

EAST AFR. PROT.  
UGANDA  
ZANZIBAR  
14437

14437  
REC'D  
14 MAY 10

QUARANTINE ARRANGEMENTS AT MOMBASA AND ZANZIBAR

Treasurer's memorandum. Considers proposed reduction in the contribution to the Zanzibar Govt. in particular and also about the proposed contribution of £250 from Uganda. Funds are not sufficient on the side of insufficiency. Estimate cost of proposed station at Kilindi at £1000 per annum. Budget procedure will be considered favourable.

to include  
The cost of the arrangements for  
by the Govt will be  
Capital cost £ 1,000 (1,750 S.P. + 1,250 Uganda)  
£ 400  
£ 1,400 a year + £ 1,000  
for £ 1,250 of certain additions are  
structural) Capital expenditures on  
construction of new station at Kilindi  
The cost of constructing a big station at  
Kilindi especially large & make the  
S.P. independent of Z bar would be  
not less than £ 5,000 a year + the  
annual upkeep £ 800 a year. Also, if  
be set up further at once we might get a  
claim for compensation from Z bar on the  
ground that the quarantine station there was

10  
18  
30  
1900



14437

GOVERNMENT HOUSE,  
NAIROBI,  
BRITISH EAST AFRICA

MAY 10

EAST AFRICA PROTECTORATE.

April 16th 1910.

No. 217  
(Incl. S)

My Lord,

I have the honour to acknowledge the receipt of Your Lordship's despatch No. 34 of 19th January respecting the proposed future Quarantine arrangements at Zanzibar and Mombasa.

*File*  
*40478*  
Dr. Milne  
Nov. 15th 09  
Treasurer  
Nov. 15th 09  
Dr. Milne  
Apr. 7th 10  
*40478*

2. I attach Memoranda by the Principal Medical Officer and Treasurer on which the statements made in my despatch No. 656 of November 22nd last were based. I consider that the proposed reduction in the contribution to be paid to the Zanzibar Government is perfectly justifiable, and that, if anything, His Highness's Administration profits more by the existence of the Station than this Protectorate does.

3. As regards Uganda I am aware that the Acting Governor considers the suggested contribution too high but I am quite unable to agree with him. Practically the whole of Uganda trade and almost all her immigrants pass through Mombasa; it is therefore obvious that any dislocation of shipping facilities at that port would affect her

very

THE RIGHT HONOURABLE  
THE EARL OF CREWE, K.G.,  
SECRETARY OF STATE FOR THE COLONIES,  
DOWNING STREET, LONDON, S.W.

very much. Moreover Uganda employs an Indian contingent and many Indians, traders and others, arrive from Bombay en route for the Protectorate; it is therefore reasonable that a proportion of the expense of quarantine arrangements should be borne by Uganda. The suggested contribution of one or one quarter of the total sum to be found by the two Protectorates appears to me to err if anything on the side of insufficiency.

4. Taken in conjunction with the attitude assumed by the Uganda Administration in regard to Customs Amalgamation there seems to be a tendency to claim a share in all the advantages which accrue to this Protectorate from its possession of a coast-line and at the same time repudiate responsibility for the expenses incidental thereto.

5. In answer to Your Lordship's enquiry as to the cost of maintaining the proposed small quarantine station at Kilindini, I attach a Memorandum by the Principal Medical Officer from which it will be seen that the annual recurrent expenditure is estimated at £400.

6. I trust that Your Lordship will consider these proposals favourably even if they meet with opposition from the Governments of Uganda and Zanzibar which will naturally be in favour of maintaining the status quo. It has long been held by the officials concerned that the contribution is

excessive

excessive and the non-official members of the  
Legislative Council expressed themselves very  
strongly to the same effect on the 11th instant.

I have the honour to be  
Your Lordship's humble  
obedient servant,

GOVERNOR

INCLOSURE

In Despatch No. of 19

14437

14

4 MAY 19

MEMORANDUM.

I have gone into this question in detail with the Principal Medical Officer and agree with that officer that for the present it would be sufficient to continue the existing arrangement of sharing with Zanzibar the one quarantine station on Prison Island.

2. By this means we should avoid any large capital expenditure, which might however be considered later if the Port of Kilindini becomes a port of greater maritime importance than at present.

3. The Principal Medical Officer gives the opinion that under existing conditions the Quarantine station is of about equal value to Zanzibar and the Mainland. But the fact of its being situated at Zanzibar gives Zanzibar a special advantage of having, on the spot, a quarantine station which is available for any local epidemic or sporadic cases of any infectious disease.

4. I think therefore that the proportions of the contributions should be revised as it does not seem equitable for East Africa to pay  $\frac{2}{3}$  of the cost of maintenance and upkeep and a further annual sum of £375 (¼ of £500) for rent and interest on the Island and capital outlay.

5. It must be remembered that charges for maintenance and repairs of buildings as well as the capital cost of any new buildings are included in the annual cost of maintaining the station and that we pay  $\frac{2}{3}$  of these charges.

6. The figures given by Dr. Milne (which I have checked) show an average annual cost of maintenance and upkeep of £1500.  $\frac{1}{2}$  of this is £750 and the additional £375 referred to above brings our share up to £1125.

7. Now that the station is erected, therefore, the Zanzibar government has the use of it for nothing; though of course it provided the original capital for its construction.

8. I think that it would be no hardship to Zanzibar for the Mainland contribution to be fixed at half of the present annual cost of maintenance and upkeep plus half of the £500 for rent and interest. This would be £1,000.

9. This figure again should, I submit, be divided between East Africa and Uganda. Uganda receives over  $\frac{1}{2}$  of the Customs Import duties collected in East Africa and I think if the £1000 were shared between East Africa and Uganda in the proportion of 3 to 1 it would be equitable.

10. Our contribution would then stand at £750 per annum, instead of at £1500 as at present, and Uganda would pay £250.

11. But even such an arrangement should in my opinion only be made on the distinct understanding that East Africa could cut itself adrift from Zanzibar at any time on giving a year's notice without any question of compensation to Zanzibar.

12. I agree with Dr. Milne that it would be preferable to pay a fixed annual contribution than to pay a fixed proportion of actual expenses.

13. If the £1000 which Dr. Milne asks may be expended in East Africa for an export Quarantine station is sanctioned it should of course be expended in such a manner as to be able to be absorbed into a larger scheme at a future date.

Sd/ C.C. Bowring.

Nairobi,

Treasurer.

November 15th 1909.



In Despatch No. of 19

MEMORANDUM

A nominal sum of £1,000 was laid down as being necessary for providing Mombasa with the means of dealing with epidemic diseases. Preliminary to discussing the annual upkeep of such an establishment, it is necessary to detail how it is proposed to spend this sum, on page 7 is given a summary of the expenditure, capital and recurrent involved.

A plan is attached showing the general arrangement and detailed cost of the proposed buildings.

These consist of

(a) European Infectious Diseases Hospital stone built, two wards of 2 and 5 beds for females and males respectively, or separation of cases.

Cost £500.

(b) Native Infectious Hospital landi, stone built, of 12 beds, for males only.

Cost £200.

(c) Two roomed Hospital Assistant's quarters. Stone.

Cost (not shown on plan) £200.

(d) Airtight stone disinfecting chamber and boiler shed. £200.

With this establishment, the Medical Officer of Health (under whose charge they would be placed), would be in a position to deal promptly with most cases of epidemic disease arising in the town. The disinfecting chamber

chamber would be available, not only for effects coming from patients in the town or at the quarantine station, but also for the routine disinfection of suspicious goods for shipping or vanning by railway.

The provision of such an establishment as that laid down in the foregoing paragraphs, does not present the sanitary outfit necessary for the safe guarding of a seaport town on the equator; it has been designed as a minimum permanent quarantine station. A plague ward, a small sex block have not been included; observation camps and buildings for Europeans, Indians and seafarers, have been omitted, and other minor offices and houses left out of the scheme. Should an epidemic arise, temporary measures of a more permanent nature than in the past could be undertaken round the present buildings.

Expenditure shown on the plan amounts to £1,000; this does not include the cost of quarters for the medical assistant, £200 additional for equipment. I am not in favour of leaving this former item out, as in time of stress it is difficult enough to make arrangements for the care of the sick without having to consider the bare necessities of the subordinate staff.

Equipment might possibly be provided partly from the medical stores. It would be more desirable if a special sum was allotted.

I understand that the land on which it is situated is claimed by the Sultan of Zanzibar; in any case its retention will probably involve legal difficulties; further, the erection of the clayton disinfecting chamber across the water will prohibit one of its main uses - disinfecting goods for ships or despatches up country.

The site for the permanent quarantine station, in my opinion with which Dr. Haran concurs, should be at Kilindini, within reasonable distance of both wharves and railway station, so situated that the disinfecting chamber is on railway siding, or where one can be constructed to it. A sketch map is attached showing the amount of Government land available in the neighbourhood, in which a final selection of a site would have to be made by the Acting Medical Officer of Health in conjunction with a representative of the railway department and submitted for approval. It will be seen that the only government land belongs to the railway.

No provision has been made for a water supply. A sum of £50 for the digging of a well or a tank supply would have to be inserted.

1050.  
£ 1,250. This brings the total estimate to £1050, or with inclusion of hospital attendants' quarters £1,250 with no allowance for contingencies.

It should be pointed out that this building would be constantly occupied by the member of the subordinate staff working in the Medical Officer of Health's laboratory; so, whether the quarantine camp was occupied or not, it would be of use.

"Estimate of the probable annual upkeep of proposed small quarantine station at Mombasa".

Staff. (With the Hospital Assistant's house occupied by a member of the permanent subordinate staff there would be no need for a special caretaker in charge of the station.)

## (1) Native Diseases Hospital:-

2 Greasers at 15/- p.m.	Rs 300
1 sweeper at 15/- p.m.	Rs 180

When the hospital was occupied these men would have to be confined to camp, and would therefore require an issue of rations.

Rations, 3 men, for say 6 months in the year at 2/50 each, per month..... Rs 30

Allowance for caretaker, if no  
Hospital Assistant ..... Rs 36.

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Total Rs 606

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## (2) European Infectious Disease Hospital:-

1 Greasee cook at 45/- p.m.	Rs 540
1 Cook's boy at 4/- p.m.	" 72
2 Ward orderlies at 15/- p.m.	" 360
Rations, 3 men at 2/50 each p.m. 6 months	" 50
Allowance to cook at 10/- p.m.	" 40

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Total Rs 1042

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As cooks can be picked up readily in Mombasa, it would not be necessary to fill his post until services were required; there would almost certainly be a saving on this head.

## (3) Disinfectant:-

1 Engineer at 50/- p.m.	Rs 600
1 Greaser at 8/- p.m.	" 90

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Total Rs 690

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As it is not improbable that an arrangement could be arrived at with the railway authorities to provide an Engineer to work the disinfecter when required, at an allowance of Rs 20 p.m., the estimate for his salary could be cut down by half. When not required, all this native staff will be made use of by the Medical Officer of Health in furthering sanitary measures in the town.

Unkeep and maintenance:-

(1) Native Hospital	Rs 288
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(calculated on the cost of 12 beds occupied for 4 months in the year at the rate of 20 cts each bed per diem 1440 days at 20 cts = 288).

(2) European Hospital per annum	Rs3000
---------------------------------	--------

This amount will probably be found to be larger than is necessary but at the first instalment of a hospital many things will be required which cannot at first be foreseen.

(3) Contingencies, Hospitals and Disinfecter at Rs 25/- p.m. ....	Rs 300
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Total       "   3588

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Summary of Expenditure.

Capital cost.

European Hospital	£ 500
Native Hospital	" 400
Out buildings etc.	" 100
Disinfecting chamber	" 200
* Hospital Assistant's quarters	" 200
Well	" 50
* Furniture equipment	" 50
<hr/>	
Total	" 1300

\* MAY be struck out if imperative that the sum be kept within a £ 1,000.

Recurrent Expenditure.

1. Staff. Menial (£ 73)	£ 75
Cook	" 36
Engineer	" 40
Duty allowance for above	" 7

Total " 158

2. Upkeep

Native Hospital	" 20
European Hospital	" 200
Contingencies	" 20

Total " 240

Total say £ 400 p.a.

Sd/- A.P.Milne.  
Principal Medical Officer.

Nairobi,  
April 7th 1910.

## MEMORANDUM

in Dept. of ... of ... 19...

## MEMORANDUM

The issues involved by this question are as follows:-

- I. The reduction of the annual payment of £1500 p.a. by East Africa Protectorate to the Zanzibar Government for the right to use Prison Island Sanitary Station, or,
- II. In lieu of any annual payment, the substitution thereof of a new Sanitary Station for the Port of Mombasa.

As regards No. I,

The Lords Commissioners of His Majesty's Treasury suggest that consideration of the question of reduction of this annual payment should be conducted along these lines viz:-

- A. The use made by Zanzibar of the Sanitary Station.
- B. The use made by Mombasa. The relative importance of this station to the two Administrations being thus contrasted, it might then be possible to consider.
- C. The reduction of payment on the basis of a capitation rate and average numbers.

A. Table I shows the number of vessels arriving North via Mombasa, quarantined at Zanzibar. (Figures supplied by Dr. C. N. Spurrier M.O.H. Zanzibar).

TABLE I.

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24

MAY 1910

Year	Ships	Ports	Total Vessels	Contacts Suspects	Sick	Total No. Quarantined.	Remarks
1900	1	-	1	600	-	800	After 4 deaths from plague on voyage.
1901	1	-	1	-	1	1	Small pox
1902	-	1	-	8	-	8	Plague suspects
		1	1	100	-	102	Plague contacts following one case of death from plague.
1903	-	-	-	-	-	-	
1904	3	-	3	-	3	3	Small pox
	1	-	1	-	2	2	Malignant Chicken pox
	1	-	1	91	-	91	After case of plague on board sent on from Malacca
	1	-	1	27	-	27	-do-
		1	1	-	1	2	No. not stated after unknown death on board x
1907	7	-	7	-	7	7	Small pox
	3	-	3	-	3	3	-do-
1908	1	-	1	772	8	780	-do-
	1	-	1	-	1	1	Beriberi
1907	1	-	1	-	1	1	Small pox
	1	-	1	-	1	1	Beriberi
1908	-	-	-	-	-	-	



In eight years

Total number of vessels detained	24
Total number of souls quarantined	1926

B. From the available records in the Health Office, Mombasa, and elsewhere, it would appear that of this total the following were specifically sent on from Mombasa

Table II.

No. of vessels forwarded	7
No. of souls quarantined	365

This would appear to give, as between Mombasa and Zanzibar, a proportion of 1 to 3.7 in the use made of Prison Island by the respective Governments. But, in comparing Table I and II, it must be borne in mind, that, (1) Mombasa is the first port of call for ships arriving from Aden - 5 days - and from Bombay - 15 days - and would therefore of necessity make far greater use of a Sanitary Station than Zanzibar.

(2) That the chances of infection breaking out in a ship proceeding to Zanzibar after a clean bill of health from Mombasa - a voyage of some 12 hours - are infinitely less than before her arrival at Mombasa.

(3) That the records at Mombasa only date from 1904 and are probably incomplete. It is, therefore, fairer to conclude that, in judging of the relative necessity of the Island, the proportions should be reversed.

This conclusion only takes into account ships arriving from the north. The Sanitary Station is equally at Zanzibar

Zanzibar for ships coming from the South, Madagascar, Seychelles, Beira, Natal, &c. so that the arguments (1) and (2) used in the preceding paragraph, apply generally speaking, in the same degree to Zanzibar, though it is unfortunate that a table cannot be inserted showing the actual use made by ships from the South.

Thus it is apparent that the Sanitary Station at Zanzibar is of equal necessity to that port and to Mombasa.

Table III shows the total annual outlay incurred by the Zanzibar Government on behalf of the quarantine island, contrasted with the contribution paid by the East Africa Protectorate.

Table III.

Year	Total amount paid by Zanzibar for maintenance of station	West	Total cost	Share paid by E. Africa Protectorate	Remarks
1900	£ 1698	£ 500	£ 2198	£ 1648	
1901	1509	500	2109	1581	
1902	1696	500	2196	1647	
1903	1648	500	2148	1611	
1904	1306	500	1806	1355	
1905	1435	500	1935	1450	
1906	1296	500	1796	1347	
1907	1547	500	2047	1535	
1908	1273	500	1773	1330	
average	£ 1500	£ 500	£ 2000	£ 1500	

Average number annually quarantined 240.

The net result of the working of the agreement between the two countries has been that, the East Africa Protectorate has borne the whole cost of the maintenance of the station, because its share of the rent is equivalent to one quarter of the annually recurrent expenditure which forms that share. This to a port 112 miles away; for it must be borne in mind that a fully equipped quarantine station at a seaport is made use of for many purely domestic matters, an advantage in which Mombasa is geographically unable to participate.

C. On the basis of a capitation rate, the present cost per head would work out at £8-3-1 each, taking the average for 7 years expenditure and annual number of souls quarantined out of 9 years as 240 from 3 ships per annum. There are serious drawbacks to the system of a capitation grant - it is impossible to forecast the annual expenditure, whether the station is used or not its staff and equipment must be maintained; when there was no plague the whole incidence would then have to be borne by Zanzibar, whereas one shipload of plague from Mombasa would probably relieve that government of all payments for that year. In any case the cost would be unfairly distributed. A more equitable division would be to (1) accept the fact that a Sanitary Station is necessary to Zanzibar; (2) that, (in a less degree) it is an equal necessity to Mombasa, (3) which should contribute towards its upkeep a fixed sum annually.

II. The provision of a new Sanitary Station for the port of Kilimaini.

In considering this question it must be definitely accepted as an axiom that a Sanitary station must be so constructed and so equipped that it is able to

once and effectively with any sanitary problem presented to it - that he is sure that it must be in a position to accommodate the crew and passengers and disinfect the cargo of the largest ship touching at the port.

The following table gives approximate statistics regarding the shipping calling at Mombasa both North and South, during 1908 - 1909.

Table IV.

1. Total No. of steamers	238
" " dhows	1232
<hr/>	
Total	1470
<hr/>	
2. Average tonnage of four years	753,369 tons
3. Total No. of passengers steamers estimated	20000
" " " dhows	15000
" " " dhow crews	17000
" " " steamer crew	4500
" " " steamer crews natives	7000
<hr/>	
Total persons passing through the port	63800
<hr/>	

4. Of these (exclusive of dhows), it is estimated that 12,000 persons disembarked at Mombasa - during 1908.

5. Largest ship D.O.A.L. S.S. "Admiral"

Passenger accommodation	1st	112
" "	2nd	112
" "	3rd	80
	Deck	438
Europeans		92
Native crew		42
<hr/>		
Total		876
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Thus, in estimating for the erection of Sanitary buildings, it would probably be sufficient to base the calculations on the following data:-

1st class passengers		100
2nd	-do- (crew)	200
3rd	-do- (and crew)	500

with of course the necessary disinfecting plant.

Without entering into <sup>the</sup> details of what such an establishment would cost, it will be sufficient to state that whatever the cost of Prison Island was to Zanzibar, the erection of a Sanitary Station on the mainland at Kilindini would cost far more.

Capital expenditure of Prison Island £ 5,000.

Recurrent expenditure - staff pay p.a. " 870

Upkeep p.a. " 400

So far as Mombasa is concerned the recurrent expenditure would only amount ~~to~~ to £800, the salary of Medical Officer of Health being already provided.

One other point remains to be considered, and that is the fact that plague is endemic in East Africa, and that there is no sort of provision for dealing with it at Mombasa should an outbreak occur. Foreign states have a right to demand that contacts, suspects, or individuals from infected districts should be inspected, and, if necessary, made to undergo a period of observation. Similarly all goods for export of a suspicious nature should, if necessary be disinfected before leaving the shore. In other words there should be provided at the port of Mombasa what may be termed an "export quarantine station."

To summarize the conclusions arrived at:-

(1) That the present system of a Sanitary Station on the island with the necessary equipment should be continued.

(2) The annual cost of the island be laid down as a fixed sum - say £1500 per annum, the average annual expenditure of 8 years.

(3) The charges borne by this Protectorate should not exceed half this sum.

(4) Should the annual expenditure be higher than £1500, the excess to be borne by Zanzibar as representing the value to that Government of a Sanitary Station at its own door.

(5) In order to provide Mombasa with its own local infectious disease Hospital, and a camp where persons desirous of embarking may be kept under observation or segregated in the event of an outbreak of plague or other infectious disease, the provision of £1000 to erect the necessary buildings.

Sd/- A.D. Milne.

Nairobi,

Principal Medical Officer.

12th November 1909.

Govt 16437

Esq  
Moganda  
Zanzibar

W

Case 19001  
+ 24462

DRAFT

The Secretary  
to the Treasury

Perme  
January 15 10

MINUTE.

Sir,

- Mr. Parkinson 26/5
- Mr. Archer Read 26/5
- Mr. Bridges
- Mr. Just
- Mr. Cox
- Sir O. Lucas
- Sir F. Hopwood
- Col. Seely
- Lord Crewe

with reference to your letter  
 No 1871/09 of the 11<sup>th</sup> of March  
 1909, respecting the Quarantine  
 Station at Zanzibar, I am  
 directed by the Earl of Crewe

Judge Esq. 25 March 09  
8810/09

Frank Esq. 25 Nov. 09  
40778

Judge - 19 Jan. 10  
40778

from Moganda - 31 Dec 09

16 April 10

16437

Copy of 30 of 19001  
to be sent to  
the Treasury  
for their  
reference

request that you will  
 inform the L.C. of the Treasury  
 that the matter has since  
 been brought to your attention,  
 and to lay before them  
 a copy of the accompanying copy of

of correspondence  
that has passed  
between H.E. and  
the F.A.G. of the  
East. Uganda  
on this subject.

2. As it will  
obscure, the Gov. of the  
East. puts forward  
proposals that,  
while the Quarantine  
station at Langiban  
is still to be shared  
with the Gov. of that  
island by the  
Govs of the East,  
a small Infectious Diseases Hospital  
a small Quarantine  
station at Kikindini  
shall be established  
for local people.

3. The cost of this <sup>32</sup>  
arrangement will be  
£1,000 per annum for  
plus £1,000, if any  
of certain additions are  
sanctioned, capital  
expenditure on the  
construction of the new  
station at Kikindini,  
the £1,000 annual  
expenditure being made  
up of £1,000 as  
contribution to Langiban  
and £400 as the  
cost of upkeep of  
the new station at  
Kikindini of the  
£1,000 to be contributed  
to Langiban, the Gov.  
of the East. proposes that  
£400 should be  
paid by Uganda, though  
the



This proposal does not meet  
with approval of the  
Adm. Com. that Pt.

As an alternative  
to this scheme, a station  
might be constructed  
at Kalundun, sufficiently  
large to make the S.S.  
independent of Zanzibar  
for its Quarantine arrangements.  
The cost of such a station  
would be not less than £5000  
capital expenditure & the  
annual upkeep would total  
£800.

~~Under some circumstances~~ however,  
if this scheme were adopted, it might  
be possible ~~that some amount~~  
~~for thinking that~~ it is quite  
possible, as indicated in the  
5<sup>th</sup> para of your letter  
referred to above, that  
the Govt. of Zanzibar  
might put forward  
a claim for compensation  
on

on the ground that  
station at Zanzibar  
was originally  
established to meet  
the requirements of the  
S.S. & the Uganda  
Railway & that the  
capital outlay was  
incurred by the Govt.  
of Zanzibar.

DRAFT

MINUTE

- Mr.
- Mr.
- Mr. Fiddes.
- Mr. Just.
- Mr. Cox.
- Sir C. Lucas.
- Sir F. Hopwood.
- Col. Seely.
- Genl. Crozier.

5 This second  
alternative might well  
be more economical in  
the long run, though  
involving a larger  
capital expenditure  
for its inception; but  
as the arrangement  
proposed by the Govt.  
is to be consummated  
by E. Africa it will  
be desirable without  
any form of compensation

to Zanjibar (ca 12<sup>th</sup> pers.

high ground camp.

to the 6<sup>th</sup> of the 2<sup>nd</sup> of

Nov 1909) and

as the small station at

Kibindini can be

incorporated, if necessary,

into a larger one, thus

save space leaving I apply

significant freedom of

action in the future

had (and) is in favour

of the proposal ~~is~~ submitted

by the Gov. of the East

as a temporary expedient,

and would be glad to

know whether I

concur in his entering

into negotiations with

the Gov. of Zanjibar on

the basis of this

proposal.

4/1