EAST AFR. PROT.

Nº· 6034
/07-8

C. O.
6034
Recᵈ
Rᴇᴄ 19 FEB 08

(Subject.)

Railways to Kenia

To his report on lines projected.

(Minutes.)

Mr Read
See 5739 which shows
that Capt. S. has sent in
an amended & enlarged
report on which no doubt
Mr Currie & the Gov will
have their say.
If it does not come by
next mail ask by telegram
when it may be expected.
M 26/2

___
The attached copy was brought here by Mr
Churchill & Lintott wrote to... Sept a few
days ago

Yes .. I am afraid the prospect of a proper on the export of Kenia timber is far from bright. —

see — but the papers are too incomplete to form much of an opinion

Mr Noall

If there is nothing by next mail telegraph

Settler Nairobi

Ethliopsis

when may report be expected

Kenia Railway

Sent 5.10 pm
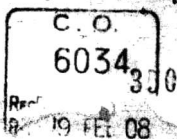
PROJECTED RAILWAYS TO KENIA.

The line is considered as divided into:

(1). A main line from the Uganda Railway to a
point across the Tana about 98 - 99 miles
from the Uganda Railway; and

(2). A timber extension to the S.E. corner of
Kenia Forest.

Four separate estimates are given below.

(A). A line from Nairobi along the Fort
Hall Road, as proposed by the
East Africa and Uganda Corporation.

(B). A line from Athi River Station joining
(A). at Punda Milia.

(C). A timber extension.

(D). An alternative route from Nairobi.

Estimates B. and C. are in accordance with the
wishes of Mr. Moreton Frewen, who requested that the
shortest line to the Forest should be found, without
paying any heed to local traffic.

	£ per m. 5	£ per m. 5	£ 500 per m. 5	£ 100 200 500	£ per m. 4	£ 500 per m. 5	Remarks
1 Survey.	500		500	100 / 200		1000 10	
2 Land & Compensation.	1000 10		500	200	9	1000 10	
3 Earthwork & Rock.	85864 867		85762 910	30181 1312		85640 878	
4 Bridges & Culverts.	28465 288		24589 267	11112 526		25962 266	
5 Viaducts.	80829 816		10284 118	5124 223		26034 277	Viaducts of wood for C.
6 Permanent Way.	190748 1927		176289 1918	38775 1688 187492 1985			Including 60 miles full ballast on A. B. and D.
7 Telegraphs.	7218 73		6709 78	976 48		7817 75	Wooden poles on C.
8 Station Buildings.	9085 91		8857 96	1944 84		9085 93	Includes watering arrangements,
9 Fencing.	595 4		595 4	25 1		395 4	
10 Plant.	8095 82		8095 88	1000 44		8095 85	
11 Rolling Stock.	nil nil		nil nil	5360 235		nil nil	2 special locomotives for C.
12 General Charges.	31709 580		50968 857	7365 580 51200 520			
TOTALS. £	445826		355088	102185			
Rate per mile. £	4482		5814	4440			
Length, Miles.	9.9		9.8	2.5			
Gradients.	1.5%		1.5%	1.5%			
Curvature.	Minimum Curve			10 deg. curve			All grades compensated for curvature at the rate of .03% per deg. of curve.

Notes on Estimate.

1. **SURVEY**. This amount is kept low, as it is under-
   stood that a detailed survey is to be executed
   before the line is definitely decided on.

2. Compensation is allowed for damage to crops, etc.

3. Earthwork .... at 20 % above highest rail(?)
   for .... with African la....
   All .... made for .....
   .... cotton soil o...
   ....

   ..... have been t...... ....
   ...... Al...... ...... been made for the
   hig...... .... at present.

   ...... 60-lb. rai...... ..... sleepers hau...... en......
   .... lighter rail is recomm......
   ...... there by s...... .... rolling stock a......
   ...... Railway to ....
   ...... stock has an axte load of 1...... s. Local
   wooden sleepers have ...... been found satisfact-
   ory up to the present. . If they could be
   used, a saving of possibly £200 a mile could
   be made. Ballast over 80 miles of line has
   been allowed for.

The three alternative schemes are therefore :-

$$A. \text{ and } C. = £545,954$$
$$B. \text{ " } C. = £455,003$$
$$D. \text{ " } C. = £484,686$$

It is recommended that, if it is the intention of H.M. Government to build a line to develop the Kenia Province, route D & C. be chosen, for the following reasons :-

It starts from Nairobi, an existing town, and the headquarters of the Railway.

It will develop the country beside the first 25 miles of line, on which there are already settlers, and there is possibly not much to choose between the country traversed by the next 25 miles of routes A. or D. as regards suitability for agricultural and trop--ical produce.

Line B. is not recommended, as the geographical position of the Kenia Forests prevents the timber, at the present, from competing with other more favour-ably situated forests, the Railway freight to the sea being 18/. per fifty cubic feet.

It is therefore considered that tropical produce will stand the extra mileage, and that the local traffic will pay the interest on the extra cost of

(D.

D. over B., such extra cost being £31,000.

The lengths to the Athi River Station from Kenia of the various routes are :-

B. & C.	......	115 miles.
D " C	.. ..	150½ "
A " C ..	......	155 "

A certain proportion of the traffic will be to-wards the Lake, and the advantages will then lie with the Nairobi Route.

(TRAFFIC

TRAFFIC PROSPECTS.

The Kenia Railway must be considered entirely as
a development line. It has the following advantages:-

It runs through a stretch of good country in
which White settlers can live, and where the ground
is suitable for the cultivation of sisal, ground nuts,
possibly wheat, and cotton, this latter being across
the Tana.

It taps the rich fertile slopes of Kenia across the
Tana. This, the Embu country, has never known a
famine.

It will be the commencement of the railway which
must some day run up to the Boran country and the
Abyssinian Border. For strategical reasons it is
therefore of value.

Although the timber of the forest will not apparent-
ly form an article of export, it will be of great as-
sistance in the development of the country, for build-
ing and other purposes.

The railway will be of assistance in getting in
labour, and, judging by Indian experience, will in time
carry a large number of third-class passengers.

The railway will bring traffic to the Uganda Rail -
way.

The building of the line will encourage settlers
along the route to grow tropical produce.

(The

The line will open up the land fit for settlers to the North and West of Kenia.

ESTIMATED TRAFFIC.

Taking the goods mileage of the Uganda Railway for 1906-1907 as a basis of calculation, it will not be unreasonable to assume a ton mileage on the branch of $\frac{1}{4}$ the number of tons carried over

Mileage of Branch   of the mileage of
Mileage of Main Line
The main line

$$= \frac{1}{4} \times \frac{1}{5} \times 23,000,000$$

$$= 1,150,000 \text{ ton miles.}$$

The net receipts of 1906-7 are equal to $\frac{1}{2}$ per ton mile.

The goods revenue in say 5 years' time should amount to £2,595.

Taking the average haul as 60 miles, and 50% of the tonnage being carried to the Coast, the branch will produce a further revenue of:-

$$\frac{1,150,000}{60 \times 2} \times \frac{1}{2} \times 560 = £960$$

on the main line.

To the above must be added.

Livestock and Coaching Traffic.

Livestock:-

1000 sheep	=	20 trucks.
200 cattle	=	18 "
		38 "

(The

The livestock rate is 8d. a truck mile. Taken over 78 miles, this brings in, at a net receipt of say 4d. a mile, the sum of £47. 10s.

Coaching Traffic.

The following are the numbers of passengers estimated for. The mileage they are carried over is assumed to 50 miles, i.e., half the length of the line.

	Number.	Rate per mile.	£ s.
First Class.........	100	8d.	6₤ 10
Second "	100	1½d.	31 5
Third Class...	50	¾d.	7 16
Parcels..........	1000	½d.	104 3
In Parcels	5000	¼d.	980 4

£468 17s.

TOTAL ESTIMATED TRAFFIC, exclusive of export of timber:

Goods on Branch	£ 3,390.	0
do. on Main line..	960.	0
Livestock.	47.	10
Coaching..	468.	17
TOTAL NET RECEIPTS.	£5,866.	7s.

(This

This sum amounts to 5% on the capital expended, viz., £484,586.

This result is estimated to be achieved in three years from the completion of the line.

A. J. Stevenson

Capt., R.E.

18th November, 1907.

The rate for ....load of Pacific Coast Deals arrived at Lourenzo Marques is 8R4 /= of cubic feet, that is to say, per ton.

A quotation for sailing freight, Pacific Coast to Egyptian Mediterranean ports, is 10/. per 40 cubic feet, i.e., 20/. per 2th, say at Lourenzo Marques (the distances being about the same).

The value of Pacific Coast Deals, f.o.b. Pacific Coast, is therefore 38/6 per ton of 50 cubic feet.

Sailing freight and landing charges thereto at Lourenzo Marques or Durban would probably be 10/. per ton.

In order for Kenia Timber to compete with Pacific Coast deals, its value at Mombas F.O.B. must not exceed 28/. plus 18/. (the difference in freight between Pacific Coast - Lourenzo Marques and Mombasa - Lourenzo Marques.)

Out of this amount has to be paid the following :-

Royalty ...   1/2

Railway freight @ ½ per
ton mile.............18/

£2. 4

The value of Kenia Timber loaded on rail ready to leave Forest must not exceed £2,4/ minus 2½/4 = 8½/2

The present value of unseasoned sawn timber at Nairobi is 80/. for 50 cubic feet (say 1 ton.)

If this figure be compared with the 28/8 above, it does not appear possible, even taking into account the economies which would be gained by .... on a large scale,

(to

to lumber, cut and load timber at the 22/8 and make a
profit.

A.G. Stevens

Capt.. RE.

The above rates were supplied me by Major Leggett,
the Pacific Coast deals being a transaction he carried
out in South Africa when in charge of the Repatriation
Board.