2. The undersigned having just assumed charge of the Conservator's office is not able to offer any remarks or explanation, and thinks it better not to delay the information furnished by the Deputy Conservator until he is in a position to do so.

(Signed) J. C. WALKER, Major,
for Conservator of Forests.

ENCLOSURE No. 1.

Letter from E. N. PRINGLE, Esq , Executive Engineer, West Coast Division, to Lieutenant-Colonel R. S. JAGO, Deputy Conservator of Forests, in charge of Chinchona Plantation, dated Devála, 28th September 1881, No. A-1.

IN reply to your letter No. 279, dated 21st September 1881, I have the honor to inform you that Rs. 32,700 has been allotted in the Budget of 1881-82 for Chinchona buildings, out of which Rs. 1,730 have been spent up to August. The sum required in 1882-83 will be about Rs. 10,000, as in all probability this year's allotment will not be entirely spent owing to late sanction.

ENCLOSURE No. 2.

Letter from Lieutenant-Colonel R. S. JAGO, Deputy Conservator of Forests, in charge of Chinchona Plantation, to E. N PRINGLE, Esq., Executive Engineer, West Coast Division, dated Ootacamund, 30th September 1881, No. 317.

I INFER from your letter of the 28th instant, No. A-1, that Rs. 22,700 out of the sanctioned sum of Rs. 32,700 will be expended during the current official year on the new Chinchona buildings at Naduvatam, thus leaving a balance of Rs. 10,000 for expenditure in 1882-83. I have now the honor to request that you will be so good as to inform me what time of the next official year the buildings in question will be completed and ready for the purpose of drying Chinchona bark.

2. I have already brought to your notice in paragraph 2 of my letter No. 173, dated the 5th ultimo, the condition of the present drying-shed at Naduvatam and the consequent loss to Government in this year's crop. Should the completion of the new drying-shed be delayed till next year there will be a further heavy loss to Government. I shall, however, address Government separately on the subject on receipt of your reply to this letter.

ENCLOSURE No. 3.

Letter from E. N. PRINGLE, Esq., Executive Engineer, West Coast Division, to Lieutenant-Colonel R. S. JAGO, Deputy Conservator of Forests in charge of Chinchona Department, Nílgiris, dated Mannantody, 15th October 1881, No. 480.

IN reply to your letter No. 317, dated 30th September 1881, I have the honor to state that I hope to have the buildings at Naduvatam completed by 31st July 1882; every exertion will be made to do this, but it will depend, of course, a good deal on the labor question. On my recent inspection of the existing Chinchona drying-shed, I find serious faults in design which will apparently be again carried out in the revised plan. For instance, the roof is a single one of corrugated iron, and as the fires are banked up at night and the fall of temperature externally is considerable, the moisture within the building is necessarily deposited upon the cooled iron and falls again on the bark.

ENCLOSURE No. 4.

Letter from Lieutenant-Colonel R. S. JAGO, Deputy Conservator of Forests, in charge of Chinchona Department, to the Secretary to Government, Revenue Department, Fort St. George (through the Conservator of Forests, Madras), dated Ootacamund, 10th November 1881, No. 432.

I HAVE the honor to forward the following remarks on Government Official Memorandum No. 385, dated 2nd instant :—

1. *Sheds for drying and storing bark.*—With his letter No. 149, dated 15th November 1877, the late Mr. A. McWebster, then Commissioner of the Nílgiris, and in charge of the Chinchona Department, submitted to Government plans and estimates for these works, amounting to Rs. 35,730. The system proposed for heating was by hot-water pipes. After the results of certain drying experiments were known, the Government in their Order No. 1, dated 3rd January 1880, decided upon the construction of these sheds, but disapproved of hot-water pipes; directing that the usual system of heating by hot-air flues should be continued. The plans and estimates were therefore forwarded to the Public Works Department for revision. In G.O., No. 2 of same date, Government were pleased to allot the sum of Rs. 20,000 towards the construction of these buildings for the official year 1880-81. In G.O., No. 1367, dated 20th October 1880, Government, while passing the revised plans and estimates submitted, and directing certain modifications, directed that a further allotment of Rs. 16,000 should be entered in the Budget Estimate for 1881-82. By G.O., No. 1654, dated 7th December 1880, certain other modifications were directed to be made in the plans, &c.

2. No portions of the sums allotted for the official years 1879-80 and 1880-81 were spent, owing, I presume, to no final plans being ready.

3. I enclose copy of a letter from the Executive Engineer, West Coast Division, from which it will be seen that he proposes to spend about Rs. 22,700 on these buildings by the end of the current official year and suggests that a sum of Rs. 10,000 be carried forward into the next Budget estimate. Hence the entry in the Budget Estimate for 1882-83. So far as I was able to gather during my last visit to Naduvatam, I find that the following is all that is ready towards the construction of these buildings :—

About 70,000 country-made bricks.
„ 18,000 machine „
„ 1,500 Parahs of river sand.

I beg to enclose copies of two letters on the subject between the Executive Engineer and myself.

4. *Gram Store.*—Ragi store was completed in 1879 at a cost of Rs. 3,250—*vide* G.O., No. 21, dated 7th January 1879.

5. *Cooly lines.*—I give below the number of cooly lines in existence on the Naduvatam Plantation with their cost against the sanctioned Budget allotment.

Years.	Number of Huts.	Cost.	Budget Grant.
		RS. A. P.	RS.
1878-79	31	2,055 13 3	2,000
1879-80	52	1,523 12 11	4,000
1880-81		5,552 8 1	5,000

Of the 31 huts 20 have to be demolished during the current year to make room for the proposed drying-shed. The sum of Rs. 2,000 was allotted in the Budget estimate for the current year for their re-erection elsewhere. This will be completed before the close of the year, after which no more new lines will be required for this estate. Of course, all the lines will require annual repairs, for which due provision will be made.

6. *Assistant Superintendent's Quarters.*—These were completed during the year 1880-81 at a cost of Rs. 2,000.

7. *Repairs to Superintendent's Quarters.*—The sum of Rs. 1,000 alluded to in the memorandum under reply (fourth work) was entered in the Regular Estimate for 1880-81, for securing the roof of the Superintendent's Bungalow and not the Assistant Superintendent's as stated. It was proposed to do the work within the year (1880-81), and therefore no provision was made in the Budget for the current year as erroneously mentioned; owing, however, to materials not being procurable, the repairs were not carried out. No allotment having been made and therefore no funds being available for the current year, and as the repairs are very necessary, a sum of Rs. 1,000 was entered in the Budget for 1882-83 for the purpose.

8. *Reconstruction of Cooly line.*—This work alluded to in paragraph 5 will be completed before the close of the current official year.

9. *Repairs to Overseer and Clerk's Quarters.*—The roofs of these buildings consist of grass; it is therefore proposed to re-do them, substituting iron for the grass. I enclose a detailed estimate.

ESTIMATE for re-doing Roof of Overseer and Clerk's Quarters at the Government Chinchona Plantation, Naduvatam.

Particulars.	Rate.	Amount.
Overseer's Quarters.	RS.	RS. A. P.
8-25 Squares—Roofing ...	50	412 8 0
Clerk's, &c., Quarters.		
21-75 Squares—Roofing ...	50	1,087 8 0
Total ...	...	1,500 0 0

NADUVATAM,
9th November 1881.

(Signed) H. HILLIER,
Acting Assistant Superintendent.

No. 293. ORDER THEREON, 21st December 1881, No. 1955.

Miscellaneous.

THE Conservator of Forests submits, without remark, the Budget Estimate of the Government Chinchona Plantations for 1882-83, as prepared by the Deputy Conservator in charge of those Plantations. Instructions will be issued separately in regard to the future preparation and submission of this Budget.

2. REGULAR ESTIMATE, 1881-82—*Receipts.*—The receipts for the current year are calculated at Rs. 6,48,000, *i.e.*, Rs. 1,84,000 in excess of the Sanctioned Estimate, and consist of the following items :—

	1881-82. Regular Estimate.	1881-82. Sanctioned Estimate.
	RS.	RS.
(*a*) Value of bark sent home	6,30,104	4,50,000
(*b*) Value of bark supplied to private parties ...	10,000	...
(*c*) Sale proceeds of plant and seed, &c.	8,000	8,000
(*d*) Value of bark supplied to Medical Departments, Madras and Bombay	...	6,000
Total ...	6,48,104	4,64,000

3. The Deputy Conservator explains that the increase in (*a*) is due partly to "better prices being obtained than anticipated" on sales of the bark already effected in England, "but principally" to the high value of the alkaloids to be extracted from the 250 bales retained* by the Secretary of State. His calculation of Rs. 1,86,000 is based on the produce of the 250 bales being 1,000 lb. of quinine sulphate and 3,000 lb. of chinchonidine sulphate. The latter figure, however, is a mistake for 300 lb., and this at once reduces the estimate for that item from £6,750 to £675. The cost of manufacture cannot be taken into account as it is not at present known, so the gross value will be shown here, leaving the charges to be adjusted against the large surplus expected. The other items call for no remark. The total receipts† then come to Rs. 5¾ lakhs in round numbers and exceed the Sanctioned Estimate by Rs. 1,11,000. This excess is due, not to higher prices as stated (for there was a general fall in the market prices for Chinchona bark), but chiefly to the larger consignments of bark sent home as shown below, and partly to the greater profit expected to be realized from manufacture in lieu of sale of 250 bales of the bark :—

* Paragraph 3 of Despatch, 19th May 1881, No. 14, in G.O., 21st June 1881, No. 964.

	RS.
† Value of bark £46,433-13-8, at 1*s.* 8*d.*	5,57,204
Other items	18,000
Total ...	5,75,204

Vide paragraph 2 of the Despatch above quoted.

	LBS.
Quantity estimated to be shipped in framing the Budget, 1881-82, *vide* paragraph 2 of G.O., 17th January 1881, No. 127 ...	2,00,000
Quantity actually shipped, the sale proceeds of which are likely to be realized this year—	LBS.
(1) G.O., 26th January 1881, No. 185 ...	152,044
(2) G.O., 8th March ,, ,, 416 ...	31,337
(3) G.O., 16th May ,, ,, 771 ...	51,355
(4) G.O., 15th July ,, ,, 1079 ...	5,697
	2,40,433

4. The instruction in paragraph 2 of G.O., 3rd January 1880, No. 2, in regard to rounding figures and omitting fractions of Rupees in Budget estimates should in future be carefully attended to.

5. REGULAR ESTIMATE—*Charges.*—The Charges are estimated at Rs. 1,17,659, the grant being Rs. 1,03,809 not Rs. 1,20,509 as entered in the Statement. The difference (Rs. 16,700) between the last two figures occurs under "Buildings—New Works." The amount will be struck out, as no authority can be traced sanctioning modification of the Budget grant. The excess of Rs. 13,850 in the Regular over the Sanctioned Estimate occurs chiefly in the following items :—

G.O., 17th January 1881, No. 127.

	RS.
Sanctioned amount	20,000
Amount entered as such in the Budget Statement	36,700
Difference ...	16,700

	RS.
(*a*) Carriage of Crop	2,500
(*b*) Buildings—New Works	6,700
(*c*) Unforeseen Charges	3,600
Total ...	12,800

The necessity for items (*a*) and (*c*) is explained in the Deputy Conservator's paragraphs 11 and 16 and item (*b*) will be allowed to stand, as the allotment in the Sanctioned Estimate for the Buildings at Naduvatam is only Rs. 16,000 and it is expected (Public Works G.O., 29th November 1881, No. 2975-W, Department) that Rs. 22,000 will be spent this year. The total amount of Rs. 22,700 should be placed to the credit of the Public Works Provincial Budget. Further, the Regular Estimate will be enhanced by Rs. 18,000, which is the supplemental grant sanctioned by G.O., 7th December 1881, No. 1882, for the purpose of uprooting the red barks on grass land.

6. The Regular Estimates as modified by Government stand as follow :—

Budget Estimate for 1881-82.	RS.		RS.
Receipts	4,64,000	Receipts	5,75,200
Charges	1,03,809	Charges	1,35,660
Surplus ...	3,60,191	Surplus ...	4,39,540

7. BUDGET ESTIMATE, 1882-83—*Receipts.*—The Receipts for next year are estimated at Rs. 4,08,540, against Rs. 4,64,000 and Rs. 5,75,000, the Sanctioned and Regular Estimates respectively for the current year, the actuals of the last five years being as shown in the margin. The estimate is based on the expected outturn* and value of the current year's crop as particularized in paragraph 4 of the Deputy Conservator's report. The estimate of outturn, however, does not include the 100,000 lbs. of dry bark referred to in the correspondence embodied in G.O., 7th December 1881, No. 1882, which it is expected will

	Actuals. RS.
1876-77	1,10,457
1877-78	3,57,215
1878-79	4,00,354
1879-80	4,39,787
1880-81	4,34,261
Total ...	5)17,42,074
Average ...	3,48,415

* lb. 1,45,000.

fetch about Rs. 1,00,000 according to the latest prices. The Estimate for 1882-83 will therefore be raised in round numbers to five lakhs of rupees.

8. *Charges*, 1882-83.—The Charges are estimated at Rs. 1,10,460 and compare as follows with the Actuals of the last five years and the Sanctioned and Regular Estimates for the current year :—

	Actuals. Rs.
1876-77	59,630
1877-78	69,770
1878-79	73,680
1879-80	79,720
1880-81	96,100
	5)3,78,900
Average ...	75,780
Sanctioned Estimate, 1881 82	1,03,810
Regular do. do.	1,35,660

9. The component items of the Estimate for 1882-83 as compared with those of the Sanctioned and Regular Estimate are shown below.

	1881-82.		1882-83, Budget Estimate.
	Sanctioned Estimate.	Regular Estimate.	
	Rs.	Rs.	Rs.
(*a*) Salaries	13,284	13,384	13,584
(*b*) Propagation	5,000	5,000	5,000
(*c*) Up-keep	33,425	33,425	33,125
(*d*) Crop	27,500	48,000	33,650
(*e*) Buildings...	21,500	28,350	21,000
(*f*) Miscellaneous	3,100	7,500	4,100
Total ...	1,03,809	1,35,659	1,10,459

The increase of Rs. 300 under (*a*) for extra travelling allowance to the Deputy Conservator, which has been disallowed by the Government of India (G.O., No. 1700, dated 11th November 1881), will be struck out. The abnormal increase against (*d*) "Crop" in the Regular Estimate has already been noticed—*vide* paragraph 6 *supra*. The increase over last year in the Budget Estimate against (*d*) includes Rs. 2,000 for constructing "barbaques for the purpose of drying bark by the heat of the sun," —an experiment sanctioned by G.O., 29th August 1881, No. 1280, paragraph 19. It is undesirable to provide permanent accommodation to meet the requirements of an experimental operation, but the provision will be retained and transferred to the head "Buildings" on the understanding that the outlay is limited to actual and unavoidable requirements. (*e*) The provision for "Buildings—New Works" is composed of the following items :—

	Rs.
I. Completion of Chinchona Buildings, Naduvatam	10,000
II. Construction of a Chattram on the main road to Wynaad ...	2,000
III. Construction of a Drying-shed on the "Hooker" estate ...	5,000
Total ...	17,000

I. The additional amount required according to the estimate* for completing the Naduvatam buildings next year will be Rs. 8,374 (Rs. 22,700 having altogether been provided in the Sanctioned and Regular Estimate for the year), and that amount will be placed to the

* G.O., 29th November 1881, No. 2975-W, P.W.D.

credit of the Public Works Provincial Budget for 1882-83, the estimate in the Chinchona Budget being reduced to the same figure.

Estimates and plans have not been submitted for items II and III which will however be allowed to stand; but no expenditure is to be incurred on II, pending further report and sanction, and as regards III, pending decision on the question referred to in paragraph 5 of G.O., No. 1280, dated 29th August 1881.

The provision of Rs. 4,000 for "Repairs" is approved under the circumstances stated in paragraph 14 of the Deputy Conservator's letter and in his further communication, dated 10th November 1881, No. 432.

Except as regards the Naduvatam buildings, it is not clear whether any of the "New Works and Repairs" are intended to be undertaken by the Public Works Department. If any are, they should be specified so that the necessary transfer of funds may be made to the Public Works Provincial Budget.

The Budget estimates as passed by Government are as follows :—

	Rs.
Receipts	5,00,000
Charges	1,08,533

or in round numbers—1,08,500.

(True Extract.)

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

To the Conservator of Forests.
" the Accountant-General, with Budget Estimates.
" the Financial Department.
" the Public Works Department.
" the Board of Revenue.
" the Commissioner of Nilgiris.

Exd. J. W. Fischer.

80 Copies.

Original

Govt. of {1881} Madras.

REVENUE.

To

The CONSERVATOR of FORESTS,

&c., &c., &c.

Dated December 21st, 1881.

Printed January 17th, 1882.

Encl. Encl.

G.O., 21st December 1881, No. 1035.

DECEMBER.

Nos. 291—293.

SUBJECT.

Chinchona Budget Estimate, 1882-83.—Passing rders on —.

No. 291 — Office of Deputy Conservator of Forests
Octacamund, 19th October 1881

From Lt-Col. R. S. Sago
Deputy Conservator of Forests
Nilgiris

To Col. H. A. Beddome
Conservator of Forests
Madras

Sir, I have the honor to submit the Budget Estimate of Receipts & Expenditure of the Govt. Chinchona Plantations on the Nilgiris for the Official year 1882-83

2 — Receipts —: The Regular Estimate of receipts from Sale proceeds of crop in England amount to Rs 630,104—3—2 Against Sanctioned estimate of Rs 450,000 as shown below:—

£

By 1215 Bales (Co. No 964 / 21st July 1881) = 22006—3—5

Carried over 22006—3—5

Brought forward £ 22006 — 2 — 5

By 250 Bales for Manufacture of Quinine (Net Outturn of 1000 lbs Quinine Sulph. @ 175 Shillings — £ 8750 — — —

" 3000 lbs Chinchonidine Sulph. @ 45 Shillings — £ 6750 — — —

" 305 Bales (L.O. No 1102 21st July 1881) — £ 8091 — 19 — 3

" 488 Bales (L.O. No 1111/1111 24th Septr 1881) — £ 6220 — 11 — —

" 56 Bales About — £ 690 — — —

Total Rs. 52508 — 13 — 8 = £ 30124 — 3 — 7 ①

The increase may be accounted for by both prices being obtained than anticipated, but principally from the valuation of the Alkaloids to be extracted from the 250 bales retained by the Right Honorable the Secretary of State for the purpose of experimenting whether it would pay better to extract on Govt Account or sell the raw product in the open Market. From the Estimate* of the probable outturn of the Quinine & Chinchonidine & according to the prices quoted for the above Salts in L.O. No 1395 dated 25th October 1880

* Para 3 of despatch dated 19th May 1881 recorded in L.O. No. 961 of 21st June 1881

1880, a sum of £ 180000 is the result. & this from 250 Bales! The Account Sales of the last Consignment viz. 56 Bales of last year's Crop not having been received an approximate valuation has been made.

The Regular Estimate of receipts from Plants & Seed is the same as usual and calls for no remarks. I may here state however that the demand for plants of C. Succirubra has entirely stopped, and there are whole Nurseries at Neddiattum & Pykara which are filled with 2 years to 18 Months old plants, the major portion of which will have to be cast away owing to there being no call for them. Rs 10,000 are entered as the Regular Estimate of bark to be sold to private parties. The actuals for 1880-81 from this item for 50 Bales amounted to £ 12800. It is proposed to sell 100 Bales of our poor quality bark as the good qualities pay better to manufacture than to sell. I think this point of extracting the febrifuge from the whole of the better qualities of Govt bark worthy of consideration of the Hon'ble Government

× L.O. No. 1366 dated 5th August 1881.

The value of the crop of the current season (which forms the Budget Estimate for 1882-83) is estimated at Rs 397040 (as under

Peradeniya & Hakgala Plantations

Crown	lbs.	S.P.	£	s	d
Natural	6900	@ 1/2 =	1610	—	—
Pruned	9500	@ 6/8 =	3166	13	4
Renewed	24000	@ 6/4 =	7600	—	—
Branch	6600	@ 3/4 =	1100	—	—
Total	47000	=	13476	13	4

Red			£	s	d
Natural	30700	@ 2/2 =	3325	16	8
Pruned	1700	@ 3/ =	705	—	—
Renewed	9700	@ 4/6 =	2092	10	—
Root	900	@ 2/4 =	105	—	—
Branch	12400	@ 1/7 =	981	13	4
Total	58000	=	7210	—	—

Dodabetta Plantations

Crown					
Natural	8000	@ 5/7 =	2233	6	8
Pruned	10000	@ 6/1 =	3041	13	4
Renewed	20000	@ 7/ =	7000	—	—
Branch	2000	@ 1/3 =	125	—	—
Total	40,000	=	12400	—	—

Grand Total 145000 = 33086 13 4 = Rs 397040 @ 2/8

Rs 7500 are estimated as the receipts from Plants &c. for 1882/83. It is proposed to abandon the propagation of C. Succirubra (except for Estate purposes) and to confine our attention to that of C. Officinalis & C. Pubescens for which there is now a fair demand from the plateau where all house owners are now turning their waste Compounds into Chinchona Estates.

Charges — The Charges for 1882/83 are estimated at Rs 110657

Salaries — A sum of Rs 2700 is entered as the Salary of the Superintendent for 1882-83 against the Regular Estimate for 1881-82 of Rs 2500 & a Sanctioned estimate of Rs 2400 for the same year, as the Govt have been pleased to raise the Travelling allowance of this Officer i.e. the Deputy Conservator of Forests, Nilgiri Range

Propagation & Nurseries — The allotment is the same as for the previous year & calls for no remark

Upkeeps — (a) Working Charges — The allotment also calls for no remark

(b) Manure — The Regular Estimate for Reduviathum exceeds the Sanctioned Estimate for the current year by Rs 1000 — This latter amount was specially sanctioned by Govt for experiments in patent Manure vide their proceedings No 962 dated 21st June 1881. A Saving of Rs 1000 under this head is shewn for the Doddabetta Plantations which is due to the system of purchasing & carting Manure from the Ootacamund Town not having been commenced as yet. Rs 3700 are budgetted for the Reduviathum Plantations for the year 1882-83. Govt in para 3 of their order above referred to desire that every effort should be made to increase the quantity of cattle Manure obtainable at present