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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

G.O. No.	1620 -A	Press
B.P. No.		Mis.
Dated	2-5-	1877
		197

Not to be folded or roughly handled

No. 61-A.

tary to
Secretary to the Government
1877, No. 195:--

By direction of Sir Richard Temple,
minute recorded by him in which he suggests
ways as some check against the destruction

1620
ERNARD, Esq., c.s.i., Secretary,
GARSTIN, Esq., Additional
dated Cuddalore, 18th April

the honor to forward copy of a
use of coal on the Madras Rail-
roads in the Madras Presidency.

Minute by Sir Richard Temple, dated Cuddalore, 18th April 1877.

THERE is a point connected with the supply of
Presidency which has a bearing upon the rainfall and
I desire to represent to the Madras Government, as follows:

2. The failure of the periodical rains and the consequent loss of crops seem to be becoming more frequent in Southern India. This circumstance is attributed by many, with much show of probability, to the gradual denudation of the forests with which the country used to abound. The effects are felt throughout the Presidency generally, but more particularly in those tracts which adjoin the courses or upper courses of some rivers upon which irrigation works, great and small, depend. One potential cause of this demand has been, and still is, the demand of fuel for the consumption of the locomotives on the railways.

3. As one instance out of a great many I would mention that at this moment there is under- stood to be a contract between the Madras Railway Company and a native contractor for the supply of a very large quantity of wood fuel—a large enough to cause a heavy drain, if not an utter exhaustion, of the particular forests which the supplies are drawn. It unfortunately happens that these forests lie, as I understand, near the upper course of the Palar river. Their destruction doubtless tends to aggravate the want of water-supply of this river. And such uncertainty which hangs more and more over the this river are drawn the channels which fill an peculiarly unfortunate, inasmuch as from districts of North Arcot and Chingleput. Several series of tanks for irrigation in the propitious floods. One year it will come down this river descend in seasonable and tearing up its channels, breaching its tanks. A violent inundation, demolishing its dams, I merely adduce this as a type of what is going on near it will leave them all high and dry. and which is in part at least attributable to denudation and in too many parts of the country, of forests.

4. Of course there are difficulties arising from private rights with reference to the preservation of forests. There are also many measures for overcoming those difficulties. I am now addressing myself to one measure only for mitigation of evil, viz., the diminution of the demand which is at present so greatly stimulated by the requirements for wood fuel.

5. The question immediately arises why should the Madras Railway burn coal in the same way as do the E. I. Railway, the E. B. Railway, the G. I. P. Railway, the O. and R. Railway, and various of the State Railways. The Madras Railway, it is true, does not pass through the heart of a rich coal basin as the East Indian Railway does, nor does it touch a coal field at any of its extremities as the G. I. P. Railway does. Compared with any other of the railways mentioned, it is favorably situated. It touches the coast at Madras and Beypore, and at either of these ports it can land English and Australian coal at the same rate per ton as the G. I. P. Railway does at Bombay, and as both the sarn lines do at Madras and Negapatam or Tuticorin. And although from a commercial point of view, comparing at its own risk, grave objections might be offered to a course which will undoubtedly increase its expenditure on fuel, I

Note.—And I cite the Madras Railway Company as a sample case. I think that this is a case where present thoughtful men will, aggravate the calamity of famine.

6. The increased cost, as far as the Madras Railway Company is concerned, is likely for many years to come to fall upon the Government, and may be possible to form an approximate estimate of its amount.

7. The cost of working 2,400,000 train miles annum would, I am informed by Captain Bisset, be approximately 8,00,000 Rupees at the present cost of fuel to the Madras Railway Company. Considering the advantages of the two ports may fairly be estimated that the cost of working the same number of train miles with coal only will not much exceed 2,00,000 Rupees. And when local enterprise enters into the business of carrying coals from the fields of Bengal to the coast ports of Madras, it is not unreasonable to expect that the cost of Indian coal

delivered at the
Rupees 2 to Rupees
be so far reduced as to make
is at the present time.

8. There are some minor advantages
require mention in this minute, although
And I conclude by reiterating my opinion
careful guarding of the forests, especially
way of checking this destruction would
lines, and so stop entirely a heavy drain
sides of the Madras country.

of some importance to economical working.
ests of the Madras districts require a more
ts, from destruction; and that one practical
al instead of wood on all the Madras Railway
in on the forests and undergrowth of the hill

RICHARD TEMPLE.

No. 61-B.

ORDER THEREOF

Miscellaneous.

May 1877, No. 1,620-A.

Communicated to the Consulting
Engineer for Railways for report.

Extract.)

(Signed) J. H. GARSTIN,
Additional Secretary to Government.

To the Consulting Engineer for Railways
,, the Board of Revenue.
,, the Conservator of Forests.
,, the Public Works Department.
,, the Financial Department.

Exd. J. W. Fischer.

No.

1620A
3

From Mr. Bernard.

Dated April 19th 1877.

FOR ORDERS.

I circulate for orders 3 letters from Mr. Bernard forwarding 3 minutes by Sir R. Temple.

1. Replying to Mr. Foruish's rejoinder
 2. Remarking on the condition of the Madras District
 3. Suggesting the use of coal as fuel on Railways instead of wood
- I would suggest that as Sir R. Temple has left this Presidency these minutes be unnoticed - the first only being communicated to Mr. Foruish.

In Para 8 of his minute on the Coal vs. wood question, Sir R. Temple goes beyond his instructions in giving an opinion to the effect that the Madras Forests require more careful guarding. There are 4 or 5 more minutes passing through the Press.

J. H. P.

found to be correct
+ also test for 2 papers
Nil

be disposed of by G.O.

BM 2674

I can't see how the
can be raised there with
a casual grant

I quite agree
with him

Yours

For J. & W. Co. to Mr. Singh for report.

Govt. of (1877) Madras.

REVENUE.

THE CONSULTING ENGINEER

FOR RAILWAYS,

Secy. Secy. Secy.

Secy. Secy. Secy.

MAY.

No. 61-A-61-B.

FAMINE RELIEF, No. 1068-A.

Use of Coal on Madras Railways to check the destruction of forests. - Communicated for report to the Consulting Engineer for Railways minute by Sir Richard Temple suggesting the -

FOR ORDERS.

16/0/87
5
No. 195.

From

C. BERNARD, ESQ., C.S.I.,
Secretary to Sir Richard Temple,

To

J. H. GARSTIN, ESQ.,
*Additional Secretary to the
Government of Madras.*

Dated CUDDALORE, 19th April, 1877.

Sir,

By direction of Sir Richard Temple, I have the honour to forward copy of a Minute recorded by him in which he suggests the use of coal on the Madras Railways as some check against the destruction of forests in the Madras Presidency.

I have the honour to be,

Sir,

Your most obedient Servant,

C. BERNARD,

Secretary to Sir Richard Temple.

cur

L 2750

Best

3-1-77

Minute by Sir Richard Temple, *15d*

Cuddalore, 18th April, 1877.

There is a point connected with the supply of fuel to the several railways of the Madras Presidency which has a bearing upon the rainfall and the prospects of future harvests, and which I desire to represent to the Madras Government, as follows:—

2. The failure of the periodical rains and the consequent loss of crops seem to be becoming more frequent in Southern India. This circumstance is attributed by many, with much show of probability, to the gradual denudation of the forests with which the country used to abound. The effects are felt throughout the Presidency generally, but more particularly in those tracts which adjoin the courses or upper courses of some of the rivers upon which irrigation works, great and small, depend. One potential cause of this denudation has been, and still is, the demand of fuel for the consumption of the locomotives on the several railways.

3. As one instance out of a great many I would mention that at this moment there is understood to be a contract between the Madras Railway Company and a native contractor for the supply of a very large quantity of wood fuel—a quantity large enough to cause a heavy drain, if not an utter exhaustion of the particular forests from which the supplies are drawn. It unfortunately happens that these forests lie, as I understand, near the upper course of the Palar river. Their destruction doubtless tends to aggravate the uncertainty which hangs more and more over the water-supply of this river. And such uncertainty is peculiarly unfortunate, inasmuch as from this river are drawn the channels which fill an extensive series of tanks for irrigation in the districts of North Arcot and Chingleput. Seldom does this river descend in seasonable and propitious floods. One year it will come down with violent inundation, demolishing its dams, tearing up its chan-

nels, breaching its tanks. Another year it will leave them all high and dry. I merely adduce this as a type of what is going on too often and in too many parts of the country, and which is in part at least attributable to denudation of forests.

4. Of course there are difficulties arising out of private rights with reference to the preservation of forests. There are also many means of overcoming those difficulties. I am now addressing myself to one measure only for mitigating the evil, *viz.*, the diminution of the demand which is at present so greatly stimulated by the railway requirements for wood fuel.

5. The question immediately arises why should not the Madras Railway burn coal in the same way as do the E. I. Railway, the E. B. Railway, the G. I. P. Railway, the O. and R. Railway, and various of the State Railways. The Madras Railway, it is true, does not pass through the heart of a rich coal basin as the East Indian Railway does, nor does it touch a coal field at any of its extremities as the G. I. P. Railway does. But compared with any other of the Railways mentioned, it is favourably situated. It touches the sea-coast at Madras and Beypore, and at either of these ports it can land English and Australian coal at the same rate per ton as the G. I. P. Railway does at Bombay, and as both the southern lines do at Madras and Negapatam or Tuticorin. And although from a commercial company trading at its own risk, grave objections might be offered to a course which will undoubtedly at first increase its expenditure on fuel, I

have to repeat that this is a case where present economy may, and in the opinion of most thoughtful men, will aggravate the calamity of famine in future.

6. The increased cost, as far as the Madras Railway Company is concerned, is likely for many years to come to fall upon the Government, and it may be possible to form an approximate estimate of its amount.

Note.—And I cite the Madras Railway Company as a sample case.

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7. The cost of working 2,400,000 train miles per annum would, I am informed by Captain Bisset, be approximately 800,000 Rupees at the present cost of fuel to the Madras Railway Company. Considering the advantage of the two ports, it may fairly be estimated that the cost of working the same number of train miles with coal fuel only will not much exceed 900,000 Rs. And when local enterprise enters into the business of carrying coals from the fields of Bengal to the coast ports of Madras, it is not unreasonable to expect that the cost of Indian coal delivered at these ports (which is at the present time quoted at Rs. 22 per ton, or from Rs. 2 to Rs. 4 higher than English coal of rather higher cash value at the pit's mouth) will be so far reduced as to make coal fuel even less expensive to the Madras Railway than wood fuel is at the present time.

8. There are some minor advantages in the use of coal fuel which are too well known to require mention in this Minute, although they are of some importance to economical working. And I conclude by reiterating my opinion that the interests of the Madras districts require a more careful guarding of the forests, especially the hill forests, from destruction; and that one practical way of checking this destruction would be to burn coal instead of wood on all the Madras Railway lines, and so stop entirely a heavy and constant drain on the forests and undergrowth of the hill sides of the Madras country.

RICHARD TEMPLE.

Revenue {1877} Department.

C. E. BERNARD, Esq., C.S.I.,
Secretary to Sir Richard Temple.

Dated 19th }
Received 20th } April, 1877.

No. 195.

Forwarding copy of a Minute by Sir Richard Temple, suggesting the use of coal on the Madras Railways as some check against the destruction of forests in the Madras Presidency.

No 162087 *Handwritten*
Commencement to the Committee of Enquiry
for Railways for April.

2 May 1877

2nd Capt. No. 10. The Oregon and California
 35th The Oregon and California
 21st The Oregon and California
 21st The Oregon and California
 5th The Oregon and California