

(1) Number of pages 48(2) Date of repair 26.8.38(3) Initials of the Referencer 4**MADRAS RECORD OFFICE.****Government of Madras.***Revenue* **DEPARTMENT.**

G.O. No.	<u>486</u>	Press <u>Mis.</u>
Dated	<u>15-6-</u>	<u>1886</u>

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following letter from P. MACFADYEN, Esq., Chairman, Chamber of Commerce, Madras, to the Chief Secretary to Government, dated 4th February 1886 :—

I have the honor to inform you that the attention of the Chamber of Commerce has recently been directed to the extension of the number of trees in the Government Cinchona Plantations near Ootacamund. According to the Administration Report it appears that that number advanced from 1,122,766 to 1,620,744, or by about 45 per cent. in the year ended 31st March 1885, and the Chamber has reason to suppose that in the current year the work of planting fresh trees over and above the replacement of those that die or are felled has not been intermitted. I am therefore desired to submit, on the Chamber's behalf, that such extension seems opposed to the spirit in which the plantations were set on foot as well as to the spirit of the Government of India's policy of encouraging private enterprise.

2. The Chamber has no reason to suppose that the plantations were established as a commercial enterprise in view to the creation, for the exclusive benefit of the treasury, of a lucrative industry hitherto unknown in India. The scourge of fever had, from time to time, brought very forcibly to the notice of the Government the suffering and loss that were due to the want in this country of a febrifuge that could be brought within reach of all classes. The experiment of obtaining the cinchona plant in its native habitat, of transferring it to, and of acclimatising it in, India was one that entailed heavy expenditure, which it was vain to expect private individuals to incur on philanthropic grounds. It came, however, legitimately within the province of the State to expend public money in giving a fair trial, under competent scientific directions, to the experimental cultivation of a plant that offered a defence against the most fertile of all the causes that contribute to the mortality returns. The Government, therefore, took a broad view of its duty in this matter, and it succeeded beyond its most sanguine expectations in its benevolent scheme. It was possible for the State to patiently wait for a return on the large investment that it made in the cultivation of the exotic. That return eventually came, and not only was the surplus of revenue over expenditure from 1860-61 to 1884-85 Rs. 5,51,743, but the Government now possesses in the plantations an estate that would realise a large sum of money were it offered for sale to-morrow. Thus the enterprise has not only been successful as proving incontestably the suitability of the climate of the Nilgiris—as well as of other hill ranges in India—for the growth of cinchona, but it has yielded the State a handsome pecuniary profit. But it is no more consistent or desirable for the Government to make money by cultivating cinchona than by cultivating coffee, rice, indigo or cotton. The Government has established the fact that the cinchona tree flourishes in India, and there has been no reluctance on the part of private individuals to avail themselves of the offer of seed at low prices which was made by the Government. No longer, therefore, is the Government the only grower of the tree, but private plantations are assisting to cheapen the drug, or to achieve the object that the Government had originally in view. But private enterprise cannot compete on equal terms with the Government, which has the command of the public purse, and is free to sell at a loss when it cares to do so. The *raison d'être* of the Government Plantations exists no longer, yet the plantations are being extended with an assiduity worthy of a very opulent Joint Stock Company ambitious of paying handsome dividends to shareholders. In 1877-78 the number of plants was 569,031, and the net profit for the year was Rs. 2,88,980. Now, as has been shown above, the plants are three times as numerous. The Chamber fails to comprehend the aim of such extension, and I

am therefore to submit that in the Chamber's judgment it is time for the Government to reassure planters by announcing that the State, so far from increasing the severity of the competition that it offers to private enterprise, will gradually retire from the field, permit the usual operations of the laws of supply and demand, and confine its own attention to the introduction and acclimatisation of new varieties of cinchona for the guidance and encouragement of those who engage in the production of the plant.

READ—letter from M. A. LAWSON, Esq., Director of Government Cinchona Plantations, Nilgiris, to the Secretary to Government, Revenue Department, dated 2nd April 1886.

ABSTRACT.—Submitting remarks on letter from the Chairman of the Chamber of Commerce regarding the matter of extension of cinchona cultivation by Government on the Nilgiris.

READ—letter from G. G. ARBUTHNOT, Esq., Chairman, Chamber of Commerce, Madras, to the Secretary to Government, Revenue Department, dated 9th April 1886.

ABSTRACT.—Pointing out a clerical error in his predecessor's letter re-Government Cinchona Plantations, and stating that the Chamber of Commerce awaits information as to the policy pursued with respect to the development of the plantations.

READ—letter from M. A. LAWSON, Esq., Government Botanist and Director of Cinchona Plantations, Nilgiris, to the Secretary to Government, Revenue Department, dated 19th April 1886.

ABSTRACT.—Submitting a report regarding the increase in the number of cinchona plants from 1875 to 1885, and explaining that no new land has been planted with cinchonas.

ORDER—dated 15th June 1886, No. 483, Revenue.

Miscellaneous.

In the letter read above the Chairman of the Chamber of Commerce states that the attention of the Chamber has recently been directed to the extension of the number of trees in the Government Cinchona Plantations which advanced from 1,122,766 to 1,620,744 in the year ending 31st March 1885. The Chairman then proceeds to notice that the object with which these plantations were set on foot was to provide a febrifuge which could be brought within the reach of all classes, but he urges that private growers of cinchona are now assisting to achieve this object, and that the *raison d'être* of the Government plantations, therefore, no longer exists. The Chairman states that he is accordingly directed to submit that, as private enterprise cannot compete on equal terms with the Government which has the command of the public purse and is free to sell at a loss when it cares to do so, it is time for the Government to reassure planters by announcing that the State will gradually retire from the field and permit the usual operations of the law of supply and demand.

2. As regards the extension of the number of trees, it will be sufficient to observe that the increase which is caused almost entirely by renewals is apparent only; for, with the exception of one or two pieces of land of inconsiderable area which were added to the plantations for the purpose of rounding off the estates where danger from fire was to be feared, no new land has been planted in recent years. The reason of the ostensible increase is that when plants are first put down they are placed at comparatively short distances apart for the purpose of affording mutual shelter, but as soon as they have become firmly established, they are thinned to a very considerable extent. For example, on the Government plantations the plants are first planted out usually at intervals of 3 feet, but are afterwards thinned out until the space between each tree is 9 feet, i.e., out of every nine trees planted only one is left to attain maturity.

3. Turning now to the question of the suggested retirement of the Government from the cinchona enterprise, His Excellency the Governor in Council cannot admit that the *raison d'être* of these plantations no longer exists. It is true that the price of sulphate of quinine has, of late years, fallen considerably, but it is still so high as to be prohibitive to a very large majority of the natives of this presidency. The desired febrifuge must be sought, therefore, in some cheaper preparation of cinchona bark than sulphate of quinine, and although the extract recently prepared by Mr. Hooper has met with some measure of success, this problem must be regarded as one that has not yet been fully solved.

4. Nor can it be admitted that the plantations have yet completely served the second of the purposes for which they were established, viz., the conduct of experiments and investigations in connection with the culture of cinchona. Many most valuable results have already been obtained, but in a report made to this Government in 1883, Dr. Trimen, one of the greatest living authorities on the subject, pointed out that there are many questions of the greatest importance to cultivators of cinchona still pressing for solution. As examples of these, he mentioned the causes of the difference in proportion and quantities of the alkaloids in barks from trees of identical botanical type; the testing of the results which Mr. Broughton obtained from experimental manuring, the cause of the increase of alkaloids in renewed bark, and, lastly, the influence of age on the alkaloids. These investigations, Dr. Trimen considers, can only be carried on in a Government establishment, as the work must be performed by a resident analyst and must, of necessity, be spread over many years.

5. Lastly, His Excellency the Governor in Council cannot admit the correctness of the argument, implied rather than expressed, that the connection of the Government with cinchona planting has interfered with the usual operation of the law of supply and demand. It might be sufficient to reply to this that the outturn of the Government plantations is so trifling when compared with the total quantity of cinchona bark placed on the market, that prices would not be perceptibly influenced even if the Government bark was sold at a loss. As a matter of fact, however, it has always been sold by public auction, and the prices realised have been those ruling in the market at the time of sale.

(True Extract.)

(Signed) J. F. PRICE,
Ag. Secretary to Government.

To the Chairman, Chamber of Commerce, Madras.
„ the Government Botanist and Director, Cinchona Plantations.
„ the Board of Revenue.
„ the Editors' Table.

Exd. W. H. French.

70 Copies.

22/3/10 ✓
3-9-13 ✓
16-7-14 ✓

original

Govt. of (1886) Madras.

REVENUE.

Issued

Recd.

Encl

G.O., 15th June 1886, No. 486.

JUNE.

Government Cinchona Plantations.

Passing orders on letter from the Madras
Chamber of Commerce as regards the extension
of the number of trees in the —.



1
K.S.

Please keep these
papers till the draft
is sent to Mr Lawson
returns

S.H.

P/6

Note for Mr. Clark

Please get the
draft G. O. exped-
soon as possible as
I want to deposit it
out to Mr. Dawson
at Hingham.
What is the prob-
ability of sending it
to him?
Yours truly,
H. C. [unclear]



Revenue Secretariat
June 7th 1886

My dear Sir -

I return the
draft GO regarding enclosure
planting. Mr. S. says in
his Memo to R. that for the
last two years the income
has been less than the
expenditure: how about
this?
That allusion to the fact?

of 5 lakhs seems to me
to be rather dangerous
may be on the look out
for something to procure
upon.

I thought that Lawson
had come in. I should
like to be sure that we
have said as far as he
is concerned all that
is correct. He appears
however to be in a great
hurry for the G.D.
I think that he could

be breaking through; staying
in the house and a dose of
genuine tonight will probably
set it all right

Yours sincerely
Redmond



8 Revenue Secretariat,
June 7, 1886.

My Dear Sir,

Here are enclosed

from Mackinnon

from Secretary

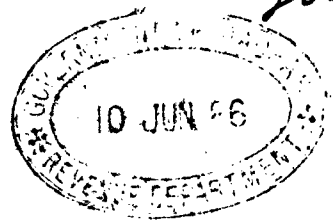
and Mackinnon

7.6.86

My dear Price.

His Excy. hopes
that there will be no
delay about pushing
on the correspondence
relative to the increase
in the number of Cinchona
trees (Chamber of Commerce)
in consequence of Lawson's
absence. He is at Madras.
Yours truly

W. H. Munro



Govt Gardens
Ostacamaru
10 Thursday

My dear Mr Price

Since I returned
the papers relating to
the Madras Chamber
of Commerce's letter on
the subject of the undue
increase of planting,
which they say is going
on in the foot estates,
I have considered the
matter again very
carefully and measure
the distance between

small of our address
and I think it would
be safer to put the
distance between them
at 9 ft. instead of 12 ft.

I am
yrs. sincerely
M. L. Lawson

11 B Governor
083
H.A. Secy 12. vi. 86
12 JUN 86

My dear Stuart
The enclosed
came this morning with
your note of the 10th
from Naduvattam.

The statements are
modified in the draft
you showed me in this
Office yesterday and
quite correct.
Yr. sincere
M. A. La. 12. vi. 86

No. 1.

Director's Office, Cotacamund

2nd April 1886

From



Mr. A. Lawson Esquire
Director, Govt. Cinchona Plantations
Gardens and Parks
Nilgiris

To

Mr. J. F. Rice Esquire
Secretary to Government
Revenue Department

Returned.

Sir,

With reference to the letter of Mr. Macfadyen, Chairman of the Chamber of Commerce in Madras, which has been forwarded to me for remarks, I have the honor to inform you that the increase of Cinchona trees on the Government Cinchona Plantations spoken of, is due to extensive restorations, which have been carried out on the Naduvattam, Hooker and Wood estates.

2. These restorations are not yet complete as there is still a considerable amount of land, which was

formerly cultivated, but which has not yet been replanted, but which if possible I hope to finish during this and next year.

3. With respect to the views put forward by the Chamber of Commerce affecting the propriety of Government holding Cinchona plantations, this is a matter of policy, on which I do not suppose that Government would care to have my opinion; but I may remark that bark is never sold, unless good prices are expected to be realized; and in this respect the sums obtained have generally been good when compared with the prices, which similar kinds of bark have fetched in London.

4. With respect to the advantages, which private

gain if Government were to sell their plantations to a company as suggested by Mr. Macfadyen, I do not understand what they could be, as the company would try to turn out as much bark from their estates as they possibly could, and so the present stagnation in the market would not be relieved.

5. It is true the original intention of Government was to place a cheap febrifuge in the hands of the masses of India, and I believe that it is the intention of the present Government that this original view should be now carried out. If so, it will be for them to consider whether it would be most advantageous for the public at large that they should

retain their plantations and
use their own bark, or whether
they should sell them and then
purchase their fibrifuge from
private growers; and I presume
the determination they will
arrive at will be founded
upon which method will be
the cheapest.

I have the honor to be
Sir
Your most Obedt. Servant
W. L. Lawson
Director

The Chamber of Commerce,
Madras 8 April 1886

From. Geo. G. Subathrust Esq.

Chairman, Chamber of Commerce
Madras

To The Chief Secretary to Government,
Fort Saint George.

Sir,

I have reason to believe that there was
a clerical error in the fair copy of the letter
from my predecessor in office, to yourself,
dated the 4th February, on the subject of the
Government's Cinchona Plantations, for it
was stated that in the year ended 31 March
1885, the number of trees on those estates ad-
vanced from 1,122,766 to 1,160,739. The latter
number should have been 1,620,744, instead
of 1,160,739, and I have to express my regret
for this clerical error which no doubt did
not escape the attention of the Government.

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I may take this opportunity of saying
that the Chamber awaits with interest the
information ^{with} which, it hopes, the Government
may be pleased to favour it, in explanation
of the policy pursued in connection with the
development of the Plantations.

I have the honour to be, Sir,

Your most obedient servant,

George G. Matthews

Chairman.

Revenue

The Chamber of Commerce.

Madras 4 February 1886

From

P. Macfadyen Esq.

Chairman, Chamber of Commerce.

Madras

To

The Chief Secretary.

Government of Madras.

Madras.

Sir,

I have the honour to inform you that the attention of the Chamber of Commerce has recently been directed to the extension of the number of trees in the Government Cinchona Plantations near Ootacamund. According to the Administration Report it appears that that number advanced from 1,122,766 to 1,607,399 or by about 45 per cent. in the year ended 31st March 1885, and the Chamber has

1620744

This is the number of trees in the Cinchona plantations near Ootacamund.

reason to suppose that in the current year the work of planting fresh trees over and above the replacement of those that die or are felled, has not been interrupted. I am, therefore, desired to submit, on the Chamber's behalf, that such extension seems opposed to the spirit in which the Plantations were set on foot, as well as to the spirit of the Government of India's policy of encouraging private enterprise.

The Chamber has no reason to suppose that ~~that~~ the Plantations were established as a commercial enterprise in view to the creation, for the exclusive benefit of the Treasury, of a lucrative industry hitherto unknown in India. The scourge of fever had, from time to time, brought very forcibly to the notice of the Government the suffering and loss that were due to the want in this country of a febrifuge that could be brought within reach of all classes. The experiment of obtaining the Cinchona plant

20 ✓
in its native habitat, of transferring it to, and of acclimating it in India, was one that entailed heavy expenditure which it was vain to expect private individuals to incur on philanthropic grounds. It came, however, legitimately within the province of the State to expend public money in giving a fair trial, under competent scientific directions, to the experimental cultivation of a plant that offered a defence against the most fertile of all the causes that contribute to the mortality returns. The Government therefore, took a broad view of its duty in this matter, and it succeeded beyond its most sanguine expectations in its benevolent scheme. It was possible for the State to patiently wait for a return on the large investment that it made in the cultivation of the exotic. That return eventually came, and not only was the surplus of revenue over expenditure from

1860-61 to 1884-85 Rs 5,51,743, but the Government now possesses in the Plantations an estate that would realise a large ^{sum} of money were it offered for sale tomorrow. Thus the Enterprise has not only been successful as proving incontestably the suitability of the climate of the Nilgris - as well as of other hill ranges in India - for the growth of Cinchona, but it has yielded the State a handsome pecuniary profit. But it is no more consistent or desirable for the Government to make money by cultivating Cinchona than by cultivating coffee, rice, indigo or cotton. The Government has established the fact that the Cinchona tree flourishes in India, and there has been no reluctance on the part of private individuals to avail themselves of the offer of seed at low prices which was made by the Government. No longer, therefore, is the Government the only grower of the tree, but private

213
plantations are assisting to cheapen the drug, or to achieve the object that the Government had originally in view. But private enterprise cannot compete on equal terms with the Government, which has the command of the public purse, and is free to sell at a loss when it cares to do so. The raison d'être of the Government Plantations exists no longer yet the Plantations are being extended with an assiduity worthy of a very opulent Joint Stock Company ambitious of paying handsome dividends to shareholders. In 1877-78 the number of plants was 549,031, and the net profit for the year was Rs 2,88,980. Now, as has been shown above, the plants are three times as numerous. The Chamber fails to comprehend the aim of such extension, and I am, therefore, to submit that in the Chamber's judgment it is time for the

Government to reassure planters by announcing that the State, so far from increasing the severity of the competition that it offers to private enterprise, will gradually retire from the field, permit the usual operations of the laws of supply and demand, and confine its own attention to the introduction and acclimatization of new varieties of Cinchon for the guidance and encouragement of those who engage in the production of the plant.

I have the honour to be, Sir,

Your most obedient servant,

Reverdy Jones

Chairman.

Om. No 103

With the reference to the statement in the letter of the Director of Govt. Cutchona Plantations, of 2nd April, 1886, nos. that the increase of Cutchona trees in the Govt. Plantations is due to extensive restorations which have been carried out on the Naduvattam, Hooker, and Wood estates, the undersigned has ~~done~~ the honor to invite attention to the accompanying statement, which shows that the number of trees has steadily increased since the year 1879-80, and to request that the apparent discrepancy between these figures and the reason given by the Director for the ^{increase in} ~~explanation of~~ the number of trees may be explained.

HAS
9/10

For St George
9th April/86

The 2nd of Govt Cutchona Plantations
with a statement

20-15-4-86

cc-5-86. Cg-6-86.
Rd-6-86. A10-6-86.

Revenue Deptt.

Revenue (1886) Cutchona

From No 2766.

The Director of
Govt. Cutchona Plantations
Nilgiris

The Secretary to Government
Revenue Department
Fort St George.

No 1.

Dated 2nd } April 1886.
Recd 5th }

Enclosure. one

Subject

Extension of Cutchona cultivation
by Government on the Nilgiris

Submitting remarks on
letter from the Chairman of
the Chamber of Commerce
regarding the matter of—

1317

24

ABSTRACT.

4624-8-86 to 1911

(1886.)

REVENUE DEPARTMENT

No. 2887.

From Geo. G. Arbuthnot Esq.

Chairman, Chamber of
Commerce, Madras.

Dated ^{8th}

Received 7th April 1886.

Enclosures ..

No. ..

SUBJECT.

Pointing out a clerical
error in his predecessor's
letter re. Govt. Canch. Plan.
and stating that the Cham-
ber of Commerce awaits
information as to the policy
pursued with respect to the
development of the Plantations.

Revenue (1886) Deptl.

Revenue (1886) Cerechona

From No. 3137.

The Govt Botanical Director of
Cerechona Plantations
- Nilgiris

To, The Secretary to Government
Revenue Department
Coimbatore.

No. 8

Dated 15 April 1886.
Recd 25

Enclosure. Nil

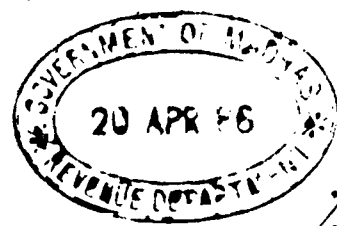
Subject

Increase in the number of
Cerechona plants from 1875 to 1886

Submitting a report
regarding the — and explaining
that no new land has been
planted with Cerechona.

No. 8
From

No Director's Office
Coimbatore 17 April 1886.



Mr. A. Lawrence Esq.

Govt Botanical Director

Cerechona Plantations

- Nilgiris

The Secretary to Government
Revenue Department

Coimbatore

Sir,

With reference to Official Memo No. 103
dated the 9th April 1886 I have the honor to inform
you that I believe all the trees planted from
the year 1875 to 1883 the year in which I took over
charge were 'renewals', that is trees planted to
take the place of those that had died and not
new plantations as from your Memo I gather
you suppose. Since 1883 all the trees planted
out have been of the nature of renewals. no
new land has been planted with Cerechona
except one or two corners with the view
of rounding off the Estate in certain parts
where

where danger from fire is to be feared.

I have the honor to be

Sir

Your Most Obedt Servant

M. Q. Lawson

Govt Botanist & Director

Statement showing the number of trees on the Govt Cinchona Plantations at the end of each of the last ten years: 21

Number of trees at the end of	1875-76	11,904,58	These figures were only found approximately by calculation on actual enumeration in 1877-78. They were found to be incorrect. At the end of 1877-78 the actual number found on enumeration was 569,031. * 28,259 trees were uproots
" " end of	1876-77	11,904,58	
" " "	1877-78	569,031	
" " "	1878-79	569,031	
" " "	1879-80	540,772	
" " "	1880-81	666,815	
" " "	1881-82	742,356	
" " "	1882-83	967,795	
" " "	1883-84	1,315,446	
" " "	1884-85	16,20,744	This is exclusive of the gross estate for which no accurate returns were available. The number at the end of 1883 in this estate was 192,68

HW
8/4
9/4

Statement of No. 1070

Draft Lt.

P. F. C. No 1070

Read the following letter
from the Chairman of the Cham-
ber of Commerce, Madras, of
4th July, 1886.

P. A.

C No 2766.

Read also
1. Letter from the Director of
Cust. Cutchona Plantations,
Nilgiris, dated 2nd April 1886,
No. 1.

"

" 2887.

2. Letter from the Chairman
of the Chamber of Commerce,
Madras, dated 8th April 1886.

"

" 3157.

Letter from the Cust. Collector
and Director of Cutchona Planta-
tions, Nilgiris, dated 19th April
1886, No. 8.

In the letter read
above the Chairman of the
Chamber of Commerce states
that the attention of the Cham-
ber has recently been directed
to

and that private planters are

to the extension of the number
of trees in the Govt. Cinchona
plantations which advanced
from 1,122,766 to 1,620,441 in
the year ending 31 March 1888.
The Chairman then proceeds
to notice that the defect with
which these plantations were
set on foot was to provide a
febrifuge which could be
brought within the reach of all
classes, but he urges that pri-
vate growers of cinchona are
now assisting to achieve this
defect and that the raison
d'être of the Govt. plantations,
therefore, no longer exists. The
Chairman states that he
is accordingly directed to
submit that, as private en-
terprise cannot compete on
equal terms with the Govt.
which has the command
of the public purse and is
free

30
free to sell at a loss when
it comes to do so, it is time
for the Govt. to reassess plans
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the State will gradually
retire from the field and
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of the law of supply and de-
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2. As regards the exten-
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it will be sufficient to de-
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which is caused almost ^{entirely} by
renewals is apparent only,
for with the exception of
one or two pieces of land of
inconsiderable area which
were added to the planta-
- tions for the purpose of
rounding off the estates where
danger from fire was to be
feared, no new land has
been

and that private planters are

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The reason of the ostensible
increase is that when plants
are first put down they are
for reasons well known to
all practical planters, placed
at comparatively short dis-
tances apart but as soon as
they have become firmly es-
tablished, they are thinned
to a very considerable extent.

For example on the Govt. plan-
tations the seedlings are first
planted out at intervals of
2 feet but are afterwards
thinned out until the space
between each tree is 12 feet,
i.e. out of every 16 trees plant-
ed only one is left to attain
maturity.

3. Turning now to the ques-
tion of the suggested retirement
of the Govt. from the cinchona
enterprise,

31
enterprise, H.E. the Governor in
Council cannot admit that
the raison d'être of their plan-
tations no longer exists. It is
true that the price of sulphate
of quinine has, of late years, fallen
considerably, but it is still
so high as to be prohibitive to
a very large majority of the na-
tives of this Presidency. The de-
sired febrifuge must be sought
therefore, in some cheaper pre-
paration of cinchona bark than
sulphate of quinine, and although
the extract recently prepared
by Mr. Hooper has met with
some measure of success, this
problem must be regarded
as one that has yet to be
solved.

4. Nor can it be admitted
that the plantations have
yet completely served the
purpose of the purposes for
which

and that private planters are

which they were established viz.
the conduct of experiments and
investigations in connection
with the culture of cinchona.

Many most valuable results have
already been obtained but in
a report made to the Govt. in
1883, Dr. Trimen, one of the great-
est living authorities on the
subject, pointed out that there
are many questions of the great-
est importance to cultivators
of cinchona still pressing for
solution. As examples of these,
he mentioned the causes of
the difference in proportions
and quantities of the alkalo-
ids in barks from trees of
identical botanical type,
the testing of the results which
Mr. Broughton obtained from
experimental manuring,
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the cause of the increase of
alkaloids in renewed bark,
and, lastly, the influence
of age on the alkaloids. These
investigations, Dr. Trimen con-
sidered, can only be carried
on in a Govt. establishment,
as the work must be per-
formed by a resident
analyst and must, of neces-
sity, be spread over many
years.

5. Lastly, H.C. the Governor
in Council cannot acknowledge
the correctness of the argument,
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that the connection of the Govt.
with cinchona planting has
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be sufficient to reply to this
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that the output of the Govt.
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total quantity of cinchona
bark placed on the market
that prices would not be per-
ceptibly influenced even if
the Govt. bark was sold at a
low. As a matter of fact, however,
it has always been sold by
public auction and the prices
realised have been the ruling
in the market at the time
of sale. Moreover, the planta-
tions have, as is indeed de-
scribed in the above letter,
yielded to Govt., after pay-
ment of all expenses and
interest on capital, a net
profit of five lakhs of ru-
pees, and thus affords the
best possible evidence that
the Govt. have never sold
at

* Dated 14 April 1877 No. 7 printed
in the Proc. of the Madras Govt.
Proc. Dept. of 8 June 1877 No. 1011.

37
at a loss or in any way
interfered with the opera-
tion of economic laws.

b. A consideration of the
circumstances set forth above
has convinced H. E. in Council
that, to quote from a despatch
of the Duke of Argyll, "it is
clearly necessary that the
Govt. should retain the plan-
tations in their own hands
for the present," and that
"the time has not, therefore,
arrived for finally deciding
upon the question of their
retention or eventual sale."

HAS
8/6

and that private planters are

34

REVENUE DEPARTMENT.

No.

Draft G.O. on the letter
from the Chamber of Com-
merce regarding the Govt.
188

From

Dated

Cinchona Plantations.

FOR ORDERS.

Mr. Lawson has seen
the draft and certifies
to the accuracy of all
the statements contained
in it as amended.

As there is still some
difference of opinion
as to certain portions, the
draft is recirculated for
final orders.

Has
11/6 11.6.86

*Through the
Sale of the
Rights of the
Government to
the Cultivation of
Cinchona in the
Province of...*

1 that private planters are

C Nos 1070, 2766, 2887, 3157.

From The Chairman, Chamber of Commerce, Madras.

Dated 4th Feby. 1886.

FOR ORDERS.

1. H.E. the Governor.
2. Hon. Mr. Sullivan.
3. Hon. Mr. Martin.

FOR ORDERS.

In the above letter, the Chairman of the Chamber of Commerce states that the attention of the Chamber has recently been ~~directed~~ to the extension of operations in the Govt. Cinchona Plantations as evidenced by the Report for the year ending the 31st Mar. 1886, and he submits that such extension seems opposed to the spirit in which the Plantations were set on foot, as well as to the spirit of the Govt. of India's policy of encouraging private enterprise. The Chairman then proceeds to note that the Plantations were established with a view to providing a febrifuge that could be brought within reach of all classes; that the Govt. has now established the fact that the Cinchona plant will flourish in India, and that private planters are

are now assisting to cheapen
the drug, or to achieve the
object which Govt. had originally
in view; but that private
enterprise cannot compete
on equal terms with the Govt.,
which has the command of
the public purse, and is
free to sell at a loss when
it cares to do so. ^{the difference must} ^{the reason}
^{the} d'être of Govt. Plantations exists
no longer, and ^{the Govt. has the} ~~the Chamber of Commerce~~
~~the Chamber of Commerce~~ is
therefore directed to submit that
in the Chamber's judgment, ~~the~~
it is time for the Govt. to reassure
planters by announcing that so
far from increasing the severity
of the competition that it
offers to private enterprise it will
gradually retire from the
field, permit the usual
operations of ^{the laws of} supply and
demand, and confine its
own attention to the intro-
duction and acclimatisation
of new varieties of Cinchona
for the guidance of those
who engage in the pro-

Printed in G.O. of 26th Sept. 1883,
No. 1189, Revenue.

duction of ³⁷ the plant.
2. The Chamber are in error
in supposing that the ~~raison~~
~~d'être~~ of the Govt. Plan-
tions no longer exists. It is
true that there seems every
likelihood of a cheap and
efficacious febrifuge having
been discovered in Dr. Hooper's
Liquid Extract of Cinchona, but
there still remain a large number
of unsettled problems in Cin-
chona cultivation. In the re-
port submitted by him to this
Govt. Dr. Trimen ~~now~~ writes as
follows:—
"But there are many questions of
the greatest value to cultivators
still ~~unsettled~~ pressing for solution.
The range of difference in the
proportions and quantities of ^{the} al-
kaloids in barks from trees of
identical botanical type is
very large, and the same is
true of the plants raised from
seed of a single tree. We know
nothing of the causes of these in-
dividual differences. There is even
variation in analysis of bark

FOR ORDERS.

raised from cuttings of one and the same tree; yet it has been shown that the stock has no influence on the alkaloids in grafted shoots. It is thus clear that in the production of alkaloids the inherited nature of ^{the} trees is largely influenced by certain surrounding conditions, and there it is most important we should discover. The apparently good results which Mr Broughton obtained from experimental manuring have never yet been corroborated or disproved. Even the cause of the increase of alkaloids in renewed bark is but little understood, and we probably are unable to avail ourselves of the fact to the full extent. The influence of age on alkaloidal composition in the various species is only guessed at from experience, but no series of analyses of selected trees at frequent intervals from the commencement of their lives onwards is available.

There are samples of the investigations which only an analyst ^{resident} ~~working~~ on the spot and working with the Superintendent can hope to decide."

It will be seen from this extract that there are still many points connected with the Cinchona enterprise which require further investigation, and, as Dr Trimen remarks in his next paragraph, these researches can only be properly carried on in a Govt. establishment, where the officers can devote themselves in a spirit of pure research to a work which must of necessity be spread over many years.

3. In 1878 this Govt informed the Govt. of India [†] that it was of the utmost importance to the success and permanency of the cinchona cultivation and its extension in the

† Letter of 14th Mar. 1878, }
No 400, Agriculture Dept.

Presidency that the plantations should, at least for some time to come, remain in the hands of Govt.

Again in 1882, the Hilgiri Planting and Mining Association raised the question in an address to H. E. the Governor. In his reply thereto His Excellency said that "the same wise policy which made it (Govt.) acquire will make it desire to dispossess itself of that estate. The only questions that can well be raised are as to the time when and the way in which this ought to be done.

The time will arrive when Govt. can do no more to promote the establishment of the Chinchona industry in India than can be done by private persons. so many

* Please see manuscript in G.O. Public of 24th Mar. /82, no. 155

controversies are still going on about Chinchona cultivation that I should hardly be inclined to think that it would be advantageous for the industry as a whole to dispense with the aid of Govt. in too great a hurry."

4. The Chamber objects to the engagement of Govt. in the cinchona industry on the ground that Govt. can, if they please, sell at a loss, and ~~that they then~~ it desires that Govt. will gradually retire from the field and permit the usual operations of supply and demand. The Chamber does not actually allege that the Govt. ever have sold their bark at a loss, and the fact that after paying 4 1/2 per cent. interest on capital

was a feverifuge when

The balance of total receipts over total expenditure since the plantations were started is no less than 5 lakhs affords the ~~best~~ possible evidence that the State has not interfered with the laws of supply and demand. As a matter of fact if the accounts were kept as a private firm would keep them the balance would be found to be considerably more than 5 lakhs, but it would perhaps be as well not to magnify the receipts: it is sufficient to show that the business has been carried on at a considerable profit.

5. As regards the extent to which Govt. is engaged in the cenchona industry, attention is invited to the fact that the quantity of bark exported from this Presi-

between 11 & 12
Jan 1885

dency in 1884-85 was 720,641 lbs., while the quantity of bark sold by Govt. during that year was 81,880 lbs. Supposing the whole of this to have been exported, there still remain 638,761 lbs which must have been supplied from private plantations.

6. It is submitted, therefore, that the Chamber might be informed that the Govt. are unable to agree with them that the time has arrived for Govt. to retire from the field; that the raison d'être of the plantations has not ceased to exist (the extract from Dr. Treven's report might be quoted); that the Govt. have never sold at a loss, and that they have no reason to believe that they have ever interfered with the usual operations of the laws of nature a feverifuge which

supply and demand.

7. As regards the extension of the plantations, however, the question is somewhat different. In 1878, ~~at~~ when Capt. (now Col.) Campbell Walker made a careful enumeration, the number of trees was found to be 569,031. Of these about 20 per cent were supplies or stunted trees and the number of sound and healthy plants was estimated at 450,000.

In 1884-85 the number had risen to 1,620,744, the increase during that year having been as much as 45 per cent.

M^r Dawson states that this increase is due to extensive ^{which} restorations, ~~and that these~~ restorations are not yet complete. When it was pointed out to him that the number of trees ~~was~~ is now greater than at any period during the past ten years, he

(1)
replied (C. No. 3157) that he believed all the trees planted from 1875 to 1883, the year in which he took over charge, were renewals and not new plantations; and that since 1883 all the trees planted out have been of the nature of renewals; no new land, having been planted except one or two corners with the view of rounding off the estate in certain points ^{when there was danger of fire burning.} It is clear, however, that M^r Dawson must be mistaken. In the Administration Report for 1874-75, (G.O. 10th July, 1877 No. 2273 Rev.) there is a statement showing the total number of trees planted since 1862-63 as 1,190,458 or 430,286 less than the number now existing. Many of the trees shown in this statement must have been renewals, and as stated above ^{was} a ferrugine which

Capt. Walker found in 1878 that there were only 569,031 trees actually on the plantations. It is probable, therefore, that the number of trees never exceeded three-quarters of a million and it is certain that until 1884-85 ^{it} ~~they~~ never exceeded 1,190,458.

There can be no doubt, then, that planting has been considerably extended, and it now rests with Govt. to decide whether further extension should cease. The arguments against such extension are those which apply to any interference by Govt. in commercial enterprises. The argument in its favour is that the extension may enable Govt. to supply a febrifuge ~~to~~ at a cost which will be within the means of the

from the sickness which yearly proves fatal to so large a number of the people of India. ^{M^r} Hooper's extract has so far proved a success, but whether the demand for it is likely to be so great that as to render further planting necessary is unknown.

Has
26/4

The number of trees put down in the Govt. Cutchona plantations seems to be much larger than is necessary for purely scientific research and it would perhaps ^{be better} to increase it.

Though M^r. Macpherson does not distinctly say so it seems pretty evident that what the Chamber of Commerce wish is that Govt. should sell off portions of their present estates. These would probably pass into the hands

of wealthy firms such as
Messrs. Arthur & Co. & Sons
of which are already
largely interested in cinchona
and as Mr. Dawson states
in para 4 of his letter
No. 1 dated 2nd inst. the
effect of this would be
that private growers generally
would not be so much better
off than now. The money
which Govt. now receives
would pass into the
pockets of the purchasers
of the plantations
If Govt. looked up tomorrow
the whole of these cinchona
it does not seem likely
that the price of bark
would be affected in
any appreciable degree
by such a proceeding

29/11

The Government and the Cinchona Bark Trade.—Mr. L. M'IVER asked the Under-Secretary of State for India whether during the last two years the Government cinchona plantations on the Neilgherry hills had been extended by nearly half a million trees; whether it was true that a large amount of private capital had been invested in cinchona cultivation on the Neilgherry hills; whether, with regard to the statement contained in the despatch, April 4, 1871, of the Secretary of State for India, "It should be clearly understood that the Government have no intention of embarking permanently in the bark trade. In sending their cinchona bark to the London market, one object is certainly to repay the cost of introduction and experimental cultivation of the plants; but the principal intention of the Government in sanctioning this measure is to act as a pioneer in establishing the reputation of the Indian-grown barks and not to injure the prospects of private planters, whose success would give the Government very great satisfaction;" whether it was true that the Government of India

since that time had continued and extended their investments in that branch of commerce; and whether it was the intention of the Indian Government to continue in competition with private enterprise. SIR U. KAY-SHUTTLEWORTH: I can answer my hon. friend's first three questions in the affirmative, only reminding him that the Duke of Argyll, in a despatch to the Government of Madras of the same date as that which he quotes, wrote:—"It is clearly necessary that the Government should retain the plantations in their own hands for the present. The time has not, therefore, arrived for finally deciding upon the question of their retention or eventual sale." As at present informed, however, I incline to the opinion that a portion of the plantations, with the manufactory, should remain permanently under Government superintendence. Though it has never been the intention of the Indian Government to continue permanently in the bark trade, the time for withdrawing from it has been deferred during scientific investigations on the subject of the production of a cheap

The extract given above seems to settle the reply which should be made to the Chamber.

The fact is that though the actual number of trees may be somewhat larger than existed in the plantations two years since the area of the plantations has not been so largely increased in recent years and there is no intention to enlarge.

There is every reason for holding on until the big season of a cheap febrifuge.

Jury is settled and the many other questions of interest included & in this note satisfactorily dealt with. This will not be in our generation & practically it may be assumed that there will be the permanent superintendence contemplated by the Duke of Argyll.

During the last two years the receipts from sales of bark have fallen short of the expenditure incurred. I see no reason why bark is insufficient to meet charges should not annually be sold but it is better not to make an income out of sales. Let the plantations pay their own way & let the bulk of the bark harvested be utilized for the cheap febrifuge. It is the great desideratum.

43

Follow Sir U. Kay Shuttleworth answer in substance leaving out the election between the + +

Note that the area has not been increased much & add to what I said about febrifuge the substance—only the substance of Trimmis advice Trimmis is the first authority in the world on this subject let me in draft

Some can still be taken as the answer may be called for in Parliament Dawson said see & check every word before it comes to me W.S. Jan 3/86

No time should be lost

make a febrifuge which

Extension of operations in the
Airplane Plantations.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following letter from
the Chairman of the Chamber
of Commerce, Madras, of 4th
Feby. 1886.

Read also

C. nos. 2766, 2887, 3157

Order 486 of 15. 6. 86.

In the letter read above the Chairman of the Chamber of Commerce states that the attention of the Chamber has recently been directed to the extension of the number of trees in the Govt. *Cinchona* plantations which advanced from 1,122,766 to 1,620,744 in the year ended 31st March, 1885. The Chairman then proceeds to notice that the object with which these plantations were set on foot was to provide a febrifuge which

I agree, subject to
the careful revision of all
statements by Mr. Lawson

clear
June 9/86

4106

[Faint handwritten notes at the bottom of the page]

1-5-86 C 9-6-86
2-6-86 B 10-6-86

could be brought
reach of all
he urges that private grow-
ers of cinchona are now
assisting to achieve this
object and that the raison
d'être of the Govt. planta-
tions, therefore, exists no longer.
The Chairman is accordingly
directed to submit that, as
private enterprise cannot com-
pete ~~with~~ on equal terms with
the Govt. which has the
command of the public
purse and is free to sell
at a loss when it cares
to do so, it is time for the
Govt. to reassure planters
by announcing that ^{the State} ~~is~~ ~~for~~
~~from increasing the security~~
~~of the~~ will gradually
retire from the field and
permit the usual operations
of the law of supply and
demand.

2. As regards the ⁹ extension
of the number of trees, it
will be sufficient to observe
that the increase is ap-
parent only. for with the
exception of one or two ~~corners~~
pieces of land of inconsiderable
area which were added to the
plantations for the purpose
of rounding off the estate
where danger from fire was
to be feared, no new land
has been planted in recent
years. The reason of the
apparent increase is that
when the plants are first
~~for reasons which have been taken into account~~
put down they are placed
at comparatively short
distances ^{apart for the purpose} ~~from each other~~
~~of affording mutual shelter,~~
but as soon as they have
become firmly established, they
are thinned to a very con-
siderable extent. For example
on the Govt. plantations the
~~seedlings~~ ^{plants} are ^{usually} first planted
out at intervals of 3 feet
but are afterwards thinned

down out until the space between each tree is 9 feet, i.e. out of every 9 trees planted only one is left until it attains to maturity.

3. Turning now to the question of the retirement of the Govt. from the cinchona enterprise, H.S. the G. in C. cannot admit that the raison d'être of ~~the~~ ^{these} plantations no longer exists. It is true that the price of sulphate of quinine here of late years, fallen considerably, but it is still so high as to be prohibitive to a very large majority of the natives of this Presidency. The desired ^{sought} febrifuge must be obtained therefore, in some cheaper preparation of cinchona bark than sulphate of quinine, and altho' the extract recently prepared by Mr Hooper has met with some measure of success, this problem

I don't think this is done by practical planters. I am under the impression they thin out the distances of 6 feet but only when the trees are of some age and the bark they yield will pay for the operation. Better show the para to Lawson

that has ^{not} ~~yet~~ ^{been} ~~to be~~ ^{fully} solved.
4. Nor can it be admitted that the plantations have yet completely served the second of the purposes for which they were established viz. - the conduct of experiments and investigations in connection with the culture of cinchona. Many most valuable results have already been obtained, but in a report made to this Govt. in 1883, Dr Tremin, one of the greatest living authorities on this subject, pointed out that there are many questions of the greatest importance to ~~the~~ cultivators still pressing for solution. As examples of these he mentioned the causes of the difference in proportion and quantities of the alkaloids in barks from ~~the~~ trees of ~~the~~ an identical botanical

type, the testing of the results at which Mr. Broughton obtained from experimental manuring, the cause of the increase of alkaloids in renewed bark, and lastly the influence of age on the alkaloids.

These investigations, Dr. Trevisan considers, can only be carried on in a Govt. establishment, as the work must be performed by a resident analyst and must of necessity be spread over many years.

5. Lastly, H. E. the G. in C. cannot admit the argument, implied rather than expressed, that the Govt. connection of ^{the} Govt. with cinchona planting has interfered with the usual operation of the

17th March 1906
To the Chairman, Chamber of Commerce, Madras.
15a Govt. Botanical & Dr. C. I. Planters
116 Land of Revenue
" Edition Table.

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law of supply and demand. It might be sufficient to reply to this that the out-turn of the Govt. plantations is so trifling when compared with the total quantity of cinchona produce placed on the market that prices would not be perceptibly influenced even if the Govt. bark ~~were~~ sold at a loss. As a matter of fact, however, the bark has always been sold by public auction and the prices realised have been those ruling in the market at the time of sale. Moreover, the plantations have, as is indeed observed in the above letter, yielded to Govt., after payment of all expenses and interest on capital, a nett profit of five lakhs of rupees, and this affords the best

possible evidence that the Govt. have never sold at a loss or in any way interfered with the operation of economic laws.

Draft G.O. re Extension of operations in the Chinn-chona Plantations

17/6
6. A consideration of the circumstances set forth above has convinced H.E. in Council that, to quote from a despatch of the Duke of Argyll, "it is clearly necessary that the Govt. shd. retain the plantations in their own hands for the present," and that "the time has not, therefore, arrived for finally deciding upon the question of their retention or eventual sale."

of 4th April 1871 No. 7 printed in the Procs. of the Madras Govt. Rev. Dept. of 8th June 1871, No. 1,071.

So that I
but as we state in the
previous paper
it is immaterial
to present
purpose

Has
7/6

Ch
8/6

Submitted that this paper be placed on the E. Y.

29-6-71

Has

Ch
8/6

recd
14/6

must be registered