M.R.O. 14—10,000—21-4-22

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1786	Press ~~Mis.~~
79.81	
Dated 7-9.	1861.

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department, 7th September 1861.

Read the following papers :—

No. 79. Despatch from the Right Honorable Sir C. WOOD, Bart., Secretary of State for India (Public), to His Excellency the Honorable the Governor in Council, Fort Saint George, dated India Office, London, 2nd July 1861, No. 27.

SIR,

1. I have considered in Council your letter in the Revenue Department, dated 24th April, No. 63 of 1861, reporting that "in defference to the opinions" of Mr. Markham and Mr. McIvor, you have modified your Order of 9th March, No. 552, respecting the abandonment of the site for Cinchonæ cultivation, at the back of the Government Gardens at Ootacamund, and the relinquishment of further attempts to raise plants from seeds or cuttings in the Government Gardens. In this determination you have anticipated the directions contained in my Despatch, dated [illegible]th June (No. 25), 1861.

2. It is [illegible] opinion very desirable that the management of the Cinchona experiment should be placed in the hands of Mr. McIvor, at least for the present, free from the control of other Officers, and that he should, as regards this duty, be placed in direct communication with your Government.

3. The important operation of introducing the Cinchonæ into India has now been successfully effected, and it is my opinion that the measures for the cultivation of these valuable plants should be framed, as far as possible in accordance with the habits of the growth of the Cinchonæ in their native forests in South America, and not with reference to the mode of culture pursued by the Dutch in Java. It will, nevertheless, be well that Mr. McIvor should be kept informed respecting the proceedings of the Dutch, and as the reports of the Superintendent are published in Germany Mr. McIvor can be supplied with accurate and reliable information from time to time respecting the progress of the Cinchona experiment in Java.

4. The superintendence of the Cinchona plantations in the Neilgherry Hills will involve great responsibility as well as considerable toil and anxiety, and qualifications not easily found are required for the post. I shall, therefore, be willing to sanction any reasonable allowance which you may deem it right to propose for Mr. McIvor, for the performance of this important duty.

5. With reference to paragraph 3 of your Order of the 16th April, I have to inform you that the gardener Weir has accepted other employment, but that a gardener with the requisite acquirements will be engaged and sent out to Ootacamund, with as little delay as possible.

No. 80. MINUTE BY THE HONORABLE THE PRESIDENT.

1. I forward herewith a letter addressed to my Private Secretary by Mr. McIvor, enclosing an Estimate of the cost of the buildings to be erected, that of clearing the land, &c., for next year's plantation of the Cinchona plants, and also of the permanent Establishment which will be required to keep the plantations in order.

2. To this must be added :—

(1.) The cost of the propagating house, which is in progress, and will soon be completed, for which a sum of about 1,500 Rupees was granted, but which will according to Mr. McIvor be finished for about 2,000; probably it would be as well to insert 2,500 as the cost of this, including contingencies.

(2.) Mr. McIvor's salary as Superintendent.

3. These additions will raise the Estimate for capital expended upon the preparation of a plantation of 160 acres to 31,076 Rupees, and the annual outlay to, say, 13,200 Rupees or 1,100 Rupees per month.

4. I think, however, that this will be money well laid out. The number of trees which an acre will carry is about 700, say 650; and as it is estimated that each tree will produce after, say, ten years' growth 5lbs. weight of bark annually, the yield per acre will be 3,250lbs., say 3,000lbs.; and for 160 acres 4,80,000lbs., or upwards of 200 tons at 6 *d* per pound, which I believe to be a low price. This will give £12,000 per annum, as the return upon the 160 acres, the annual expense of management, &c., being £1,320.

5. It will be seen that in the Estimate a sum is taken for trenching the ground for the plants. Mr. McIvor, in his wish to keep down the estimate of first cost, proposed to put the plants in pits; I however, suggested the propriety of trenching a portion of the ground: at all events, in order to ascertain whether this would not secure a better growth than the system which he was about to adopt; this, if found to be necessary generally, will add to the first cost of the plantation, but it will be well re-paid by the improved growth of the trees.

6. It appears to me that Mr. McIvor might be empowered to conduct the whole of the work, including the erection of the buildings, subject to the condition that the work, when completed, should be examined and approved by the District Engineer. It is absolutely necessary that the work should be pushed on vigorously, in order that the land should be fenced in, trenched, and prepared for planting, by the end of May 1862; and the house for the Overseer and men must be ready by the same time. If the responsibility of the whole is thrown upon Mr. McIvor, the Government will know to whom any blame of neglect will attach; but if the Department of Public Works is placed in charge of the erection of the buildings, and wall, &c., there will be of course, in case of failure, mutual accusations between the Department and Mr. McIvor, and the Government will not have it in its power to decide which was in fault. I forward herewith a return of the number of plants at present in the garden. I saw two or three yesterday, which had been planted out in the garden, and these appeared healthy; those in the propagating house were in the best possible condition. Mr. McIvor was busily engaged in increasing the number by laying and making cuttings; he expects also to receive a large fresh supply of seed in October, and by the end of May 1862 to have plants enough to fill the land which he will have ready, while in the course of 1862, and the first half of 1863, he will have plants sufficient to fill 200 or 300 additional acres. The sum mentioned in the Estimate will be required at once, and must be inserted in the Supplementary Estimate, leave being given to Mr. McIvor to proceed at once with the preparation of the land, the construction of buildings and the wall, the object of which is to keep pigs, &c., out of the plantations; he must also be directed to send in an Estimate for the Budget of 1862-63, including in that the cost of the additional clearing at Neddivattam and the Establishment for this and for the year's plantations also. These latter will not of course be required in full strength till the middle of 1862, as the Estimate for first cost provides for trenching the ground and planting out the young plants.

7. I think it would be advisable that, as proposed by Mr. McIvor, the gardener who is expected to arrive, should be placed in the position of Deputy, that is, should be empowered to act in all cases for Mr. McIvor both in the Botanic Garden itself, and in charge of the Cinchona plants; and as before stated that the whole Establishment should be withdrawn from the control of the Conservator of Forests.

(Signed) W. T. DENISON.

From Mr. W. G. McIVOR, Superintendent Botanical Gardens, to J. W. BREEKS, Esq., Private Secretary to His Excellency the Governor of Madras, dated Ootacamund, 16th August 1861.

MY DEAR SIR,

1. I have the honor to enclose the Estimate for the formation of the Cinchona plantations on the Neilgherries amended as suggested by His Excellency the Governor.

2. I would most respectfully propose that the European gardener engaged by the Secretary of State, be placed in charge of the propagating Department, and in addition to this duty he be required to act as my Deputy in the garden during my occasional absence at Neddivattum.

3. The propagating house sanctioned by order of Government, No. 1,328, dated 3rd July 1861, being urgently required for our rapidly increasing number of plants, the work was immediately begun by me, and will shortly be completed, according to a Plan and Specification furnished by the Engineer. This Officer has also furnished an Estimate amounting to 3,680 Rupees. I, however, believe that I will be able to finish the work according to Plan and Specification for 2,000 Rupees. I would recommend that this work when finished be examined and reported on by the Engineer, and I would wish this done with all the buildings I may erect as a course likely to prove satisfactory to the Government and myself.

4. I enclose for the information of His Excellency the Governor, a report of the number and condition of our Cinchona plants.

Estimate of cost of Cinchona Plantations on the Neilgherries.

Particulars.	Cost of forming the Plantation with buildings, roads, &c. RS.	A.	P.	Cost of fixed Establishment. RS.	A.	P.
Nursery at Ootacamund.						
Building and other Contingent charges.						
To house for the European gardener to consist of two main-rooms, 12×12, and four verandah rooms, 6×12. Walls to be built of burnt brick in clay. Fire-places, chimnies and corner of brick in chunam, and plastered with chunam throughout. Roof to be constructed of teak wood and covered with tiles. Doors and windows and flooring of two main-rooms of teak wood. Verandah rooms to be floored with flat tiles	1,200	...	...	...	...	...
To building a wall 756 yards in length to enclose Nursery-ground 5 feet high, and 14 inches thick of burnt brick laid in clay, at 1 Rupee per yard	756	...	...	...	...	...
Contingent charges at 10 per cent	195	9	7	...	...	...
Fixed Establishment.						
European gardener, probable, 150£ per annum	...	...	...	125	...	...
Head Propagator	...	...	-	35	...	...
Two 1st Assistants at 10 Rs. each	...	...	...	20	...	...
Three 2nd do. at 7 Rs. do	...	...	...	21	...	...
Six gardeners at 6 Rs. do	...	...	...	36	...	...
Six do. at 5-8 do	...	...	...	33	...	...
One Peon at	...	...	...	7	...	...
Total Rupees	2,151	9	7	277	...	...

To forming a Plantation of 50 acres of Cinchona trees on the Dodabetta site.

Particulars.	Cost of forming the Plantation with buildings, roads, &c. RS.	A.	P.	Cost of fixed Establishment. RS.	A.	P.
Building and other Contingent charges.						
To house for Overseer to consist of two main-rooms, 12×12 each, and two verandah rooms, 6×12—to be constructed with burnt brick laid in clay, and bamboo roof covered with tiles. Teak-wood doors and windows	560	...	...	...	...	...
To houses for twenty coolies—to be constructed with brick built in clay. Bamboo roof covered with tiles. Teak-wood doors and windows	200	...	...	...	...	...
To felling 40 acres at 10 Rs. per acre. Sopping and clearing 40 acres at 7 Rs. per acre. Pitting 40 acres at 10 Rs. per acre. Trenching 10 acres at 180 Rs. per acre. Carriage of plants for 50 acres at 2 Rs. per acre. Filling in holes, planting and shading at 5 Rs.	3,230	...	...	...	...	...
The proceeds from the sale of firewood may be estimated to cover the cost of enclosing and finishing the construction of roads.	399	...	...	...	...	..
Contingent charges at 10 per cent	...	...	...	40	...	...
Fixed Establishment.						
One Overseer	...	...	...	10	...	...
One Maistry	...	...	...	30	...	...
Five Gardeners at 6 Rs. each	...	...	...	110	...	...
Twenty Coolies at 5-8 each						
Total Rupees	4,389	...	...	190	...	...

Estimate cost of forming a Plantation of 100 *acres of Cinchona trees on the Neddivattum site.*

Particulars.	Cost of forming the Plantation with buildings, roads, &c.			Cost of fixed Establishment.		
	RS.	A.	P.	RS.	A.	P.
Building and other Contingent charges.						
To house for Overseer with quarters for Superintendent to contain four main-rooms, 12×14 each, and six verandah rooms, 12×7 each. Walls to be constructed of burnt brick laid in clay. Chimney and corners of brick in chunam, and plastered with chunam throughout. Roof to be constructed with teak-wood king beams. Rafters of jungle wood with bamboo reapers and covered with tiles	1,750	...	...	...	...	...
To out-houses, one kitchen 10×12, and two out-houses 10×15 each, constructed as above	330	...	...	...	...	...
To tool-rooms and store-rooms, each 10×15 feet, constructed as above	250	...	...	...	...	...
To houses for one hundred coolies to consist of thirty rooms 7×10 feet each, constructed as above	1,000	...	...	...	...	...
To enclosing 100 acres with a wall 5 feet high and 14 inches thick with burnt brick laid in clay, and trench outside 4 feet wide 2½ feet deep, at 1 Rupee per running yard of 3,900 yards	3,900	...	...	...	...	...
To felling 100 acres at 15 Rupees per acre. Sopping and clearing, at 15 Rupees per acre. Pitting 80 acres, at 20 Rupees per acre. Trenching 20 acres, at 20 Rupees per acre. Carriage of plants, at 6 Rupees per acre. Filling holes, planting, and shading, at 8 Rupees per acre	10,000	...	...	...	...	...
To forming cart roads, 12 feet wide, over 100 acres of land including from public road to plantation, or about 4½ miles, at 300 Rupees per mile	1,350	...	...	...	...	...
To two teakwood bridges over streams 10 feet span each, and 8 feet wide with stone abutments at 85 Rupees each	170	...	...	...	...	...
To tools, 200 pickaxes at 2 Rupees each. 200 felling axes at 2 Rupees each. 100 bill-hooks at 1-8 each. 200 momaties, at 1 Rupee each. 12 steel digging forks at 4 Rupees each. 24 steel spades at 2 Rupees each. 12 crow bars at 3 Rupees each	1,282	...	...	...	...	...
Contingent charges at 10 per cent	2,003	3	2	...	...	...
Fixed Establishment.						
One Overseer	...	...	...	70	...	...
One Head Maistry	...	...	...	15	...	...
Two Peons at 7 Rupees each	...	...	...	14	...	...
Fifty Coolies, at 6 Rupees each	...	...	...	300	...	...
Office Establishment.						
One Writer at 20 Rupees; Books, Stationery, Ink, Quills, &c., 3 Rupees	...	...	...	23	...	...
Total Rupees	22,035	3	2	422	...	...

GOVERNMENT GARDENS, OOTACAMUND,
16*th August* 1861.

(Signed) W. G. McIVOR,
Superintendent Botanical Gardens.

Abstract of Estimate of Cinchona Plantations on the Neilgherries.

Particulars.	Cost of forming the Plantations with buildings, roads, tools, &c.			Cost of fixed Establishment.		
	RS.	A.	P.	RS.	A.	P.
Nursery at Ootacamund.						
Buildings and other Contingent charges	2,151	9	7	...	...	...
Fixed Establishment	...	...	...	277	...	...
Dodabetta Plantation.						
Building and other Contingent charges	4,389	...	...	...	...	...
Fixed Establishment	...	...	...	190	...	...
Neddivattum Plantation.						
Building and other Contingent charges	22,035	3	2	...	...	...
Fixed Establishment	...	...	...	399	...	...
Office Establishment	...	...	...	23	...	...
Total Rupees...	28,575	12	9	889	...	...

GOVERNMENT GARDENS, OOTACAMUND,
16*th August* 1861.

(Signed) W. G. McIVOR,
Superintendent Botanical Gardens.

Report on the Number and condition of the Cinchona plants in the Government Gardens at Ootacamund on the 9th August 1861.

Names.	Number.	Remarks.
Cinchona Succirubra, or red bark.	1,517	The imported plants are all in very promising condition, many of them being in the most luxuriant state of health. The largest of the plants measure 2 feet 6 inches to 2 feet 10 inches high, and some of their leaves measure 7⅛ inches by 11⅛ inches. The average growth of the month being 1¾ inches. The maximum growth made by the most luxuriant shoots being 7 inches. The first of our seedlings are from 6 to 7 inches high, and from 6 to 8½ inches in diameter across the leaves. The average growth of the mouth being about 1½ inches while the maximum monthly growth made by the most vigorous plants is 2½ inches.
Cinchona Calisaya, Calisaya bark.	6	
Cinchona Nitida, Genuine grey bark	804	
Cinchona Micrantha Var; Provinciana	896	
Cinchona Micrantha Var; Pata de Gallinazo	42	
Species without name	271	
Total...	3,536	

GOVERNMENT GARDENS, OOTACAMUND,
9*th August* 1861.

(Signed) W. G. McIVOR,
Superintendent Botanical Gardens.

Read again Despatch from the Right Honorable the Secretary of State, dated 16th July 1861, No. 35, and recorded in G. O. 4th instant, No. 1,760.

No. 81. ORDER THEREON, 7th September 1861, No. 1,786.

1. In their Order of the 16th April last, No. 855, the Government directed that the Cinchona experiment should for the present be restricted to the garden ravine and Neddivattum sites, the Horticultural Gardens being also made available as a nursery and propagating place, and in any other way that might be found advisable. Under these orders, therefore, operations on any other site will not be undertaken without the express permission of Government.

Sites.

2. In the same order the operations at the selected sites were entrusted to Mr. McIvor, but doubts having arisen as to the exact degree of authority which it was intended to vest in him, the Government in their Order of the 3rd July last, gave him full and entire control over the operations, holding him answerable for his conduct of them, and restricted the intervention of the Conservator of Forests to periodical inspections and reports, without, however, the power of interference except by order of Government.

Superintendence of operations.

3. In the Order of the 3rd July the Government also resolved to apply to the Secretary of State for permission to raise Mr. McIvor's salary from Rupees 200 to Rupees 300 per mensem, in consideration of the additional responsibility and labor which this important experiment will entail on him. The Secretary of State has expressed his willingness to sanction any reasonable remuneration which this Government may propose. The Government are now in a better position to judge of the probable labor, &c., which will devolve on Mr. McIvor, and resolve to recommend that Mr. McIvor's salary be raised from Rupees 200 to Rupees 350 during the first year, and to 400 in the second. This remuneration is for his services as Superintendent of the Gardens as well as of the Cinchona operations. The grant will take effect from the commencement of the current official year, and provision for it will be made in the Supplemental Budget.

Mr. McIvor's remuneration.

4. The Government in April last applied to the Secretary of State to send out Mr. Weir, as an Assistant to Mr. McIvor. Mr. Weir, however, has accepted other employment, but another skilled gardener, G. Batcock, has been engaged. He will be placed on arrival under Mr. McIvor's orders, and will act as his Deputy both in the Horticultural Garden and the Cinchona plantations. His salary is to be £150 per annum, commencing from the 20th August 1861, and increasing at the rate of 10£ yearly. His engagement is for five years, and he is to have a suitable residence or an allowance for houserent.

Assistant gardeners.

Despatch, 16th July 1861, No. 35.
C. O. 4th instant, No. 1,760.

5. In paragraph 5 of the Order of the 3rd July 1861, Government sanctioned the immediate construction of a propagating house at a cost of about 1,500 Rupees, and in paragraph 6, Mr. McIvor was called upon for a statement of the probable monthly expenses of the experiment. Mr. McIvor has now submitted estimates to the following amount.

Estimates of expenditure.

	Capital.	Current monthly expenditure.
	RS.	RS.
Propagating house in the Gardens, estimated by the District Engineer at Rupees 3,680, but which Mr. McIvor hopes to complete for...	2,000	.....
House for European Gardener.....	1,200	.....
Wall round nursery.....	756	.....
Contingencies.....	196	.....
European Gardener at £150.....	.....	125
18 Under Gardeners.....	.....	145
1 Peon.....	.....	7
Nursery at Ootacamund.....	4,152	277
For a plantation of 50 acres on the Dodabetta, or garden ravine site.....	.....	.....
Overseer's house.....	560	.....
Coolies' quarters.....	200	.....
Clearing, pitting, trenching, and planting, (fencing and roads being covered by sale of timber).....	3,230	.....
Contingencies.....	399	.....
Overseer.....	.....	40
Under Gardeners.....	.....	150
Dodabetta site.....	4,389	190
Plantation of 100 acres at Neddivattum.....		
Overseer's house.....	1,750	.....
Out-houses.....	330	.....
Tool and store rooms.....	250	.....
Coolies' quarters.....	1,000	.....
Enclosing site with wall.....	3,900	.....
Clearing and planting.....	10,000	.....
Cart roads.....	1,350	.....
2 bridges.....	170	.....
Tools.....	1,282	.....
Contingencies.....	2,003	.....
Overseer.....	.....	70
51 Under Gardeners.....	.....	315
2 Peons.....	.....	14
Neddivattum site...	22,035	399
Writer and Stationery.....	.....	23
Mr. McIvor's allowance.....		150

6. The aggregate estimate thus amounts to an outlay of capital of Rupees 30,576, or (say) Rupees 31,000, and a monthly charge of Rupees 1,039, or Rupees 12,468 per annum. To the latter charge an addition of 150 Rupees will have to be made in the second year on account of the increase then proposed for Mr. McIvor, and that due under his agreement to George Batcock, who in each successive year will also draw £10, or 100 Rupees extra.

7. Thus for an outlay of £3,100 and an annual charge of about £1,300, the Government will have a nursery and two plantations of 160 acres of Cinchonas. Each acre will contain about 700 trees and each tree is estimated after (say) ten years' growth to produce 5lbs weight of bark annually, for which 6 pence per lb is a low price. Taking, however, 650 trees to the acre, and 3,000 lbs weight only of bark, the annual produce would be 4,80,000 lbs, worth

12,000£ per annum as the return on a capital of £3,100, and an annual outlay of £1,300. The experiment, however, cannot be regarded as a mere money speculation; if successful, its results will be of incalculable benefit to the public.

8. The estimate includes a provision for *trenching* a part of the land. Mr. McIvor in his anxiety to keep down the first cost proposed to put the plants in pits. The trenching of a portion of the land was suggested by the President, and if found successful will be extended: and the improved growth of the plants will compensate for the additional expense of this mode of preparing the ground.

9. The Government resolve to authorize Mr. McIvor to conduct the whole of the operations including the erection of the buildings, subject to the condition that the work when completed shall be examined and approved by the District Engineer.

10. The work will be pushed on vigorously, in order that the land may be fenced, trenched, and prepared for planting by the end of May 1862. The houses for the Overseers and laborers must also be ready by that time.

11. The Accountant General will accordingly provide in the Supplemental Budget, for an outlay of Rupees 31,000 on buildings, &c., and of Rupees 7,000 for establishments, or Rupees 38,000 in all. Pending the sanction of the Supreme Government to the Budget, the Collector of Coimbatore will be authorized to make such advances as may be necessary from time to time on Mr. McIvor's receipts, to be subsequently adjusted. The Accountant General will furnish the Collector with the necessary instructions.

12. The Accountant General will also instruct Mr. McIvor to prepare his Budget Estimate for 1862-63 in due form and time.

13. Under the orders already noticed, Mr. McIvor has been placed in an independent position as regards the Cinchona experiment, and the Governor in Council resolves to place the Botanical gardens similarly under his entire control. The preliminary operations of the Cinchona experiment are conducted in the Botanical gardens; the propagating house now sanctioned will be constructed, and it will be embarassing, if Mr. McIvor has not full power over the gardens, as well as the Cinchona plantations. Mr. McIvor will, therefore, be under the direct orders of Government in both these Departments as laid down in G. O. 3rd July last.

14. These Proceedings will be communicated to the Secretary of State and the Government of India.

(Signed) J. D. SIM,
Secretary to Government.

are too closely connected to admit of separation - and therefore if we remove the head of the Curatorial Dep^t from the control of the Commissioner of Lands we must equally relieve the Curator of the Botanic Garden of his present connexion with the Govt as to the Establishments.

As to the addition to his Salary, he will have a very heavy amount of responsibility thrown upon him & will have the charge of the Establishment from the Labourer upwards & I hope the Govt may return a handsome profit. I do not think therefore that 200 Rs^s per month will be too large a sum or perhaps it may be as well to say that for the first year 150 & 2^nd 200 — we shall see by the end of a complete year what our charges & receipts will be —

WD

Nilgiri -

I forward herewith a letter addressed to my Private Secretary by Mr Mc Ivor inclosing an Estimate of the cost of the Buildings to be erected, that of clearing the Land &c, for next years Plantations of the Cinchona Plants - and also of the permanent Establishment which will be required to keep the Plantations in order -

To this must be added for the cost of the Purchase House which is in progress, and will soon be completed, for which a sum of about £500 R - was paid, but which will accordingly Mr Mc Ivor has finished for about 2000 - probably it would be well to expect 2500 £ as the cost of this, including contingencies -

and Mr Mc Ivors Salary as Superintendent -

Wells,

these additions will raise the Estimate for Capital expended upon the preparation of Plantation of 160 Acres. to 3107£ R. and the annual outlay to say 1320£ R. or 1100£ Rs per month. —

I think however that the cost will be money well laid out. The Numbers of Trees to the Acre will vary in about 700. say 650 and as it is estimated that each tree will produce after say ten years growth. 5 lbs weight of Bark. the yield per Acre will be 3250 lbs say 3000 lbs. and for 160 Acres 480000 lbs or upwards of 200 Tons. — at 6£ per lb. which I believe to be a low price, this will yield 12000 per annum on the 160 Acres. the annual expence of management &c being 1320 £ —

It will be seen that in the Estimate a sum is taken for trenching the ground for the Plants. Mr M'Ivor wishes to keep down the Estimate of cost proposed to put the Plants in Soti. I however suggested the propriety of trenching a portion of the ground at all events in order to ascertain whether this would not secure a better growth than the system which he was about to adopt. This is found to be necessary, I think will add to the future cost of the Plantation, but it will be well repaid by the improved growth of the Trees.

It appears to me that Mr M'Ivor might be empowered to conduct the whole of the work including the erection of the buildings subject to the condition that the work when completed should be examined & approved by the District Engineer as is absolutely necessary that this work should be practised on a properly

Jn order that the Land should be fenced in, trenched, & prepared for Plantns, by the end of May 1862 - & the Seeds for the Borders & Beds must be ready by the same time - y^e responsibility y^t wholly thrown upon Mr. McIvor the Gov^t will know to whom any blame or neglect will attach, both y^e Dep^y & overlooker in charge y^e building, & trenching y^t will be y^e fault, then will be no excuse in case of failure - mutual accusations between the Dep^y & Mr McIvor and the Gov^t will not have it in their power to decide which was in fault - Forward herewith a return y^e number of Plants at present in the Garden - I saw two or three fine days, when had been planted out in the Garden, & then appeared healthy - Those in the propagating House were in the best possible condition & Mr McIvor was busily engaged in increasing the number by layering and making cuttings. he expects also to receive a large fresh supply of seed in October and by the end of May 62 to have plants enough to fill the Land which he will have ready - during the course of 1862, & the first half of 1863, he will have Plants sufficient to fill 2 or 300 additional Acres. The sum mentioned in the Estimate will be required at once & must be included in the Supplementary Estimate, I have duly forwarded to Mr McIvor the proceedings with the preparation of the Land the Construction of buildings & the wall the object of which is to keep Dogs out of the Plantations - he must also be directed to send in an Estimate for the Budget of 62-63. including in that the additional cost of the additional Cleaning at Paddington and the establishment for this and for the Government Plantations also.

8/22/62

That latter will not of course be required in full strength till the middle of 1862 as the estimate for first cost provides for trenching the ground & planting out the Young Plants -

I think it would be advisable that, as proposed by Mr Milton the Gardener who is expected to arrive, should be placed in the position of Deputy - that is should be empowered to act in all cases for him in Zoological & the Botanic Gardens in charge of the Aviaries Plants, and in case before stated that the whole establishment should be withdrawn from the control of the Commissioners of Parks.

Wellington

Rev. Dept

No 1786

Proceedings of the Madras Government
Under date the 7th September 1861
Read the following
Minute by the Honorable
the President.
(Here enter 17th August 1861)

In their order of the
16 April last No 855
the Govt. directed that
the Cinchona experi-
ments should for the
present be restricted
to the Gardens Ravine
& Seddiwatturum Sites,
the Horticultural
Gardens being also
made available as a Nursery
& preparatory place &
in any other may that
may still be found advi-
sable - Under these
orders therefore operations on
any other Site
cannot be undertaken without the
express permission

Sites.

Rev. Dept
No. 1786
Forwarded

Minute by the President
Dated 19th August 1861
Read 7th Sept 1861
(Answered)

Forwarding Abstract
of Accounts for the Estimate for
certain buildings on
account of Cinchona
Plantations, and also
Corresponding Orders as to
the Amount of Revenue
Salaries &c to be granted &
their Duties under
the above work
No 1786 7 Sept.

Copy in a Letter to England
dated 23rd Sept 1862
No 1788

of Govt.

In the same order the operations at the selected sites were entrusted to Mr. McIvor. But doubts having arisen as to the exact degree of authority which it was intended to vest in Mr. McIvor, the Govt. in their order of the 3 July last, gave him full & entire control over the operations, holding him answerable for his conduct of them & restricting the intervention of the Conservator of Forests & periodical reports inspections & reports to what touches the

Superintendence of Operations

Mr. McIvor's Remuneration.

powers of interference except by order of Govt.

In the order of the 3d July the Govt also resolved to apply to the Secy of State for permission to raise Mr McIvors salary from Rs 200 to Rs 300 per mensem in consideration of the additional responsibility & labor which this important & experimental will entail on him - The Secy of State has expressed his willingness &c &c. Sanction among reasons at the remuneration which

Asst. for dens.

Despatch 16 July 61.
No 35.
C.O 41 with No 1760.

there for the many pro-
fits. The fits are
now in a letter to
Ceylon & fifth of the
Establishment &c
which will devolve
on Mr Mc Lean and
in Rec. Gi cation
of their previous
proposal, they &c.
Also Rec. & &c.
commend that
Mr Mc Lean's salary
be raised from
£ 200 to £ 350
during the first
year and to £ 400
in the second.
This remuneration
is for his services
as Supt of Pro fisheries
as well as of the
Cinchona &c.

operations. This part
will take effect from
the commencement of the
current official year & pro-
vision for it must be
made in the Supple-
mentary Estimates.

The fit in April
last applied to the
Secy of State & Lord
ask Mr Weir, as an
asst to Mr Mc Lean.
Mr Weir however has
accepted other em-
ployment & the
skilled fisheries, Mr
J. Babcock, has been
employed. He will be
placed on annual
under Mr Mc Lean's
orders & will act as
his Deputy both in
the Agricultural fish
& the Cinchona plantations
His salary is to be
£ 150 per annum. Com-

mencing from the 20 Augt. 1861, and increasing at the rate of 10£ yearly. His engagement is for 5 years & he is to have a suitable residence or an allowance for house rent.

In para 5 of the Min of the 3 July 1861, Govt. sanctioned the immediate construction of a Propagating house at a cost of about 1500 Rs. and upon a Mr. McIvor was called upon for a Statement of the probable monthly expenses of the Experiment. Mr McIvor has not yet furnished the Estimates & the following account.

Estimates of Expenditure

~~Nursery at Ootacamund.~~

Propagating House in the Government estimates & the District Engr. at Rs 3683 but that Mr M. hopes to complete for

	Capital — Rs	Current Monthly Expenditure Rs
	2000	
House for European gardener	1200	
Walls round Nursery	756.	
Contingencies	196.	
European gardener @ £150		125
8 Under gardeners		145
1 Peon		7
Nursery at Ootacamund.	4152	277

For a Plantation of 50 Acres on the Dodabetta or Jackanarie Site.

Native Houses	560.
Coolies' Quarters	200.
Clearing - Pitting - Trenching & Planting - Fencing being covered by sale of timber / Contingencies	3230. 399

Overseer		40
Under foremen		150
Dodabetta Site.	43089	190
Plantation of 100 Acres at Neediwuttum		
Per Coast House	1750	
Out Houses	330	
Tool & Store Rooms	250	
Coolies' Quarters	1000	
Enclosing Site with Wall	3900	
Clearing & Planting	10,000	
Cart Roads	1350	
2 Bridges	170	
Tools	1202	
Contingencies	2003	
Overseer		70
57 Under foremen		315
2 Peons		14
Re Nimuttum Site	22035	399
Writer & Stationery		23
For Mr Scott's allowance		150

The opposite Estimate thus amounts to an outlay of Capital of Rs 30576 or /say/ Rs 31,000- and a monthly charge of Rs 1039- or Rs 12468 per annum — To the latter charge an addition of 150 Rs will have to be made in the second year on account of the increase Rent fixed for Mr McScott & that Rent continue for agreement for forge Betacoe- also in Coast Peccarne you will also draw £10 or 100 Rs. Extra.

Thus for an outlay of Rs 31,000 and an annual

charge of about ~~£1000~~ £1300, the post with five a Nursery and the Plantations of 160 acres Huichenes.

Each acre will contain about 700 tree and each tree is estimated after (for) ten years growth to produce 5 lbs weight of Bark annually for which 6 pence per lb is a low price. Taking however 650 trees to the acre 3000 lbs weight of Bark, the annual produce would be 480,000 lbs worth 12000 £ per annum - as the return on a Capital of £ 30000 I am annual outlay of £1300. The experiment however can not be regarded as a mere money Speculation - if successful its results will be of incalculable benefit to the ~~people of India~~ public -

The Estimate includes a provision for trenching ~~and~~ — ~~of pitting~~ a part of the land - Mr. R. in his account to Keck Dixon the first cost per ~~plant~~ ~~to~~ put the plants in pits - The trenching of a part of the land was suggested by the President & if found successful will be extended. The ~~improved~~ improved growth of the plants under the additional expense of the more deep trenching the

proved.

The Asst. Engr. & authorised Mr. McLeod to conduct the whole of the operations, including the erection of the Buildings subject to the condition that the Work so done shall be examined & approved by the District Engr.

The work will be pushed on expeditiously, in order that the land may be fenced, trenched & prepared for planting by the end of May 1862.

The Rents for the Pensioners & Lutmey

must also be made up to that time.

The Accts. will be accordingly provide for an outlay of Rs. 31000 on Buildings &c and Rs. £7000 for Establishment & Rs. 3000 in all.

Pending the sanction of the Asst. Engr. to the Budget, the Collr. of Coimbatore will be authorised to make such advances as may be necessary from time to time on

Mr Mc Ivor re-
ceipts & he subt.
Lefroy thy Instns.
The Acct. pt. will
furnish the Sec.
in the necessary
Instructions -

The Acct/ pt.
will also instruct
Mr Mc Ivor to pre-
pare his Budget
estimate for 1862/3
in due form & time.

Under the works
already in hand
Mr Mc Ivor has
been placed in an
independent Re-
turn as regards
the Cinchona ex-
periments - and
the pt. will address
& place the Bota-
nical Resident Super-
intendent under his
entire control. &
The preliminary
operations of the
Cinchona experi-
ment are conducted
in the Botanical
Gardens - the pro-
posed house has
sanctioned will
be constructed,
and it will be
Empl. for attg. if
Mr Mc Ivor has
not full power
~~over the Cinchona~~
over the Gardens
as well as the
Cinchona plan-
tations - Mr Mc Ivor
will therefore be
under the Direct
orders of Govt. in

I/C Rose Dept.
as last Letter
in f.o. 3 July
last.

[illegible]

These Lines
with Do Com.ⁿ to
the Lieut Gov.ʳ State
and the Inst.ᵒ
of Deaf.

7 Copies. Supt.ᵉ Gov.ᵗ Gardw. Dr. Drummond. Pitts.
4 " Conservators of Forests.
13 " Board of Revenue.
3 " Accountant Genl.
3 " Civil Paymaster.
4 " Public Depts.
13 " Chief Engr.

Copying a Letter to England
Dated 23d Oct. No. 75 of 1862

12.2.23 IV

Revenue 1861 Dept.
Pro: of Govt for Septr.

No 1786.

Pro: of the Madras Govt
Dd 7th Sept: /61.

From Mr N.G. Ker Inv. & /18 Sept /61
No 2246 in Pro.
From Offg. Civil Paymaster Dd 27th
March /62 & No 762

Home Despatch
Regarding Cinchona Plants
Seeds, with orders thereon

No 79 at 81.