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MADRAS RECORD OFFICE

Government of Madras

Public Works

DEPARTMENT

G.O. No.	1257-58	Press
B.P. No.		Mis.
Dated	12-5-	1873.

Not to be folded or roughly handled

Railway Department.

CONSULTING ENGINEER'S OFFICE,

No. 126

From

LIEUT.-COLONEL J. H. M. SHAW STEWART, R.E.,

Consulting Engineer for Railways,

To

COLONEL G. W. WALKER, R.E.,

Secretary to Government,

Public Works Department,

Fort Saint George.

SIR,

With reference to the order of

2/25th Novr/42.

Government No. 2742, I have the honour to furnish the following information as to the probable result of obtaining coal by inland water-carriage from the Lower Godavari fields for use on the Railways in this Presidency, after the completion of the East Coast Canal.

The distance from the Coal fields to Madras will be about 480 miles, as follows:

From

From Coal fields near Dammagudien to
Godavery ancient River navigation to be
improved _____ 117 miles

Godavery ancient to Bezvada
Canal completed _____ 89 — "

Bezvada to Nizampatam Canal
completed _____ 41 — "

Nizampatam to Adirapattam
Canal not commenced _____ 138 — "

Adirapattam to Duzeragapattam
Canal under construction _____ 22 — "

Duzeragapattam to Madras
Canal completed _____ 48 — "
480 miles

3 In the late Colonel
Anderson's report No 83 of 28th October 1868,
paragraph 15, it is stated that for a 30-ton
dhony the monthly expenses, including a
charge

32 —
charge for depreciation and repairs, do not
exceed Rs 20. Allowing 15 miles per day
for 26 days, 390 miles will be travelled in a
month. It will therefore take 1 1/4 months
to do the journey from Dammagudien to
Madras. Some allowance must be made
for delay, but it may be safely assumed
that a dhony will do the journey both
ways in 3 months.

The freight on 30 tons of
coal, at 2 pice per ton mile for 480 miles, will
be Rs 150; and, supposing the boat to
average only 8 tons of goods cargo at 6 pice per
ton mile on the return journey, will give
Rs 75 more; or a total for the journey both
ways, of Rs 225. Deducting Rs 120 for
three months working expenses, there remains
as profit Rs 105.

It might, however, be desirable
that the Railway Companies should
purchase

purchase and maintain their own boats, which cover the cost of 30-ton dhows including masts and sails, may be taken at Rs 900; and the yearly expenses will probably be:

Establishment, 9 months at Rs 20	180
Interest on Rs 900 at 5%	45
Repairs	75
Depreciation	50
Tolls	90
	<u>Rs 440</u>

The boats will make three trips during the nine months in which the canals are open, and the cost of carriage per ton will be $\frac{440}{90} = \text{Rs } 4.14.3$. This calculation is on the supposition that the present rude system of navigation is employed; but with the improved arrangements for traffic which the Railway authorities could make, it is probable that the cost of carriage would be somewhat

somewhat less than the figure above arrived at. In the memorandum of traffic on the East Coast Canal by Mr. W. Fraser, Esq., it is shown that firewood is carried at rather less than 2 pice per ton mile; and from this and the foregoing calculations, we may safely estimate the cost of carriage of coal in large quantities at 2 pice per ton mile, or Rs 5 per ton from the Lower Godavery coal fields to Madras. Supposing the Godavery coal to possess two-thirds the efficiency of English coal, its value per ton at Madras will be according to the opinion of the Madras Railway Authorities expressed in the correspondence published with the Order of Government No. 1971, of 24 July 1871, Rs 14. Taking the cost per ton delivered on board at Rs 5,

and

and adding Rs 5 for carriage, the total cost per ton at Madras will be Rs 10, and it might therefore be very profitably used on the Madras and Coimbatore Railways.

5. With reference to paragraph 3 of the letter from the Government of India accompanying the Order of Government under reply, I have the honour to suggest that the Government of New South Wales be communicated with, as to the price at which Australian coal could be delivered at Madras, and that they be also requested to furnish any available information regarding the kinds of coal best suited for locomotive purposes.

I have the honour to be
Your most obedient servant

Madras
1st March 1873

Montgomery F. G. R. E.
Genl Engineer for
Railways

Pr. 21st Nov/68 70450-151.
21st — 72 — 347-3487

RAILWAY DEPARTMENT.

From *Pr. of Govt. 21st Nov/68*
1872.

The Consulting Engineer
for Railways,

To

The Secretary to Government,
P. W. Department,
Fort Saint George.

Dated 1st } *Recd.* 1872
Recd. 3 }

No. 126.

*No. 1257-1258-2nd class
Journalling engine
-tion as to the probable
result of obtaining coal
by inland water carriage
from the River Loddon
fields for use on the
Ry in the immediate
future.*

With an order

No. 1257

Ordered that the Govt.

be given the same.

*To the Secy to Govt. P.W. Department
6.11.72*