

DESPATCH.

## EAST AFR. PROT.

N<sup>o</sup>.

1567

C. O.

15367

Ref<sup>d</sup>  
Date 30 APR 07

(Subject.)

1907

April 4

at previous Paper.

S  
8/59/07  
337

Mombasa water supply

Appn of £ + 4 Gds.

They appn with memorandum by Orange of Ry & Comm of Lands  
regarding the adoption of a land guarantee scheme as proposed by  
Mr. Gurney regarding amount of appn.

(Minutes.)

Mr. Read

We are not told of Mr. Gurney's  
objection to the amount of the  
guarantee for preparing the  
proposal to Lord of the Admiralty  
Syndicate which we discussed  
Mr. Gurney's alternative proposal  
that the guarantee of the amount  
generated by the port income  
that a lower price could be charged  
for the water would finally be  
negotiated by the Treasury.  
With regard to the general question  
of the water supply of Mombasa  
I would however  
Mombasa has a rainfall

at subsequent Paper

Commr  
17436

of about 80 inches: and that being as  
I shall not readily believe, until it is  
caused by a short water engineer  
after examining the ground. But this is  
a natural supply 100 miles off for a  
supply for a town of some  
size.

25000 m³ daily

- (2) The opinions of the medical men  
in 8159/07 do not show that the  
present water supply of Mombasa is  
serious danger to health.
- (3) As we have seen at New Delhi in  
the place an abundant water  
supply increases the largest built  
up area per capita regulation as  
well as efficient sewage system  
finished at the same time, becoming  
it off.
- (4) We want of course go to the engineer  
of fortifications a water supply in order  
to provide for Africa
- (5) The most pressing matter appears  
to be the supply of water for the  
Railway: as well as long runs  
to the port to be supplied to  
take her part to be supplied to  
Mr. Maff or one's authority for  
break bulk on land some to supply  
it.

204

I think we might ask this on  
the draft one. I observe that  
no info is given as to Mr. Gibbs status  
8/15/9 as to whether he is  
st. & that Lord C. Mortlock to give  
a monopoly of such a kind to a private  
Co. add the same above, & ask  
for further info on the return  
of the report already made  
by Mr. Ross & referred to by Mr.  
Purvis who has not received me

MBZ 1/5

W. Antelope

So farred?

H-SR

2/5

19.

Mr. Jones 25  
at one



Commissioner's Office

C. O.

15567

Malrobi

Recd  
Mr 5C APR 07

April 4th 1907.

EAST AFRICAN PROTECTORATE.

No. 125.

(Incl. 3)

My Lord,

I have the honour to transmit herewith a copy

of an application in connection with a scheme for supply-

ing Mombasa with water which I have received from

Mr. F. W. Gibbs, together with memoranda by the Manager

of the Uganda Railway and the Commissioner for Lands.

2. The importance of a proper water-supply for

Mombasa, Kilindini and the Railway between the latter

place and Voil cannot be exaggerated, and I would suggest

that, failing the adoption of some such Government

guaranteed scheme as proposed by Mr. Currie, Your Lordship's

consideration

H.M. Principal Secretary of State

for the Colonies,

Dowding Street,

LONDON, S.W.

consideration may be extended to Mr.Gibbs' application.

I have the honour to be,

With the highest respect,

My Lord,

Your Lordship's most obedient,

Humble servant,

*[Signature]*  
Acting Commissioner.

Despatch No. 25 of Apr. 4/1907

C. O.

15367

No. Ref.

Ref. 30 APP 07

March

Copy

Sir,

I have the honour to submit herewith, for Your Excellency's consideration, the following application in connection with a scheme for the supply of water to Mombasa, Kilindini and the Uganda Railway between Voi and Kilindini.

I have, as you know, already gone into the engineering considerations of the question, as thoroughly as the data at present available permits; and in addition to this, I have personally visited the proposed source of supply and made certain surveys which were sufficiently comprehensive to satisfy myself that by utilizing the main storage areas an ample supply of sufficient potable water may be made available at such an elevation as to render a "gravity supply" to Mombasa, through a network of "Pipe Line" approximately 110 miles length.

Such a scheme would serve not only Mombasa and Kilindini but all the intervening country and Railway along the route of the railway between Mombasa and Voi as well as many remote plantations or settlements which require water for either domestic or irrigation purposes. At present no reliable water would be under such heads as to afford ample fire protection.

A large amount of survey work is necessary before a report with detailed estimates and specifications can be drawn up and until this is completed only a very approximate estimate can be made of the cost of the scheme.

My proposal is that the Government give me sufficient time to undertake and complete these surveys and to grant me

S.Y. the Acting Commissioner,

Nairobi.

(2)

an "option" on a concession for the supply of water to Mombasa, based on the following conditions:-

(1) The time of such option to be for ten months in which to complete my Report; such period, however, to date from the time the Government signifies its consent in writing.

(2) In the event of the data collected during this ten months' period proving that the scheme would be feasible to be undertaken by private enterprise and upon my signifying that such is the case then the consideration for the grant of such option, I will stand over to the Government free of charge all of the data collected in the way of reports, surveys, etc., etc.

(3) If, however, the data collected show that the scheme is feasible and I signify my intention in writing of proceeding with its construction I am then to be given a further period of six months in which to complete the necessary financial arrangements and commence actual construction work.

The general terms of the Concession to be as follows:-

(a) The term of the Concession to be fifty years at the expiration of which period Government to have the right to take over all the works at valuation to be arrived at by arbitration.

(b) The sole right to sell water in Mombasa and Kilindini town and harbours as well as along the route of the pipe line.

(c) A free grant of a suitable site for the construction of the necessary workshops and offices in Mombasa or Kilindini.

(d) Entry free of duty of all material to be used in the construction of the scheme and of all material to be

used

(3)

used for its maintenance during the first ten years of its operation.

(e) A free grant of the necessary land for storage tanks and reservoirs.

(f) The sale of water to be by meter only and at the following rates:-

If the consumption exclusive of the Railway and shipping supplies is less than

than 150,000 gallons per day ... Re.10 per 1000 gallons.

if between 150,000  
and 200,000) " " " ... " 9 " " "

if between 200,000)  
and 250,000) " " " ... " 8 " " "

if between 250,000)  
and 300,000) " " " ... " 7 " " "

if between 300,000)  
and 350,000) " " " ... " 6 " " "

" if between 350,000)  
and 400,000) " " " ... " 5/8 " " "

if over 400,000 " " " ... " 5 " " "

Rate to the Railway on a guaranteed minimum consumption of 150,000 gallons per day Rs.1/8 per 1000 gallons.

A preliminary estimate of the total cost of the scheme is Rs.25,000.

I am leaving for England on the 30th instant and as it is imperative to commence the surveys as soon as possible after June 1st, the commencement of the healthy season, I should be greatly obliged to have the Government's decision communicated to me at its earliest possible convenience.

My address will be:-

G/o Messrs. Beechey Son & Nicholas M.M.L.D.C.

Consulting Civil Engineers,

11, Victoria Street, Westminster.

I have etc.

Sd/- FRANK D. GIBBS.

In Dispatches 125 of 1907

MEMORANDUM

(1) Mr. Gibbs' proposals are, I consider, reasonable with the following exceptions:-

3.(d) I don't think he can be allowed entry free of duty for all material to be used for maintenance during the first ten years.

3.(f) His rates for the sale of water are very high.

(2) If however Government will not do the work itself we shall have to pay heavily to get it done by private enterprise.

Assuming that Mr. Gibbs' figure of £325,000 as the probable cost of the work is correct and that sales are at a minimum, viz:

	Rs.
150,000 per diem @ Rs.10 per 1000 gallons to town	= 1,500
150,000 " " @ 1/6 " 1000 "	" Ry. = 225

= £115/- per diem.

The total revenue per annum will therefore be

$$\text{£}115 \times 265 = \text{£}41,975 \text{ say } \text{£}42,000.$$

Taking working expenses including directors' fees and other home charges at say £10,000 per annum this leaves £32,000 available as nett income or about 10% on outlay.

From a promoter's point of view there is therefore evidently something in the scheme.

(3). Our present water supply on the Railway Voi to Kilindini is obtained as follows:-

Voi

(2)

Vol.	Source	Quality
Maji-ya-Chemvi	Pumped from well	Fair
Mazeras	Pumped from stream	Bad
Kilindini	Pumped from wells	Indifferent

Our present total consumption between these places including what we deliver to gangmen etc. along the line is probably about 100,000 to 120,000 gallons per day.

The total cost to us is about Rs. 1,000 per annum.

(4) To get a regular and ample supply of good locomotive water all along the line from Voli to Kilindini - I assume that the water from the Segala Hills is good water - would, I consider, justify the Railway guaranteeing a payment of not less than Rs. 5,000 per annum or 150,000 gallons per day at Rs. 1/8 per 1,000 = Rs. 275 per annum.

This would leave Rs. 700 to be collected in Mombasa and Kilindini exclusive of the Railway.

I would say that, unless Government put up the greater part of it, this would be impossible for some years to come. If Government pays for the water at this rate it would obviously be cheaper for Government to raise the money on Levy Tax and do the work.  $150,000 \times .00125 = Rs. 1,875$  ann.

(5) It is absolutely essential for the Procuratorate that water shall be laid on to Mombasa and if it is impossible to get the work done by Government I would recommend that this application be entertained but in a modified form.

(6) That the capital be formed of £500,000 at debenture guaranteed by Government; the interest on these viz: £.12,000 being guaranteed as for £.5,000 by Railway and as for £.7,000 by Customs. That the balance of £.25,000 be shares for the Company.

Under this arrangement the cost of water could probably

be

(3)

be reduced by nearly £ because the revenue required would only be:

Working Expenses	£.10,000
Interest on debentures	£.12,000
Dividends on shares 15% on shares	£.3,750
	<hr/>
	£.25,750

of which £10,000 and £.7,000 less £.12,000 would be paid by Railways and Protectorate Government only £15,750 will be got from the public rate.

This could probably be done without much difficulty.

If we get really heavy traffic between Kilindini and Voi on our present water supply we shall find it almost impossible to carry on.

(7) Of course the whole question depends on the water proving on analysis to be of good quality.

(8) The above is merely a rough suggestion which would require to be thought out in detail. I don't know whether the idea would be acceptable to Mr. Gibell or the Treasury but probably an arrangement on this basis could be come to if the Treasury agreed.

After paying 10% on the share capital the balance of profit certainly must accrue to Government.

Sd/- H. A. F. GIBELL.

Manager,

Uganda Railway.

Nairobi,

March 26th 1907.

8

In Despatch No. 155 of April 4, 1907.

MEMORANDUM

The question of the Mombasa water supply is one of the first importance to the country. The traffic on the Uganda Railway is rapidly developing and Mombasa is becoming by degrees the principal port of the East Coast of Africa.

I am told that the Naval authorities would make it one of their coaling stations if only the water supply were sufficient.

As to the scheme itself I believe Mr. Gibbs has gone in the right direction for his supply. If the water is pure (and that should be ascertained without delay) there is a large quantity in the Sagala Hills with a splendid fall for the generation of electric power. This latter fact should be borne in mind in fixing the rates for water.

I agree with Mr. Currie that the rates proposed by Mr. Gibbs are much too high. They are certainly too high to demand from the residents of Mombasa Island.

As the Government cannot itself carry out the work, the modified scheme of a Government guarantee suggested by Currie is worth consideration.

Sd/- J. MONTGOMERY.

Commissioner for Land.

Nairobi,

April 2nd 1907.