has been going on steadily
since the 1st April. —
Statements 11 and 12 give
the number of trees operated
on during the year under
different systems of bark-
-resting.

11. — The bark-yielding
capabilities of Neddiwatta
are of course very much
reduced now, and it
should be brought to the
notice of Government that
the estate is in a very
different state to what
it was, when the report
called for in GO No 2105
dated

dated 13 August 1881 was submitted to the Conservator. The estate is supposed to be 318 acres planted. From this must be deducted

50 acres uprooted in 1881-82
36 — — in 1882-83
10 — of 1879 coppice
16 — of plot XXVIII, which failed
5 — trees escaped in 1880 in plot XXIII of 1869, which have died off.

117 acres

And what with trees that have died out, or are dying out, and which are now being uprooted or will be uprooted hereafter, another 50 acres may be added on to the 117, making 167 acres in all, or rather more than half of the whole estate. So that there are not quite 150 acres carrying mature trees, at say about 500 to the acre, which can be looked to for the next

four

four years to yield crop. There will be no difficulty in getting a sufficient crop of bark this year, but for the next year and four succeeding ones, it will be very small from Kedowtaum, and after the dying Succinubrums are uprooted on Hooker and Wood, scarcely anything at all from these 2 estates. Of course there are our hybrids now planted, and to be continued this year, but we must give them another 5 or 6 years, by which time they ought to be in splendid condition. There can be no doubt as to the hardiness of these trees, that is those we have been in the habit of calling C. Magnifolia and C. Pubescens according as they are glabrous or hairy. They show no sign

of

of having suffered in the monsoon either from rain or wind. One glance at a mass of chinchona trees is sufficient to enable one to recognize these trees by their robustness, healthy appearance, and straight stems. In all the uprooted succumbed plots, are have left these magnificent or Rubiaceous trees standing, and their vigorous appearance is very striking. - These will of course be as falling off in crop at Dodabetta, for I am glad to report that the trees in that Estate are looking remarkably well. —

12. — During the years under report 87902 plants were permanently put out at Neddivattam, in plots XVIII, XIX, XX and XXI, which were uprooted in 1881-82, to the extent of about 40 acres, consisting of

77.000

77000 C. Pubescens 10,000 C. officinalis, 900 C. Calisaya and 2 Carthagena. The young plants at the close of the year looked remarkably well and the planting has been a very great success. I think I may say that not more than 5 per cent have failed and the plants are now well established and growing vigorously, and not likely to fail. This success is due to our having waited till the worst of the storms were over before we commenced our planting, which will compare very favorably with any private planting or neighbouring Estates. The number of Nilgiri trees on the whole Estate was reduced by 21,376, partly by uprooting and partly by cutting

Re

The whole land denuded of its trees, has been replanted 4×4, and we have 20 acres of this year, and about 10 acres from last year or in all 30 acres; and plants are now ready in our nurseries, and at the proper season the whole of the available land will be planted up principally with C. Pahoensis. Of the 6 Carthagenas received last year at Neddiwattam, two were planted out in plot XXIII, and two in Nursery No 1, these last two were killed by hail in May 1882; two more were subsequently put out in plot XV, and made good progress, the height of the tallest on the 31st March was 3 feet 7 inches. The

Calisayas

Calisayas in plot XV made good growth, and show the true type of Ledgeriana.

13.— On the Hooker estate the number of bark-yielding trees is enormously reduced, partly on account of uprootals and cappings, and partly in account of trees dying out re and at the close of the year the remaining trees planted so sickly an appearance that we must uproot some acres this year, or we shall lose all the bark, and next year I am afraid this estate will yield no crop at all. On this plantation 70.0 20 plants, mostly C. Officinalis, were put out. Of this number 43.600 were renewals and are therefore not included in the balance sheet at the close of the year. The

planting

planting was, I regret, to state, almost entirely a failure, owing to the effects of the monsoon. The plantings on this Estate, during the last few years have been so unsuccessful, that I should question the advisability of continuing them, and would rather concentrate all efforts on the two principal plantations of Keddawatta and Dodalette. The number of mature trees on the Estate was reduced by 7,489.

14.— At Dodalette 84,860 plants were put out consisting of C. officinalis and C. magnifolia, in the marginally noted plots, some as renewals, and the remainder between the original rows of trees

		Plants
Block	7	13,140
"	8	1760
"	9	7,800
"	11	4,350
"	12	210
"	13	7,330
"	16	3,900
"	23	10,980
"	27	10,900
"	30	2,500
"	31	3,700
"	32	6,470
"	36	7,790
"	37	10,450
"	39	230
Total		84,860

trees, as the lines are sufficiently far apart to allow of interplanting. The planting has been very successful, and at the close of the year, the plants all looked very healthy, and had made satisfactory growth. The number of mature trees was reduced by 960, of which 131 trees were uprooted and 829 were coppiced, as they showed signs of dying out. Of the two original Santa Fé plants, but one in Plot VII in 1881-82, one had to be removed to the Propagating House, as it was very small, and looked sickly, the other has made but little progress in growth, though it looks fairly healthy. There are two other plants of this variety in the Propagating House, one looking healthy and the other sickly. The size

Carthagena

Carthagena plants put out in the same plot VII, have not made much progress, though they look sturdy enough. Dodonaea is so doubtful for high for this variety, as the same plants at Keddington have grown much more satisfactorily. 1330 Eucalyptus globulus plants were planted out around the boundary of the estate, which will be useful, as a protection against the force of the wind, and also serve for the supply of fuel hereafter. —

New Zealand flax was planted in rows, one foot apart in the steeper places where necessary to prevent the soil being washed away.

15. — The wood setts at the close of the year looked very

very unhappy, the trees with the exception of a small portion, all looked very sickly, with a very meagre show of foliage. A very large number must necessarily be uprooted this year. This setts will yield little or no crop after this year for the next few years to come. — 61,500 plants were put out, principally C. officinalis and about 8,000 Succirubras as renewals in plot F, but there because the whole plot consisted of C. Succirubra and it is too low for C. officinalis and there were no more hybrid plants ready for planting out, available. In addition to these about 3,000 Ledgeriana plants were put out in plots VII and IX. The planting was however rather unsuccessful, and at the close of the year there were

were many failures, also with the Ledgeriana plants, both of this last year, and of the previous year. It should be mentioned also that Caterpillars do much damage on the Estate, and undoubtedly did much injury to the young Ledgeriana plants, which we have had now to prune in as well as we can. The planting on this Estate too, seems destined to be a failure, the subsoil is I am afraid much against it. Of the mature trees, 5418 were cut out, partly dying and partly dead ones.

16.— The following statement shows the present state of the 4 plantations as compared with that, at the close of last Official Year, and the number

of trees uprooted and supplied and also the number planted out during the Official Year under report.

Plantations	Number of trees on 31st March 1882.	Number of trees uprooted	Number of trees supplied	Number of plants planted out	Balance on 31st March 1883.
Neddiwatte	170054	12624	8752	87902	236580
Pykara { Hooker	236557	705	6784	26420	255482
Pykara { Wood	46902	3467	1957	61500	102984
Doddabetta	288849	131	829	84860	372747
Total	742356	16927	18316	260682	967793 *

* See General Remarks.

In the Column of plants pla
out during the year,
only those are shown which
have been freshly put
out, and renewals are
not taken into consideratio
in the statement, and
it should be clearly
understood, that although
of the number of plants
shown as planted out
in 1882-83, many may
now be dead, yet mea
much as such casualties
will all be renewed this
season

Remission, and such renewals not afterwards taken into account, the number now given may be accepted as perfectly correct. —

16. — Upkeep of Plantations Conservancy.

Keddiwattam and Hookes.

Both estates were efficiently manorky-weeded, and the weeds buried in renovation pits, dug for the purpose near the trees in all plots: all the roads, drains, and bridges which were destroyed and washed away during the Monsoon were repaired and rebuilt. a new road was cut through plot X at Keddiwattam, as it was found that the plot could not be worked with one road only — and in this Estate also, the road leading from

from the cattle sheds to the public road, cutting in at the 9th mile-stone, was widened out, and very nearly finished by April 1st. The object of this is to render it serviceable for carts, (which was not the case before) to bring manure down to the lower plots in the Estates. A length of about 2 miles, for this road alone, will be effected by this. In all places where landslips had occurred, rough stone revetments were constructed to support the roads. At Hookes the cart road leading from Ossington lines which had been much cut up in the rains was put into thorough repair, Catch drains were

opened

opened out, and new side drains were cut. The Knowsley River bridge was thoroughly repaired. The bridge from destruction was more fortunate as two bridges, both above it, were carried away. A small piece of road near our new Clattram was cut, as the old piece was taken up by the building site of the Clattram. —

Orchardetta. The whole plantation with the exception of a few small plots where it was not necessary, was weeded, and many plots were weeded 2 or 3 times, especially those in which young plants had been put out

into plots Nos. VII VIII. XXXVI and XXXVII and portions of plots XXIV. XXX, XXXIII, XXXIV and XXXV, where the soil is in parts, gravelly, and in others, hard and poor, were dug up deep. The roads, drains, and bridges and water channels, were kept in good order. — 4,112 yards of rough stone revetment were constructed, partly along the upper road sides, and partly in some of the plots, where it was necessary to prevent the soil from being washed away. —

Wood. The whole of this Estate with the exception of a part of plot IX where there are no trees, was well weeded. In all cases the weeds were buried

buried in fermentation pits (of which 42·336 were dug) in plots II, VI and VII.— 49² yards of rough stone revetments were constructed along the sides of the roads, and in the plots to prevent wash. All roads, drains, bridges &c were kept in proper order.—

17— Manure.—

Cultivation. Cattle manure was largely collected and applied to trees growing in plots VIII, IX, XII, XIII, XIV, XX and XXIII, and Horse Dung in plot III. A quantity of manure was collected at Nos near Clatham. No beneficial effects arising from manure previously applied, were noticeable, all trees having suffered so much from wind and rain, that they all looked the same, and it was not possible to distinguish between those that had been manured, and those that had been left alone.

The same remarks applies exactly to trees which were manured in April of the Official year under Report, with the patent manures, as crushed bones, stable manure, Superphosphate &c, which were ordered to be tried in G.O. No 962, dated 21st June 1881, and which as reported in para 6 of last years Administration Report, appeared too late to be used during official year 1881-82.

These manures were applied in all to 3211 trees, Specimens and Specimens, in plots XX, XXV and XXIX. In January, the Head Owseer reported that no beneficial results were apparent

and

and the same in March, when it was found that the manures were not sufficiently decomposed, to justify our Collecting specimens of bark for analysis. I recommend therefore that another 6 or 8 months be allowed to elapse, before such a Collection be made, when the result might be reported on, in the next Administration Report.

Dodabetta and Wood manure was largely Collected from Cattle sheds and Kraals on both Estates. - at Wood Estate Forty buffaloes were kraaled at the mines for 3 months. Fifty one tons of Pandrette were purchased from the Ootacamund Municipality, forty of which were applied at Dodabetta during the year, the remainder being kept for use during the current official year.

The number of trees manured at Dodabetta was as follows:-

Plot XII 5060 trees with Pandrette
" XVIII 7000 " " with Cattle manure
" XXXVI 5100 " "

17160

The results of this application should be carefully investigated before long, and Conclusions arrived at, as to the effects produced on the bark, by the various manures. This might be reported on in next years Administration Reports.

18. - Nurseries.

Seedwattans and Stocks

In addition to the seeds shown as distributed in Statement No 13, 2 pounds of Eucalyptus seeds were given to Mr Jamieson in exchange for 2 pounds of acacia Melanoxylon. 5 pounds

found of C. Pubescens and were sent to the Ceylon Government, and 42 lbs of Pubescens and 46½ lbs of Officinalis and was sent to the Head-quarters Office for distribution to the public, and 4 7/10 oz of seed of different varieties was exhibited at various shows, and finally handed over to Dr. Bidie C.I.E. Two hundred and thirty one thousand plants as under:—

C Officinalis : 96,000
C Pubescens : 132,000
Other varieties : 2902

were actually issued, some for the public, and the rest for Government estate during the year. 2000 Calisaya plants were transferred to Mool Estate. The crop of seed this year, will be far below the average, as the trees have suffered so

as from the monsoon, but this is rather a better for comparison as the trees are all so sickly, and not equal to the drain of a large quantity of seed.—

Dodabetta and Mool

a very large number of plants and seedlings were raised during the year, and 69,056 plants, and 134,252 seedlings, principally Officinalis and Magnifolia were distributed to the publics, and the balance in stock on 31st March was as follows:—

I Propagating House

C. Crispa seedlings	1000
" Magnifolia "	1500
" Angustifolia "	1500
" Calisaya "	15
" Pitayo "	8
Total	4023
C. Carthagena, rooted cuttings	40
C. Pitaya " do	25
C. Ledgeriana " do	5
C. Santa Fé " do	1
Total	71

C. Carthagena plants — 1
C. Santa Fe — 2
C. Cabanya — 2
Total 5

II. Nurseries

C. Magnifolia plants - 30.000
C. Condaminea — 300.000
C. Peruviana — 5.000
Total 335.000

Work Nurseries

C. Ledgeriana plants 1.700
C. Hybrid — 500
C. Condaminea — 120.500
Total 122.700

460 pounds of seed, principally Officinalis, were Collected and 379 were distributed to the publics, including what was sent in to the Seed-Office for the same purpose: About 80 lbs of seed, C. Officinalis, remained in stock on the 31st March.

Statement

× C. Officinalis and C. Peruviana 55-0 / 4-9 = 59-9

Statement No. 13 shows the number of plants and seedlings and the quantity of seed sold to the public during the year: There was a very large demand for seed, during the last five months of the year under report, and that for hybrid seed of the Ledgeriana variety, was far in excess of the possible supply. People are again very anxious to get C. Succirubra seed, but little could be supplied before the close of the year, although much has been sent out since. No permission to issue seed to was taken away from the subordinates for various reasons, and it is now issued

issued direct from this Office, and though this has added much to the work of the Office, the results are I think, on the whole, much more satisfactory. At the close of the year, the nurseries on all 4 Estates were well stocked with plants and seedlings of C. Officinalis, C. Calisaya, C. Magnifolia and a few thousand C. Led. Javanica. —

19. — Crop. —

The total crop for all 4 Estates Amounted to 135,016½ pounds of dry bark including 5,304 pounds of Moss, the balance in stock on the 31st August 1882. In para 11, of the Budget Estimate

Estimate for 1882-83, embodied in G.O. dated 21st December 1881, the Collection of Bark, is put down at 165,000 pounds, namely 60,000 lbs Doddabetta, and 105,000 lbs Neddivattam and Pykara. We have fallen short of this amount by nearly 30,000 pounds. This was unavoidable, owing to the difficulties we had to deal with, during the exceptionally heavy monsoon, as explained in para 7. —

The crop was distributed over the 4 Estates as under,

	Neddivattam	lbs
Natural Red		23,225
Mossed — a		15,225
Renewed — a		14,325
Branch — a		10,313
Root — a		5,500
Dust — —		1,300
Natural Crown		1,400
Mossed — a		300
Renewed — a		600
Branch — —		100
Mixed — — —		16½
Total		72,444½

* The crop of Hooker Estate was dried at both Neddivattam and Neddivattam drying houses and 1,900 lbs of Churbark included under Neddivattam properly belongs to Pykara.

Dadabetta

	lbs
Natural Crown	11.440
Mossed — a	12.089½
Renewed — a	11.078
Branch —	4.178
Root — —	111
Dust — — —	100
Natural Pata	41
Mossed — a	206
Renewed — —	111
Total	39304½

Pykara

	lbs
Natural Red	9.631
Mossed — a	1.805
Renewed — a	6088
Branch —	2346
Root — — —	92
Natural Crown	1124
Mossed — a	409
Renewed — a	1114
Branch — —	244
Root — —	105
Dust — — —	310
Total	23268

Grand Total 195,016¾

Re-

—

the bark collected was on the whole of an inferior kind, having been taken from dying trees for the most part. It will be observed from Statements Nos 11 & 12 showing the number of trees decorticated under different systems during the year, that the proportion of green to dry bark is greater than 3 to 1, which is generally speaking, the average. The reason for this is, that the bark taken from felled trees during the rains, got so saturated and unavoidably mixed with mud and foreign matter, which made the weight of the green material higher

higher than it otherwise would have been. It is becoming more and more difficult to procure mules. During the year we sustained a heavy loss in grass.

Re Conveying barked trees, by the road on which a large stock was placed having fallen away under it during the rains. —

20. — The bark was disposed of as follows:—

	lbs
* Shipped to the Home Market	62,518
Sold Locally	69,327½
Samples	284½
Balance in store on 31st March 1883	2,887
Total	135,016¾

Among that shipped to England include 59 bales, the contents of which

	lbs
* G.O.M. 631 of 15 June 1882	5,304
— 108789 Octobre —	8,500
— 137697 Dec —	17,133
— 223 of 6 Febry 1883	9,100
— 430 of 10 April —	16,581
— 552 of 4 May —	5,900
Total	62,518

which were cropped during the official year under report, but could not be dispatched till soon after the 1st April of this year. I believe I am right in doing this. The value of these bales has also been shown under "Receipts" of the bark left in store on 31st March, namely 2,887 pounds, the details of which are as marginally noted. I have to say, that it is all refuse bark, and of little or no value, at the outside 4 annas a pound. It may during this year either be sold locally or shipped to England. As regards the local sales, as noted above 69327½ pounds of bark with 284½ pounds of samples

	lbs
Dodabetta Crown	450
Pykara — —	1180
— Red	1257

samples alone offered for sale by public auction, by messrs Oakes & Co realizing in all Rs 10,396-0-1 Rs or £1-9-0 a pound, all round.—

Government have recorded their satisfaction at the result of the sales in the minute originally noted G. Os. I have nothing to add hereto, that which I previously reported on the subject beyond repeating my opinion, that in the event of any further sales being held, only the inferior kinds of bark (principally red) should be offered for sale, and I consider that the results of the sales justify this conclusion.—

Buildings

G.O 23d Nov 1882 No 1307
— 5th March 1883 No 323
— 24th April 1883 No 1662.

21.— Buildings New

A good deal was done during the year towards the completion of the new drying-shed at Keddiwattam. By the 31st March, all the outside brickwork was finished, and there remained the furnaces and flues to complete, together with the roof and inner fittings.— The roof could of course be put on, but nothing could be done with the inner fittings till the furnaces and flues were completed. There then appeared no reason whatever why the whole building should not be ready before the monsoon set in, but the slow progress that has been made since

the

the 1st April, first turned the certainty into a hope, and the hope is now an almost certain disappointment. The packing-store was got up to the basement, long before the 31st March, and nothing more was done to it up to the close of the Official year, and nothing has been done to it since. ——

The Chattram at Neddivattam sanctioned by Government in G. O. 23rd May 1882, No. 452, R.D, was built during the year, and opened to the public in February last. *

* see General Remarks.

Two new huts were erected at Dodabetta, Constructed out of some surplus stone, and zinc-sheeting, remaining

remaining over from the 2 Cattlesheds which were erected in the previous year, and a small room close to the new Nursery adjoining the drying-shed at Wood, was built, and roofed with Corrugated iron. ——

22.— Repairs

Neddivattam and Stooker.

The roof of No. I bungalow was taken off and refitted and tiles put over the Corrugated iron.— The roofs of the Clerk's and Overseer's quarters, which formerly consisted of thatch, were taken off, and corrugated iron substituted. In addition to this, the end walls of both had to be thoroughly repaired, those

of

of one having twice collapsed altogether, and of the other, the walls were so cracked and considered so unsafe that they had to be pulled down and rebuilt, but fell down again, and had to be a second time rebuilt. Repairs were done to the old drying and packing sheds, as in consequence of the new ones not having been got ready, we had to make use of the old buildings again. As almost every building suffered in a greater or less degree during the monsoon, repairs had to be undertaken largely and at the close of the year, all buildings were in good order and thoroughly whitewashed

whitewashed and clean. All Doddabetta and Wood necessary repairs were done to all buildings on both estates. —

23.- Experiments Neddivattam and Stubbs

The growth of the block Coppice of 1879, particularly in plots VI and VII, below N.I Bungalow, at the close of the year was superb, and I think some of it ought to be cut over again this year, certainly next year.

The 1871 Coppice, Plot I, Neddivattam - 200 trees which were cut for the second time in March 1881, made good growth, at the close of the last Official year, 87 stools had thrown up suckers. The maximum height was 8 feet, and girth 5 inches.

The upper unbarked portion

portions of the stems of trees which had been previously barked, in plot XII, were sliced and 1,900 pounds of dry bark was obtained. Slicing or scraping was also resorted to in plot No XX, and 323 trees previously unbarked were treated in this manner, the yield of bark was 500 pounds. 57 trees were missed and 239 were grazed 17 were sliced in strips and not covered at all, which 6 trees treated in the same way were covered. The result of this experiment was not satisfactory. The Head Owner kept careful notes on the subject and was able to report that the bark had renewed in about

3 months, and that the trees looked remarkably well. Some of them should in my opinion be barked again this year and the bark analysed and the difference if any, between scraped trees, missed trees, and trees left unmolested noted. ——

Dedabetta and Bord

The 500 trees, which were treated under the scraping process in plots V and XXVIII in 1881-82, are doing well. The bark is well renewed and will be sliced again this year. ——

The application of new Zealand flax as a Coating to barked trees proved a failure, and the bark renewed satisfactorily. The

following

following statement shows the present Condition of the 1879 Coppicing, on all 4 Estates with maximum Lengths and girths. —

Plantations	Plot	acres	Number of trees Coppiced	Number of Trees Stumps Spirmed	Number of Failures	Max. length	Max. girth
Dodabetta	XI	5·00	3956	3241	15	8¾	6¾"
	XVIII	5·00	2493	2096	397	8'	6"
	Total	10·00	5849	5297	552		
Wood	VIII	5·00	2540	1302	1238	15'	11½"
Neddivattam	VI	0·25	56	56	0	15¼'	12"
	VII	4·75	2263	2215	48	15'	12"
	XXIII	5·00	2628	1663	965	15¼'	11"
	Total	10·00	4947	3934	1013		
Stokes	XI	5·00	2226	977	1249	13'	12"

24. — Firewood Plantations.

Neddivattam. An extensive Nursery Containing over 100000 of Eucalyptus globulus seedlings was completely destroyed by

by the rains the seedlings having all rotted off, and out of 9400 Eucalyptus plants remaining not one but only about 1000 are living, the rest having died off. Even the Acacia Melanoxylon plants, put out in the previous year, looked sickly, and made but poor progress. No planting of Australian trees for firewood and other purposes, will however be actively carried on this year, and we have formed good nurseries; and sown 2 pounds of Acacia Melanoxylon, and 3 pounds of Eucalyptus globulus and 1 pound of acacia decurrens seed, all of which will be germinating

Seriously planted out this year. On the boundaries of the estate, the land is already pitted to the extent of 50 acres.—

The acacia decurrens is to be planted at Reddawattum to give it a trial in that locality, in the same way as it is to be tried in other parts of the Hills, under different conditions. There is no more land available at Dadalella for firewood planting, and failures only will be planted up. The firewood for the furnaces during the year, was obtained partly from the stumps of uprooted trees and partly from jungle-wood

* of Reddawattum

wood cut within the boundaries of the estate and for the current year, the supply has been obtained by cutting in a small sholah within the estate boundaries near the Maswechy bridge.

25.—Labor

The supply of labor on the Dadalella side was scanty, owing to the number of private plantations which were opened out, the proprietors of which pay the Badagas more than we do, while on the Reddawattum side it was excessive, as there we depend almost entirely on Contract labor, and the number of coolies contracted for by the Head Darsan

ab

ab the suggestion of Mr. Rowson, proved to be too many for the stakes' requirements. No loss however ensued in consequence of this, as, by employing them on repairing the public road, during the monsoon. Full work was given to them all. Care has been taken to prevent the trouble arising again, and in the new agreements, I have contracted with the Maistries for the smallest number possible, casual daily labor to be employed in cases of emergency and I have also inserted a Clause in the agreements, to the effect that, if necessary the Maistries must work on the Dodabetta side.

No

This was not done last year and they refused to go to Dodabetta in consequence. The labor this year at Dodabetta too, will be in a much more satisfactory state as the chief Superintendt has arranged with new Maistries, to bring their gangs of Coolies to Dodabetta, when ever required. —

26. General Remarks.

The health of the laborers during the year was satisfactory on the whole, and none was absent on sick leave - As regards Conduct, I have no Complaints to make. Mr. In one case Donald was dismissed, but this was for misbehaviour before my time. Mr. Narrainsawmy Naidu did his work in the most excellent manner as he always does, and Mr Killin

Carried

Carried on his work ab-
Neddivattam, in spite
of many hardships, in
a very praiseworthy way.
The out-turn of work for
the year will show that
there was nowhere any
neglect of duty.

27.— The new Chattram
near Neddivattam as
stated in para 21 was
built during the year,
and thrown open to the
public in February last.
It was a Capital Chattram,
well designed, well built
and clean. The situation
is good, and during March,
the Head Overseer reports
that the average daily
attendance of carts was
20, and the maximum
37.— On the first days,
Carters were induced to
halt there by having grass
and firewood supplied
free to them. After a
time, this was stopped
almost

almost entirely, and grass
is now only given in special
cases. The building and
management of the Chattram
reflect much credit on the
Head-Overseer.—

28.— In G.O. Oct. 1286 dated
20th November 1882, the land immedi-
-ately adjoining the
Chattram, and between
it and the plantation
boundary was made
over to the Chinchona
Department, and the
land lying between
the Neddivattam and
Stokes Estates was in-
-cluded in a Notification
submitted to Government
of land, proposed to be
reserved — and the re-
-servation of this land
will give the Chinchona
Department control over
a very important stretch
of land outside the plan-
-tation boundaries, Con-
-necting all plantations

on

on this side one with the other. —

29. — It may be brought here to the notice of Government that the location of the Stand Overseer's bungalow is about as bad a one as could be selected. It stands near the Kanigton boundary of our plantation, and very much out of the way and removed, being far both from the Superintendent's bungalow and the drying shed, the distance from the latter having proved a serious inconvenience during the monsoon when the bridges were submerged, and the Stand Overseer had to go long rounds to his work, and in case of fire, it would be most serious for the Stand Overseer to be so far away and great loss might follow to Government. Thus

Can

Can be no doubt that the Stand Overseer's house should be on the same ground, and as close as possible, to the drying shed, in the same way as the house at Dodabetta is, for this is the very centre of operations in the plantation. The question of a proper water supply for the Superintendent's bungalow should be considered. This has been repeatedly written about for orders - at present, water has to be brought from a distance in a cart as Mr. Lawson will no doubt spend much of his time at the Addiattam, it would be more convenient and less expensive in the long run, to have water brought to the bungalow by means of a cut water channel.

30. — As regards the Receipts of the year, it may be

kept

thought that they compare very unfavorably with the Budget Estimate. It is true that there is a very considerable difference, but it should be borne in mind that our crop is much smaller than was expected and in my opinion, the value of the crop when the Budget Estimate was framed at was taken too high a figure, and one, which would seldom be realized at home. I have taken the value of the whole crop to be Rs 3-0 per pound all round, as this I hold to be reasonable, inasmuch as it is an average, obtained in an open market at 4 different Auctions, from the sale of about 85,000 pounds of bark, realizing in all about 1,24,000 Rs. This average is really the present market value for the bark

bark we sold consisted of all kinds from the very best to the worst, and our sales were spread over 15 months during which time the prices at home fluctuated very considerably. If I had now taken the value of the bark all round, to be roughly Rs 2½ per pound, our receipts would have been about 3,40,000 Rupees, which brings us very close to the Budget Estimate. Even as they stand, however, they compare very favorably with the Expenditure.—

31.— Some objections may be taken to my having substituted 4,10,000 Rs for Rs 5,00,000 as the Budget Estimate. This is however, unavoidable. It has as I have before shewn, always been the custom for the crop of one

one year to be taken into
Consideration as the
receipts of the following
year, this is the very
Confusing way of keeping
accounts, and as the change
has to be made, whereby
the Crop of a year becomes
the basis, on which the
receipts of the same year
are calculated -, a
change in the Budget
Estimate figures is
also necessary. This
Estimate 4,10,000 Rupees
refers to the crop of
1882-83 and as this crop
appears in the receipts
of 1882-83, the Estimate
referring to that crop,
must be taken. I am
aware, that no Estimated
receipts from local sales
are included in the £4,10,00,
and that such receipts
are included in our
Statement for 1882-83,
this however of no im-
portance

portance as the whole
crop is worked out ab
its market value, namely
£1-9-0 per pound, all round.
To set the matter quite
right, it remains only
to alter the figures of
the Sanctioned Budget
Estimate for 1883-84 from
4,10,000 to £ 2,35,000
the market value of
150,000 pounds of bark, the
Estimated crop for the
year. In the preparation
of a balance sheet
for the plantations,
the value of 232,467
pounds of bark sold
time during 1881-82,
and which is not
shown in the receipts
of 1882-83, must be in-
cluded. The value
of that crop, was
Estimated to be
£ 5,00,000 and this

In

vide para 2 of G.O. No 1409
dated. 14.12.82.

Sejiure may be added to, or the present Estimated value of Crop namely Rs 1-7-0 a pound all round, may be taken. I should think the original Estimated value in this case as given above, is the proper one. This is the only item that requires to be included under receipts, in the balance sheet, every thing else has been accounted for.

32. — The amount shown under Permanent Advances as recoverable, namely Rs 3998-1-0, consists of all new advances which have been made this year; and old advances not yet cleared off, for which fresh agreements have been entered into, all of which are good debts and will be gradually paid

paid off during the current years. —

33. — It will be observed that the stock during the year has increased by about 2.25.000 plants. I have recorded my opinion above, that the crop for the next few years will be much reduced in quantity. The Estates Stocks and Work are in a particularly poor condition and are apparently getting worse year by year. When our present plantings, which consist so largely of hybrids, are fit to bark a few years hence, then the value of the Estates will have enormously increased both in quantity and quality of bark. It is a great satisfaction to note the good growth of our young

ywing Pubescens, and looking to the very excellent Condition of the old hybrids, Consider what a good Justness is before Them.

34.— I regret that but little progress has been made towards opening Plantation books. It is an exceedingly difficult thing to do for the Past, as the accounts are all mixed up in such a way, that it is not possible to ascertain what particular Expenditure was incurred on particular objects. For the present, and for the future, it will be an easy task, as the system of accounts is now much more defined and improved, and careful notes on

on all points are kept, as well as diaries by all subordinates. I should think it would be a good plan to appoint some intelligent extra writer to undertake the work of opening Plantation Books, and getting up the details as well as possible, from the materials available, for the first 10 years of the Plantations. I am sure that nine among the subordinates have time to do it, and the Superintendent certainly has not. — The writer would work under the orders of the Superintendent. —

35.— The Abstract Statement of Receipts, Expenditure &c &c, ordered by Government — in G.O. No. 3137 dated 25th September 1862 is appended and forms Statement at p. 14. —

It

36.— It is much regretted that the Chinchona Administration Report for 1881-82 was not as carefully put together and with as much detail as it doubtless would have been, if the Officer who was in charge of the Plantation for the year, had written it himself. I had the preparation of it, and was dealing with facts, concerning which I knew nothing personally. The remarks and questions put by Government, in their order No 66 dated 17 January 1883, I will now briefly answer.—

Para 4.— The receipts for 1882-83 refer to cash obtained and sold locally of the same year.—

Para 4.— The excess over the sanctioned Budget Estimate

Estimate was due to the uprooting of Succirubra at Neddivattum.—

Para 4.— Mr. Stillie the Head Overseer, explains that the balance in stores at the close of 1880-81, was partly at Ootacamund, and partly at Neddivattum,— that, at the former place, was in bales, and had been weighed, while at the latter it was all loose, and was roughly estimated, and included in the Closing balance, and that subsequently having been shipped to England with other bark of 1880-82, it was left out of the opening balance though included in the year's crop. The opening balance of 1881-82 was then given at the actual amount in Stores at Ootacamund.

Para 4

78)

Tonight it is clear that there was considerable carelessness in keeping the accounts, still, I see no reason to doubt the accuracy of the Head Overseer's statement.

Para 6.— The discrepancy referred to as existing between the Conservator's figures and the crops actually shipped Lowe, is due to an error on the part of Sadasivam, in their enumeration.

The 488 bales of last year referred to in G.O 16 May 1881 No 771, should not have been included, as they formed part of the Crop of 1880-81.—

The first Consignment of crop for 1881-82, begins with G.O No 1079 dated 15 July 1881, and the last ends with G.O No 943 dated 1st May, 1882, which Sadasivam & Lowe omitted altogether.

The

G.O 15 July	1881	No 1079	5,697
" 2 Nov	"	" 1629	44,186
" 19 "	"	" 1758	32,414
" 17 Dec	"	" 1945	23,534
" 16 Jany	1882	" 53	15,929
" 6 Feby	"	" 159	20,400
" 21 "	"	" 223	14,521
" 8 March	"	" 271	36,720
" 1 May	"	" 443	39,066
		Total	232,467

4/2/1131/79

The Consignments are as marginally noted, and the total agrees exactly with the figures given by the Conservator para 7.— We received back at Hooker and Ordabetta Counterfoil C. Officials.— Para 7.— The planting at "Ward" of 20,000 Succirabra as renewals was done by order of Mr Rowan, and probably long before the receipt of G.O dated 29 August 1881, No 1281; they were put out in Plot I which consisted of pure Succirabra, and likewise Lowe, and too much so for C. Officinalis, and as I am informed, there were then, no Hybrids available. These were I do not doubt, Mr Rowan's reason for planting back on C. Succirabra.

para 7

Para 7 — As regards the Succisubra seedlings raised and thrown away I can only say that it was most unfortunate. The seedlings were raised, because it was thought there would be a demand for them. The taste of the public, changes from year to year, very much, and this year, if we had had them in our nurseries, we could have sold them largely for the demand; for. C. Succisubra and has it; year been very great. Now we have no Succisubra plants or seedlings, but we have officinalis, and from my experience of the last few months I think it probable that a very large number of them will have to be grubbed up, and thrown away. —

I have the honor to be
Sir
Your most obt. servt.
H. A. Cary.

Dr Commissioner of Forests

No 1

Statement showing the Rainfall at the Government Cinchona Plantations Darjeeling during the Official Years 1882-83.

Months	for 1881-82 Rainfall	for 1881-82 Number of wet days	for 1882-83 Rainfall	for 1882-83 Number of wet days
April	1.16	3	4.87	8
May	13.14	18	6.48½	11
June	1.30	18	8.12	22
July	3.02½	13	11.22	24
August	9.24	24	6.10	24
September	3.34	17	3.34	16
October	3.67	11	10.29	18
November	7.69	20	8.30	16
December	3.09	6	0.35	4
January	2.58	4	0.01½	2
February	.	.	.	.
March	0.49	2	3.36	10
Total	48.71½	136	61.35¼	160

Pashcommund
13 June 1883

H. A. Gass.
Sr Conservator Forests
in charge

Is
Cinchona

No 2.

Statement showing the Rainfall at the Government Chinchona Plantations Nedivattam during the Official year 1882-83.

Months	For 1881-82 Rainfall	For 1881-82 Number of wet days	For 1882-83 Rainfall	For 1882-83 Number of wet days
April	0·50	2	1·21	4
May	3·77	14	6·54	19
June	9·87	26	34·70	25
July	24·13	22	102·11	30
August	17·90	28	16·94	27
September	4·54	20	12·61	25
October	3·55	13	12·20	21
November	7·02	16	5·71	14
December	1·40	4	0·11	2
January	0·54	4	·	·
February	·	·	·	·
March	0·21	1	2·80	11
Total	73·73	150	194·93	178

Ootacamund
13th June 1883

F. A. Lees.
Superintendent of Forests
in charge

Statement showing the Rainfall at the Government Cinchona Plantation "Hooker" during the Official year 1882-83.

Months		Rainfall	Number of wet days
April	1882	0·25	1
May	"	8·23½	19
June	"	29·03	21
July	"	61·87	31
August	"	13·16	25
September	"	10·21	19
October	"	11·56	20
November	"	6·50	16
December	"	0·01	1
January	1883	"	"
February	"	"	"
March	"	2·71	10
Total		143·53½	163

Postage amount 13 June 1883

H. H. Cross
Dr. Conservator of Forests
Cinchona Plantations

No: 4.

Statement showing the Rainfall at the Government Cinchona Plantations Nuwara during the Official year 1882-83.

Months		Rainfall	Number of wet Days
April	1882	0·86	5
May	"	9·07	18
June	"	26·08	22
July	"	21·09	31
August	"	13·74	27
September	"	10·01	22
October	"	14·16	20
November	"	7·22	18
December	"	0·12	1
January	1883	"	"
February	"	"	"
March	"	2·66	9
	Total	155·01	173

Peradeniya
13th June 1883

T. H. Lewis.
Dr Conservator of Forests
in charge

No. 5

Statement showing the Receipts on account of the Government Cinchona Plantations in Nilgiris, for 1882-83, Calculated in accordance with orders of the Secretary of State vide G.O. No 1163 dated 23rd October 1882.

Particulars	Actuals for 1882-83	Sanctioned Budget Estimate for 1882-83.
Value of bark cropped (1,29,712¾ lbs)	83,350 15 11°	1,08,500 . . x
Sale proceeds of seed and plants	4,200 7 10	7,500 . .
Miscellaneous	1145	
Total	87,696 7 9	1,16,000 . .

° Actual charges incurred in collecting the crop of 82-83. —

x Sanctioned expenditure for collecting 165000 pounds of bark, the estimated crop of 1882-83. —

(Calcutta 13th June 1883)

H. Cross.
Dy Conservator of Forests
in charge

Statement showing the Receipts on account of the Government Cinchona Plantations & Nilgiris for 1882-83, Calculated according to the market value of the Bark.

Particulars	A Actuals for 1881-82 *			B Actuals for 1882-83			C Sanctioned Budget Estimate for 1882-83			D Sanctioned Budget Estimate for 1883-84.		
Value of Bark sent home	5,22,000	—	2	97684	6	°						
do to Bombay	1,531	2	4	.	.	.						
" sold locally	15,660	1	7	106396	.	1	5,00,000	.	.	410,000	.	.
Sale proceeds of seeds and plants	6,048	1	5	4,200	7	10						
Miscellaneous	1,605	1	4	145	.	.						
Total	5,24,824	6	8	208425	13	11	5,00,000	.	.	4,10,000	.	.

* Entered for the sake of comparison. — "The value of bark sent Home" is actually the value of crop taken during 81:82. —

° Value of 62518 pounds of bark sent Home during 82:83. —

* vide para 2 of G.O.No. 1409 dated 15th December 82.

Explanation for the above Statement of Receipts.

The Budget Estimate for 1882-83, namely Rs 5,00,000, refers to the crop of 1880-82. The Budget Estimate for 1883-84 namely Rs 4,10,000 refers to the crop of 1881-83. The Receipts here given are the crop of 1882-83, therefore the Budget Estimate referring to that crop, namely Rs 4,10,000, should be considered, in reviewing the financial results of the year. —

The Regular Estimate of 1882-83 was Rs 6,38,000. This is made up of Value of Crop during 1881-82, namely Rs: 5,00,000, [illegible] of bark sold locally during 1882-83, and other miscellaneous receipts. The Comparison is very favorable.

Under the old system of keeping accounts Rs 97,684-6-0 the value of crop sent home during 1882-83 would have formed the Receipts for 1883-84. This would no longer be case, therefore the Budget Estimate, for 1883-84, namely Rs 4,10,000, which refers to the crop of 1882-83, will have to be discarded, and fresh figures substituted. This has been explained elsewhere.

Recommended
13 June 1883

H. Ellis.
Dy Conservator of Forests
in charge

No. 7

Statement showing the Expenditure in detail on the Dodabetta Chinchona Plantations for the Official year 1882-83.

Months	Nurseries: Establishment	Labor	Postage for seed	Collection of seed	Postage on seed	Working charges: Roads	Building	Fitting & Planting	Various	Manure	Buildings: New	Repairs
April 1882	220 7 9	70 " "	23 " "	98 1 6	" " "	9 11 "	291 7 6	207 8 6	96 8 "	639 3 "	" " "	" " "
May "	176 " "	73 14 6	23 " "	26 1 6	13 8 "	14 1 "	228 10 "	197 2 "	96 3 "	378 7 "	" " "	6 14 "
June "	160 " "	49 5 "	23 " "	12 13 6	3 7 15 "	32 5 6	375 4 6	69 7 "	93 9 "	127 4 "	" " "	71 9 "
July "	166 12 5	40 11 6	23 " "	9 " "	16 12 "	71 13 "	64 9 6	44 11 "	78 10 "	30 " "	" " "	" " "
August "	320 " "	48 7 "	23 " "	23 " "	9 12 "	14 5 "	4 7 "	50 11 6	52 2 "	35 5 "	" " "	" " "
September "	294 " 6	51 3 6	23 " "	10 4 6	9 " "	17 14 "	18 14 "	45 11 "	57 5 6	30 1 "	" " "	" " "
October "	285 " "	120 15 "	23 " "	9 8 "	5 8 "	13 " "	70 15 "	4 15 6	54 13 "	30 6 "	" " "	" " "
November "	293 " "	40 15 "	23 " "	14 5 "	" 8 "	14 9 "	29 13 "	95 8 "	117 7 "	23 7 "	" " "	20 8 11
December "	293 " "	48 5 6	23 " "	8 1 "	" " "	16 2 "	147 8 9	116 6 6	104 3 "	134 10 "	" " "	30 15 "
January 1883	293 " "	97 5 6	23 " "	6 9 6	" " "	12 8 "	530 13 9	99 " 6	98 7 "	23 15 "	" " "	132 15 6
February "	293 " "	46 3 "	52 8 "	44 "	" " "	13 15 "	87 2 13 "	29 11 "	201 14	145 2 "	" " "	141 15 9
March "	293 " "	135 15 "	23 " "	15 9 6	" " "	11 5 "	364 7 1	16 14 "	794 1 "	307 3 "	" " "	24 " 8
Total	3067 4 8	823 4 6	305 8 "	216 13 "	92 15 "	241 8 6	3199 11 1	955 10 6	1844 5 10	1905 9 "	" " "	428 14 10
		5	5	5	5	5		5		3		5

1971

Statement showing the Expenditure in detail on the Woodcutters Plan for 1882-83 (Continued)

Collection of Coal

Month	Barking Sawing	Collection Mines	Sorting Back	Packing Back	Storage Back	Carriage Back	Carriage Rivers	Cartage Jetties	Total
April 1882	" "	" "	911 "	" "	" "	" "	" "	13 " "	165810 3
May "	" "	605 "	515 "	" "	" "	" "	" "	10136	1360146
June "	606 "	32615 "	55 "	" "	" "	" "	22 " "	74 "	14755 6
July "	49476	24236	1796	" "	" "	" "	34 " "	" "	1334311
August "	36511 "	20563	1114 "	5156	2510 "	" "	52 " "	" "	1226133
September "	4329 "	43215	2236	" 15 "	20 " "	" "	767 "	" "	154383
October "	38015	43334 "	3114 "	40 " "	274 "	" "	40 " "	225 "	1594 53
November "	35614 "	37419	313 "	84 "	54 "	" "	1092 6 "	128 "	2533 98
December "	32013 3	1483 "	2246	1712 "	" "	" "	34 " "	10 10 "	14755 46
January 1883	3446	" "	656	3612 "	32 "	" "	2608 "	138 "	16721 29
February "	95 "	" "	" 15 "	45 "	14 "	" "	408 "	94 "	18642 1
March "	315 "	" "	222 "	112 "	32 "	5010 "	20 " "	866	27466 9
Total	24595 "	2224 "	3	1876 "	115 11 6	88 " "	5010 "	172 13 "	10711 " 20484 11 8

Ahmednuggur
13th January 1883

Killas.
Dy Conservator of Forests
in charge

No 8

Statement showing the Expenditure per detail in the Medical Department Chuchuna Mandala
for the Official year 1882-83.

Months	Establishment	Nurseries Labor	Nurseries Professional	Nurseries Clothing & Bedding	Nurseries Various	Repairs Plant	Repairs Building	Repairs Roads & Bridges	Repairs Various	Repairs Manure	Buildings New	Buildings Repairs	Uniforms Clothing
April 1882	411	116 4 8	30	4 8		490 3	268 9 6	29 13	156 13 4	99 6 1		253 4 2	
May	461	130 7 1	30	55 9 9		178 11 5	3 12 6	28 2	198 8 9	122 7 10		163 6 9 9	
June	446 7 9	129 6 7	30			119 9 1	12 7 6	13 9 6	150 13 4	107 4 3		31 6 8	
July	436	91 0 8	28			27 15	20 5	35 7	173 2 1	61 9 12	418 9 4	93 1 3 4	
August	251	91 15 10	32			236 4	40	145 9 6	166 8 9	189 3 2			
September	251	112 6 6	32	31 12	2 4	297 9 6	44 15	178 13 3	648 6 10	328 11 2	6 8	55 9 9	
October	251	111 17 12		7		190 2	95 12 6	29 9 6	174 2 2	182 1 11		13 2	
Nov	243	114 11 9	12	65 6		392 13 4	197 1 9	285 2 5	238 11	184 15 9	63 9 2 9	64 6 13 2	48
Decm	123	117 9	32	24 6		239 6 10	198 12 6	146 10 9	267 4 2	17 15 8	40 8	5 4 1	
Jany 1883	183	181 17	32		103 3 6	632 9	394 11	389 4 2	243 4 4	100 12 1	834 5	115 11 5	
February	213	115 11	32			396	263 13	50 14 6	255 4 7	209 15 4		7 2	
March	213	91 10 7	32		3 7		116 10 9	109 9	36 9 10	207 5 8		4 8	
Total	3482 7 9	1352 13 7	334	410 3 9	108 14 6	3924 9 2	2266 3	1472 8 7	2710 13 2	2469 15 1	1939 6 6	4513 11	48

133

Statement showing the Receipts & Disbursements on account of Colonial Churches &c. for 1882-83 (Continued).

Collection of Cash

Months	Packing & Freight	Collection of Rents & Grain	Keeping Bank	Packing Bank	Stamps	Carriage of Bank	Postage	Travelling Allowance	Contingencies	Total
April 1882	142 10 6	. . .	59 11 6	5 10 .	35 3 .	. . .	84 14 2	78 11	10 4 .	2,276 5 .
May .	a . .	. . .	10 4 6	433 13 .	48 15 6	5 . .	24 8 10	21 15 5	a . .	2,391 14 4
June .	10 . .	226 11 .	a . .	. . .	51 8 .	46 . .	610 11 8	. . .	13 6 .	3,504 6 8
July .	493 . .	471 6 11	47 15 .	. . .	39 11 2	. . .	157 14 6	34 10 11	14 8 .	4,070 9 1
August .	323 5 6	149 4 9	296 14 9	23 12 3	28 2 .	. . .	452 10 9	9 1 9	15 2 .	2,450 15 1
Septemb. .	367 3 .	93 7 .	108 14 6	. . .	30 6 .	115 5 6	89 7 36	. . .	20 1 :	4,126 4 6
October .	905 1 9	77 1 .	175 8 6	11 14 .	39 12	44 8 6	218 16	75 . .	5 3 3	2605 2 6
Novembr .	175 5 2	35 11 5	260 1 .	29 8 6	38 4 6	363 5 .	144 8 5	. . .	8 . .	4723 4 1
Decembr .	371 14 9	. . .	131 10 9	7 14 .	35 15 6	10 . .	134 12	. . .	18 6 .	2265 . 11
January 1883	19 8 .	51 . .	246 5 8	501 .	76 6 .	40 . .	258 2 9	107 15 4	74 1 .	4.111 10 6
February .	. . .	. . .	51 5 6	18 9 .	64 13 6	102 8 .	38 8 6	46 9 10	39 1 10	2,098 11 6
March .	. . .	. . .	6 14 6	. 9 .	45 10 .	155 7 6	11 4 11	81 14 2	. . .	1,198 10 5
Total	3408 2 2	1104 10 1	1395 11 2	583 16 9	534 . .	4 9 152 6	3,44 10 8	455 4 3	248 1 1	36,722 14 6

Ootacamund }
13th June 1883 }

H. H. Cox.
Dy Conservator of Forests
in charge

1550

No 9

Statement Showing the Expenditure in Detail on the Pykara Cinchona Plantations for the Official year 1882-83

Months	Nurseries: Establishment	Nurseries: Labour &c.	Nurseries: Collection of Seed	Nurseries: Various	Working Charges: Filling Planting	Working Charges: Weeding	Working Charges: Road and Drains	Working Charges: Various	Measure	Buildings: New Works	Buildings: Repairs
April 1882	120	139 6 3	" " "	" " "	339 15 8	197 " 3	8 11 6	86 5 8	74 8 7	" " "	18 4 7
May "	120	124 6 6	58 9 6	18 4 9	71 7 3	2 11 "	10 13 3	61 11 4	77 7 2	" " "	152 2 10
June "	120	145 10 4	" " "	" " "	56 7 "	80 5 6	25 6 "	154 6 7	39 6 10	" " "	150 11 4
July "	120	78 12 10	" " "	" " "	58 6 "	" " "	19 2 6	38 9 5	22 7 8	" " "	" " "
August "	120	84 12 "	" " "	" " "	16 10 "	29 7 "	66 13 6	123 5 1	25 13 1	" " "	" 9 11
September "	120	104 1 8	1 " "	" " "	300 10 "	208 15 6	91 " "	160 5 5	56 1 9	" " "	4 7 6
October "	120	109 7 2	" " "	" " "	293 6 9	133 11 6	42 14 "	107 14 7	64 2 4	" " "	12 3 10
November "	120	136 4 2	13 4 6	" " "	213 5 6	281 2 6	30 11 9	141 11 10	64 5 1	9 4 6	" 9 4
December "	120	141 " 1	9 10 6	" " "	282 1 6	232 13 "	36 3 "	164 9 11	139 5 5	2 7 7	" 8 9
January 1883	120	129 2 4	" " "	24 " "	421 14 7	320 13 9	74 13 6	272 2 "	148 9 1	" " "	8 9 8
February "	120	107 10 10	" 8 "	" " "	338 15 "	202 3 9	17 8 9	225 " 8	91 7 "	" " "	145 7 10
March "	120	87 15 1	1 8 "	" " "	167 13 "	89 12 "	16 2 "	157 1 9	174 9 1	" " "	22 10 5
	1440	1388 9 3	84 8 6	42 4 9	2561 " 3	1778 15 9	440 3 9	1693 4 3	978 3 1	11 12 1	617 6 "

137D

Statement showing the Expenditure per detail on the Pykarra Chinchona Plantation
for the Official Year 1882-83 (Continued).

Months	Collection of Crops							Total
	Barking & Cleaning	Collection of Moss and Grass	Drying Bark	Packing Bark	Storage	Carriage of Bark	Various	
April 1882	14 1 "	" " "	3 14 6	" 9 "	10 " "	36 " "	25 5 10	1,074 2 10
May "	" " "	" " "	26 7 6	5 5 6	" " "	" " "	23 4 4	752 10 11
June "	24 "	17 8 14 6	26 13 "	3 6 "	10 " "	21 6 "	30 " 10	1,045 1 11
July "	388 1 "	87 15 "	71 " 6	" " "	10 " "	12 10 "	134 5 2	1,041 6 1
August "	257 12 "	100 2 6	81 9 6	7 14 "	10 " "	31 2 "	62 14 7	1,018 13 2
September "	74 6 3	17 10 3	82 8 6	" 15 "	10 " "	38 1 6	67 2 1 9	1,942 5 1
October "	166 6 "	6 8 6	86 8 "	" " "	10 5 "	14 8 6	54 6 10	1,222 7 "
November "	112 " 6	" " "	49 9 9	10 " "	10 " "	97 3 "	53 7 2	1,342 15 7
December "	66 4 6	" " "	33 3 6	4 6 "	10 " "	2 2 "	35 5 2	1,281 1 11
January 1883	" " "	" " "	26 11 9	3 15 "	10 4 6	" " "	130 " 9	1,691 " 11
February "	" " "	19 7 6	1 11 "	2 19 "	8 11 4	51 14 3	35 2 11	1,387 5 10
March "	" " "	" " "	" " "	" " "	10 " "	1 8 "	22 9 4	871 8 8
	1081 3 3	410 10 3	490 1 6	57 15 6	109 4 10	306 7 3	1249 " 8	14,670 14 11

Pokaramund
13 June 1883

H. Ellgar.
Dy Conservator of Forests
in Charge

129

Fo 10

Statement showing the Expenditure in detail of Office Establishment and General Expr for the Official Year 1882-83.

Months	Establishment	Deputy Controller's allowance	Inspection Establishment	Allowance on Plantation	Value of Stamps issued	Carriage of Bullion & Specie	Railway Charges	Shipping Charges	Batta and Travelling allowance	Contingencies	Provincial Clothing	Passage money & Misc. Crew	Total
April 1882	131	200						41 2 11		8 7		682	1065 9 11
May	131	200					597 5	79 2		129 8 6			1129 15 6
June	131	200						711 4 3		17 10 6			1060 8 9
July	131	200				32 8	80 13	33 11 6	33 14	42			556 1 6
Augt	149	114 200		180	17954			6 12		35 12			2367 7 4
Septr	131	200						14 14	153	23 12			522 10
October	131	200						9 13		29 6			370 13
Novr	123	200					258 13	28 3 9		29 8			639 8 9
Decr	127	12 10 200						2 11	57 14 9	37			425 6 7
Jany 1883	129	11 4 200						16 14	28 14 4	131 12			507 3 8
Febry	122	8 200				111 10 4	753 5	10 11		57 13 10	35		1280 8 9
March	131	200	514 4 7			82 14 6	260 8	1 3 2	307 12 10	49 8			1547 3 1
Total	1569	4 2 2400	514 4 7	180	17954	227 10	1950 12	962 3 6	581 7 11	585 1 10	35	682	11472 6 10

15 6 6 5 5 6 6 6 5 5

Actuary's Office
13 June 1883

H. Gilgan Esq
Dy Conservator of Forests, in charge.

Statement shewing the number of Trees Barked and c
on the Government Chinchona Plantation Hoo

No. of Plots	Stripping & dressing process.				Coppicing process.				Uprooting Proc		
	Red		Crown		Red		Crown		Red		C
	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	Tr
I	1953	5,859	537	805	200	1,797	155	385	"	"	
II	"	"	298	384	"	"	103	385	"	"	
III	448	1,054	"	"	264	1,717	20	20	"	"	
IV	"	"	200	318	"	"	364	962	"	"	
V	"	"	"	"	"	"	22	78	"	"	
VI	"	"	"	"	"	"	1,196	2,422	"	"	
VII	"	"	295	401	636	3,207	740	2,142	"	"	
VIII	"	"	12	36	1,567	11,267	180	402	"	"	
IX	"	"	"	"	76	223	257	514	"	"	
X	"	"	172	229	96	506	157	436	10	80	
XI	1,191	3,301	83	54	682	5,581	38	76	"	"	
XII	"	"	"	"	"	"	25	68	"	"	
XIII	"	"	1,028	1,257	"	"	6	38	"	"	
Total	3,592	10,214	2,625	3,454	3,541	24,358	3,243	9,928	10	80	

Returned
13th June 1883

No. 11.

Statement Showing the number of Trees Barked and the quantity of Bark obtained under various Systems of harvesting in the Government Chinchona Plantation, Neddiwattai during the official year 1882-83.

No. of Plots	Stripping & Scraping Process.				Coppicing Process.				Uprooting Process.				Java Process.		For Samples.		Grand Total.		Remarks.
	Red		Crown		Red		Crown		Red		Crown		Red		Crown				
	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	
I	378	3142	"	"	11	491	"	"	"	"	"	"	"	"	"	"	389	3,633	
II	"	"	"	"	21	434	"	"	"	"	"	"	"	"	"	"	21	434	
III	"	"	"	"	103	572	"	"	"	"	"	"	"	"	"	"	103	572	
IV	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
V	"	"	"	"	625	6,118	"	"	58	749	"	"	"	"	"	"	683	6,867	
VI	"	"	"	"	58	1,043	15	192	"	"	"	"	"	"	"	"	73	1,235	
VII	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
VIII	"	"	"	"	125	1922	56	442	"	"	"	"	"	"	"	"	181	2,306	
IX	"	"	"	"	66	1007	8	64	"	"	"	"	"	"	"	"	74	1,073	
X	"	"	"	"	437	5,573	"	"	10,922	96,153	22	224	"	"	"	"	11,381	101,951	
XI	"	"	"	"	4,608	28,583	13	155	"	"	"	"	"	"	"	"	4,621	23,738	
XII	"	"	"	"	176	2,673	"	"	15	66	"	"	2,103	6,340½	"	"	2,294	9,079½	
XIII	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
XIV	"	"	"	"	131	1,715	7	56	162	1,597	"	"	"	"	"	"	300	3,358	
XV	"	"	"	"	20	369	"	"	"	"	"	"	"	"	"	"	20	369	
XVI	"	"	"	"	"	"	"	"	345	2,140	"	"	"	"	"	"	345	2,140	
XVII	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
XVIII	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
XIX	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
XX	"	"	"	"	"	"	"	"	"	"	"	"	323	2,036	"	"	323	2,036	
XXI	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
XXII	4,804	20,886	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4,004	20,886	
XXIII	"	"	"	"	16	975	12	110	"	"	"	"	"	"	"	"	28	1,085	
XXIV	6,804	32,379	"	"	917	9,155	4	70	"	"	"	"	"	"	"	"	7,725	41,604	
XXV	"	"	"	"	1,069	9,306	2	28	"	"	"	"	"	"	"	"	1,071	9,334	
XXVI	"	"	"	"	218	2,372	27	163	1,098	10,730	"	"	"	"	"	"	1,343	13,265	
XXVII	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
XXVIII	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
XXIX	"	"	"	"	"	"	"	"	"	"	"	"	"	"	50	339	8	76	
Total	11,186	54,407	"	"	8,609	72,378	144	1,230	12,600	111,435	22	224	2,426	8,376½	50	339	35,037	250,439½	

9 5 11 3 3 4 15 11 11 11 5 11 11 5 11 11 15 16

Statement Showing the number of Chinchona trees barked and the quantity of bark taken, at the Government Chinchona Plantation Dodabetta during the Official year 1882–83.

Plot	Ootacamund		Pala de Galinago or Magnifolia		Grand Total		Remarks.
	Trees	Barkttes	Trees	Barkttes	Trees	Barkttes	
IX	12091	12,949	4	19	12,095	12,968	
XIV	3001	6485	"	"	3,001	6,485	
XV	1856	3299	2	7	1,858	3306	
XXIII	5226	5173	17	86	5243	5259	
XXVIII	542	830	13	60	555	890	
XXIX	5257	7868	15	65	5,272	7933	
XXX	6685	8796	"	"	6,685	8796	
XXXI	4013	5139	32	152	4045	5291	
XXXII	3657	6889	28	105	3685	6994	
XXXIII	4328	7051	40	215	4368	7266	
XXXIV	1731	5920	"	"	1731	5920	
XXXVI	931	1453	10	42	941	1495	
XXXVII	1162	1133	2	9	1164	1142	
XXXVIII	2479	4,689	2	9	2,481	4,698	
XXXIX	158	217	"	"	158	217	under Sliving System from cut trees, and branches
		13,883	"	"	"	13,883	
Total	53,117	91774	165	769	53,282	92,543	

1437

D

Statement Showing the number of trees Barked and the quantity of Bark obtained under various systems of Stripping on the Government Chinchona Plantations Wood during the Official year 1882-83.

Sub Division	Under Moosing	Stripping and Lopping	Stripping Branches		Uprooting Branches		Young Trees for Samples		Grand Total		Remarks
	Red	Crown	Red	Crown	Red	Crown	Red	Of all qualities			
	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	Trees	Bark	
I	185	710	.	.	11	65	.	.	.	.	.	.	.	.	.	.	196	805	
II	2777	8531	.	.	573	0254	.	.	.	.	.	.	.	.	.	.	3360	12585	
III	.	.	.	.	214	2805	44	450	.	.	.	.	.	.	.	.	258	3255	
IV	.	.	.	.	404	3095	14	90	.	.	.	.	.	.	.	.	418	3095	
V	1235	4940	.	.	558	3060	.	.	.	.	.	.	.	.	.	.	1793	8000	
VI	.	.	.	.	182	785	.	.	.	.	.	.	.	.	.	.	182	785	
VII	.	.	.	.	60	290	.	.	.	.	.	.	.	.	.	.	60	290	
VIII	.	.	.	.	703	5545	.	.	.	.	.	.	.	.	.	.	793	5545	
IX	.	.	.	.	30	190	.	.	.	.	.	.	.	.	.	.	30	190	
Total	4197	14011	.	.	2825	20299	58	540	.	.	.	.	.	.	.	.	7080	34850	

Ootacamund
12th June 1883

H. Gates
Deputy Conservator of Forests in charge

No: 13

Statement shewing the quantity of Seed, and the number of plants, sold to the public during the Official Year 1882-83.

Particulars	Seed	Plants	Seedlings
Ledgerianæ			
C. Officinalis	35 . 6½	16,000	.
C. Succirubra	160 . -	.	.
C. Pubescens	78 . 5½	.	15,000
Ledgerianæ			
C. Officinalis	287 . . 1	52,000	80,000
C. Chahuargua	12 . 7	.	10,000
C. Pata de Gallinazo	20 . 2¼	.	43,000
C. Angustifolia	. . 8	4,000	.
C. Lodgeriana	. . .	1,156	1,252
Total	593 . 14¾	73,156	149,252

Ootacamund
13th June 1883

H. Gates
Dy Conservator in charge

No: 14.

A

Statement showing the Total yield of the Government Chinchona Plantations, Nilgiris, for the ~~month of~~ Official year 1882/83.

1	2	3 BARK.													4	5 Propagation.		
		a Under-stripping and mossing system.			b Uprooting.			c Coppicing.			d Scraping.			Total quantity of Green Bark collected during the month.	Quantity when dry.	Seed.	a Plants.	b Seedlings	c Rooted cuttings.
Name of Plantation.	Species of Produce.	No. of Plots.	No. of trees decorticated.	Outturn of Green Bark lbs.	No. of Plots.	No. of trees decorticated.	Outturns of Green Bark lbs.	No. of Plots.	No. of trees decorticated.	Outturns of Green Bark lbs.	No. of Plots	No. of trees decorticated.	Outturns of Green Bark lbs.			lbs.	No.	No.	No.
		Add last year's balance													5,304				
Dodabetta	Crown Bark	11	2959	17674				branches		13·813	1	158	217	91,774	38,946½				
	Various	11	165	769										769	358				
Neddivattam	Red Bark	3	1118	5640½	6	12600	111435	17	8609	72378	2	2426	837½	248596½	69,883				
	Crown —	·	·	·	1	22	224	9	144	1280				1504	500				
	various for analysis	·	50	339										339	161½				
Pykara	Red Bark	6	7789	34353	1	10	80	7	3541	43841	·	·	·	78244	14,963				
	Crown —	8	2625	3484	6	695	2411				13	3243	1046½	16363	4896				
Total				173,026			114,150			131,352			1906½	437589½	135261¾				

14 3 3 4 3 3 4 3 3 4 3 3 4 6 5 3 4 4 4

B

Statement showing the disposal of Bark and other produce collected in the Government Chinchona Plantations during the ~~Official~~ Year 1882/83.

1	2	3						4			5				
		BARK.						SEED.			PROPAGATED PLANTS AND SEEDLINGS.				
		a Sent to Madras for shipment to London.		b Sold in the Country.		c ~~Supplied to the Medical Department~~ Sundries	d Total.	a Sold to the Public.	b Used for Nurseries	c Total.	a Plants.	b Seedlings.		c Rooted Seedlings.	Remarks.
Name of Plantation.	Name of Species.	Bales No.	Quantity lb.	Bales No.	Quantity lb.	Bales No.	Quantity lb.	lb.	lb.	lb.	Sold to Public.	Permanent ly put up in the Plantations.	Sold to Public.	Trans-planted.	Transplanted to Nurseries.	
Dodabetta	Crown Bark	135	20156	168	17257½	-	83	303	39496½						
	Remains	4	358	-	-	-	-	4	358						
Neddivattam	Red bark	304	30400	394	39400			698	69800						
	Crown —	24	2400	-	-			24	2400						
	Remains	1	100	-	-		144½	1	244½						
Pykara	Red -	90	9000	98	9870	-	41	188	20372						
	Crown —	-		15	1500	-	16	18	3996						
Total C		518	62514	658	69327½	-	244½	1236	135018¼						

(a) Including 450 lb. in store on 1st January 83
(b) — — 1257 —
(c) — — 1150 —

C

Statement showing the Receipts and Expenditure of the Government Chinchona Plantations of Nilgiris for the Official Year 1883/84

Name of Plantation.	RECEIPTS. Budget Estimate.	During the Month.	Up to the end of the Month. Total	EXPENDITURE. A. Conservancy and Works. Budget Estimate.	During the Month. Amount	Up to the end of the Month. Total	B. Establishment. Budget Estimate.	During the Month. Amount	Up to the end of the Month. Total	GRAND TOTAL OF ALL EXPENDITURE. Budget Estimate.	During the Month.	Up to the end of the Month. Total
Dodabetta					1739 R. -			317 15 8				
Neddivattam					329 5 8			377 8 10				
Pykara	50000	-	28625 13 11	9181	1323 14 11	6326 1 10	16634	144 - -	1507 4 1	108570	-	83350 15 11
Office and General					477 1 3			670 5 7				

17

6 years the 6 3 5 6 3 6 8 6 8

Outstanding advance of previous ~~month~~ accounted for in this ~~month~~ Official year Rs 7500 - - -

Value of cheques issued in this month.

DEDUCT.

Cheques issued in this month but not cashed within the month.

Portions remaining unaccounted for out of the advances received in this month.

Amount accounted for out of the advance received. - 2165-15-9

Balance Rs 5324-0-3

Passed in Cash 13 June 83

H. Ellis. J.

Dr Conservator of Forests Nilgiris

D

Statement showing the Inspection tour of the Officers in charge of the Government Chinchona Plantations, Nilgiris, for the month of 188 .

Month and Date.	Places Travelled. From	To	Marches.	Halts.	Object of Journey.
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

Station.....

Dated .....188 .

.....

.....

No 158

153D

Office Note.

I beg to submit herewith the Administration Report of the Cinchona Plantations in the Nilgiri District, for the Official Year 1882-83, and request that it may be sent on to the Revenue Secretary to Government, as early as possible, with any remarks you may wish to offer.

Ootacamund 13th June 1883

H. H. Cross
Deputy Conservator in charge.

To, The Collector, Nilgiris.

Registered (1883) Despatched

No. 11-144-

From
The Officiating Conservator of Forests
in charge Chinchona

To The Collector of Nilgiris

Dated 13th
Rec'd 16th } June 83
Reg'd 19th
Desp'd 21st

No. 148 C

Encl: 15

Subject

Submitting the Administration Report of the Chinchona Plantations, Nilgiris for the Official year 1882-83.

Rec'd. 5-7

157D

READ—Office Note by H. A. GASS, Esq., Deputy Conservator of Forests, in charge of Chinchona Plantations, Nilgiris, to the Collector of Nilgiris, dated Ootacamund, 13th June 1883, No. 148-C.

I beg to submit, herewith, the Administration Report of the Chinchona Plantations in the Nilgiri District for the official year 1882-83, and request that it may be sent on to the Revenue Secretary to Government as early as possible with any remarks you may wish to offer.

ENCLOSURE.

From H. A. GASS, Esq., Deputy Conservator of Forests, in charge of the Chinchona Plantations, Nilgiris, to the Collector of Nilgiris, dated Ootacamund, 13th June 1883.

I have the honor to submit the Administration Report (with 14 enclosures) of the Government Chinchona Plantations in the Nilgiri District for the year 1882-83.

2. I took charge of the plantations on the 1st June 1882, and continued to hold charge during the remainder of the official year. I devoted much attention to the plantations and visited them frequently and as often as my other work permitted me to do so, and spent in all about forty days in inspection of the different estates, and when unable to go out myself, I had the Assistant Superintendent and Head Overseer into office for personal inquiry.

3. During the year some changes took place in the management of the plantations. Colonel Jago, who was in charge of them, went on leave and I relieved him. The plantations of Naduvatam and Hooker were inspected by Major Walker, Conservator of Forests, accompanied by Dr. Brandis, C.I.E, in August. The plantations were visited by Dr. Bidie, C.I.E., in November 1882, for the purpose of collecting specimens of Chinchona bark, with reference to G.O., dated 5th May 1882, No. 464 Mr. M. A. Lawson was appointed to be Superintendent of Chinchona Plantations, &c., and arrived in the country in February, but up to the 1st April had not taken charge. Among the subordinates some changes took place; Mr. Rowson resigned his appointment on the 1st July. The Manager of the two offices, Forest and Chinchona, Mr. Parthasarathy Mudaliar, was transferred to the office of the Conservator of Forests, and Mr. B. Venkatarutnum Naidu from the Conservator's office to the Acting Managership of this office. Mr. Macdonald, the Assistant Overseer of Naduvatam, was dismissed for continued intemperance. One Mr. Samuels was subsequently appointed to this post on probation. Mr. Narrainasawmy Naidu obtained promotion on Mr. Rowson resigning his appointment and became Assistant Superintendent. He was placed in charge of Dodabetta and Wood estates. Mr. Hillier was made Head Overseer and left in charge of Naduvatam and Hooker. Mr Burrows was transferred from Hooker to Wood, and Mr. Bonjour from Wood to Hooker. A new clerk was brought from the Tinnevelly Forest office, one Subramania Pillai, and placed under the Head Overseer's orders, and Arulanundum Pillai, transferred from Naduvatam, was placed under the orders of the Assistant Superintendent as his clerk.

4. SEASON AND RAINFALL.—The year was a most unfavorable one both for cultivation and also for collection of crop, and the monsoon was altogether unprecedented. The rainfall at Dodabetta gauged 61·35 inches distributed over 158 days against 48·71 inches distributed over 136 days in the previous year; at Naduvatam 194·93 inches and 178 wet days against 73·73 inches and 150 wet days in the previous year; at Wood it was gauged at 155·1 inches and 173 wet days; and at Hooker 143·53 distributed over 163 days. The maximum fall occurred in July when it amounted to—

	INCHES.
Dodabetta	11·22
Naduvatam	102·11
Hooker	61·87
Wood	71·9

The minimum fall was in January and February, when at Dodabetta 0·1 inch was gauged and in the other three estates nothing at all during the two months Statements 1, 2, 3 and 4 give details of rainfall, and I have added a column in the case of Dodabetta and Naduvatam, to enable a comparison to be drawn between this and the previous year, month by month.

5. Very high winds occurred on all four estates during the months of June, July and August, more especially in June and July, and a very large number of trees were blown down, and coppice shoots were broken off in spite of precautions taken to protect them. The foliage was beaten off even the Officinalis trees by the wind and rain, and in the case of the Succirubras the trees presented a most wretched appearance, large numbers having been entirely killed. There was hardly any frost at Dodabetta till the 12th January last, when a severe frost took place which affected 2,000 of the trees—300 large ones 18 and 19 years old, and 1,700 young ones from 1 to 3 years old. Some of the trees were coppiced at once and the remainder left in the hope of their recovering, but latterly all but 50 of the large ones were coppiced also, as they showed signs of dying out altogether. Very mild frost occurred at Naduvatam, and no damage was done. A hailstorm occurred at Naduvatam in May 1882, which damaged two young Carthagenas, and the tail end of a severe thunderstorm passed over this estate and Hooker on the 29th March of this year. In addition to the fearful havoc that was caused amongst the trees on the several estates, enormous damage was done to our roads, bridges, &c., and also buildings. Great inconvenience was caused both to the subordinates and to coolies engaged on the estates by having to go a long way round by the main road past the travellers' bungalow to their work, in consequence of the plantation bridges having been washed away. The bridge on the road leading from Hooker to Naduvatam was injured, but fortunately held. The Pykara bridge was carried away. Landslips occurred in all directions, and many of them of large size. As our Chinchona estate coolies were the only Government ones on the Naduvatam side, we used a number of them in working a raft on the Pykara river in bringing over the mails and in clearing away the worst of the landslips, and I venture to think they were of considerable assistance.

6. As regards buildings, the old jail which had to be used again throughout the year as a drying-shed, became, in spite of money (Rs. 500) spent on it to put it in repair, quite dangerous, in consequence of the centre wall being saturated, and for a time we had to stop all drying operations for fear of the building collapsing altogether. The Clerk's quarters and the Assistant Overseer's house were both damaged, the walls of the former being cracked and the end walls of the latter having fallen out. During the dry weather in December and January all these things were put in repair, and all traces of the damage caused to roads, drains, bridges and buildings were removed.

7. The harvesting of crop was naturally rendered extremely difficult. In the beginning of the monsoon the usual stripping process was resorted to This had, however, to be abandoned as it was not found possible to "lift" the bark without permanent injury to the trees, and it therefore became necessary to coppice and uproot. This was done in Plot No. X * principally, as the trees there first showed signs of dying out altogether. The coolies in collecting bark had a very bad time of it, as being obliged to remain on the same spot exposed to wind and rain, their limbs became quite numbed, and they frequently had to be carried home after a few hours' work. We had, however, no deaths among our coolies, though many corpses of travellers were buried by our people.

* Naduvatam.

8. Receipts and Expenditure.—Statements Nos. 5 and 6 show the receipts from sale-proceeds of seeds, plants, &c., bark sold locally, value of bark sent to England, and it should be understood that the receipts refer only to the crop harvested during the year under report and not to the crop of 1881-82; the receipts are calculated both in accordance with the orders of the Secretary of State contained in Despatch No. 31, dated 14th September 1882, embodied in G.O., dated 23rd October 1882, No. 1163, and also according to market value of the bark. The budget estimate for 1882-83, as sanctioned by Government in G.O., No. 1955, dated 21st December 1881, paragraph 7, amounted to Rs. 5,00,000, while the regular estimate, as sanctioned in paragraph 2 of G.O., No. 1409, of 14th December 1882, amounted to Rs. 6,28,000. Of these estimates, however, the first referred to the value of the crop of 1881-82, and the latter to the same crop, *plus* the value of bark sold locally in 1882-83. The budget estimate for 1883-84, as sanctioned in paragraph 5 of G.O., No. 1409, dated 14th December 1882, amounts to Rs. 4,10,000; this estimate is based on value of crop taken and sent home during 1882-83, the year under report; and in drawing a comparison between the budget estimate and the receipts, this figure should be taken and not Rs. 5,00,000.† This has been done accordingly by me in the statements, as the receipts now given by me are those obtained from value of bark sent home, sold locally, &c., during the year under report.

† See General Remarks.

The crop of the year consisted of 135,016¾ lb. of dry bark, instead of 165,000 as budgeted for. Of this, 62,518 lb. were sent to the Secretary of State and 69,611¾ lb. including 284¼ lb. of samples, were sold in Madras by public auction, and the balance 2,687 lb. remained in stock.

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The receipts are therefore as follows:—

				Rs.	A.	P.
First—						
Receipts by Treasury accounts for seed, plants, &c.	...	...		4,200	7	10
Book adjustment				100	0	0
Miscellaneous				45	0	0
Value of 129,712½ lb.* of bark calculated in accordance with the Secretary of State's despatch...	...	...		83,350	15	11
				87,696	7	9
Budget Estimate†				1,16,000	0	0
			—	28,303	8	3
Second—						
Receipts by Treasury accounts				4,200	7	10
Book adjustment				100	0	0
Miscellaneous				45	0	0
Receipts from 69,611¾ lb. by local sale				1,06,396	0	0
Market value of 62,518 lb.‡ calculated roughly ...				97,684	6	0
				2,08,425	13	11
Budget Estimate				4,10,000	0	0
			—	2,01,574	2	1 §

The sanctioned expenditure (G.O., dated 21st December 1881, No. 1955) was Rs. 1,08,533, whereas the actual total expenditure has amounted only to Rs. 83,350-15-11. The difference is thus Rs. 25,182. This is to be accounted for partly by the smallness of the crop, also because a sum of Rs. 10,000 shown in our budget for the new drying-shed does not appear on our debit side in the year's accounts, and, lastly, because Rs. 5,000 sanctioned for a drying-shed at Hooker has not been expended.

Statements 7, 8 and 9 show the expenditure in detail in all four estates.

9. In connection with this subject the permanent advance may be mentioned. At the commencement of the year this advance for all four estates stood at Rs. 7,500. Out of this by the 31st March 1883 Rs. 2,165-15-9 had been refunded into the Treasury by the Head Overseer and the advance stood as under—

	Rs.	A.	P.
Recoverable advances	3,998	1	0
Irrecoverable advances certified by Assistant Superintendent.	336	15	0
Do. do. do. by Head Overseer	999	0	3
Total ...	5,334	0	3 §

It will thus be seen that the advance is now in a much more satisfactory state, and there can be no reason why it should not be cleared off altogether by the end of the current official year, provided Government sanction the writing off from the accounts of the bad debts and irrecoverable advances which have in some cases been carried on from year to year for a long time. Regarding this I have written separately for orders. Advances are, of course, a necessity and must be made every year; labor is otherwise impossible to obtain, but there can be no reason why the advances should not be made smaller ones and be cleared off *in toto* by the end of each official year.

10. Permanent Plantations.—At the close of the year the plantations of Naduvatam, Hooker and Wood presented a wretched appearance in consequence of the effects of the monsoon, while Dodabetta looked as well as ever. At Naduvatam thousands of the old Succirubras had to be cut down to save the bark. All over the estate the trees suffered immensely and became staghended and threw out suckers all down the stems. Even in "Napier," the best part of the plantation, this was the case, and coppicing and uprooting had to be resorted to

* 129,712½ lb. of bark above quoted consist of 135,016¾, less 5,304 lb. (balance of last year's crop).
† Calculated according to the wishes of the Secretary of State, i.e., the cost of production.
‡ The value of 62,518 lb. has been calculated at the average rate obtained at Madras, viz., Rs. 1-9-0.
§ See General Remarks.

very extensively, notably in Plots III, V, X, XI, XXIV, XXV and XXVI, and this work had to be kept up till the close of the official year as the trees continued to show the effects of the monsoon long after it was over. During the dry weather the bark was sun-dried, and we obtained in all 59 bales of dry bark which has since been despatched to England. Much more would have been got ready, as there were still a large number of dying trees, but our supply of labor was very small, most of the coolies having gone down to the plains as usual. The uprooting of dying trees has been going on steadily since the 1st April. Statements 11 and 12 give the number of trees operated on during the year under different systems of harvesting.

11. The bark-yielding capabilities of Naduvatam are of course very much reduced now, and it should be brought to the notice of Government that the estate is in a very different state to what it was when the report called for in G.O., No. 2105, dated 13th August 1881, was submitted to the Conservator. The estate is supposed to be 318 acres planted. From this must be deducted—

50	acres	uprooted in 1881-82.
36	,,	,, in 1882-83.
10	,,	of 1879 coppice.
16	,,	of Plot XXVIII which failed.
5	,,	of trees scraped in 1880 in Plot XXIII of 1869 which have died off.
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And what with trees that have died out, or are dying out, and which are now being uprooted or will be uprooted hereafter, another 50 acres may be added on to the 117, making 167 acres in all, or rather more than half of the whole estate; so that there are not more than 150 acres carrying mature trees, at about 500 to the acre, which can be looked to for the next five years to yield crop. There will be no difficulty in getting a sufficient crop of bark this year, but for the next year and few succeeding ones, it will be very small from Naduvatam, and after the dying Succirubras are uprooted on Hooker and Wood, scarcely anything at all from these two estates. Of course there are our hybrids now planted and to be continued this year, but we must give them another five or six years, by which time they ought to be in splendid condition. There can be no doubt as to the hardiness of these trees, that is, those we have been in the habit of calling *C. magnifolia* and *C. pubescens* according as they are glabrous or hairy. They show no signs of having suffered in the monsoon either from rain or wind. One glance at a mass of Chinchona trees is sufficient to enable one to recognize these trees by their robustness, healthy appearance, and straight stems. In all the uprooted Succirubra plots, we have left these Magnifolia or Pubescens trees standing, and their vigorous appearance is very striking. There will, of course, be no falling off in crop at Dodabetta, for I am glad to report that the trees on that estate are looking remarkably well.

12. During the year under report 87,902 plants were permanently put out at Naduvatam in Plots XVIII, XIX, XX and XXI, which were uprooted in 1881-82 to the extent of about 40 acres, consisting of 77,000 *C. pubescens*, 10,000 *C. officinalis*, 900 *C. calisaya*, and two Carthagena. The young plants at the close of the year looked remarkably well, and the planting has been a very great success. I think I may say that not more than 5 per cent. have failed and the plants are now well established and growing vigorously and not likely to fail. This success is due to our having waited till the worst of the storms were over before we commenced our planting, which will compare very favorably with any private planting on neighbouring estates. The number of mature trees on the whole estate was reduced by 21,376, partly by uprootal and partly by coppicing. The whole land denuded of its trees has been repitted 4 × 4, and we have 20 acres of this year and about 10 acres from last year, or in all 30 acres; and plants are now ready in our nurseries, and at the proper season the whole of the available land will be planted up principally with *C. pubescens*. Of the six Carthagenas received last year at Naduvatam, two were planted out in Plot XXIII and two in Nursery No. I; these last two were killed by hail in May 1882. Two more were subsequently put out in Plot XV and made good progress; the height of the tallest on the 31st March was 3 feet 7 inches. The Calisayas in Plot XV made good growth and show the true type of Ledgeriana.

13. On the Hooker estate the number of bark-yielding trees is enormously reduced, partly on account of uprootals and coppicings, and partly on account of trees dying out, &c.; and at the close of the year the remaining trees presented so sickly an appearance that we must uproot some acres this year or we shall lose all the bark, and next year I am afraid this estate will yield no crop at all. In this plantation 70,020 plants, mostly *C. officinalis*, were put out. Of this number 43,600 were renewals and are therefore not included in the balance sheet at the close of the year. The planting was, I regret to state, almost entirely a failure owing to the effects of the monsoon. The plantings on this estate during the last few years have been so unsuccessful that I should question the advisability of continuing them, and would rather concentrate all efforts on the two principal plantations of Naduvatam and Dodabetta. The number of mature trees on the estate was reduced by 7,489.

14. At Dodabetta 84,860 plants were put out, consisting of *C. officinalis* and *C. magnifolia*, in the marginally-noted plots, some as renewals, and the remainder between the original rows of trees as the lines are sufficiently far apart to allow of interplanting. The planting has been very successful, and at the close of the year the plants all looked very healthy and had made satisfactory growth. The number of mature trees was reduced by 960, of which 131 trees were uprooted and 829 were coppiced as they showed signs of dying out. Of the two original *Santa Fé* plants put out in Plot VII in 1881-82, one had to be removed to the Propagating House as it was very small and looked sickly, the other has made but little progress in growth though it looks fairly healthy. There are two other plants of this variety in the Propagating House, one looking healthy and the other sickly. The six Carthagena plants put out in the same Plot VII have not made much progress though they look sturdy enough. Dodabetta is no doubt too high for this variety, as the same plants at Naduvatam have grown much more satisfactorily. 13,300 *Eucalyptus globulus* plants were planted out round the boundary of the estate, which will be useful as a protection against the force of the wind and also serve for the supply of fuel hereafter.

	PLANTS.
Plot No. 7	12,140
,, ,, 8	1,750
,, ,, 9	7,800
,, ,, 11	4,350
,, ,, 12	210
,, ,, 13	7,330
,, ,, 16	3,300
,, ,, 23	10,980
,, ,, 27	10,900
,, ,, 30	2,500
,, ,, 31	3,700
,, ,, 32	6,470
,, ,, 36	2,730
,, ,, 37	10,450
,, ,, 39	250
Total ..	84,860

New Zealand flax was planted in rows, one foot apart, in the steeper places where necessary, to prevent the soil being washed away.

15. The Wood estate at the close of the year looked very unhappy; the trees, with the exception of a small portion, all looked very sickly with a very meagre show of foliage. A very large number must necessarily be uprooted this year. This estate will yield little or no crop after this year for the next few years to come. 61,500 plants were put out, principally *C. officinalis*, and about 8,000 Succirubras as renewals in Plot I, put there because the whole plot consisted of *C. succirubra* and it lies too low for *C. officinalis*, and there were no more hybrid plants ready for planting out available. In addition to these, about 3,000 Ledgeriana plants were put out in Plots VII and IX. The planting was, however, rather unsuccessful, and at the close of the year there were many failures, also with the Ledgeriana plants both of this, last year and of the previous year It should be mentioned also that Sambur do much damage in this estate, and undoubtedly did much injury to the young Ledgeriana plants which we have had now to fence in as well as we can. The planting on this estate, too, seems destined to be a failure; the subsoil is, I am afraid, much against it. Of the mature trees, 5,418 were cut out, partly dying and partly dead ones.

The following statement shows the present state of the four plantations as compared with that at the close of last official year, and the number of trees uprooted and coppiced, and also the number planted out during the official year under report:—

Plantations.	Number of Trees on 31st March 1882.	Number of Trees uprooted.	Number of Trees coppiced.	Number of Plants planted out.	Balance on 31st March 1883.
Naduvatam	170,054	12,624	8,752	87,902	236,580
Pykara { Hooker ...	236,551	705	6,784	26,420	255,482
Pykara { Wood ...	46,902	3,467	1,951	61,500	102,984
Dodabetta	288,849	131	829	84,860	372,749
Total ...	742,356	16,927	18,316	260,682	967,795 *

In the column of plants put out during the year, only those are shown which have been freshly put out, and renewals are not taken into consideration in the statement, and it should be clearly understood that although of the number of plants shown as planted out in 1882-83 many may now be dead, yet inasmuch as such casualties will all be renewed this monsoon, and such renewals not afterwards taken into account, the number now given may be accepted as perfectly correct.

16. Upkeep of Plantations—Conservancy—*Naduvatam and Hooker.*—Both estates were sufficiently mamooty-weeded and the weeds buried in renovation pits dug for the purpose near the trees in all plots. All the roads, drains and bridges which were destroyed and washed

* See General Remarks.

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The crop was distributed over the four estates as under—

Naduvatam.

	LB.
*Natural Red	23,225
Mossed „	15,225
Renewed „	14,320
Branch „	10,313
Root „	5,500
Dust „	1,300
Natural Crown	1,200
Mossed „	300
Renewed „	600
Branch „	100
Mixed „	161¼
Total ...	72,444¼

Dodabetta.

	LB.
Natural Crown	11,440
Mossed „	12,039½
Renewed „	11,078
Branch „	4,178
Root „	111
Dust „	100
Natural Pata	41
Mossed „	206
Renewed „	111
Total ...	39,304½

Pykara.

	LB.
Natural Red	9,631
Mossed „	1,805
Renewed „	6,088
Branch „	2,346
Root „	92
Natural Crown	1,124
Mossed „	409
Renewed „	1,114
Branch „	244
Root „	105
Dust „	310
Total ...	23,268
Grand Total ...	135,016¾

The bark collected was on the whole of an inferior kind, having been taken from dying trees for the most part. It will be observed from Statements Nos. 11 and 12, showing the number of trees decorticated under different systems during the year, that the proportion of green to dry bark is greater than 3 to 1, which is generally speaking the average. The reason for this is that the bark taken from felled trees during the rains got so saturated and unavoidably mixed with mud and foreign matter, which made the weight of the green material higher than it otherwise would have been. It is becoming more and more difficult to procure moss. During the year we sustained a heavy loss in grass for covering barked trees, by the road on which a large stack was placed having given way under it during the rains.

20. The bark was disposed of as follows:—

	LB.
Shipped to the Home market*	62,518
Sold locally	69,327½
Samples	284¼
Balance in store on 31st March 1883	2,887
Total ...	135,016¾

*The crop of Hooker estate was dried at both Wood and Naduvatam drying houses, and 1,900 lb. of Chinchona bark included under Naduvatam properly belongs to Pykara.

Among that shipped to England I include 59 bales, the contents of which were cropped during the official year under report, but could not be despatched till soon after the 1st April of this year. I believe I am right in doing this. The value of these bales has also been shown under "Receipts." Of the bark left in store on 31st March, viz., 2,887 lb., the details of which are as marginally noted, I have to say that it is all "refuse" bark and of little or no value, at the outside 4 annas a pound. It may, during this year, either be sold locally or shipped to England. As regards the local sales as noted above, 69,327½ lb. of bark with 284¼ lb. of samples were offered for sale by public auction by Messrs. Oakes and Co., realising in all Rs. 1,06,396-0-1, or Rs. 1-9-0 a pound all round. Government have recorded their satisfaction at the result of the sales in the marginally-noted Government Orders. I have nothing to add here to that which I previously reported on the subject beyond expressing my opinion that in the event of any further sales being held, only the inferior kinds of bark (principally Red) should be offered for sale, and I consider that the results of the sales justify this conclusion.

	LB.
Dodabetta Crown	450
Pykara do.	1,180
Do. Red	1,257

G.O., 23rd November 1882, No. 1307.
„ 5th March 1883, „ 323.
„ 24th April „ „ 1662.

21. Buildings, New.—A good deal was done during the year towards the completion of the new drying shed at Naduvatam. By the 31st March all the outside brickwork was finished, and there remained the furnaces and flues to complete together with the roof and inner fittings. The roof could of course be put on, but nothing could be done with the inner fittings till the furnaces and flues were completed. There then appeared no reason whatever why the whole building should not be ready before the monsoon set in, but the slow progress that has been made since the 1st April, first turned the certainty into a hope, and the hope is now an almost certain disappointment. The packing-store was got up to the basement long before the 31st March, and nothing more was done to it up to the close of the official year and nothing has been done to it since.

The chattram at Naduvatam, sanctioned by Government in G.O., 2nd May 1882, No. 452, Revenue Department, was built during the year and opened to the public in February last.†

† See General Remarks.

Two new huts were erected at Dodabetta, constructed out of some surplus stone and zinc-sheeting remaining over from the two cattle-sheds which were erected in the previous year, and a small room close to the new nursery adjoining the drying shed at Wood was built and roofed with corrugated iron.

22. Repairs—*Naduvatam and Hooker.*—The roof of No. I Bungalow was taken off and refitted, and tiles put over the corrugated iron. The roofs of the Clerk's and Overseer's quarters, which formerly consisted of thatch, were taken off and corrugated iron substituted. In addition to this, the end walls of both had to be thoroughly repaired, those of one having twice collapsed altogether; and of the other, the walls were so cracked and considered so unsafe that they had to be pulled down and rebuilt, but fell down again and had to be a second time rebuilt. Repairs were done to the old drying and packing sheds, as in consequence of the new ones not having been got ready we had to make use of the old buildings again. As almost every building suffered in a greater or less degree during the monsoon, repairs had to be undertaken largely, and at the close of the year all buildings were in good order and thoroughly white-washed and clean. At *Dodabetta* and *Wood* necessary repairs were done to all buildings on both estates.

23. Experiments—*Naduvatam and Hooker.*—The growth of the block coppice of 1879, particularly in Plots VI and VII below No. I Bungalow, at the close of the year was superb, and I think some of it ought to be cut over again this year, certainly next year.

The 1871 *Coppice, Plot I, Naduvatam.*—Two hundred trees which were cut for the second time in March 1881 made good growth; at the close of the last official year 151 stools had thrown up suckers. The maximum height was 8 feet and girth 5 inches.

The upper unbarked portions of the stems of trees which had been previously barked in Plot XII were sliced and 1,900 lb. of dry bark was obtained. Slicing or scraping was also resorted to in Plot No. XX, and 323 trees previously unbarked were treated in this manner; the yield of bark was 500 lb. Fifty-one trees were mossed and 239 were grassed, 17 were sliced in strips and not covered at all, while 16 trees treated in the same way were covered. The result of this experiment was most satisfactory The Head Overseer kept careful notes on the subject and was able to report that the bark had renewed in about three months, and that the

	lb.
*G.O., No. 631 of 15th June 1882	5,304
„ „ 1087 of 9th October „	8,500
„ „ 1376 of 7th December „	17,133
„ „ 223 of 6th February 1883	9,100
„ „ 430 of 10th April „	16,581
„ „ 552 of 4th May „	5,900
Total ..	62,518

trees looked remarkably well. Some of them should, in my opinion, be barked again this year and the bark analysed, and the difference, if any, between scraped trees, mossed trees, and trees left unmossed, noted.

Dodabetta and Wood.—The 500 trees which were treated under the scraping process in Plots V and XXVIII in 1881-82 are doing well. *The bark is well renewed and will be sliced again this year.*

The application of New Zealand flax, as a covering to barked trees, proved a success, and the bark renewed satisfactorily. The following statement shows the present condition of the 1879 coppicing on all four estates with maximum heights and girths :—

Plantations.	Plot.	Acreage.	Number of Trees coppiced.	Number of Trees which sprouted.	Number of failures.	Maximum height.	Maximum girth.
Dodabetta ...	XI	5·00	3,356	3,201	155	8¾′	6¾″
	XXVIII	5·00	2,493	2,096	397	8′	6″
Total ...		10·00	5,849	5,297	552	...	...
Wood	VIII	5·00	2,540	1,302	1,238	15′	11¼″
Naduvatam ...	VI	0·25	56	56	...	15¼′	12″
	VII	4·75	2,265	2,215	48	15′	12″
	XXIII	5·00	2,628	1,663	965	15½′	11″
Total ...		10·00	4,947	3,934	1,013	...	...
Hooker	XI	5·00	2,226	977	1,249	13′	12″

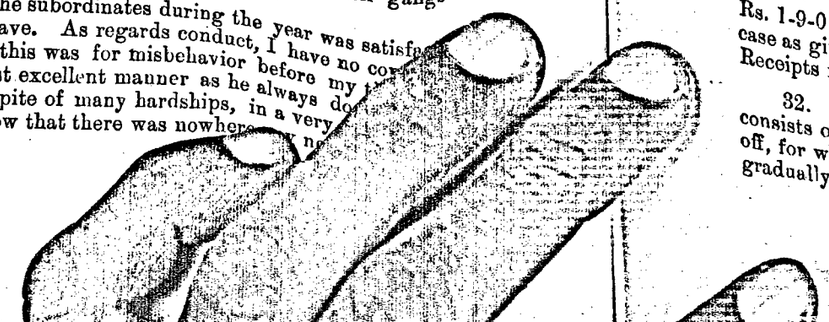
24 FIREWOOD PLANTATIONS—*Naduvatam.*—An extensive nursery containing over 100,000 of *Eucalyptus globulus* seedlings was completely destroyed by the rain, the seedlings having all rotted off, and out of 9,400 Eucalyptus plants permanently put out, only about 1,000 are living, the rest having died off. Even the *Acacia melanoxylon* plants, put out in the previous year, looked sickly and made but poor progress. The planting of Australian trees for firewood and other purposes will, however, be actively carried on this year, and we have formed good nurseries and sown 2 lb. of *Acacia melanoxylon* and 3 lb. of *Eucalyptus globulus* and 1 lb. of *Acacia decurrens* seed, all of which will be permanently planted out this year. On the boundaries of the estate the land is already pitted to the extent of 50 acres.

The *Acacia decurrens* is to be planted at Naduvatam to give it a trial in that locality, in the same way as it is to be tried in other parts of the hills under different conditions. There is no more land available at Dodabetta for firewood planting, and failures only will be planted up. The firewood for the furnaces * during the year was obtained partly from the stumps of uprooted trees and partly from junglewood cut within the boundaries of the estate, and for the current year the supply has been obtained by cutting in a small sholah within the estate boundaries near the Macoorchy bridge.

* Of Naduvatam.

25. LABOR.—The supply of labor on the Dodabetta side was scanty owing to the number of private plantations which were opened out, the proprietors of which pay the Badagas more than we do, while on the Naduvatam side it was excessive, as there we depend almost entirely on contract labor, and the number of coolies contracted for by the Head Overseer at the suggestion of Mr. Rowson, proved to be too many for one estate's requirements. No loss, however, ensued in consequence of this, as by employing them on repairing the public road during the monsoon full work was given to them all. Care has been taken to prevent this trouble arising again, and in the new agreements I have contracted with the Maistries for the smallest number possible, casual daily labor to be employed in cases of emergency, and I have also inserted a clause in the agreements to the effect that, if necessary, the Maistries must work on the Dodabetta side. This was not done last year, and they refused to go to Dodabetta in consequence. The labor this year at Dodabetta, too, will be in a much more satisfactory state, as the Assistant Superintendent has arranged with new Maistries to bring their gangs of coolies to Dodabetta whenever required.

26. GENERAL REMARKS.—The health of the subordinates during the year was satisfa[ctory] on the whole, and no one was absent on sick leave. As regards conduct, I have no co[mplaints] to make. Mr. MacDonald was dismissed, but this was for misbehavior before my t[ime]. Narrainasawmy Naidu did his work in the most excellent manner as he always do[es]. Hillier carried on his work at Naduvatam, in spite of many hardships, in a very [satisfactory] way. The outturn of work for the year will show that there was nowhere[fore] n[eglect].



27. The new chattram near Naduvatam, as stated in paragraph 21, was built during the year and thrown open to the public in February last. It is a capital chattram, well designed, well built and clean. The situation is good, and during March the Head Overseer reports that the average daily attendance of carts was 20 and the maximum 37. In the first days cart-men were induced to halt there by having grass and firewood supplied free to them. After a time, this was stopped almost entirely, and grass is now only given in special cases. The building and management of the chattram reflect much credit on the Head Overseer.

28. In G.O., No. 1286, dated 20th November 1882, the land immediately adjoining the chattram, and between it, and the plantation boundary was made over to the Chinchona Department, and the land lying between the Naduvatam and Hooker estates was included in a notification submitted to Government, of land proposed to be reserved and the reservation of this land will give the Chinchona Department control over a very important stretch of land outside the plantation boundaries, connecting all plantations on this side one with the other.

29. It may be brought here to the notice of Government that the position of the Head Overseer's bungalow is about as bad a one as could be selected. It stands near the Ossington boundary of our plantation, and very much out of the way and being far removed both from the Superintendent's bungalow and the drying shed, the distance from the latter having proved a serious inconvenience during the monsoon when the bridges were destroyed and the Head Overseer had to go long rounds to his work; and in case of fire, it would be most serious for the Head Overseer to be so far away, and great loss might follow to Government. There can be no doubt that the Head Overseer's house should be on the same ground, and as close as possible, to the drying shed, in the same way as the house at Dodabetta is, for this is the very centre of operations in the plantation. The question of a proper water-supply for the Superintendent's bungalow should be considered. This has been separately written about, for orders. At present, water has to be brought from a distance in a cart. As Mr. Lawson will no doubt spend much of his time at Naduvatam, it would be more convenient and less expensive in the long run to have water brought to the bungalow by means of a cut-water channel.

30. As regards the receipts of the year, it may be thought that they compare very unfavorably with the budget estimate. It is true that there is a very considerable difference, but it should be borne in mind that our crop is much smaller than was expected, and in my opinion the value of the crop when the budget estimate was framed was taken at too high a figure, and one which would seldom be realised at home. I have taken the value of the whole crop to be Rs. 1-9-0 per pound all round, and this I hold to be reasonable, inasmuch as it is an average obtained in an open market at four different auctions from the sale of about 85,000 lb. of bark, realising in all about Rs. 124,000. This average is really the present market value, for the bark we sold consisted of all kinds from the very best to the worst, and our sales were spread over fifteen months, during which time the prices at home fluctuated very considerably. If I had now taken the value of the bark all round to be roughly Rs. 2-8-0 per pound, our receipts would have been about Rs. 3,40,000, which brings us very close to the budget estimate. Even as they stand, however, they compare very favorably with the expenditure.

31 Some objections may be taken to my having substituted Rs. 4,10,000 for Rs. 5,00,000 as the budget estimate. This is however unavoidable. It has, as I have before shown, always been the custom for the crop of one year to be taken into consideration as the receipts of the following year; this is a very confusing way of keeping accounts, and as the change has to be made whereby the crop of a year becomes the basis on which the receipts of the same year are calculated, a change in the budget estimate figures is also necessary; this estimate Rs. 4,10,000 refers to the crop, &c., of 1882-83, and as this crop appears in the receipts of 1882-83, the estimate referring to that crop must be taken. I am aware that no estimated receipts from local sales are included in the Rs. 4,10,000 and that such receipts are included in our statement for 1882-83; this is, however, of no importance as the whole crop is worked out at its market value, viz., Rs. 1-9-0 per pound all round. To set the matter quite right, it remains only to alter the figures of the sanctioned Budget Estimate for 1883-84 from Rs. 4,10,000 to Rs. 2,35,000, the market value of 150,000 lb. of bark, the estimated crop for this year. In the preparation of a balance sheet for the plantations, the value of 232,467 lb. of bark sent home during 1881-82, and which is not shown in the receipts of 1882-83, must be included. The value of that crop was estimated to be Rupees 5,00,000 * and this figure may be adhered to, or the present estimated value of crop, viz., Rs. 1-9-0 a pound all round, may be taken. I should think the original estimated value in this case as given above is the proper one. This is the only item that requires to be included under Receipts in the balance sheet, everything else has been accounted for.

* *Vide* paragraph 2 of G.O., No. 1409, dated 14th December 1882.

32. The amount shown under Permanent Advance as recoverable, viz., Rs. 3,998-1-0, consists of all new advances which have been made this year, and old advances not yet cleared off, for which fresh agreements have been entered into, all of which are good debts and will be gradually paid off during the current year.

33. It will be observed that the stock during the year has increased by about 2,25,000 plants. I have recorded my opinion above, that the crop for the next few years will be much reduced in quantity. The estates of Hooker and Wood are in a particularly poor condition, and are apparently getting worse year by year. When our present plantings, which consist so largely of hybrids, are fit to bark a few years hence, then the value of the estates will have enormously increased both in quantity and quality of bark. It is a great satisfaction to note the good growth of our young Pubescens, and looking to the very excellent condition of the old hybrids, consider what a good future is before them.

34. I regret that but little progress has been made towards opening plantation books. It is an exceedingly difficult thing to do for the past, as the accounts are all mixed up in such away that it is not possible to ascertain what particular expenditure was incurred on particular objects. For the present and for the future, it will be an easy task as the system of accounts is now much more detailed and improved, and careful notes on all points are kept as well as diaries by all subordinates. I should think it would be a good plan to appoint some intelligent extra writer to undertake the work of opening plantation books and getting at the details as well as possible, from the materials available, for the first ten years of the plantations, for I am sure that none among the subordinates have time to do it, and the Superintendent certainly has not.

The writer would work under the orders of the Superintendent.

35. The abstract statement of receipts, expenditure, &c., &c., ordered by Government in G.O., No. 3137, dated 25th September 1882, is appended and forms Statement No. 14.

36. It is much regretted that the Chinchona Administration Report for 1881-82 was not as carefully put together and with as much detail, as it doubtless would have been, if the officer who was in charge of the plantation for the year had written it himself. I had the preparation of it, and was dealing with facts, concerning which I know nothing personally. The remarks and questions put by Government, in their Order, No. 66, dated 17th January 1883, I will now briefly answer :—

Paragraph 4.—The receipts for 1882-83 refer to crop shipped and sold locally of the same year.

Paragraph 4.—The excess over the sanctioned budget estimate was due to the uprooting of Succirubra at Naduvatam.

Paragraph 4.—Mr. Hillier, the Head Overseer, explains that the balance in store at the close of 1880-81 was partly at Ootacamund and partly at Naduvatam; that at the former place was in bales and had been weighed, while at the latter it was all loose and was roughly estimated and included in the closing balance, and that subsequently having been shipped to England with other bark of 1881-82, it was left out of the opening balance though included in the year's crop. The opening balance of 1881-82 was then given at the actual amount in store at Ootacamund. Though it is clear that there was considerable carelessness in keeping the accounts, still I see no reason to doubt the accuracy of the Head Overseer's statement.

Paragraph 6.—The discrepancy referred to as existing between the Conservator's figures and the crop actually shipped home is due to an error on the part of Government in their enumeration. The 488 bales of bark referred to in G.O., 16th May 1881, No. 771, should not have been included, as they formed part of the crop of 1880-81. The first consignment of crop for 1881-82 begins with G.O., No. 1079, dated 15th July 1881, and the last ends with G.O., No. 443, dated 1st May 1882, which Government have omitted altogether. The consignments are as marginally noted, and the total agrees exactly with the figures given by the Conservator.

			lbs.
G.O., 15th July	1881,	No. 1079	5,697
,, 2nd November	,,	,, 1629	44,186
,, 19th ,,	,,	,, 1758	32,414
,, 17th December	,,	,, 1945	23,534
,, 16th January	1882,	,, 53	15,929
,, 6th February	,,	,, 154	20,400
,, 21st ,,	,,	,, 223	14,521
,, 8th March	,,	,, 271	36,720
,, 1st May	,,	,, 443	39,066
		Total ..	2,32,467

Paragraph 7.—The renewals both at Hooker and Dodabetta consisted of *C. officinalis*.

Paragraph 7.—The planting at "Wood" of 20,000 Succirubras as renewals was done by order of Mr. Rowson, and probably long before the receipt of G.O., dated 29th August 1881, No. 1280. They were put out in Plot I which consisted of pure Succirubra and lies low, and too much so for *C. officinalis*, and, as I am informed, there were then no hybrids available. These were, I do not doubt, Mr. Rowson's reasons for falling back on *C. succirubra*.

Paragraph 7.—As regards the Succirubra seedlings raised and thrown away, I can only say that it was most unfortunate. The seedlings were raised because it was thought there would be a demand for them. The taste of the public changes from year to year very much, and this year if we had had them in our nurseries we could have sold them largely, for the demand for *C. succirubra* seed has this year been very great. Now we have no Succirubra plants or seedlings, but we have Officinalis, and from my experience of the last few months, I think it probable that a very large number of them will have to be grubbed up and thrown away.

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No. 1.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Dodabetta*, during the Official Year 1882-83.

Months.	For 1881-82.		For 1882-83.	
	Rainfall.	Number of Wet days.	Rainfall.	Number of Wet days.
April	1·16	3	4·87	8
May	13·14	18	6·48¾	11
June	1·30	18	8·12	22
July	3·02½	13	11·22	29
August	9·24	24	4·40	24
September	3·34	17	3·34	16
October	3·67	11	10·29	18
November	7·69	20	8·90	16
December	3·09	6	0·35	4
January	2·58	4	0·01½	2
February	...	...	...	...
March	0·49	2	3·36	10
Total	48·71½	136	61·35¼	160

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 2.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Naduvatam*, during the Official Year 1882-83.

Months.	For 1881-82.		For 1882-83.	
	Rainfall.	Number of Wet days.	Rainfall.	Number of Wet days.
April	0·50	2	1·21	4
May	3·77	14	6·54	19
June	9·87	26	34·70	25
July	24·13	22	102·11	30
August	17·90	28	16·94	27
September	4·54	20	12·61	25
October	3·55	13	12·20	21
November	7·02	16	5·71	14
December	1·40	4	0·11	2
January	0·84	4	...	...
February	...	...	...	...
March	0·21	1	2·80	11
Total	73·73	150	194·93	178

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 3.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Hooker*, during the Official Year 1882-83.

Months.	Rainfall.	Number of Wet days.	Remarks.
	IN. C.		
April 1882	0 25	1	
May "	8 23½	19	
June "	29 03	21	
July "	61 87	31	
August "	13 16	25	
September "	10 21	19	
October "	11 56	20	
November "	6 50	16	
December "	0 01	1	
January 1883	...	...	
February "	...	...	
March "	2 71	10	
Total ..	143 53½	163	

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No 4.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Wood*, during the Official Year 1882-83.

Months.	Rainfall.	Number of Wet days.	Remarks.
	IN C.		
April 1882	0 86	5	
May "	9 07	18	
June "	26 08	22	
July "	71 09	31	
August "	13 74	27	
September "	10 01	22	
October "	14 16	20	
November "	7 22	18	
December "	0 12	1	
January 1883	...	...	
February "	...	...	
March "	2 66	9	
Total ...	155 01	173	

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 5.

STATEMENT showing the Receipts on account of the Government Chinchona Plantations, Nilgiris, for 1882-83, calculated in accordance with orders of the Secretary of State—*vide* G.O., No. 1163, dated 23rd October 1882.

Particulars.	Actuals for 1882-83.	Sanctioned Budget Estimate for 1882-83.	Remarks.
	RS. A. P.	RS. A. P.	
Value of Bark cropped (129,712¾lb)...	*83,350 15 11	†1,08,500 0 0	
Sale-proceeds of Seeds and Plants ...	4,200 7 10	7,500 0 0	
Miscellaneous	145 0 0	...	
Total ...	87,696 7 9	1,16,000 0 0	

* Actual charges incurred in collecting the crop of 1882-83.
† Sanctioned expenditure for collecting 165,000 lb. of bark, the estimated crop of 1882-83.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

OOTACAMUND,
13th June 1883.

No. 6.

STATEMENT showing the Receipts on account of the Government Chinchona Plantations, Nilgiris, for 1882-83, calculated according to the Market value of the Bark.

Particulars.	Actuals for 1881-82.*	Actuals for 1882-83.	Sanctioned Budget Estimate for 1882-83.	Sanctioned Budget Estimate for 1883-84.	Remarks.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Value of Bark sent home.	5,00,000 0 0	†97,684 6 0			* *Vide* paragraph 2 of G.O., No. 1409, dated 14th December 1882.
Value of Bark sent to Bombay.	1,531 2 4	..			
Value of Bark sold locally.	15,660 1 7	1,06,396 0 1	5,00,000 0 0	4,10,000 0 0	
Sale proceeds of Seeds and Plants.	6,048 1 5	4,200 7 10			
Miscellaneous	1,605 1 4	145 0 0			
Total ..	5,24,844 6 8	2,08,425 13 11	5,00,000 0 0	4,10,000 0 0	

* Entered for the sake of comparison.—"The value of bark sent Home," is actually the value of crop taken during 1881-82.
† Value of 62,518 pounds of bark sent Home during 1882-83.

Explanation for the above Statement of Receipts.

The Budget Estimate for 188..83, viz. Rs. 35,00,000, refers to the crop of 1881-82. The Budget Estimate for 1883-84, viz., Rs. 4,10,000, refers to the crop of 1882-83. The receipts here given are the crop of 1882-83; therefore the Budget Estimate referring to that crop, viz., Rs. 4,10,000, should be considered in reviewing the financial results of the year.

The Regular Estimate of 1882-83 was Rs. 6,28,000. This is made up of value of crop sent home during 1881-82, viz., Rs. 5,00,000 *plus* value of bark sold locally during 1882-83 and other minor receipts. The comparison is very favorable.

Under the old system of keeping accounts, *Rs.* 97,684-6-0, the value of crop sent home during 1882-83, would have formed the receipts for 1883-84. This is no longer the case, therefore the Budget Estimate for 1883-84, viz., Rs. 4,10,000, which refers to the crop of 1882-83, will have to be discarded, and fresh figures substituted. This has been explained elsewhere.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

OOTACAMUND,
13th June 1883.

No. 7.

STATEMENT showing the Expenditure in Detail on the *Dodabetta* Chinchona Plantations for the Official Year 1882-83.

Months.	Establishment.	Nurseries.				Working Charges.				Manure.
		Labor.	Propagation.	Collection of Seed.	Postage on Seed.	Roads.	Weeding.	Pitting and Planting.	Various.	
1	2	3	4	5	6	7	8	9	10	11
	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 1882	220 7 9	70 0 0	23 0 0	98 1 6	...	9 11 0	291 7 6	207 8 6	96 8 0	639 3 0
May „	176 0 0	73 14 6	23 0 0	26 1 6	13 8 0	14 1 0	228 10 0	197 2 0	96 3 0	378 7 0
June „	160 0 0	49 5 0	23 0 0	12 13 6	37 15 0	32 5 6	375 4 6	69 7 0	93 9 0	127 14 0
July „	166 12 5	40 11 6	23 0 0	9 0 0	16 12 0	71 13 0	64 9 6	44 11 0	78 10 0	30 0 0
August „	320 0 0	48 7 0	23 0 0	2 3 0	9 12 0	14 5 0	4 7 0	50 11 6	52 2 0	35 5 0
September „	294 0 6	51 3 6	23 0 0	10 4 6	9 0 0	17 14 0	18 14 0	45 11 0	57 5 6	30 1 0
October „	285 0 0	120 15 0	23 0 0	9 8 0	5 8 0	13 0 0	70 15 0	4 15 6	54 13 0	30 6 0
November „	293 0 0	40 15 0	23 0 0	14 5 0	0 8 0	14 9 0	29 13 0	75 8 0	117 7 0	23 7 0
December „	293 0 0	48 5 6	23 0 0	8 1 0	...	16 2 0	147 8 9	116 6 6	104 8 0	134 10 0
January 1883	293 0 0	97 5 6	23 0 0	6 9 6	...	12 8 0	530 13 9	99 0 6	98 7 0	23 15 0
February „	293 0 0	46 3 0	52 8 0	4 4 0	...	13 15 0	872 13 0	27 11 0	201 1 4	145 2 0
March „	293 0 0	135 15 0	23 0 0	15 9 6	...	11 5 0	564 7 1	16 14 0	794 1 0	307 3 0
Total ...	3,067 4 8	823 4 6	305 8 0	216 13 0	92 15 0	241 8 6	3,199 11 1	955 10 6	1,844 5 10	1,905 9 0

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Statement showing the Expenditure in Detail on the Dodabetta Chinchona Plantations for the Official Year 1882-83—(Continued).

Months.	Buildings.		Collection of Crop.							Contingencies.	Total.
	New.	Repairs.	Barking and Mossing.	Collection of Moss.	Drying Bark.	Packing Bark.	Storage of Bark.	Carriage of Bark.	Various.		
	12	13	14	15	16	17	18	19	20	21	22
	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 1882 ...	...	...	...	...	9 11 0	...	...	...	...	13 0 0	1,658 10 3
May „ ...	...	6 14 0	...	60 5 0	5 15 0	...	...	...	50 0 0	10 13 6	1,360 14 6
June „ ...	...	71 9 0	60 6 0	326 15 0	5 5 0	...	...	...	22 0 0	7 4 0	1,475 0 6
July „ ...	...	...	494 7 6	242 3 6	17 9 6	...	...	...	34 0 0	...	1,334 3 11
August „ ...	...	...	365 11 0	205 6 3	11 14 0	5 15 6	25 10 0	...	52 0 0	...	1,226 13 3
September „ ...	...	...	432 9 0	432 15 9	22 3 6	0 15 0	20 0 0	...	76 7 0	...	1,543 8 3
October „ ...	...	...	380 15 9	433 14 0	31 14 0	40 0 0	27 4 0	...	40 0 0	22 5 0	1,594 5 3
November „ ...	...	20 8 11	356 14 0	374 1 9	31 3 0	8 4 0	5 4 0	...	1,092 6 0	12 8 0	2,533 9 8
December „ ...	...	30 15 0	320 13 3	148 3 0	22 4 6	17 12 0	...	...	34 0 0	10 10 0	1,475 14 6
January 1883 ...	...	132 15 6	34 4 6	...	6 5 6	36 12 0	3 2 0	...	260 8 0	13 8 0	1,672 2 9
February „ ...	...	141 15 9	9 5 0	...	0 15 0	4 5 0	1 4 0	...	40 8 0	9 4 0	1,864 2 1
March „ ...	...	24 0 8	3 15 0	...	22 2 0	1 12 0	3 2 0	501 10 0	20 0 0	8 6 6	2,746 6 9
Total ...	...	428 14 10	2,459 5 0	2,224 0 3	187 6 0	115 11 6	85 10 0	501 10 0	1,721 13 0	107 11 0	20,484 11 8

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OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

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No. 8.

STATEMENT showing the Expenditure in Detail on the *Naduvatam* Chinchona Plantations for the Official Year 1882-83.

Months.	Establishment.	Nurseries.				Upkeep.					Buildings.	
		Labor.	Propagation.	Collection of Seed.	Various.	Pitting and Planting.	Weeding.	Roads and Bridges.	Various.	Manure.	New.	Repairs.
1	2	3	4	5	6	7	8	9	10	11	12	13
	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 1882	411 0 0	116 4 8	30 0 0	4 8 0	..	490 3 0	268 9 6	29 13 0	156 13 4	99 6 1	..	253 4 2
May „	461 0 0	130 7 1	30 0 0	55 9 9	..	178 11 5	3 12 6	28 2 0	198 8 9	122 7 10	..	1,636 9 9
June „	446 7 9	129 6 7	30 0 0	..	..	1,199 9 1	122 7 6	43 9 6	150 13 4	107 4 3	..	316 8 0
July „	436 0 0	91 0 8	28 0 0	..	..	27 15 0	20 5 0	35 7 0	173 2 1	619 12 2	418 9 4	931 3 4
August „	251 0 0	91 15 10	32 0 0	..	..	236 4 0	40 0 0	145 9 6	166 8 9	189 3 2	..	..
September „	251 0 0	112 6 6	32 0 0	31 12 0	2 4 0	297 9 6	44 15 0	178 13 3	648 6 10	328 11 2	6 8 0	559 5 9
October „	251 0 0	111 1 7	12 0 0	7 0 0	..	190 2 0	95 12 6	29 9 6	174 2 2	182 1 11	..	0 13 2
November „	243 0 0	114 11 11	12 0 0	65 6 0	..	392 13 4	197 1 9	285 2 5	238 11 0	184 15 9	639 12 9	646 13 2
December „	123 0 0	117 0 9	32 0 0	246 0 0	..	239 6 10	198 12 6	146 10 9	267 14 2	117 15 8	40 9 0	5 14 1
January 1883	183 0 0	131 0 7	32 0 0	..	103 3 6	632 9 0	394 11 0	389 4 2	243 14 4	100 12 1	834 0 5	115 11 5
February „	213 0 0	115 11 0	32 0 0	..	..	39 6 0	763 1 3	50 14 6	255 4 7	209 15 4	..	7 0 2
March „	213 0 0	91 10 7	32 0 0	..	3 7 0	..	116 10 9	109 9 0	36 9 10	207 5 8	..	4 8 0
Total ..	3,482 7 9	1,352 13 9	334 0 0	410 3 9	108 14 6	3,924 9 2	2,266 3 3	1,472 8 7	2,710 13 2	2,469 15 1	1,939 6 6	4,513 11 0

Statement showing the Expenditure in Detail on the Naduvatam Chinchona Plantations for the Official Year 1882-83—(Continued).

Months.	Peon's Clothing.	Collection of Crop.							Firewood Plantation.	Contingencies.	Total.
		Barking and Mossing.	Collections of Moss and Grass.	Drying Bark.	Packing Bark.	Storage.	Carriage of Bark.	Various.			
	14	15	16	17	18	19	20	21	22	23	24
	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 1882	..	142 10 6	..	59 11 6	5 10 0	35 3 0	..	84 14 2	78 1 1	10 4 0	2,276 5 0
May „	..	..	..	10 4 6	433 13 0	48 15 6	5 0 0	24 8 10	21 15 5	..	3,391 14 4
June „	..	10 0 0	226 11 0	..	..	51 8 0	46 0 0	610 11 8	..	13 6 0	3,504 6 8
July „	..	493 0 0	471 6 11	47 15 0	..	39 11 2	..	157 14 6	34 10 11	44 8 0	4,070 9 1
August „	..	323 5 6	149 4 9	296 14 9	23 12 3	28 2 0	..	452 10 9	9 1 9	15 2 0	2,450 15 1
September „	..	367 3 0	93 7 0	108 14 6	..	30 6 0	115 5 6	897 3 6	..	20 1 0	4,126 4 6
October „	..	905 1 9	77 1 0	175 8 6	11 14 0	39 1 2	44 8 6	218 1 6	75 0 0	5 3 3	2,605 2 6
November „	48 0 0	775 5 2	35 11 5	260 1 0	29 8 6	38 4 6	363 5 0	144 8 5	..	8 0 0	4,723 4 1
December „	..	371 14 9	..	131 10 9	7 14 0	35 15 6	10 0 0	154 1 2	..	18 6 0	2,265 0 11
January 1883	..	19 8 0	51 0 0	246 5 8	50 1 0	76 6 0	40 0 0	250 2 9	107 15 1	74 1 0	4,111 10 6
February „	..	..	..	51 5 6	18 9 0	64 13 6	102 8 0	38 8 6	46 9 10	39 1 10	2,098 11 6
March „	..	..	..	6 14 6	0 9 0	45 10 0	188 7 6	11 4 11	81 14 2	..	1,198 10 5
Total ..	48 0 0	3,408 2 2	1,104 10 1	1,395 10 2	583 10 9	534 0 4	915 2 6	3,044 10 8	455 4 3	248 1 1	36,722 14 6

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 9.

STATEMENT showing the Expenditure in Detail on the *Pykara* Chinchona Plantations for the Official Year 1882-83.

Months.	Establishment.	Nurseries.			Working Charges.				Manure.	Buildings.	
		Labor, &c.	Collection of Seed.	Various.	Pitting and Planting.	Weeding.	Roads and Drains.	Various.		New Works.	Repairs.
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.
April 1882 ...	120	139 6 3	...	...	339 15 8	197 0 3	8 11 6	86 5 8	74 8 7	...	18 4 7
May „ ...	120	124 6 6	58 9 6	18 4 9	71 7 3	2 11 0	10 13 3	61 11 4	77 7 2	...	152 2 10
June „ ...	120	145 10 4	...	...	56 7 0	80 5 6	25 6 0	154 6 7	39 6 10	...	150 11 4
July „ ...	120	78 12 10	...	...	58 6 0	...	19 2 6	38 9 5	22 7 8	...	...
August „ ...	120	84 12 0	...	...	16 10 0	29 7 0	66 13 6	123 5 1	25 13 1	...	0 9 11
September „ ...	120	104 1 8	1 0 0	...	300 10 0	208 15 6	91 0 0	160 5 5	56 1 9	...	4 7 6
October „ ...	120	109 7 2	...	...	293 6 9	133 11 6	42 14 0	107 14 7	64 2 4	...	12 3 10
November „ ...	120	136 4 2	13 4 6	...	213 5 6	281 2 6	30 11 9	141 11 10	64 5 1	9 4 6	0 9 4
December „ ...	120	141 0 1	9 10 6	...	282 1 6	232 13 0	36 3 0	164 9 11	139 5 5	2 7 7	0 8 9
January 1883 ...	120	129 2 4	...	24 0 0	421 14 7	320 13 9	74 13 6	272 2 0	148 9 1	...	8 9 8
February „ ...	120	107 10 10	0 8 0	...	338 15 0	202 3 9	17 8 9	225 0 8	91 7 0	...	145 7 10
March „ ...	120	87 15 1	1 8 0	...	167 13 0	89 12 0	16 2 0	157 1 9	174 9 1	...	22 10 5
Total ...	1,440	1,388 9 3	84 8 6	42 4 9	2,561 0 3	1,778 15 9	440 3 9	1,693 4 3	978 3 1	11 12 1	517 6 0

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Statement showing the Expenditure in Detail on the Pykara Chinchona Plantations for the Official Year 1882-83—(Continued).

Months.	Collection of Crop.							Total.
	Barking and Mossing.	Collection of Moss and Grass.	Drying Bark.	Packing Bark.	Storage.	Carriage of Bark.	Various.	
	13	14	15	16	17	18	19	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.
April 1882	14 1 0	...	3 14 6	0 9 0	10 0 0	36 0 0	25 5 10	1,074 2 10
May „	...	...	26 7 6	5 5 6	...	...	23 4 4	752 10 11
June „	2 4 0	178 14 6	26 13 0	3 6 0	10 0 0	21 6 0	30 0 10	1,045 1 11
July „	388 1 0	87 15 0	71 0 6	...	10 0 0	12 10 0	134 5 2	1,041 6 1
August „	257 12 0	100 2 6	81 9 6	7 14 0	10 0 0	31 2 0	62 14 7	1,018 13 2
September „	74 6 3	17 10 3	82 8 6	0 15 0	10 0 0	38 1 6	672 1 9	1,942 5 1
October „	166 6 0	6 8 6	86 8 0	...	10 5 0	14 8 6	54 6 10	1,222 7 0
November „	112 0 6	...	49 9 9	10 0 0	10 0 0	97 3 0	53 7 2	1,342 15 7
December „	66 4 6	...	33 3 6	4 6 0	10 0 0	2 2 0	35 5 2	1,281 1 11
January 1883	...	...	26 11 9	3 15 0	10 4 6	...	130 0 9	1,691 0 11
February „	...	19 7 6	1 11 0	21 9 0	8 11 4	51 14 3	35 2 11	1,387 5 10
March „	...	...	...	...	10 0 0	1 8 0	22 9 4	871 8 8
Total ...	1,081 3 3	410 10 3	490 1 6	57 15 6	109 4 10	306 7 3	1,279 0 8	14,670 14 11

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OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 10.

STATEMENT showing the Expenditure in Detail of Office Establishment and General for the Official Year 1882-83.

Months.	Establishment.	Deputy Conservator's Allowance.	Superintendent's pay.	Assessment on Plantation.	Cost of Gunny Bags.	Carriage of Bark to Mettupálaiyam.	Railway Charges.	Shipping Charges.	Batta and Travelling Allowance.	Contingencies.	Peons' Clothing.	Passage Money of Mr. Cross.	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.	RS. A. P.	RS. A. P.
April 1882 ..	131 0 0	200 0 0	..	..	..	..	..	44 2 11	..	8 7 0	..	682 0 0	1,065 9 11
May ,, ..	131 0 0	200 0 0	..	..	..	..	597 5 0	79 2 0	..	122 8 6	..	..	1,129 15 6
June ,, ..	131 0 0	200 0 0	..	..	..	..	..	711 14 3	..	17 10 6	..	..	1,060 8 9
July ,, ..	131 0 0	200 0 0	..	..	..	32 8 0	80 13 0	35 14 6	33 14 0	42 0 0	..	..	556 1 6
August ,, ..	149 11 4	200 0 0	..	180 0 0	1,795 4 0	..	..	6 12 0	..	35 12 0	..	..	2,367 7 4
September ,, ..	131 0 0	200 0 0	..	..	..	..	..	14 14 0	153 0 0	23 12 0	..	..	522 10 0
October ,, ..	131 0 0	200 0 0	..	..	..	..	..	9 13 0	..	29 6 0	..	..	370 13 0
November ,, ..	123 0 0	200 0 0	..	..	..	..	258 13 0	28 3 9	..	29 8 0	..	..	639 8 9
December ,, ..	127 12 10	200 0 0	..	..	..	..	..	2 11 0	57 14 9	37 0 0	..	..	425 6 7
January 1883 ..	129 11 4	200 0 0	..	..	..	..	..	16 14 0	28 14 4	131 12 0	..	..	507 3 8
February ,, ..	122 0 8	200 0 0	..	..	..	111 10 4	753 5 0	0 10 11	..	57 13 10	35 0 0	..	1,280 8 9
March ,, ..	131 0 0	200 0 0	514 4 7	..	..	82 14 6	260 8 0	1 3 2	307 12 10	49 8 0	..	..	1,547 3 1
Total ..	1,569 4 2	2,400 0 0	514 4 7	180 0 0	1,795 4 0	227 0 10	1,950 12 0	952 3 6	581 7 11	585 1 10	35 0 0	682 0 0	11,472 6 10

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

STATEMENT showing the Number of Trees barked and the Quantity of Bark obtained under various systems of Coppicing on the Government Chinchona Plantation, *Hooker*, during the Official Year 1882-83.

Number of Plot.	Stripping and Mossing Process.			Coppicing Process.				Uprooting Process.]				Grand Total.	
	Red.		Crown.	Red.		Crown.		Red.		Crown.			
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.
I ..													
II ..	1,953	5,869	537	1,797	200	385	155	..	..	25	80	2,845	8,846
III ..	..	..	298	..	..	385	103	..	..	..	..	426	849
IV ..	448	1,054	384	1,717	264	20	20	..	..	63	212	732	2,791
V ..	..	..	..	..	..	962	364	..	..	..	..	617	1,492
VI ..	..	..	200	..	..	20	22	..	..	461	1,463	22	78
VII ..	..	..	..	..	..	78	4,422	..	..	77	215	1,657	5,885
VIII ..	..	..	318	3,207	1,196	4,422	1,196	..	..	..	..	1,748	6,965
IX ..	..	..	..	11,267	740	2,142	740	..	..	..	..	1,739	11,705
X ..	..	..	401	223	160	402	160	..	..	60	326	403	1,063
XI ..	295	36	86	566	257	514	257	..	..	..	115	464	1,426
XII ..	12	1,567	1,567	11,267	157	436	157	10	..	29	..	1,994	9,012
XIII ..	..	..	96	223	38	76	38	..	..	..	..	25	68
	172	96	682	5,581	25	68	25	..	..	..	..	1,034	1,295
	229	682	..	..	6	38	6	..	..	..	..	..	..
Total ..	83	..	..	..	..	..	..	..	..	..	..	..	..
	54	..	..	..	..	..	..	..	..	..	..	..	..
	1,028	1,267	3,541	24,358	3,243	9,928	10	80	695	2,411	13,706	60,475	
	2,625	3,484											
	10,214												
	3,592												

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 11.

STATEMENT showing the Number of Trees barked and the Quantity of Bark obtained under various systems of harvesting on the Government Chinchona Plantation, *Naduvatam*, during the Official Year 1882-83.

Number of Plot.	Stripping and Mossing Process.				Coppicing Process.				Uprooting Process.				Java Process.		For Samples.		Grand Total.	
	Red.		Crown.		Red.		Crown.		Red.		Crown.		Red.		Crown.			
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.
I	378	3,142	..	..	11	491	..	..	..	..	..	..	..	..	..	..	389	3,633
II	..	..	..	..	21	434	..	..	..	..	..	..	..	..	..	..	21	434
III	..	..	..	..	103	572	..	..	..	..	..	..	..	..	..	..	103	572
IV	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V	..	..	..	..	625	6,118	..	..	58	749	..	..	..	..	..	..	683	6,867
VI	..	..	..	..	58	1,043	15	192	..	..	..	..	..	..	..	..	73	1,235
VII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
VIII	..	..	..	..	125	1,924	56	442	..	..	..	..	..	..	..	..	181	2,306
IX	..	..	..	..	66	1,009	8	64	..	..	..	..	..	..	..	..	74	1,073
X	..	..	..	..	437	5,573	..	..	10,922	96,153	22	224	..	..	..	..	11,381	101,950
XI	..	..	..	..	4,608	28,583	13	155	..	..	..	..	..	..	..	..	4,621	23,738
XII	..	..	..	..	176	2,673	..	..	15	66	..	..	2,103	6,340½	..	..	2,294	9,079½
XIII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XIV	..	..	..	..	131	1,705	7	56	162	1,597	..	..	..	..	..	..	300	3,358
XV	..	..	..	..	20	369	..	..	..	..	..	..	..	..	..	..	20	369
XVI	..	..	..	..	..	..	..	..	345	2,140	..	..	..	..	..	..	345	2,140
XVII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XVIII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XIX	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XX	..	..	..	..	..	..	..	..	..	..	..	..	323	2,036	..	..	323	2,036
XXI	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XXII	4,004	20,886	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4,004	20,886
XXIII	..	..	..	..	16	975	12	110	..	..	..	..	..	..	..	..	28	1,085
XXIV	6,804	32,379	..	..	917	9,155	4	70	..	..	..	..	..	..	..	..	7,725	41,604
XXV	..	..	..	..	1,069	9,306	2	28	..	..	..	..	..	..	..	..	1,071	9,334
XXVI	..	..	..	..	218	2,372	27	163	1,098	10,730	..	..	..	..	..	..	1,343	13,265
XXVII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XXVIII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XXIX	..	..	..	..	8	76	..	..	..	..	..	..	..	..	50	339	8	76
Total ..	11,186	56,407	..	..	8,609	72,378	144	1,280	12,600	111,435	22	224	2,426	8,376½	50	339	35,037	250,439½

No. 12.

STATEMENT showing the Number of Chinchona Trees barked and the Quantity of Bark taken at the Government Chinchona Plantation, *Dodabetta*, during the Official Year 1882-83.

Plot.	Crown.		Pata de Gallinazo or Magnifolia.		Grand Total.		Remarks.
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	
		Lb.		Lb.		Lb.	
IX	12,091	12,949	4	19	12,095	12,968	
XIV	3,001	6,485	.. 2	.. 7	3,001	6,485	
XV	1,856	3,299	17	86	1,868	3,306	
XXIII	5,226	5,173	13	60	5,243	5,259	
XXVIII	542	830	15	65	555	890	
XXIX	5,257	7,868	..	..	5,272	7,933	
XXX	6,695	8,796	.. 32	.. 152	6,685	8,796	
XXXI	4,013	5,139	28	105	4,045	5,291	
XXXII	3,657	6,889	40	215	3,685	6,994	
XXXIII	4,328	7,051	..	..	4,368	7,266	
XXXIV	1,731	5,920	.. 10	.. 42	1,731	5,920	
XXXVI	931	1,453	2	9	941	1,495	
XXXVII	1,162	1,133	2	9	1,164	1,142	
XXXVIII	2,479	4,689	..	..	2,481	4,698	
XXXIX	158	217	..	..	158	217	Under slicing system. From cut trees and branches.
Total ..	53,117	91,774	165	769	53,282	92,543	

STATEMENT showing the Number of Trees barked and the Quantity of Bark obtained under various systems of coppicing on the Government Chinchona Plantations, *Wood*, during the Official Year 1882-83.

Sub-Division.	Under Stripping and Mossing System.				Coppicing Progress.				Uprooting Process.				Java Process.		For Samples.		Grand Total.	
	Red.		Crown.		Red.		Crown.		Red.		Crown.		Red.		Of all varieties.			
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.
I	185	740	...	...	11	65	...	..	...	...	...	...	...	...	...	...	196	805
II	2,777	8,331	...	...	573	4,254	...	...	...	...	...	...	...	...	...	...	3,350	12,585
III	...	...	...	...	214	2,805	44	450	...	...	...	...	...	...	...	...	258	3,255
IV	...	...	...	...	404	3,005	14	90	...	...	...	...	...	...	...	...	418	3,095
V	1,235	4,940	...	...	558	3,060	...	...	...	...	...	...	...	...	...	...	1,793	8,000
VI	...	...	...	...	182	785	...	...	...	...	...	...	...	...	...	...	182	785
VII	...	...	...	...	60	290	...	...	...	...	...	...	...	...	...	...	60	290
VIII	...	...	...	...	793	5,845	...	...	...	...	...	...	...	...	...	...	793	5,845
IX	...	...	...	...	30	190	...	...	...	...	...	...	...	...	...	...	30	190
Total ...	4,197	14,011	...	...	2,825	20,299	58	540	...	...	...	...	...	...	...	...	7,080	34,850

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 13.

STATEMENT showing the Quantity of Seed and the Number of Plants sold to the Public during the Official Year 1882-83.

Particulars.	Seed.	Plants.	Seedlings.
	LB. OZ.		
Naduvatam.			
C. Officinalis	35 6¾	16,000	...
C. Succirubra	160 0	...	...
C. Pubescens	78 5¾	...	15,000
Dodabetta.			
C. Officinalis	287 1	52,000	80,000
C. Uritisinga	12 7	...	10,000
C. Pata de Galinazo	20 2¾	4,000	43,000
C. Augustifolia	0 8	1,156	... 1,252
C. Ledgeriana	...	73,156	149,252
Total ...	593 14¾		

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 14.

A.—Statement showing the total Yield of the Government Chinchona Plantations, Nílgiris, for the Official Year 1882-83.

1	2	3 Bark.													4	5 Propagation.		
		a Under Stripping and Mossing System.			b Uprooting.			c Coppicing.			d Scraping.			Total Quantity of Green Bark collected during the Month.	Quantity when dry.	Seed.	a Plants.	b Seedlings.	c Rooted Cuttings.
Name of Plantation.	Species of Produce.	No. of Plots.	No. of Trees decorticated.	Outturn of Green Bark.	No. of Plots.	No. of Trees decorticated.	Outturn of Green Bark.	No. of Plots.	No. of Trees decorticated.	Outturn of Green Bark.	No. of Plots.	No. of Trees decorticated	Outturn of Green Bark.					
				LB.			LB.			LB.			LB.			LB.	NO.	NO.	NO.
Dodabetta	Add last year's balance.	..	..	..	..	..	..	..	..	..	..	..	..	..	5,304	..	..	..	..
	Crown Bark	14	52,959	77,674	..	..	..	branches		13,883	1	158	217	91,774	38,946½	..	..	..	..
	Various	11	165	769	..	..	..	..	..	..	..	..	..	769	358	..	..	..	..
Naduvatam	Red Bark	3	11,186	56,407	6	12,600	111,435	17	8,609	72,378	2	2,426	8,376½	248,596½	69,883	..	..	..	..
	Crown Bark	..	..	..	1	22	224	9	144	1,280	..	..	..	1,504	500	..	..	..	..
	Various for samples, &c.	..	50	339	..	..	..	..	..	..	..	..	..	339	161¼	..	..	..	..
Pykara	Red Bark	6	7,789	34,353	1	10	80	7	3,541	43,811	..	..	..	78,244	14,968	..	..	..	..
	Crown Bark	8	2,625	3,484	6	695	2,411	..	..	..	13	3,243	10,468	16,363	4,896	..	..	..	..
	Total	..	..	173,026	..	..	114,150	..	..	131,352	..	..	19,061½	437,689½	135,016¾	..	..	..	..

B.—Statement showing the disposal of Bark and other Produce collected in the Government Chinchona Plantations during the Official Year 1882-83.

1	2	3 Bark.								4 Seed.			5 Propagated Plants and Seedlings.						
		a Sent to Madras for shipment to London.		b Sold in the Country.		c Samples.		d Total.		a	b	c	a Plants.		b Seedlings.		c Rooted Seedlings.		
Name of Plantation.	Name of Species.	Bales.	Quantity.	Bales.	Quantity.	Bales.	Quantity.	Bales.	Quantity.	Sold to the Public.	Used for Nurseries.	Total.	Sold to Public.	Permanently put up in the Plantations.	Sold to Public.	Transplanted.	Transplanted to Nurseries.		Remarks.
		NO.	LB.	NO.	LB.	NO.	LB.	NO.	LB.	LB.	LB.	LB.							
Dodabetta	Crown Bark	155	20,156	148	18,257½	..	83	303	(a)38,946½	..	..	..	..	..	..	..	..	..	..
	Various	4	358	..	..	..	..	4	358	..	..	..	..	..	..	..	..	..	..
Naduvatam	Red Bark	304	30,400	394	39,400	..	..	698	69,800	..	..	..	..	..	..	..	..	..	..
	Crown Bark	24	2,400	..	..	..	..	24	2,400	..	..	..	..	..	..	..	..	..	..
	Various	1	100	..	..	..	144½	1	244½	..	..	..	..	..	..	..	..	..	..
Pykara	Red Bark	90	9,104	98	9,870	..	41	188	(b) 20,272	..	..	..	..	..	..	..	..	..	..
	Crown Bark	..	..	18	1,800	..	16	18	(c) 2,996	..	..	..	..	..	..	..	..	..	..
	Total	578	62,518	658	69,327½	..	284½	1,236	135,016¾	..	..	..	..	..	..	..	..	..	..

(a) Including 450 lb. in store on 31st March 1883. (b) Including 1,257 lb. in store on 31st March 1883. (c) Including 1,180 lb. in store on 31st March 1883.

C.—Statement showing the Receipts and Expenditure of the Government Chinchona Plantations, Nílgiris, for the Official Year 1883-84.

Name of Plantation.	Receipts.		Expenditure.						Grand Total of all Expenditure.	
			A. Conservancy and Works.			B. Establishment.				
	Budget Estimate.	Total.	Budget Estimate.	Amount.	Total.	Budget Estimate.	Amount.	Total.	Budget Estimate.	Total.
	RS.	RS. A. P.	RS.	RS. A. P.	RS. A. P.	RS.	RS. A. P.	RS. A. P.	RS.	RS. A. P.
Dodabetta	5,00,000	2,08,425 13 11	91,816	17,309 12 0	68,256 1 10	16,684	3,174 15 8	15,094 14 1	1,08,500	83,350 15 11
Naduvatam				32,944 5 8			3,778 8 10			
Pykara				13,230 14 11			1,440 0 0			
Office and General				4,771 1 3			6,701 5 7			

	RS. A. P.
Outstanding advance of previous years to be accounted for in this official year	7,500 0 0
Value of cheques issued in this month	
Deduct—	
Cheques issued in this month, but not cashed within the month	
Portions remaining unaccounted for out of the advances received in this month	2,165 15 9
Amount accounted for out of the advance received	
Balance	5,324 0 3

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

OOTACAMUND,
13th June 1883.

1892

REVENUE (1883) DEPART

No. 4144

From the Dy Conservator of Forests, in charge of Chinchona Plantations

Dated 13th June 83.
Recd. 26th

No. 148/C

Encl 15

SUBJECT.

Submitting the Administration Report of the Chinchona Plantations, Nilgiris, for the Official year 1882-83

READ—Office Note by H. A. GASS, Esq., Deputy Conservator of Forests, in charge of Chinchona Plantations, Nílgiris, to the Collector of Nílgiris, dated Ootacamund, 13th June 1883, No. 148-C.

I beg to submit, herewith, the Administration Report of the Chinchona Plantations in the Nílgiri District for the official year 1882-83, and request that it may be sent on to the Revenue Secretary to Government as early as possible with any remarks you may wish to offer.

ENCLOSURE.

From H. A. GASS, Esq., Deputy Conservator of Forests, in charge of the Chinchona Plantations, Nílgiris, to the Collector of Nílgiris, dated Ootacamund, 13th June 1883.

I have the honor to submit the Administration Report (with 14 enclosures) of the Government Chinchona Plantations in the Nílgiri District for the year 1882-83.

2. I took charge of the plantations on the 1st June 1882, and continued to hold charge during the remainder of the official year. I devoted much attention to the plantations and visited them frequently and as often as my other work permitted me to do so, and spent in all about forty days in inspection of the different estates, and when unable to go out myself, I had the Assistant Superintendent and Head Overseer into office for personal inquiry.

3. During the year some changes took place in the management of the plantations. Colonel Jago, who was in charge of them, went on leave and I relieved him. The plantations of Naduvatam and Hooker were inspected by Major Walker, Conservator of Forests, accompanied by Dr. Brandis, C.I.E, in August. The plantations were visited by Dr. Bidie, C.I.E., in November 1882, for the purpose of collecting specimens of Chinchona bark, with reference to G.O., dated 5th May 1882, No. 464 Mr. M. A. Lawson was appointed to be Superintendent of Chinchona Plantations, &c., and arrived in the country in February, but up to the 1st April had not taken charge. Among the subordinates some changes took place; Mr. Rowson resigned his appointment on the 1st July. The Manager of the two offices, Forest and Chinchona, Mr. Parthasarathy Mudaliar, was transferred to the office of the Conservator of Forests, and Mr. B. Venkatarutnum Naidu from the Conservator's office to the Acting Managership of this office. Mr. Macdonald, the Assistant Overseer of Naduvatam, was dismissed for continued intemperance. One Mr. Samuels was subsequently appointed to this post on probation. Mr. Narrainasawmy Naidu obtained promotion on Mr. Rowson resigning his appointment and became Assistant Superintendent. He was placed in charge of Dodabetta and Wood estates. Mr. Hillier was made Head Overseer and left in charge of Naduvatam and Hooker. Mr Burrows was transferred from Hooker to Wood, and Mr. Bonjour from Wood to Hooker. A new clerk was brought from the Tinnevelly Forest office, one Subramania Pillai, and placed under the Head Overseer's orders, and Arulanundum Pillai, transferred from Naduvatam, was placed under the orders of the Assistant Superintendent as his clerk.

4. SEASON AND RAINFALL.—The year was a most unfavorable one both for cultivation and also for collection of crop, and the monsoon was altogether unprecedented. The rainfall at Dodabetta gauged 61·35 inches distributed over 158 days against 48·71 inches distributed over 136 days in the previous year; at Naduvatam 194·93 inches and 178 wet days against 73·73 inches and 150 wet days in the previous year; at Wood it was gauged at 155·1 inches and 173 wet days; and at Hooker 143·53 distributed over 163 days. The maximum fall occurred in July when it amounted to—

	INCHES.
Dodabetta	11·22
Naduvatam	102·11
Hooker	61·87
Wood	71·9

The minimum fall was in January and February, when at Dodabetta 0·1 inch was gauged and in the other three estates nothing at all during the two months. Statements 1, 2, 3 and 4 give details of rainfall, and I have added a column in the case of Dodabetta and Naduvatam, to enable a comparison to be drawn between this and the previous year, month by month.

5. Very high winds occurred on all four estates during the months of June, July and August, more especially in June and July, and a very large number of trees were blown down, and coppice shoots were broken off in spite of precautions taken to protect them. The foliage was beaten off even the Officinalis trees by the wind and rain, and in the case of the Succirubras the trees presented a most wretched appearance, large numbers having been entirely killed. There was hardly any frost at Dodabetta till the 12th January last, when a severe frost took place which affected 2,000 of the trees—300 large ones 18 and 19 years old, and 1,700 young ones from 1 to 3 years old. Some of the trees were coppiced at once and the remainder left in the hope of their recovering, but latterly all but 50 of the large ones were coppiced also, as they showed signs of dying out altogether. Very mild frost occurred at Naduvatam, and no damage was done. A hailstorm occurred at Naduvatam in May 1882, which damaged two young Carthagenas, and the tail end of a severe thunderstorm passed over this estate and Hooker on the 29th March of this year. In addition to the fearful havoc that was caused amongst the trees on the several estates, enormous damage was done to our roads, bridges, &c., and also buildings. Great inconvenience was caused both to the subordinates and to coolies engaged on the estates by having to go a long way round by the main road past the travellers' bungalow to their work, in consequence of the plantation bridges having been washed away. The bridge on the road leading from Hooker to Naduvatam was injured, but fortunately held. The Pykara bridge was carried away. Landslips occurred in all directions, and many of them of large size. As our Chinchona estate coolies were the only Government ones on the Naduvatam side, we used a number of them in working a raft on the Pykara river in bringing over the mails and in clearing away the worst of the landslips, and I venture to think they were of considerable assistance.

6. As regards buildings, the old jail which had to be used again throughout the year as a drying-shed, became, in spite of money (Rs. 500) spent on it to put it in repair, quite dangerous, in consequence of the centre wall being saturated, and for a time we had to stop all drying operations for fear of the building collapsing altogether. The Clerk's quarters and the Assistant Overseer's house were both damaged, the walls of the former being cracked and the end walls of the latter having fallen out. During the dry weather in December and January all these things were put in repair, and all traces of the damage caused to roads, drains, bridges and buildings were removed.

7. The harvesting of crop was naturally rendered extremely difficult. In the beginning of the monsoon the usual stripping process was resorted to. This had, however, to be abandoned as it was not found possible to "lift" the bark without permanent injury to the trees, and it therefore became necessary to coppice and uproot. This was done in Plot No. X* principally, as the trees there first showed signs of dying out altogether. The coolies in collecting bark had a very bad time of it, as being obliged to remain on the same spot exposed to wind and rain, their limbs became quite numbed, and they frequently had to be carried home after a few hours' work. We had, however, no deaths among our coolies, though many corpses of travellers were buried by our people.

* Naduvatam.

8. Receipts and Expenditure.—Statements Nos. 5 and 6 show the receipts from sale-proceeds of seeds, plants, &c., bark sold locally, value of bark sent to England, and it should be understood that the receipts refer only to the crop harvested during the year under report and not to the crop of 1881-82; the receipts are calculated both in accordance with the orders of the Secretary of State contained in Despatch No. 31, dated 14th September 1882, embodied in G.O., dated 23rd October 1882, No. 1163, and also according to market value of the bark. The budget estimate for 1882-83, as sanctioned by Government in G.O., No. 1955, dated 21st December 1881, paragraph 7, amounted to Rs. 5,00,000, while the regular estimate, as sanctioned in paragraph 2 of G.O., No. 1409, of 14th December 1882, amounted to Rs. 6,28,000. Of these estimates, however, the first referred to the value of the crop of 1881-82, and the latter to the same crop, *plus* the value of bark sold locally in 1882-83. The budget estimate for 1883-84, as sanctioned in paragraph 5 of G.O., No. 1409, dated 14th December 1882, amounts to Rs. 4,10,000; this estimate is based on value of crop taken and sent home during 1882-83, the year under report; and in drawing a comparison between the budget estimate and the receipts, this figure should be taken and not Rs. 5,00,000.† This has been done accordingly by me in the statements, as the receipts now given by me are those obtained from value of bark sent home, sold locally, &c., during the year under report.

† See General Remarks.

The crop of the year consisted of 135,016¾ lb. of dry bark, instead of 165,000 as budgeted for. Of this, 62,518 lb. were sent to the Secretary of State and 69,611¾, including 284¼ lb. of samples, were sold in Madras by public auction, and the balance 2,887 lb. remained in store.

The receipts are therefore as follows :—

		Rs.	A.	P.
First—				
Receipts by Treasury accounts for seed, plants, &c. ...		4,200	7	10
Book adjustment		100	0	0
Miscellaneous		45	0	0
Value of 129,712¾ lb.* of bark calculated in accordance with the Secretary of State's despatch...		83,350	15	11
		87,696	7	9
Budget Estimate†		1,16,000	0	0
		— 28,303	8	3
Second—				
Receipts by Treasury accounts		4,200	7	10
Book adjustment		100	0	0
Miscellaneous		45	0	0
Receipts from 69,611¾ lb. by local sale		1,06,396	0	0
Market value of 62,518 lb.‡ calculated roughly ...		97,684	6	0
		2,08,425	13	11
Budget Estimate		4,10,000	0	0
		— 2,01,574	2	1 §

The sanctioned expenditure (G.O., dated 21st December 1881, No. 1955) was Rs. 1,08,533, whereas the actual total expenditure has amounted only to Rs. 83,350-15-11. The difference is thus Rs. 25,182. This is to be accounted for partly by the smallness of the crop, also because a sum of Rs. 10,000 shown in our budget for the new drying-shed does not appear on our debit side in the year's accounts, and, lastly, because Rs. 5,000 sanctioned for a drying-shed at Hooker has not been expended.

Statements 7, 8 and 9 show the expenditure in detail in all four estates.

9. In connection with this subject the permanent advance may be mentioned. At the commencement of the year this advance for all four estates stood at Rs. 7,500. Out of this by the 31st March 1883 Rs. 2,165-15-9 had been refunded into the Treasury by the Head Overseer and the advance stood as under —

	Rs.	A.	P.
Recoverable advances	3,998	1	0
Irrecoverable advances certified by Assistant Superintendent.	336	15	0
Do. do. do. by Head Overseer	999	0	3
Total ...	5,334	0	3 §

It will thus be seen that the advance is now in a much more satisfactory state, and there can be no reason why it should not be cleared off altogether by the end of the current official year, provided Government sanction the writing off from the accounts of the bad debts and irrecoverable advances which have in some cases been carried on from year to year for a long time. Regarding this I have written separately for orders. Advances are, of course, a necessity and must be made every year; labor is otherwise impossible to obtain, but there can be no reason why the advances should not be made smaller ones and be cleared off *in toto* by the end of each official year.

10. Permanent Plantations.—At the close of the year the plantations of Naduvatam, Hooker and Wood presented a wretched appearance in consequence of the effects of the monsoon, while Dodabetta looked as well as ever. At Naduvatam thousands of the old Succirubras had to be cut down to save the bark. All over the estate the trees suffered immensely and became stagheaded and threw out suckers all down the stems. Even in "Napier," the best part of the plantation, this was the case, and coppicing and uprooting had to be resorted to

* 129,712¾ lb. of bark above quoted consist of 135,016¾, less 5,304 lb. (balance of last year's crop).
† Calculated according to the wishes of the Secretary of State, *i.e.*, the cost of production.
‡ The value of 62,518 lb. has been calculated at the average rate obtained at Madras, viz., Rs. 1-9-0.
§ See General Remarks.

very extensively, notably in Plots III, V, X, XI, XXIV, XXV and XXVI, and this work had to be kept up till the close of the official year as the trees continued to show the effects of the monsoon long after it was over. During the dry weather the bark was sun-dried, and we obtained in all 59 bales of dry bark which has since been despatched to England. Much more would have been got ready, as there were still a large number of dying trees, but our supply of labor was very small, most of the coolies having gone down to the plains as usual. The uprooting of dying trees has been going on steadily since the 1st April. Statements 11 and 12 give the number of trees operated on during the year under different systems of harvesting.

11. The bark-yielding capabilities of Naduvatam are of course very much reduced now, and it should be brought to the notice of Government that the estate is in a very different state to what it was when the report called for in G.O., No. 2105, dated 13th August 1881, was submitted to the Conservator. The estate is supposed to be 318 acres planted. From this must be deducted—

50	acres	uprooted in 1881-82.
36	,,	,, in 1882-83.
10	,,	of 1879 coppice.
16	,,	of Plot XXVIII which failed.
5	,,	of trees scraped in 1880 in Plot XXIII of 1869 which have died off.
117		

And what with trees that have died out, or are dying out, and which are now being uprooted or will be uprooted hereafter, another 50 acres may be added on to the 117, making 167 acres in all, or rather more than half of the whole estate; so that there are not more than 150 acres carrying mature trees, at about 500 to the acre, which can be looked to for the next five years to yield crop. There will be no difficulty in getting a sufficient crop of bark this year, but for the next year and few succeeding ones, it will be very small from Naduvatam, and after the dying Succirubras are uprooted on Hooker and Wood, scarcely anything at all from these two estates. Of course there are our hybrids now planted and to be continued this year, but we must give them another five or six years, by which time they ought to be in splendid condition. There can be no doubt as to the hardiness of these trees, that is, those we have been in the habit of calling *C. magnifolia* and *C. pubescens* according as they are glabrous or hairy. They show no signs of having suffered in the monsoon either from rain or wind. One glance at a mass of Chinchona trees is sufficient to enable one to recognize these trees by their robustness, healthy appearance, and straight stems. In all the uprooted Succirubra plots, we have left these Magnifolia or Pubescens trees standing, and their vigorous appearance is very striking. There will, of course, be no falling off in crop at Dodabetta, for I am glad to report that the trees on that estate are looking remarkably well.

12. During the year under report 87,902 plants were permanently put out at Naduvatam in Plots XVIII, XIX, XX and XXI, which were uprooted in 1881-82 to the extent of about 40 acres, consisting of 77,000 *C. pubescens*, 10,000 *C. officinalis*, 900 *C. calisaya*, and two Carthagena. The young plants at the close of the year looked remarkably well, and the planting has been a very great success. I think I may say that not more than 5 per cent. have failed and the plants are now well established and growing vigorously and not likely to fail. This success is due to our having waited till the worst of the storms were over before we commenced our planting, which will compare very favorably with any private planting on neighbouring estates. The number of mature trees on the whole estate was reduced by 21,376, partly by uprootal and partly by coppicing. The whole land denuded of its trees has been repitted 4 × 4, and we have 20 acres of this year and about 10 acres from last year, or in all 30 acres; and plants are now ready in our nurseries, and at the proper season the whole of the available land will be planted up principally with *C. pubescens*. Of the six Carthagenas received last year at Naduvatam, two were planted out in Plot XXIII and two in Nursery No. I; these last two were killed by hail in May 1882. Two more were subsequently put out in Plot XV and made good progress; the height of the tallest on the 31st March was 3 feet 7 inches. The Calisayas in Plot XV made good growth and show the true type of Ledgeriana.

13. On the Hooker estate the number of bark-yielding trees is enormously reduced, partly on account of uprootals and coppicings, and partly on account of trees dying out, &c.; and at the close of the year the remaining trees presented so sickly an appearance that we must uproot some acres this year or we shall lose all the bark, and next year I am afraid this estate will yield no crop at all. In this plantation 70,020 plants, mostly *C. officinalis*, were put out. Of this number 43,600 were renewals and are therefore not included in the balance sheet at the close of the year. The planting was, I regret to state, almost entirely a failure owing to the effects of the monsoon. The plantings on this estate during the last few years have been so unsuccessful that I should question the advisability of continuing them, and would rather concentrate all efforts on the two principal plantations of Naduvatam and Dodabetta. The number of mature trees on the estate was reduced by 7,489.

14. At Dodabetta 84,860 plants were put out, consisting of *C. officinalis* and *C. magnifolia*, in the marginally-noted plots, some as renewals, and the remainder between the original rows of trees as the lines are sufficiently far apart to allow of interplanting. The planting has been very successful, and at the close of the year the plants all looked very healthy and had made satisfactory growth. The number of mature trees was reduced by 960, of which 131 trees were uprooted and 829 were coppiced as they showed signs of dying out. Of the two original *Santa Fé* plants put out in Plot VII in 1881-82, one had to be removed to the Propagating House as it was very small and looked sickly, the other has made but little progress in growth though it looks fairly healthy. There are two other plants of this variety in the Propagating House, one looking healthy and the other sickly. The six Carthagena plants put out in the same Plot VII have not made much progress though they look sturdy enough. Dodabetta is no doubt too high for this variety, as the same plants at Naduvatam have grown much more satisfactorily. 13,300 *Eucalyptus globulus* plants were planted out round the boundary of the estate, which will be useful as a protection against the force of the wind and also serve for the supply of fuel hereafter.

	PLANTS.
Plot No. 7	12,140
,, ,, 8	1,750
,, ,, 9	7,800
,, ,, 11	4,350
,, ,, 12	210
,, ,, 13	7,330
,, ,, 16	3,300
,, ,, 23	10,980
,, ,, 27	10,900
,, ,, 30	2,500
,, ,, 31	3,700
,, ,, 32	6,470
,, ,, 36	2,730
,, ,, 37	10,450
,, ,, 39	250
Total ..	84,860

New Zealand flax was planted in rows, one foot apart, in the steeper places where necessary, to prevent the soil being washed away.

15. The Wood estate at the close of the year looked very unhappy; the trees, with the exception of a small portion, all looked very sickly with a very meagre show of foliage. A very large number must necessarily be uprooted this year. This estate will yield little or no crop after this year for the next few years to come. 61,500 plants were put out, principally *C. officinalis*, and about 8,000 Succirubras as renewals in Plot I, put there because the whole plot consisted of *C. succirubra* and it lies too low for *C. officinalis*, and there were no more hybrid plants ready for planting out available. In addition to these, about 3,000 Ledgeriana plants were put out in Plots VII and IX. The planting was, however, rather unsuccessful, and at the close of the year there were many failures, also with the Ledgeriana plants both of this, last year and of the previous year. It should be mentioned also that Sambur do much damage in this estate, and undoubtedly did much injury to the young Ledgeriana plants which we have had now to fence in as well as we can. The planting on this estate, too, seems destined to be a failure; the subsoil is, I am afraid, much against it. Of the mature trees, 5,418 were cut out, partly dying and partly dead ones.

The following statement shows the present state of the four plantations as compared with that at the close of last official year, and the number of trees uprooted and coppiced, and also the number planted out during the official year under report:—

Plantations.	Number of Trees on 31st March 1882.	Number of Trees uprooted.	Number of Trees coppiced.	Number of Plants planted out.	Balance on 31st March 1883.
Naduvatam	170,054	12,624	8,752	87,902	236,580
Pykara { Hooker ...	236,551	705	6,784	26,420	255,482
Pykara { Wood ...	46,902	3,467	1,951	61,500	102,984
Dodabetta	288,849	131	829	84,860	372,749
Total ...	742,356	16,927	18,316	260,682	967,795 *

In the column of plants put out during the year, only those are shown which have been freshly put out, and renewals are not taken into consideration in the statement, and it should be clearly understood that although of the number of plants shown as planted out in 1882-83 many may now be dead, yet inasmuch as such casualties will all be renewed this monsoon, and such renewals not afterwards taken into account, the number now given may be accepted as perfectly correct.

16. Upkeep of Plantations—Conservancy—*Naduvatam and Hooker.*—Both estates were sufficiently mamooty-weeded and the weeds buried in renovation pits dug for the purpose near the trees in all plots. All the roads, drains and bridges which were destroyed and washed

* See General Remarks.

away during the monsoon were repaired and rebuilt. A new road was cut through Plot X at Naduvatam, as it was found that the plot could not be worked with one road only; and in this estate also the road leading from the cattle-sheds to the public road, cutting in at the 9th milestone, was widened out and very nearly finished by 1st April. The object of this is to render it serviceable for carts (which was not the case before) to bring manure down to the lower plots in the estate. A saving of about two miles per trip each way will be effected by this. In all places where landslips had occurred, rough-stone revetments were constructed to support the road. At *Hooker* the cart-road leading from Ossington lines, which had been much cut up in the rains, was put into thorough repair, catch-drains were opened out, and new side drains were cut. The Macoorchy river bridge was thoroughly repaired. The escape of this bridge from destruction was most fortunate, as two bridges, both above it, were carried away. A small piece of road near our new chattram was cut, as the old piece was taken up by the building-site of the chattram.

Dodabetta.—The whole plantation, with the exception of a few small plots where it was not necessary, was weeded, and many plots were weeded two or three times, especially those in which young plants had been put out. Plots Nos. VII, VIII, XXXVI and XXXVII and portions of Plots XXIV, XXX, XXXIII, XXXIV and XXXV, where the soil is in parts gravelly and in others hard and poor, were dug up deep. All roads, drains and bridges and water-channels were kept in good order. 4,112 yards of rough-stone revetment were constructed, partly along the upper road sides and partly in some of the plots, where it was necessary to prevent the soil from being washed away.

Wood.—The whole of this estate, with the exception of a part of Plot IX where there are no trees, was well weeded. In all cases the weeds were buried in renovation pits, of which 42,336 were dug in Plots II, VI and VII. 492 yards of rough-stone revetment were constructed along the sides of the roads and in the plots to prevent wash. All roads, drains, bridges, &c., were kept in proper order.

17. MANURE—*Naduvatam.*—Cattle-manure was largely collected and applied to trees growing in Plots VIII, IX, XII, XIV, XV, XX and XXIII, and *Hooker* in Plot III. A quantity of manure was collected at our new chattram. No beneficial effects arising from manure previously applied were noticeable, all trees having suffered so much from wind and rain that they all looked the same, and it was not possible to distinguish between those that had been manured and those that had been left alone. The same remark applies exactly to trees which were manured in April of the official year under report with patent manures, as crushed bones, poonac, poudrette, &c., which were ordered to be tried in G.O., No. 962, dated 21st June 1881, and which, as reported in paragraph 6 of last year's Administration Report, arrived too late to be used during the official year 1881-82.

These manures were applied in all to 3,211 trees, Officinalis and Succirubra, in Plots XX, XXV and XXIX. In January the Head Overseer reported that no beneficial results were apparent and the same in March, when it was found that the manures were not sufficiently decomposed to justify our collecting specimens of bark for analysis. I recommend, therefore, that another six or eight months be allowed to elapse before such a collection be made, when the result might be reported on in the next Administration Report.

Dodabetta and Wood.—Manure was largely collected from cattle-sheds and kraals on both estates. At *Wood* estate Toda buffaloes were kraaled at the mund for three months. Fifty-one tons of poudrette were purchased from the Ootacamund Municipality, forty of which were applied at Dodabetta during the year, the remainder being kept for use during the current official year.

The number of trees manured at Dodabetta was as follows:—

Plot XII ...		
„ XVIII ...	5,060	trees with poudrette.
„ XXXVI ...	7,000	„ „
	5,100	trees with cattle-manure.
Total ...	17,160	

The results of this application should be carefully investigated before long and conclusions arrived at as to the effects produced on the bark by the various manures. This might be reported on in next year's Administration Report.

18. NURSERIES—*Naduvatam and Hooker.*—In addition to the seed, &c., shown as distributed in Statement No. 13, 2 lb. of Succirubra seed were given to Mr. Jamieson in exchange for 2 lb. of *Acacia melanoxylon*. Five pounds of *C. pubescens* seed were sent to the Ceylon Government, and 42 lb. of Pubescens and 46½ lb. of Officinalis seed were sent to the Headquarter Office for distribution to the public, and 4 7/16 oz. of seed of different varieties were exhibited at various shows and finally handed over to Dr. Bidie, C.I.E. Two hundred and thirty-one thousand plants as under—

C. officinalis ...	
C. pubescens ...	96,000
Other varieties ...	132,000
	2,902

195 D

were actually used up, some for the public and the rest for Government during the year. Two thousand Calisaya plants were transferred to Wood estate. The crop of seed this year will be far below the average, as the trees have suffered so much from the monsoon; but this is rather a matter for congratulation as the trees are all so sickly and not equal to the drain of a large quantity of seed.

Dodabetta and Wood.—A very large number of plants and seedlings was raised during the year, and 69,056 plants and 134,252 seedlings, principally Officinalis and Magnifolia, were distributed to the public, and the balance in stock on 31st March was as follows:—

I. Propagating House.

C. Crispa, seedlings ...	1,000
„ Magnifolia „ ...	1,500
„ Augustifolia „ ...	1,500
„ Calisaya „ ...	15
„ Pitayo „ ...	8
Total ...	4,023
	40
C. Carthagena, rooted cuttings ...	25
„ Pitayo „ ...	5
„ Ledgeriana „ ...	1
„ Santa Fé „ ...	71
Total ...	
	1
C. Carthagena plant	2
„ Santa Fé „	2
„ Calisaya „	5
Total ...	

II. Nurseries.

C. Magnifolia plant	50,000
„ Condaminia „	300,000
„ Uritusinga „	5,000
Total ...	355,000

Wood Nurseries.

C. Ledgeriana plant	1,700
„ Hybrid „	500
„ Condaminia „	120,500
Total ...	122,700

Four hundred and sixty pounds of seed, principally Officinalis, were collected, and 379 lb. were distributed to the public, including what was sent in to the Head Office* for the same purpose. About 80 lb. of seed, *C. Officinalis*, remained in stock on the 31st March.

	lb.	oz.
* C. Officinalis seed	55	0
„ Pata	4	9
Total ..	59	9

Statement No. 13 shows the number of plants and seedlings and the quantity of seed sold to the public during the year. There was a very large demand for seed during the last few months of the year under report, and that for hybrid seed of the glabrous variety was far in excess of the possible supply. People are again very anxious to get *C. Succirubra* seed, but little could be supplied before the close of the year, although much has been sent out since. The permission to issue seed, &c., was taken away from the subordinates for various reasons, and it is now issued direct from this office, and though this has added much to the work of the office, the results are, I think, on the whole much more satisfactory. At the close of the year, the nurseries on all four estates were well stocked with plants and seedlings of *C. officinalis*, *C. pubescens*, *C. magnifolia* and a few thousand *C. Ledgeriana*.

19. CROP.—The total crop for all four estates amounted to 135,016¾ lb. of dry bark including 5,304 lb. of bark, the balance in stock on the 31st March 1882. In paragraph 11 of the Budget Estimate for 1882-83, embodied in G.O., No. 1955, dated 21st December 1881, the collection of crop is put down at 165,000 lb., viz., 50,000 lb. Dodabetta and 115,000 lb. Naduvatam and Pykara. We have fallen short of this amount by nearly 30,000 lb. This was unavoidable, owing to the difficulties we had to deal with during the exceptionally heavy monsoon as explained in paragraph 7.

The crop was distributed over the four estates as under—

Naduvatam.

	LB.
*Natural Red	23,225
Mossed "	15,225
Renewed "	14,320
Branch "	10,313
Root "	5,500
Dust "	1,300
Natural Crown	1,400
Mossed "	300
Renewed "	600
Branch "	100
Mixed "	161¼
Total ...	72,444¼

Dodabetta.

	LB.
Natural Crown	11,440
Mossed "	12,039½
Renewed "	11,078
Branch "	4,178
Root "	111
Dust "	100
Natural Pata	41
Mossed "	206
Renewed "	111
Total ...	39,304½

Pykara.

	LB.
Natural Red	9,631
Mossed "	1,805
Renewed "	6,088
Branch "	2,346
Root "	92
Natural Crown	1,124
Mossed "	409
Renewed "	1,114
Branch "	244
Root "	105
Dust "	310
Total ...	23,268
Grand Total ...	135,016¾

The bark collected was on the whole of an inferior kind, having been taken from dying trees for the most part. It will be observed from Statements Nos. 11 and 12, showing the number of trees decorticated under different systems during the year, that the proportion of green to dry bark is greater than 3 to 1, which is generally speaking the average. The reason for this is that the bark taken from felled trees during the rains got so saturated and unavoidably mixed with mud and foreign matter, which made the weight of the green material higher than it otherwise would have been. It is becoming more and more difficult to procure moss. During the year we sustained a heavy loss in grass for covering barked trees, by the road on which a large stack was placed having given way under it during the rains.

20. The bark was disposed of as follows:—

	LB.
Shipped to the Home market*	62,518
Sold locally	69,327½
Samples	284¼
Balance in store on 31st March 1883	2,887
Total ...	135,016¾

*The crop of Hooker estate was dried at both Wood and Naduvatam drying houses, and 1,900 lb. of Chinchona bark included under Naduvatam properly belongs to Pykara.

Among that shipped to England I include 59 bales, the contents of which were cropped during the official year under report, but could not be despatched till soon after the 1st April of this year. I believe I am right in doing this. The value of these bales has also been shown under "Receipts." Of the bark left in store on 31st March, viz., 2,887 lb., the details of which are as marginally noted, I have to say that it is all "refuse" bark and of little or no value, at the outside 4 annas a pound. It may, during this year, either be sold locally or shipped to England. As regards the local sales as noted above, 69,327½ lb. of bark with 284¼ lb. of samples were offered for sale by public auction by Messrs. Oakes and Co., realising in all Rs. 1,06,396-0-1, or Rs. 1-9-0 a pound all round. Government have recorded their satisfaction at the result of the sales in the marginally-noted Government Orders. I have nothing to add here to that which I previously reported on the subject beyond expressing my opinion that in the event of any further sales being held, only the inferior kinds of bark (principally Red) should be offered for sale, and I consider that the results of the sales justify this conclusion.

	LB.
Dodabetta Crown	450
Pykara do.	1,180
Do. Red	1,257

G.O., 23rd November 1882, No. 1307.
" 5th March 1883, " 323.
" 24th April " " 1662.

21. Buildings, New.—A good deal was done during the year towards the completion of the new drying shed at Naduvatam. By the 31st March all the outside brickwork was finished, and there remained the furnaces and flues to complete together with the roof and inner fittings. The roof could of course be put on, but nothing could be done with the inner fittings till the furnaces and flues were completed. There then appeared no reason whatever why the whole building should not be ready before the monsoon set in, but the slow progress that has been made since the 1st April, first turned the certainty into a hope, and the hope is now an almost certain disappointment. The packing-store was got up to the basement long before the 31st March, and nothing more was done to it up to the close of the official year and nothing has been done to it since.

The chattram at Naduvatam, sanctioned by Government in G.O., 2nd May 1882, No. 452, Revenue Department, was built during the year and opened to the public in February last.†

† See General Remarks.

Two new huts were erected at Dodabetta, constructed out of some surplus stone and zinc-sheeting remaining over from the two cattle-sheds which were erected in the previous year, and a small room close to the new nursery adjoining the drying shed at Wood was built and roofed with corrugated iron.

22. Repairs—*Naduvatam and Hooker.*—The roof of No. I Bungalow was taken off and refitted, and tiles put over the corrugated iron. The roofs of the Clerk's and Overseer's quarters, which formerly consisted of thatch, were taken off and corrugated iron substituted. In addition to this, the end walls of both had to be thoroughly repaired, those of one having twice collapsed altogether; and of the other, the walls were so cracked and considered so unsafe that they had to be pulled down and rebuilt, but fell down again and had to be a second time rebuilt. Repairs were done to the old drying and packing sheds, as in consequence of the new ones not having been got ready we had to make use of the old buildings again. As almost every building suffered in a greater or less degree during the monsoon, repairs had to be undertaken largely, and at the close of the year all buildings were in good order and thoroughly white-washed and clean. At *Dodabetta* and *Wood* necessary repairs were done to all buildings on both estates.

23. Experiments—*Naduvatam and Hooker.*—The growth of the block coppice of 1879, particularly in Plots VI and VII below No. I Bungalow, at the close of the year was superb, and I think some of it ought to be cut over again this year, certainly next year.

The 1871 *Coppice, Plot I, Naduvatam.*—Two hundred trees which were cut for the second time in March 1881 made good growth; at the close of the last official year 151 stools had thrown up suckers. The maximum height was 8 feet and girth 5 inches.

The upper unbarked portions of the stems of trees which had been previously barked in Plot XII were sliced and 1,900 lb. of dry bark was obtained. Slicing or scraping was also resorted to in Plot No. XX, and 323 trees previously unbarked were treated in this manner; the yield of bark was 500 lb. Fifty-one trees were mossed and 239 were grassed, 17 were sliced in strips and not covered at all, while 16 trees treated in the same way were covered. The result of this experiment was most satisfactory The Head Overseer kept careful notes on the subject and was able to report that the bark had renewed in about three months, and that the

	lb.
*G.O., No. 631 of 15th June 1882	5,304
" " 1087 of 9th October "	8,500
" " 1376 of 7th December "	17,133
" " 223 of 6th February 1883	9,100
" " 430 of 10th April "	16,581
" " 552 of 4th May "	5,900
Total ..	62,518

trees looked remarkably well. Some of them should, in my opinion, be barked again this year and the bark analysed, and the difference, if any, between scraped trees, mossed trees, and trees left unmossed, noted.

Dodabetta and Wood.—The 500 trees which were treated under the scraping process in Plots V and XXVIII in 1881-82 are doing well. The bark is well renewed and will be sliced again this year.

The application of New Zealand flax, as a covering to barked trees, proved a success, and the bark renewed satisfactorily. The following statement shows the present condition of the 1879 coppicing on all four estates with maximum heights and girths :—

Plantations.	Plot.	Acreage.	Number of Trees coppiced.	Number of Trees which sprouted.	Number of failures.	Maximum height.	Maximum girth.
Dodabetta ...	XI	5·00	3,356	3,201	155	8¾′	6¾″
	XXVIII	5·00	2,493	2,096	397	8′	6″
Total ...		10·00	5,849	5,297	552	...	...
Wood	VIII	5·00	2,540	1,302	1,238	15′	11½″
Naduvatam ...	VI	0·25	56	56	...	15½′	12″
	VII	4·75	2,265	2,215	48	15′	12″
	XXIII	5·00	2,628	1,663	965	15½′	11″
Total ...		10·00	4,947	3,934	1,013	...	...
Hooker	XI	5·00	2,226	977	1,249	13′	12″

24 FIREWOOD PLANTATIONS—*Naduvatam.*—An extensive nursery containing over 100,000 of *Eucalyptus globulus* seedlings was completely destroyed by the rain, the seedlings having all rotted off, and out of 9,400 Eucalyptus plants permanently put out, only about 1,000 are living, the rest having died off. Even the *Acacia melanoxylon* plants, put out in the previous year, looked sickly and made but poor progress. The planting of Australian trees for firewood and other purposes will, however, be actively carried on this year, and we have formed good nurseries and sown 2 lb. of *Acacia melanoxylon* and 3 lb. of *Eucalyptus globulus* and 1 lb. of *Acacia decurrens* seed, all of which will be permanently planted out this year. On the boundaries of the estate the land is already pitted to the extent of 50 acres.

The *Acacia decurrens* is to be planted at Naduvatam to give it a trial in that locality, in the same way as it is to be tried in other parts of the hills under different conditions. There is no more land available at Dodabetta for firewood planting, and failures only will be planted up. The firewood for the furnaces * during the current year the supply has been obtained partly from the stumps of uprooted trees and partly from junglewood cut within the boundaries of the estate, and for boundaries near the Macoorchy bridge.

* Of Naduvatam.

25. LABOR.—The supply of labor on the Dodabetta side was scanty owing to the number of private plantations which were opened out, the proprietors of which pay the Badagas more than we do, while on the Naduvatam side it was excessive, as there we depend almost entirely on contract labor, and the number of coolies contracted for by the Head Overseer at the suggestion of Mr. Rowson, proved to be too many for one estate's requirements. No loss, however, ensued in consequence of this, as by employing them on repairing the public road during the monsoon full work was given to them all. Care has been taken to prevent this trouble arising again, and in the new agreements I have contracted with the Maistries for the smallest number possible, casual daily labor to be employed in cases of emergency, and I have also inserted a clause in the agreements to the effect that, if necessary, the Maistries must work on the Dodabetta side. This was not done last year, and they refused to go to Dodabetta in consequence. The labor this year at Dodabetta, too, will be in a much more satisfactory state, as the Assistant Superintendent has arranged with new Maistries to bring their gangs of coolies to Dodabetta whenever required.

26. GENERAL REMARKS.—The health of the subordinates during the year was satisfactory on the whole, and no one was absent on sick leave. As regards conduct, I have no complaints to make. Mr. MacDonald was dismissed, but this was for misbehavior before my time. Mr. Narrainasawmy Naidu did his work in the most excellent manner as he always does, and Mr. Hillier carried on his work at Naduvatam, in spite of many hardships, in a very praiseworthy way. The outturn of work for the year will show that there was nowhere any neglect of duty.

27. The new chattram near Naduvatam, as stated in paragraph 21, was built during the year and thrown open to the public in February last. It is a capital chattram, well designed, well built and clean. The situation is good, and during March the Head Overseer reports that the average daily attendance of carts was 20 and the maximum 37. In the first days cart-men were induced to halt there by having grass and firewood supplied free to them. After a time, this was stopped almost entirely, and grass is now only given in special cases. The building and management of the chattram reflect much credit on the Head Overseer.

28. In G.O., No. 1286, dated 20th November 1882, the land immediately adjoining the chattram, and between it, and the plantation boundary was made over to the Chinchona Department, and the land lying between the Naduvatam and Hooker estates was included in a notification submitted to Government, of land proposed to be reserved and the reservation of this land will give the Chinchona Department control over a very important stretch of land outside the plantation boundaries, connecting all plantations on this side one with the other.

29. It may be brought here to the notice of Government that the position of the Head Overseer's bungalow is about as bad a one as could be selected. It stands near the Ossington boundary of our plantation, and very much out of the way and being far removed both from the Superintendent's bungalow and the drying shed, the distance from the latter having proved a serious inconvenience during the monsoon when the bridges were destroyed and the Head Overseer had to go long rounds to his work; and in case of fire, it would be most serious for the Head Overseer to be so far away, and great loss might follow to Government. There can be no doubt that the Head Overseer's house should be on the same ground, and as close as possible, to the drying shed, in the same way as the house at Dodabetta is, for this is the very centre of operations in the plantation. The question of a proper water-supply for the Superintendent's bungalow should be considered. This has been separately written about, for orders. At present, water has to be brought from a distance in a cart. As Mr. Lawson will no doubt spend much of his time at Naduvatam, it would be more convenient and less expensive in the long run to have water brought to the bungalow by means of a cut-water channel.

30. As regards the receipts of the year, it may be thought that they compare very unfavorably with the budget estimate. It is true that there is a very considerable difference, but it should be borne in mind that our crop is much smaller than was expected, and in my opinion the value of the crop when the budget estimate was framed was taken at too high a figure, and one which would seldom be realised at home. I have taken the value of the whole crop to be Rs. 1-9-0 per pound all round, and this I hold to be reasonable, inasmuch as it is an average obtained in an open market at four different auctions from the sale of about 85,000 lb. of bark, realising in all about Rs. 124,000. This average is really the present market value, for the bark we sold consisted of all kinds from the very best to the worst, and our sales were spread over fifteen months, during which time the prices at home fluctuated very considerably. If I had now taken the value of the bark all round to be roughly Rs. 2-8-0 per pound, our receipts would have been about Rs. 3,40,000, which brings us very close to the budget estimate. Even as they stand, however, they compare very favorably with the expenditure.

31 Some objections may be taken to my having substituted Rs. 4,10,000 for Rs. 5,00,000 as the budget estimate. This is however unavoidable. It has, as I have before shown, always been the custom for the crop of one year to be taken into consideration as the receipts of the following year; this is a very confusing way of keeping accounts, and as the change has to be made whereby the crop of a year becomes the basis on which the receipts of the same year are calculated, a change in the budget estimate figures is also necessary; this estimate Rs. 4,10,000 refers to the crop, &c., of 1882-83, and as this crop appears in the receipts of 1882-83, the estimate referring to that crop must be taken. I am aware that no estimated receipts from local sales are included in the Rs. 4,10,000 and that such receipts are included in our statement for 1882-83; this is, however, of no importance as the whole crop is worked out at its market value, viz., Rs. 1-9-0 per pound all round. To set the matter quite right, it remains only to alter the figures of the sanctioned Budget Estimate for 1883-84 from Rs. 4,10,000 to Rs. 2,35,000, the market value of 150,000 lb. of bark, the estimated crop for this year. In the preparation of a balance sheet for the plantations, the value of 232,467 lb. of bark sent home during 1881-82, and which is not shown in the receipts of 1882-83, must be included. The value of that crop was estimated to be Rupees 5,00,000 * and this figure may be adhered to, or the present estimated value of crop, viz., Rs. 1-9-0 a pound all round, may be taken. I should think the original estimated value in this case as given above is the proper one. This is the only item that requires to be included under Receipts in the balance sheet, everything else has been accounted for.

* *Vide* paragraph 2 of G.O., No. 1409, dated 14th December 1882.

32. The amount shown under Permanent Advance as recoverable, viz., Rs. 3,998-1-0, consists of all new advances which have been made this year, and old advances not yet cleared off, for which fresh agreements have been entered into, all of which are good debts and will be gradually paid off during the current year.

33. It will be observed that the stock during the year has increased by about 2,25,000 plants. I have recorded my opinion above, that the crop for the next few years will be much reduced in quantity. The estates of Hooker and Wood are in a particularly poor condition, and are apparently getting worse year by year. When our present plantings, which consist so largely of hybrids, are fit to bark a few years hence, then the value of the estates will have enormously increased both in quantity and quality of bark. It is a great satisfaction to note the good growth of our young Pubescens, and looking to the very excellent condition of the old hybrids, consider what a good future is before them.

34. I regret that but little progress has been made towards opening plantation books. It is an exceedingly difficult thing to do for the past, as the accounts are all mixed up in such away that it is not possible to ascertain what particular expenditure was incurred on particular objects. For the present and for the future, it will be an easy task as the system of accounts is now much more detailed and improved, and careful notes on all points are kept as well as diaries by all subordinates. I should think it would be a good plan to appoint some intelligent extra writer to undertake the work of opening plantation books and getting at the details as well as possible, from the materials available, for the first ten years of the plantations, for I am sure that none among the subordinates have time to do it, and the Superintendent certainly has not.

The writer would work under the orders of the Superintendent.

35. The abstract statement of receipts, expenditure, &c., &c., ordered by Government in G.O., No. 3137, dated 25th September 1882, is appended and forms Statement No. 14.

36. It is much regretted that the Chinchona Administration Report for 1881-82 was not as carefully put together and with as much detail, as it doubtless would have been, if the officer who was in charge of the plantation for the year had written it himself. I had the preparation of it, and was dealing with facts, concerning which I know nothing personally. The remarks and questions put by Government, in their Order, No. 66, dated 17th January 1883, I will now briefly answer :—

Paragraph 4.—The receipts for 1882-83 refer to crop shipped and sold locally of the same year.

Paragraph 4.—The excess over the sanctioned budget estimate was due to the uprooting of Succirubra at Naduvatam.

Paragraph 4.—Mr. Hillier, the Head Overseer, explains that the balance in store at the close of 1880-81 was partly at Ootacamund and partly at Naduvatam; that at the former place was in bales and had been weighed, while at the latter it was all loose and was roughly estimated and included in the closing balance, and that subsequently having been shipped to England with other bark of 1881-82, it was left out of the opening balance though included in the year's crop. The opening balance of 1881-82 was then given at the actual amount in store at Ootacamund. Though it is clear that there was considerable carelessness in keeping the accounts, still I see no reason to doubt the accuracy of the Head Overseer's statement.

Paragraph 6.—The discrepancy referred to as existing between the Conservator's figures and the crop actually shipped home is due to an error on the part of Government in their enumeration. The 488 bales of bark referred to in G.O., 16th May 1881, No. 771, should not have been included, as they formed part of the crop of 1880-81. The first consignment of crop for 1881-82 begins with G.O., No. 1079, dated 15th July 1881, and the last ends with G.O., No. 443, dated 1st May 1882, which Government have omitted altogether. The consignments are as marginally noted, and the total agrees exactly with the figures given by the Conservator.

				lbs.
G.O., 15th July	1881,	No.	1079	5,697
,, 2nd November	,,	,,	1629	44,186
,, 19th ,,	,,	,,	1758	32,414
,, 17th December	,,	,,	1945	23,534
,, 16th January	1882,	,,	53	15,929
,, 6th February	,,	,,	154	20,400
,, 21st ,,	,,	,,	223	14,521
,, 8th March	,,	,,	271	36,720
,, 1st May	,,	,,	443	39,066
		Total ..		2,32,467

Paragraph 7.—The renewals both at Hooker and Dodabetta consisted of *C. officinalis*.

Paragraph 7.—The planting at "Wood" of 20,000 Succirubras as renewals was done by order of Mr. Rowson, and probably long before the receipt of G.O., dated 29th August 1881, No. 1280. They were put out in Plot I which consisted of pure Succirubra and lies low, and too much so for *C. officinalis*, and, as I am informed, there were then no hybrids available. These were, I do not doubt, Mr. Rowson's reasons for falling back on *C. succirubra*.

Paragraph 7.—As regards the Succirubra seedlings raised and thrown away, I can only say that it was most unfortunate. The seedlings were raised because it was thought there would be a demand for them. The taste of the public changes from year to year very much, and this year if we had had them in our nurseries we could have sold them largely, for the demand for *C. succirubra* seed has this year been very great. Now we have no Succirubra plants or seedlings, but we have Officinalis, and from my experience of the last few months, I think it probable that a very large number of them will have to be grubbed up and thrown away.

No. 1.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Dodabetta*, during the Official Year 1882-83.

Months.	For 1881-82.		For 1882-83.	
	Rainfall.	Number of Wet days.	Rainfall.	Number of Wet days.
April	1·16	3	4·87	8
May	13·14	18	6·48¾	11
June	1·30	18	8·12	22
July	3·02½	13	11·22	29
August	9·24	24	4·40	24
September	3·34	17	3·34	16
October	3·67	11	10·29	18
November	7·69	20	8·90	16
December	3·09	6	0·35	4
January	2·58	4	0·01½	2
February	...	...	...	...
March	0·49	2	3·36	10
Total ...	48·71½	136	61·35½	160

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 2.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Naduvatam*, during the Official Year 1882-83.

Months.	For 1881-82.		For 1882-83.	
	Rainfall.	Number of Wet days.	Rainfall.	Number of Wet days.
April	0·50	2	1·21	4
May	3·77	14	6·54	19
June	9·87	26	34·70	25
July	24·13	22	102·11	30
August	17·90	28	16·94	27
September	4·54	20	12·61	25
October	3·55	13	12·20	21
November	7·02	16	5·71	14
December	1·40	4	0·11	2
January	0·84	4	...	...
February	...	...	...	...
March	0·21	1	2·80	11
Total ...	73·73	150	194·93	178

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 3.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Hooker*, during the Official Year 1882-83.

Months.	Rainfall.	Number of Wet days.	Remarks.
	IN. C.		
April 1882	0 25	1	
May „	8 23½	19	
June „	29 03	21	
July „	61 87	31	
August „	13 16	25	
September „	10 21	19	
October „	11 56	20	
November „	6 50	16	
December „	0 01	1	
January 1883	...	...	
February „	...	...	
March „	2 71	10	
Total ..	143 53½	163	

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No 4.

STATEMENT showing the Rainfall at the Government Chinchona Plantations, *Wood*, during the Official Year 1882-83.

Months.	Rainfall.	Number of Wet days.	Remarks.
	IN C.		
April 1882	0 86	5	
May „	9 07	18	
June „	26 08	22	
July „	71 09	31	
August „	13 74	27	
September „	10 01	22	
October „	14 16	20	
November „	7 22	18	
December „	0 12	1	
January 1883	...	...	
February „	...	...	
March „	2 66	9	
Total ...	155 01	173	

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 5.

STATEMENT showing the Receipts on account of the Government Chinchona Plantations, Nilgiris, for 1882-83, calculated in accordance with orders of the Secretary of State—*vide* G.O., No. 1163, dated 23rd October 1882.

Particulars.	Actuals for 1882-83.	Sanctioned Budget Estimate for 1882-83.	Remarks.
	RS. A. P.	RS. A. P.	
Value of Bark cropped (129,712¾lb)...	*83,350 15 11	†1,08,500 0 0	
Sale-proceeds of Seeds and Plants ...	4,200 7 10	7,500 0 0	
Miscellaneous	145 0 0	...	
Total ...	87,696 7 9	1,16,000 0 0	

* Actual charges incurred in collecting the crop of 1882-83.
† Sanctioned expenditure for collecting 165,000 lb. of bark, the estimated crop of 1882-83.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

OOTACAMUND,
13th June 1883.

No. 6.

STATEMENT showing the Receipts on account of the Government Chinchona Plantations, Nilgiris, for 1882-83, calculated according to the Market value of the Bark.

Particulars.	Actuals for 1881-82.*	Actuals for 1882-83.	Sanctioned Budget Estimate for 1882-83.	Sanctioned Budget Estimate for 1883-84.	Remarks.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Value of Bark sent home.	5,00,000 0 0	†97,684 6 0			* *Vide* paragraph 2 of G.O., No. 1409, dated 14th December 1882.
Value of Bark sent to Bombay.	1,531 2 4	..			
Value of Bark sold locally.	15,660 1 7	1,06,396 0 1	5,00,000 0 0	4,10,000 0 0	
Sale proceeds of Seeds and Plants.	6,048 1 5	4,200 7 10			
Miscellaneous	1,605 1 4	145 0 0			
Total ..	5,24,844 6 8	2,08,425 13 11	5,00,000 0 0	4,10,000 0 0	

* Entered for the sake of comparison.—"The value of bark sent Home," is actually the value of crop taken during 1881-82.
† Value of 62,518 pounds of bark sent Home during 1882-83.

Explanation for the above Statement of Receipts.

The Budget Estimate for 1882-83, viz. Rs. 35,00,000, refers to the crop of 1881-82. The Budget Estimate for 1883-84, viz., Rs. 4,10,000, refers to the crop of 1882-83. The receipts here given are the crop of 1882-83; therefore the Budget Estimate referring to that crop, viz., Rs. 4,10,000, should be considered in reviewing the financial results of the year.

The Regular Estimate of 1882-83 was Rs. 6,28,000. This is made up of value of crop sent home during 1881-82, viz., Rs. 5,00,000 *plus* value of bark sold locally during 1882-83 and other minor receipts. The comparison is very favorable.

Under the old system of keeping accounts, *Rs.* 97,684-6-0, the value of crop sent home during 1882-83, would have formed the receipts for 1883-84. This is no longer the case, therefore the Budget Estimate for 1883-84, viz., Rs. 4,10,000, which refers to the crop of 1882-83, will have to be discarded, and fresh figures substituted. This has been explained elsewhere.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

OOTACAMUND,
13th June 1883.

No. 7.

STATEMENT showing the Expenditure in Detail on the *Dodabetta* Chinchona Plantations for the Official Year 1882-83.

Months.	Establishment.	Nurseries.				Working Charges.				Manure.
		Labor.	Propagation.	Collection of Seed.	Postage on Seed.	Roads.	Weeding.	Pitting and Planting.	Various.	
1	2	3	4	5	6	7	8	9	10	11
	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 1882	220 7 9	70 0 0	23 0 0	98 1 6	...	9 11 0	291 7 6	207 8 6	96 8 0	639 3 0
May „	176 0 0	73 14 6	23 0 0	26 1 6	13 8 0	14 1 0	228 10 0	197 2 0	96 3 0	378 7 0
June „	160 0 0	49 5 0	23 0 0	12 13 6	37 15 0	32 5 6	375 4 6	69 7 0	93 9 0	127 14 0
July „	166 12 5	40 11 6	23 0 0	9 0 0	16 12 0	71 13 0	64 9 6	44 11 0	78 10 0	30 0 0
August „	320 0 0	48 7 0	23 0 0	2 3 0	9 12 0	14 5 0	4 7 0	50 11 6	52 2 0	35 5 0
September „	294 0 6	51 3 6	23 0 0	10 4 6	9 0 0	17 14 0	18 14 0	45 11 0	57 5 6	30 1 0
October „	285 0 0	120 15 0	23 0 0	9 8 0	5 8 0	13 0 0	70 15 0	4 15 6	54 13 0	30 6 0
November „	293 0 0	40 15 0	23 0 0	14 5 0	0 8 0	14 9 0	29 13 0	75 8 0	117 7 0	23 7 0
December „	293 0 0	48 5 6	23 0 0	8 1 0	...	16 2 0	147 8 9	116 6 6	104 3 0	134 10 0
January 1883	293 0 0	97 5 6	23 0 0	6 9 6	...	12 8 0	530 13 9	99 0 6	98 7 0	23 15 0
February „	293 0 0	46 3 0	52 8 0	4 4 0	...	13 15 0	872 13 0	27 11 0	201 1 4	145 2 0
March „	293 0 0	135 15 0	23 0 0	15 9 6	...	11 5 0	564 7 1	16 14 0	794 1 0	307 3 0
Total ...	3,067 4 8	823 4 6	305 8 0	216 13 0	92 15 0	241 8 6	3,199 11 1	955 10 6	1,844 5 10	1,905 9 0

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Statement showing the Expenditure in Detail on the Dodabetta Chinchona Plantations for the Official Year 1882-83—(Continued).

Months.	Buildings.		Collection of Crop.							Contingencies.	Total.
	New.	Repairs.	Barking and Mossing.	Collection of Moss.	Drying Bark.	Packing Bark.	Storage of Bark.	Carriage of Bark.	Various.		
	12	13	14	15	16	17	18	19	20	21	22
	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 1882 ...	...	...	...	...	9 11 0	...	...	...	...	13 0 0	1,658 10 3
May „ ...	...	6 14 0	...	60 5 0	5 15 0	...	...	...	50 0 0	10 13 6	1,360 14 6
June „ ...	...	71 9 0	60 6 0	326 15 0	5 5 0	...	...	...	22 0 0	7 4 0	1,475 0 6
July „ ...	...	...	494 7 6	242 3 6	17 9 6	...	...	...	34 0 0	...	1,334 3 11
August „ ...	...	...	365 11 0	205 6 3	11 14 0	5 15 6	25 10 0	...	52 0 0	...	1,226 13 3
September „ ...	...	...	432 9 0	432 15 9	22 3 6	0 15 0	20 0 0	...	76 7 0	...	1,543 8 3
October „ ...	...	...	380 15 9	433 14 0	31 14 0	40 0 0	27 4 0	...	40 0 0	22 5 0	1,594 5 3
November „ ...	...	20 8 11	356 14 0	374 1 9	31 3 0	8 4 0	5 4 0	...	1,092 6 0	12 8 0	2,533 9 8
December „ ...	...	30 15 0	320 13 3	148 3 0	22 4 6	17 12 0	...	...	34 0 0	10 10 0	1,475 14 6
January 1883 ...	...	132 15 6	34 4 6	...	6 5 6	36 12 0	3 2 0	...	260 8 0	13 8 0	1,672 2 9
February „ ...	...	141 15 9	9 5 0	...	0 15 0	4 5 0	1 4 0	...	40 8 0	9 4 0	1,864 2 1
March „ ...	...	24 0 8	3 15 0	...	22 2 0	1 12 0	3 2 0	501 10 0	20 0 0	8 6 6	2,746 6 9
Total ...	...	428 14 10	2,459 5 0	2,224 0 3	187 6 0	115 11 6	85 10 0	501 10 0	1,721 13 0	107 11 0	20,484 11 8

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(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

OOTACAMUND,
13th June 1883.

No. 8.

STATEMENT showing the Expenditure in Detail on the *Naduvatam* Chinchona Plantations for the Official Year 1882-83.

Months.	Establishment.	Nurseries.				Upkeep.					Buildings.	
		Labor.	Propagation.	Collection of Seed.	Various.	Pitting and Planting.	Weeding.	Roads and Bridges.	Various.	Manure.	New.	Repairs.
1	2	3	4	5	6	7	8	9	10	11	12	13
	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 1882	411 0 0	116 4 8	30 0 0	4 8 0	..	490 3 0	268 9 6	29 13 0	156 13 4	99 6 1	..	253 4 2
May „	461 0 0	130 7 1	30 0 0	55 9 9	..	178 11 5	3,12 6	28 2 0	198 8 9	122 7 10	..	1,636 9 9
June „	446 7 9	129 6 7	30 0 0	..	..	1,199 9 1	122 7 6	43 9 6	150 13 4	107 4 3	..	316 8 0
July „	436 0 0	91 0 8	28 0 0	..	..	27 15 0	20 5 0	35 7 0	173 2 1	619 12 2	418 9 4	931 3 4
August „	251 0 0	91 15 10	32 0 0	..	..	236 4 0	40 0 0	145 9 6	166 8 9	189 3 2	..	..
September „	251 0 0	112 6 6	32 0 0	31 12 0	2 4 0	297 9 6	44 15 0	178 13 3	648 6 10	328 11 2	6 8 0	559 5 9
October „	251 0 0	111 1 7	12 0 0	7 0 0	..	190 2 0	95 12 6	29 9 6	174 2 2	182 1 11	..	0 13 2
November „	243 0 0	114 11 11	12 0 0	65 6 0	..	392 13 4	197 1 9	285 2 5	238 11 0	184 15 9	639 12 9	646 13 2
December „	123 0 0	117 0 9	32 0 0	246 0 0	..	239 6 10	198 12 6	146 10 9	267 14 2	117 15 8	40 3 0	5 14 1
January 1883	183 0 0	131 0 7	32 0 0	..	103 3 6	632 9 0	394 11 0	389 4 2	243 14 4	100 12 1	834 0 5	115 11 5
February „	213 0 0	115 11 0	32 0 0	..	..	39 6 0	763 1 3	50 14 6	255 4 7	209 15 4	..	7 0 2
March „	213 0 0	91 10 7	32 0 0	..	3 7 0	..	116 10 9	109 9 0	36 9 10	207 5 8	..	4 8 0
Total ..	3,482 7 9	1,352 13 9	334 0 0	410 3 9	108 14 6	3,924 9 2	2,266 3 3	1,472 8 7	2,710 13 2	2,469 15 1	1,939 6 6	4,513 11 0

Statement showing the Expenditure in Detail on the Naduvatam Chinchona Plantations for the Official Year 1882-83—(Continued).

Months.	Peon's Clothing.	Collection of Crop.							Firewood Plantation.	Contingencies.	Total.
		Barking and Mossing.	Collections of Moss and Grass.	Drying Bark.	Packing Bark.	Storage.	Carriage of Bark.	Various.			
	14	15	16	17	18	19	20	21	22	23	24
	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 1882	..	142 10 6	..	59 11 6	5 10 0	35 3 0	..	84 14 2	78 1 1	10 4 0	2,276 5 0
May „	..	..	..	10 4 6	433 13 0	48 15 6	5 0 0	24 8 10	21 15 5	..	3,391 14 4
June „	..	10 0 0	226 11 0	..	..	51 8 0	46 0 0	610 11 8	..	13 6 0	3,504 6 8
July „	..	493 0 0	471 6 11	47 15 0	..	39 11 2	..	157 14 6	34 10 11	44 8 0	4,070 9 1
August „	..	323 5 6	149 4 9	296 14 9	23 12 3	28 2 0	..	452 10 9	9 1 9	15 2 0	2,450 15 1
September „	..	367 3 0	93 7 0	108 14 6	..	30 6 0	115 5 6	897 3 6	.. ..	20 1 0	4,126 4 6
October „	..	905 1 9	77 1 0	175 8 6	11 14 0	39 1 2	44 8 6	218 1 6	75 0 0	5 3 3	2,605 2 6
November „	48 0 0	775 5 2	35 11 5	260 1 0	29 8 6	38 4 6	363 5 0	144 8 5	..	8 0 0	4,723 4 1
December „	..	371 14 9	..	131 10 9	7 14 0	35 15 6	10 0 0	154 1 2	..	18 6 0	2,265 0 11
January 1883	..	19 8 0	51 0 0	246 5 8	50 1 0	76 6 0	40 0 0	250 2 9	107 15 1	74 1 0	4,111 10 6
February „	..	..	..	51 5 6	18 9 0	64 13 6	102 8 0	38 8 6	46 9 10	39 1 10	2,098 11 6
March „	..	..	..	6 14 6	0 9 0	45 10 0	188 7 6	11 4 11	81 14 2	..	1,198 10 5
Total ..	48 0 0	3,408 2 2	1,104 10 1	1,395 10 2	583 10 9	534 0 4	915 2 6	3,044 10 8	455 4 3	248 1 1	36,722 14 6

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 9.

STATEMENT showing the Expenditure in Detail on the *Pykara* Chinchona Plantations for the Official Year 1882-83.

Months.	Establishment.	Nurseries.			Working Charges.				Manure.	Buildings.	
		Labor, &c.	Collection of Seed.	Various.	Pitting and Planting.	Weeding.	Roads and Drains.	Various.		New Works.	Repairs.
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.
April 1882 ...	120	139 6 3	...	...	339 15 8	197 0 3	8 11 6	86 5 8	74 8 7	...	18 4 7
May „ ...	120	124 6 6	58 9 6	18 4 9	71 7 3	2 11 0	10 13 3	61 11 4	77 7 2	...	152 2 10
June „ ...	120	145 10 4	...	...	56 7 0	80 5 6	25 6 0	154 6 7	39 6 10	...	150 11 4
July „ ...	120	78 12 10	...	...	58 6 0	...	19 2 6	38 9 5	22 7 8	...	...
August „ ...	120	84 12 0	...	...	16 10 0	29 7 0	66 13 6	123 5 1	25 13 1	...	0 9 11
September „ ...	120	104 1 8	1 0 0	...	300 10 0	208 15 6	91 0 0	160 5 5	56 1 9	...	4 7 6
October „ ...	120	109 7 2	...	...	293 6 9	133 11 6	42 14 0	107 14 7	64 2 4	...	12 3 10
November „ ...	120	136 4 2	13 4 6	...	213 5 6	281 2 6	30 11 9	141 11 10	64 5 1	9 4 6	0 9 4
December „ ...	120	141 0 1	9 10 6	...	282 1 6	232 13 0	36 3 0	164 9 11	139 5 5	2 7 7	0 8 9
January 1883 ...	120	129 2 4	...	24 0 0	421 14 7	320 13 9	74 13 6	272 2 0	148 9 1	...	8 9 8
February „ ...	120	107 10 10	0 8 0	...	338 15 0	202 3 9	17 8 9	225 0 8	91 7 0	...	145 7 10
March „ ...	120	87 15 1	1 8 0	...	167 13 0	89 12 0	16 2 0	157 1 9	174 9 1	...	22 10 5
Total ...	1,440	1,388 9 3	84 8 6	42 4 9	2,561 0 3	1,778 15 9	440 3 9	1,693 4 3	978 3 1	11 12 1	517 6 0

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Statement showing the Expenditure in Detail on the Pykara Chinchona Plantations for the Official Year 1882-83—(Continued).

Months.	Collection of Crop.							Total.
	Barking and Mossing.	Collection of Moss and Grass.	Drying Bark.	Packing Bark.	Storage.	Carriage of Bark.	Various.	
	13	14	15	16	17	18	19	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.
April 1882	14 1 0	...	3 14 6	0 9 0	10 0 0	36 0 0	25 5 10	1,074 2 10
May „	...	...	26 7 6	5 5 6	...	...	23 4 4	752 10 11
June „	2 4 0	178 14 6	26 13 0	3 6 0	10 0 0	21 6 0	30 0 10	1,045 1 11
July „	388 1 0	87 15 0	71 0 6	...	10 0 0	12 10 0	134 5 2	1,041 6 1
August „	257 12 0	100 2 6	81 9 6	7 14 0	10 0 0	31 2 0	62 14 7	1,018 13 2
September „	74 6 3	17 10 3	82 8 6	0 15 0	10 0 0	38 1 6	672 1 9	1,942 5 1
October „	166 6 0	6 8 6	86 8 0	...	10 5 0	14 8 6	54 6 10	1,222 7 0
November „	112 0 6	...	49 9 9	10 0 0	10 0 0	97 3 0	53 7 2	1,342 15 7
December „	66 4 6	...	33 3 6	4 6 0	10 0 0	2 2 0	35 5 2	1,281 1 11
January 1883	...	...	26 11 9	3 15 0	10 4 6	...	130 0 9	1,691 0 11
February „	...	19 7 6	1 11 0	21 9 0	8 11 4	51 14 3	35 2 11	1,387 5 10
March „	...	...	...	...	10 0 0	1 8 0	22 9 4	871 8 8
Total ...	1,081 3 3	410 10 3	490 1 6	57 15 6	109 4 10	306 7 3	1,279 0 8	14,670 14 11

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OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 10.

STATEMENT showing the Expenditure in Detail of Office Establishment and General for the Official Year 1882-83.

Months.	Establishment.	Deputy Conservator's Allowance.	Superintendent's pay.	Assessment on Plantation.	Cost of Gunny Bags.	Carriage of Bark to Mettupálaiyam.	Railway Charges.	Shipping Charges.	Batta and Travelling Allowance.	Contingencies.	Peons' Clothing.	Passage Money of Mr. Cross.	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.	RS. A. P.	RS. A. P.
April 1882 ..	131 0 0	200 0 0	..	..	..	..	..	44 2 11	..	8 7 0	..	682 0 0	1,065 9 11
May ,, ..	131 0 0	200 0 0	..	..	..	..	597 5 0	79 2 0	..	122 8 6	..	..	1,129 15 6
June ,, ..	131 0 0	200 0 0	..	..	..	..	..	711 14 3	..	17 10 6	..	..	1,060 8 9
July ,, ..	131 0 0	200 0 0	..	..	..	32 8 0	80 13 0	35 14 6	33 14 0	42 0 0	..	..	556 1 6
August ,, ..	149 11 4	200 0 0	..	180 0 0	1,795 4 0	..	..	6 12 0	..	35 12 0	..	..	2,367 7 4
September ,, ..	131 0 0	200 0 0	..	..	..	..	..	14 14 0	153 0 0	23 12 0	..	..	522 10 0
October ,, ..	131 0 0	200 0 0	..	..	..	..	..	9 13 0	..	29 6 0	..	..	370 13 0
November ,, ..	123 0 0	200 0 0	..	..	..	..	258 13 0	28 3 9	..	29 8 0	..	..	639 8 9
December ,, ..	127 12 10	200 0 0	..	..	..	..	..	2 11 0	67 14 9	37 0 0	..	..	425 6 7
January 1883 ..	129 11 4	200 0 0	..	..	..	..	..	16 14 0	28 14 4	131 12 0	..	..	507 3 8
February ,, ..	122 0 8	200 0 0	..	..	..	111 10 4	753 5 0	0 10 11	..	57 13 10	35 0 0	..	1,280 8 9
March ,, ..	131 0 0	200 0 0	514 4 7	..	..	82 14 6	260 8 0	1 3 2	307 12 10	49 8 0	..	..	1,547 3 1
Total ..	1,569 4 2	2,400 0 0	514 4 7	180 0 0	1,795 4 0	227 0 10	1,950 12 0	952 3 6	581 7 11	585 1 10	35 0 0	682 0 0	11,472 6 10

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

23

STATEMENT showing the Number of Trees barked and the Quantity of Bark obtained under various systems of Coppicing on the Government Chinchona Plantation, *Hooker*, during the Official Year 1882-83.

Number of Plot.	Stripping and Mossing Process.			Coppicing Process.				Uprooting Process.				Grand Total.	
	Red.		Crown.	Red.		Crown.		Red.		Crown.			
	Trees.	Bark.	Trees.	Trees.	Bark.	Trees.	Bark.	Trees.	B.ark	Trees.	Bark.	Trees.	Bark.
I ..	1,953	5,859	537	200	1,797	155	385	..	..	..	60	2,845	8,846
II ..	448	1,054	298	264	1,717	103	385	..	..	25	212	426	849
III ..	..	..	200	..	..	20	20	..	..	53	..	732	2,791
IV ..	..	..	..	..	..	364	962	..	..	..	..	617	1,492
V ..	..	..	318	..	..	22	78	..	..	..	..	22	78
VI ..	..	..	..	636	3,207	1,196	4,422	..	..	461	1,463	1,657	5,885
VII ..	..	..	295	1,567	11,267	740	2,142	..	..	77	215	1,748	6,965
VIII ..	..	..	12	96	223	160	402	..	..	..	..	1,739	11,705
IX ..	..	..	401	96	566	257	514	..	..	50	326	403	1,063
X ..	..	..	36	682	5,581	157	436	10	..	29	115	464	1,426
XI ..	1,191	3,301	172	..	..	38	76	..	..	..	..	1,994	9,012
XII ..	..	..	83	..	..	25	68	..	..	..	..	25	68
XIII ..	..	..	229	..	..	6	38	..	..	..	..	1,034	1,295
XIV ..	..	..	54	..	..	..	..	..	..	..	..	..	..
Total ..	3,592	10,214	2,625	3,541	24,358	3,243	9,928	10	80	695	2,411	13,706	50,475

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 11.

STATEMENT showing the Number of Trees barked and the Quantity of Bark obtained under various systems of harvesting on the Government Chinchona Plantation, *Naduvatam*, during the Official Year 1882-83.

Number of Plot.	Stripping and Mossing Process.				Coppicing Process.				Uprooting Process.				Java Process.		For Samples.		Grand Total.	
	Red.		Crown.		Red.		Crown.		Red.		Crown.		Red.		Crown.			
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.
I	378	3,142	..	..	11	491	..	..	..	..	..	..	..	..	..	..	389	3,633
II	..	..	..	..	21	434	..	..	..	..	..	..	..	..	..	..	21	434
III	..	..	..	..	103	572	..	..	..	..	..	..	..	..	..	..	103	572
IV	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V	..	..	..	..	625	6,118	..	..	58	749	..	..	..	..	..	..	683	6,867
VI	..	..	..	..	58	1,043	15	192	..	..	..	..	..	..	..	..	73	1,235
VII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
VIII	..	..	..	..	125	1,924	56	442	..	..	..	..	..	..	..	..	181	2,306
IX	..	..	..	..	66	1,009	8	64	..	..	..	..	..	..	..	..	74	1,073
X	..	..	..	..	437	5,573	..	..	10,922	96,153	22	224	..	..	..	..	11,381	101,950
XI	..	..	..	..	4,608	28,583	13	155	..	..	..	..	..	..	..	..	4,621	23,738
XII	..	..	..	..	176	2,673	..	..	15	66	..	..	2,103	6,340½	..	..	2,294	9,079½
XIII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XIV	..	..	..	..	131	1,705	7	56	162	1,597	..	..	..	..	..	..	300	3,358
XV	..	..	..	..	20	369	..	..	..	..	..	..	..	..	..	..	20	369
XVI	..	..	..	..	..	..	..	..	345	2,140	..	..	..	..	..	..	345	2,140
XVII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XVIII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XIX	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XX	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XXI	..	..	..	..	..	..	..	..	..	..	..	..	32	2,036	..	..	323	2,036
XXII	4,004	20,886	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XXIII	..	..	..	..	16	975	12	110	..	..	..	..	..	..	..	..	4,004	20,886
XXIV	6,804	32,379	..	..	917	9,155	4	70	..	..	..	..	..	..	..	..	28	1,085
XXV	..	..	..	..	1,069	9,306	2	28	..	..	..	..	..	..	..	..	7,725	41,604
XXVI	..	..	..	..	218	2,372	27	163	1,098	10,730	..	..	..	..	..	..	1,071	9,334
XXVII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,343	13,265
XXVIII	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XXIX	..	..	..	..	8	76	..	..	..	..	..	..	..	..	50	339	8	76
Total ..	11,186	56,407	..	..	8,609	72,378	144	1,280	12,600	111,435	22	224	2,42	8,376½	50	339	35,037	250,439½

No. 12.

STATEMENT showing the Number of Chinchona Trees barked and the Quantity of Bark taken at the Government Chinchona Plantation, *Dodabetta*, during the Official Year 1882-83.

Plot.	Crown.		Pata de Gallinazo or Magnifolia.		Grand Total.		Remarks.
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	
		Lb.		Lb.		Lb.	
IX	12,091	12,949	4	19	12,095	12,968	
XIV	3,001	6,485	..	..	3,001	6,485	
XV	1,856	3,299	2	7	1,858	3,306	
XXIII	5,226	5,173	17	86	5,243	5,259	
XXVIII	542	630	13	60	555	890	
XXIX	5,257	7,868	15	65	5,272	7,933	
XXX	6,685	8,796	..	..	6,685	8,796	
XXXI	4,013	5,139	32	152	4,045	6,291	
XXXII	3,657	6,889	28	105	3,685	6,994	
XXXIII	4,328	7,051	40	215	4,368	7,266	
XXXIV	1,731	5,920	..	42	1,731	5,920	
XXXVI	931	1,453	10	9	941	1,495	
XXXVII	1,162	1,133	2	9	1,164	1,142	
XXXVIII	2,479	4,689	2		2,481	4,698	
XXXIX	158	217	..	..	158	217	
	..	13,883	..	..	...	13,883	Under slicing system.
Total ..	53,117	91,774	165	769	53,282	92,543	From cut trees and branches.

STATEMENT showing the Number of Trees barked and the Quantity of Bark obtained under various systems of coppicing on the Government Chinchona Plantations, *Wood*, during the Official Year 1882-83.

Sub-Division.	Under Stripping and Mossing System.				Coppicing Progress.				Uprooting Process.				Java Process.		For Samples.		Grand Total.	
	Red.		Crown.		Red.		Crown.		Red.		Crown.		Red.		Of all varieties.			
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.
I	185	740	...	...	11	65	...	..	...	...	...	...	...	...	...	...	196	805
II	2,777	8,331	...	...	573	4,254	...	...	...	...	...	...	...	...	...	...	3,350	12,585
III	...	...	...	...	214	2,805	44	450	...	...	...	...	...	...	...	...	258	3,255
IV	...	...	...	...	404	3,005	14	90	...	...	...	...	...	...	...	...	418	3,095
V	1,235	4,940	...	...	558	3,060	...	...	...	...	...	...	...	...	...	...	1,793	8,000
VI	...	...	...	...	182	785	...	...	...	...	...	...	...	...	...	...	182	785
VII	...	...	...	...	60	290	...	...	...	...	...	...	...	...	...	...	60	290
VIII	...	...	...	...	793	5,845	...	...	...	...	...	...	...	...	...	...	793	5,845
IX	...	...	...	...	30	190	...	...	...	...	...	...	...	...	...	...	30	190
Total ...	4,197	14,011	...	...	2,825	20,299	58	540	...	...	...	...	...	...	...	...	7,080	34,850

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 13.

STATEMENT showing the Quantity of Seed and the Number of Plants sold to the Public during the Official Year 1882-83.

Particulars.	Seed.		Plants.	Seedlings.
	LB.	OZ.		
Naduvatam.				
C. Officinalis	35	6½	16,000	...
C. Succirubra	160	0	...	...
C. Pubescens	78	5½	...	15,000
Dodabetta.				
C. Officinalis	287	1	52,000	80,000
C. Uritisinga	12	7	...	10,000
C. Pata de Galinazo	20	2¾	...	43,000
C. Augustifolia	0	8	4,000	...
C. Ledgeriana	...		1,156	1,252
Total ...	593	14¾	73,156	149,252

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

No. 14.

A.—Statement showing the total Yield of the Government Chinchona Plantations, Nilgiris, for the Official Year 1882-83.

1	2	3 Bark.													4	5 Propagation.		
		a Under Stripping and Mossing System.			b Uprooting.			c Coppicing.			d Scraping.			Total Quantity of Green Bark collected during the Month.	Quantity when dry.	Seed.	a Plants.	b Seedlings.	c Rooted Cuttings.
Name of Plantation.	Species of Produce.	No. of Plots.	No. of Trees decorticated.	Outturn of Green Bark.	No. of Plots.	No. of Trees decorticated.	Outturn of Green Bark.	No. of Plots.	No. of Trees decorticated.	Outturn of Green Bark.	No. of Plots.	No. of Trees decorticated	Outturn of Green Bark.						
				LB.			LB.			LB.			LB.			LB.	NO.	NO.	NO.
Dodabetta ..	Add last year's balance.	..	..	..	..	..	..	..	..	..	..	..	..	..	5,304	..	..	..	..
	Crown Bark	14	52,959	77,674	..	..	..	branches		13,883	1	158	217	91,774	38,946½	..	..	..	..
	Various	11	165	769	..	..	..	..	..	..	..	..	..	769	358	..	..	..	..
Naduvatam ..	Red Bark	3	11,186	56,407	6	12,600	111,435	17	8,609	72,378	2	2,426	8,376½	248,596½	69,883	..	..	..	..
	Crown Bark	..	..	..	1	22	224	9	144	1,280	..	..	..	1,504	500	..	..	..	..
	Various for samples, &c.	..	50	339	..	..	..	..	..	..	..	..	..	339	161¼	..	..	..	..
Pykara ..	Red Bark	6	7,789	34,353	1	10	80	7	3,541	43,811	..	..	..	78,244	14,968	..	..	..	..
	Crown Bark	8	2,625	3,484	6	695	2,411	..	..	..	13	3,243	10,468	16,363	4,896	..	..	..	..
	Total ..	..	..	173,026	..	..	114,150	..	..	131,352	..	..	19,061½	437,589½	135,016¾	..	..	..	..

B.—Statement showing the disposal of Bark and other Produce collected in the Government Chinchona Plantations during the Official Year 1882-83.

1	2	3 Bark.								4 Seed.			5 Propagated Plants and Seedlings.						
		a Sent to Madras for shipment to London.		b Sold in the Country.		c Samples.		d Total.		a	b	c	a Plants.		b Seedlings.		c Rooted Seedlings.		
Name of Plantation.	Name of Species.	Bales.	Quantity.	Bales.	Quantity.	Bales.	Quantity.	Bales.	Quantity.	Sold to the Public.	Used for Nurseries.	Total.	Sold to Public.	Permanently put up in the Plantations.	Sold to Public.	Transplanted.	Transplanted to Nurseries.	Remarks.
		NO.	LB.	NO.	LB.	NO.	LB.	NO.	LB.	LB.	LB.	LB.						
Dodabetta ..	Crown Bark	155	20,156	148	18,257½	..	83	303	(a) 38,946½	..	..	..	..	..	..	..	..	..
	Various	4	358	..	..	..	..	4	358	..	..	..	..	..	..	..	..	..
Naduvatam ..	Red Bark	304	30,400	394	39,400	..	..	698	69,800	..	..	..	..	..	..	..	..	..
	Crown Bark	24	2,400	..	..	..	..	24	2,400	..	..	..	..	..	..	..	..	..
	Various	1	100	..	..	..	144½	1	244¼	..	..	..	..	..	..	..	..	..
Pykara	Red Bark	90	9,104	98	9,870	..	41	188	(b) 20,272	..	..	..	..	..	..	..	..	..
	Crown Bark	..	..	18	1,800	..	16	18	(c) 2,996	..	..	..	..	..	..	..	..	..
	Total ..	578	62,518	658	69,327½	..	284½	1,236	135,016¾	..	..	..	..	..	..	..	..	..

(a) Including 450 lb. in store on 31st March 1883. (b) Including 1,257 lb. in store on 31st March 1883. (c) Including 1,180 lb. in store on 31st March 1883.

C.—Statement showing the Receipts and Expenditure of the Government Chinchona Plantations, Nilgiris, for the Official Year 1883-84.

Name of Plantation.	Receipts. Budget Estimate.	Receipts. Total.	Expenditure. A. Conservancy and Works. Budget Estimate.	Expenditure. A. Conservancy and Works. Amount.	Expenditure. A. Conservancy and Works. Total.	Expenditure. B. Establishment. Budget Estimate.	Expenditure. B. Establishment. Amount.	Expenditure. B. Establishment. Total.	Grand Total of all Expenditure. Budget Estimate.	Grand Total of all Expenditure. Total.
	RS.	RS. A. P.	RS.	RS. A. P.	RS. A. P.	RS.	RS. A. P.	RS. A. P.	RS.	RS. A. P.
Dodabetta				17,309 12 0			3,174 15 8			
Naduvatam	5,00,000	2,08,425 13 11	91,816	32,944 5 8	68,256 1 10	16,684	3,778 8 10	15,094 14 1	1,08,500	83,350 15 11
Pykara				13,230 14 11			1,440 0 0			
Office and General				4,771 1 3			6,701 5 7			

	RS. A. P.
Outstanding advance of previous years to be accounted for in this official year	7,500 0 0
Value of cheques issued in this month	..
Deduct—	
Cheques issued in this month, but not cashed within the month	..
Portions remaining unaccounted for out of the advances received in this month	..
Amount accounted for out of the advance received	2,165 15 9
Balance ..	5,324 0 3

OOTACAMUND,
13th June 1883.

(Signed) H. A. GASS,
Deputy Conservator of Forests,
in charge.

REVENUE (1883) DEPARTMENT

No. 4144.

From

To

Dated 13th } Received 10083.
Recd. 26th }

No. 4148 Dated 19th Nov. 83

SUBJECT.

Statement showing the Capital and Revenue Account of the Government Chinchona Plantations, Nilgiris, from the commencement up to the Official Year ~~1881-82~~ 1882-83.

Years.	Receipts. 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.	Charges. 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
1860-61	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.
1861-62	..	..	..	..	..	..	..	4,821 15 0	..	..	4,821 15 0
1862-63	..	..	..	..	..	..	..	22,914 15 4	..	216 15 10	23,131 15 2
1863-64	..	..	..	..	..	..	..	48,390 0 0	..	1,257 14 9	49,647 14 9
1864-65	..	..	..	..	..	12,726 14 7	..	53,173 9 2	..	3,492 1 4	69,392 9 1
1865-66	..	..	..	..	..	24,444 8 11	..	59,666 12 0	..	6,614 11 11	90,726 0 10
1866-67	..	..	..	..	..	25,449 14 0	3,700 0 0	58,887 5 0	..	10,697 6 8	98,734 9 8
1867-68	..	..	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
1868-69	..	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
1869-70	..	..	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
1870-71	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
..	4,361 14 8	..	323 14 0	287 0 0	4,975 12 8	23,730 6 4	300 0 0	6,143 0 0	..	37,692 8 5	67,865 13 9
..	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
..	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
75 ..	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
75-76 ..	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
1876-77 ..	..	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
1877-78 ..	..	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
1878-79 ..	..	3,51,746 0 6	5,469 0 2	13,856 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
1879-80 ..	..	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
1880-81 ..	..	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
1881-82 ..	..	3,33,295 1 3	13,175 4 8	71,983 2 11	4,18,453 8 10	11,879 1 0	11,367 0 4	72,858 15 3	..	84,036 7 3	1,80,141 7 10
1882-83 ..	..	5,64,236 3 11	7,653 2 9	90,813 9 6	6,62,703 0 2	16,375 14 6	6,278 4 9	90,921 2 1	..	92,142 13 2	2,05,718 2 6
Total ..	61,939 8 4	~~22,79,078 12 2~~	~~59,788 13 3~~	~~1,00,498 12 0~~	~~26,60,789 11 6~~	9,27,602 15 1	64,970 14 6	8,71,179 4 1	1,46,000 0 0	~~9,13,283 4 9~~	~~22,53,336 5 10~~
		~~2860444 6 3~~	~~64046 5 1~~	~~1,00,498 12 0~~	~~33,87,764 4 1~~	342997 13 2	73,197 4 8	9,30228 15 6		944,683 6 5	24,38,087 8 0

Net Result.

	Rs. A. P.	Rs. A. P.
Receipts	~~26,60,702 14 6~~	33,87,764 4 1
Charges	~~29,53,326 5 10~~	24,38,087 8 0
	~~4,87,446 8 8~~	9,49,677 12 1

12-11-83.
19-11-83.

No 1.

Statement showing the Capital and Revenue Account of the Govt. Chinchona Plantations, Nilgiris from the commencement upto the close of the year 1882-83.

Statement showing the Receipts and Charges on account of the Govt. Chinchona Plantations, Nilgiris for 1882-83 calculated in accordance with orders of the Secretary of State — Vide G.O. No. 1163, dated 23rd October 1883.

Dr.

	Rs	As	P
To value of stock at 31 March 1882 of 5344 lbs of bark @ 1 - 4 - 0 per lb	2,514	13	8
To establishment & working	83,350	15	11
To value of 605½ lbs of bark yielded by Kuttalam & Cafanaeam Hills, Lemine-nelly Dist. at cost price of 10 - 3 - 5 per lb.	324	13	2
To Profit on the year's working	72,920	11	11
Total	159,114	6	8

Cr.

	Rs	As	P
By value of stock at 31 March 83 of 2881 lbs @ 10 - 3 - 5 per lb	1,855	2	-
By value of 30,937 lbs of bark at cost price, freight & manufacturing charges of the produce	25,606	15	-
By values of 605½ lbs of bark do. from Kuttalam & Cafanaeam	614	11	7
By value of 31,581 lbs of bark at cost price awaiting disposal at home	20,293	2	2
By value of 69,611¾ lbs of bark disposed off by Local sales	106,396	-	1
By sale proceeds of seed & plants	4,200	4	10
By Miscellaneous receipts	145	-	-
Total	159,114	6	8

* In 1882-83 the cost price of 1 lb of bark is 10 - 3 - 5 i.e. 83,350 - 15 - 11 Expenditure ÷ 129,712¾ lbs of bark crop of the year.

@ If the produce had been disposed of at the local market value it would have yielded an additional sum of Rs 61,066 - 14 - 2 thus the whole profit for the year would be Rs 72,920 - 11 - 11 + 61,066 - 14 - 2 = 1,33,987 - 10 - 1 (adding to this the Capital surplus at the end of 1881-82, according to the Statement of Capital and Rev: Account of 1881-82, G.O. 14 January 1883 No. 66 page 25, it is 1,33,987 - 10 - 1 + 4,27,446 - 8 - 8 = 5,61,434 - 2 - 9

2nd " according to Statement No. 2 (submitted herewith) ——— 1,33,987 - 10 - 1 + 4,15,661 - 15 - 9 = 5,49,649 - 9 - 10

3rd " ——— do ——— No. 3 ——— do ——— 1,23,987 - 10 - 1 + 3,25,721 - 13 - 6 = 4,49,709 - 7 - 7

4th " ——— do ——— No. 1 ——— do ——— 9,49,679 - 12 - 1

No 44

Statement showing the Receipts and Charges on account of the Govt. Chinchona Plantations Nilgiris, for 1882-83 calculated in accordance with order of the Secretary of State dated

Revd

Paid 19/11

Revenue Department.

No 1427 of 19th 11-83.

PROCEEDINGS of the MADRAS GOVERNMENT.

READ ~~the following letter~~

Chn: 41144. Letter from the Dy. Conservator of Forests, in Charge of Cinchona Plantations, dated 13th June 1883, No 148/C.

Order.

G. O. 26th Sept: 83, No: 1189. The Right Honorable the Governor in Council has recently passed orders on reports by Dr. Trimen and Mr. Lawson on the present condition of the Nilgiri Cinchona plantations and does not accordingly propose to review in any detail the report read above which however evidences care and attention on the part of Mr. Gass, the officer who was in charge until Mr. Lawson took up the duties of his appointment.

Note an order must be passed on the report of the officer in charge till has togo to the Secretary of State. The accounts too would require notice even if other matters might be passed over. The report was, as a matter of convenience got from Mr. Gass before he left but it was not due with Govt. till the was kept for a while from Secy. of State's notice but [illegible]

The

The season of 1882-83 was a singularly unfavourable one and Mr. Glass' account of the unsatisfactory condition of the Nadvratam and Pykara plantations coincides with that of Mr. Lawson. The crop was 135.016 3/4 lbs of dry bark of which 62.518 lbs were sent home and 69.611 3/4 lbs sold in Madras by public auction; the balance remaining in store. The results of the various sales held are shewn by the various Proceedings of Govt. noted in the margin. The bad debts and irrecoverable advances referred to in para 9 of the Dy. Conservator's report have been written off.

It is noted that only a small crop is expected from the Nadvratam Estate for the

*G.O, 23d Nov. 1882, No. 1307.
" 5th March 1883, - 323.
- 24th April - - 1862.

@G.O, 14th July 1883, No. 2906 Mis.

the next few years and that extensive plantings of hybrids have been made, chiefly of the hardy and valuable hybrids.

The condition of the Dodabetta plantation is satisfactory.

The Santa Fe and Carthagena varieties should receive special attention, here and at Dodabetta.

The future of the Wood and Hooker Estates which are described by Dr. Trimen and Messrs. Glass and Lawson as being in a wretched condition, is under the consideration of Govt.

The total number of trees in all the plantations on the 31st March 1883 was 967.795 as against 742,356 on the 31st March in the preceding year.

It

It is observed that the results of slicing or scraping at Nadukatam were satisfactory, the bark renewing in three months and the trees looking remarkably well after the operation. The Govt attach great importance to such experiments, the results of which will always be made public.

Orders have been passed for the provision of a water supply to the Director's Bungalow at Nadukatam and the question of erecting a new bungalow for the Overseer must lie over for the present, as the Public Works Dept has on its hands just now as much work as it can cope with.

The preparation of plantation books should receive continued attention. The answers given in

Note The planters found this system of heating Rizs Harrys position timid by reason of the result of the experiment.

Value of bark locally sold 106.396
Sale of plants seed 4.200
Value of bark supplied to Military Deptt: 100
Miscellaneous 45
1.10.741

Ry. O. 23d. Octr. 1882, No. 1163.

in para 36 of the Report to the remarks made and questions put by Govt. in their review of last year's Report, are satisfactory.

The actual receipts of the year are as shewn in the margin Rs 110741 and the charges Rs 83,351, an amount less than the sanctioned and revised estimate by Rs 25,182 and Rs 22,763 respectively.

With reference to paras 8 and 31 of the Dy: Conservator's report, it is observed that the Secy: of State's Despatch No 31, Dated 14th September 1882, referred only to the manner in which the value of the products manufactured in England is brought to account and did not prescribe a wholesale credit of all bark at the cost of production as supposed ~~by the Dy. Conservator.~~

Pending the decision of a question referred

to

1/

Cinchona Report for 1882.83

Draft G.O. requiring

as directed by the Secretary of State's despatch no: 31 d/- 14th Sept. 1882.

R.

9/11/3

Ist. statement no I
" " " II

The Hon. A.C. Sullivan
The Right Hon.
The Governor

Print

4/11

To
Addresses of last year
5- Chemical, Govt. Cinc. Plants, Parks & Gardens.
16- Board of Revenue
25- Director of Agriculture
3- Supdt. Govt. Cinchona Plantations
3- Collectors of Districts
6- Local Govt
21- P. W. Dept.
1- H.A. Gass Esqr. Conservator of Forests, Madura, Dec. 160 10. 18-12-83

Dost: 6-12-83.

c. 12-11-83.
R. 19-11-83

NOTE FOR THE CHIEF SECRETARY

N33D

Dear Sir
Will you
please have
Extract
Board

9 8.: 19 Dec 83
to: W. H. [illegible]
[illegible]
11 is to
do Sub Tab: I [illegible]