M.R.O. 1—77,006—8-6-37.

(1) Number of pages 14.

(2) Date of repair 3-16-91

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 1277 Press-Mis.

Dated 22nd April 1893.

Not to be folded or roughly handled

GOVERNMENT HOUSE,
GUINDY.

26. Mar.

My dear Mr. Gibson

I am desired to send you the accompanying papers about the iron ores in Salem, and to ask that they may be circulated to Hon: members and marked again for Std Exc.

Yours sincerely

Revan

P.S. Many thanks for your note about Tanjore.

R. H. CAMPBELL
27 MAR. 93
REVENUE DEPARTMENT
28 MAR 93

R.C.C. CAL
23 MAR 93
M. C. S.

After reading Mr. Hollands report on the iron ores of Salem, and the possibility of their utilization by means of charcoal, I asked Mr. Roper to look into the question, and see if he could advise any particular treatment of the forests in that district, so as to ensure a sufficient & regular yearly supply of timber - to be converted into charcoal for smelting the ore.

This report shows that if the ore is brought to certain spots which he mentions, charcoal can be delivered at Rs. 8. 8 a ton sufficient to make about 3000 tons of iron a year.

I am not aware what the cost of taking up the ore to those spots, and smelting it would be, but I think we should take steps to ascertain, and if it is shown to be likely to be a commercial success - we might get some company to undertake the work. We should of course expect some royalty on the timber.

W
25 Mar.

2

The two principal beds, on which iron ore is found, are the Kanjamalai and Theerthamalai and as the condition and area of the forests in the vicinity of the other beds are far less favorable to a large and sustained yield, I shall confine my remarks to the two first.

2 The figures in the statements (page 151 &c) of Mr. Hollands papers are apparently based upon the assumption that the manufactured charcoal will have in all cases to be transported for some distance to the blast furnaces whereas I am of opinion it will be found cheaper to carry the ore to a locality in the centre of a large forest clad area. This was also the opinion of Sir D. Brandis. In the case of the Kanjamalai beds the Madras Railway runs along the foot of this hill and the ore could be carried from the Ariyanur Railway station at the base of the hill to

Kadayampatti

Kadayampatti about 22 miles to the North East and situated on the centre of a large area of forest. The Theerthamalai or hill probably be most cheaply smelted at Hanumantha Theerthum como 8 miles away and about 10 miles from the railway".

3. The District Forest Officer has furnished a statement after careful examination from which it appears that if 10 miles be accepted as a workable distance for the manufacture of charcoal there will at Kadayampatti be 75,500 acres of forest available and if 16 miles be taken 134,000 acres. These estimates include probably 25 per cent of rocky and unworkable area, so that we may roughly accept 55,000 and 100,000 respectively. As regards the Theerthamalai beds they are favorably situated in the heart of a forest clad area but it will probably be found advisable to bring the ore as suggested above to Hanumantha Theerthum from which place it will be possible to work a part of the forests on the Javadi Hills. The area of present and proposed reserves after deducting 25 per cent as unsuitable amounts to 49,000 acres within 10 miles distance and 82,000 acres within 16 miles.

4. The next question is what sustained annual yield could be expected from these forests. Accurate data for any time are not available but from recently conducted experiments Mr. Brasier has found that an area cut over 4 years ago and since then only partially protected from grazing and fire yielded about ½ a ton of wood per acre per annum. This estimate, I consider, may be accepted as an average, it was also accepted by Sir D. Brandis. Upon this basis the forests available for the Kanjamalai beds within 10 miles would yield $\left(55000 \times \frac{1}{2}\right)$ 27,500 tons of fuel annually and if a radius of 16 miles be found workable $\left(\frac{100,000 \times \frac{1}{2}}{4}\right)$ = 50000 tons. Similarly the forests within 10 and 16 miles of the Theerthamalai beds would yield 24,500 tons and 41,000 tons respectively.

5. The outturn on charcoal may be calculated at least @ $\frac{1}{5}$ of the wood tonnage even allowing 20 per Cent of the wood to be unsuited for charcoal burning. So there would be annually available 5500 tons or 10,000 tons for the Kanjamalai and 4900 tons or 8200 for the Sheerutha-malai.

6. Accepting Mr Hallama estimate that 3½ tons of charcoal are required to produce 1 ton of iron the annual output of iron from the two beds would be 1570 and 1400 tons if the forests within 10 miles are worked and 2855 and 2340 if within 16 miles.

7. Before any systematic working of these forests could be undertaken it would be undoubtedly necessary to open them out by means of cart tracts and upon the judicious execution of this work would depend to a great extent the success or failure of the scheme. Without roads the cost of carriage of charcoal would be prohibitory.

The present forest establishment in the District could not undertake this and it should be done by men already experienced in road tracing and cutting.

8. I am not sufficiently acquainted with the rates paid for labour in the Salem District but Mr Brasier has ascertained from Railway fuel Contractors and others the rates paid. As estimates if the roads as suggested in the previous para are made the average cost of producing and delivering 1 ton of charcoal at the works within a distance of 10 miles will be as follows:-

Felling, billeting and transporting 4 tons of wood to side of kiln	6-0-0
Burning &c	0-8-0
Carriage of 1 ton charcoal average distance of 10 miles	1-12-0
Loading unloading &c	0-4-0
	8-8-0

The foregoing does not include any payment to the Forest Department as value of the wood.

9. No doubt such woods as Acacia Catechu, Albizzia amara, Erythroxylon monogynum are preferred

preferred for charcoal yet enquiries have shown that with one or two exceptions all other woods are used.

10. The working of the forests for these two heds would interfere to a very small extent only with the local requirements of the neighbouring villagers in regard to timber and fuel and these might be met, if necessary from forests more remotely situated. The country in the neighbourhood is sparsely populated.

11. I do not think it will be found practicable anywhere in the vicinity to establish Casuarina plantation, the soil is not suitable and the general level of the water is too low.

E. P. Wood
C.E.

2/5/93

14

(1893.)

REVENUE DEPARTMENT.

Current Number. 2423

From

The Private Secretary to
His Excellency the Gov^r
Madras.

H.M.S.P.
Sec^y. to Government

Dated 26 Mar:

Received 28 "

Enclosures 2.

No.

SUBJECT.

Requesting that the accompanying papers about the iron ores in Salem may be circulated to Hon: Members and returned again for His Excellency.

P. S. O.

Read 29/3

Circ^d 29/3

fo. 16-1-92 no 280
3-2-92 no 670
6-2-92 no 740 & 744
17-2-92 no 984
18-3-92 no 1501

ABSTRACT.

For Orders
J.H.L. 7/4/93
H.E. the Gov^r.

Circulated to Hon^ble Members with reference to Mr's remarks.

H.L. 11/4

Mr. Holland's observations are worthy of good roads are wanted and a line from 5 to 10 miles — the only roads practicable under dust circumstances are light railways — such as the Nilgiris is on a big plateau

J.H.L. 7/4/93

What is wanted is decent tracks passable for carts in the dry weather. The forests are scattered and either tramways or pucka roads would soon become useless owing to the destruction of the forest near them. The soil is all hard in dry weather & all that is wanted is smooth of bad places, & metalled crossings to enable country carts to get anywhere in the forests. H.L.S.

The notes on the other side were written by Mr. Holland on the 31/3/93 when he was Acting Chief Secretary.

Communicate to the Board of Revenue for report. W.

15

Revenue Department.

Read Cir^d 3

~~From~~

~~Dated~~ ~~189-~~

FOR ORDERS.

Order No 1477 dated 27th April 1893

1. Mr. Holland's report will be communicated to the Board of Revenue.

2. It seems to the Govt that some steps should be taken towards developing the iron resources of the Salem District & the Board will be requested to submit a report on this subject.

A copy of a note on this question, prepared by Mr. Assist. Conservator of Forests Central circle, at the request of H.E. the Governor will be communicated to ~~both~~ the Board of Revenue with the Proc^s. Rec^d 12/4/93

To the Board of Revenue (R.D.) (with a copy of Mr. Assist^t's note. Mr. Holland's report)

C.H. 17 April

Sent 25/4/93

FOR ORDER

Draft. Order

Imp. Ores from Salem

St.

1477
22 April/93