

- Pro, Memorandana 38 Die Pattie Gorten Elfe Agent on the Water boing service for 1931, & Explains in regard to an enon error aport of an intention to excerce centers Water tiles from the Tuessi Reserve This report is in time ting and although it shows that wake boring operation have her closed down this may to of advantige in the try my if it deads to a nounples of this sense on sein the principles the prot a geological survey of the are so that such forming to to underletten will there a good propert of success and nect a comportension scheme as cuppede by to DPW so that unnecessary reposise i hanspate to ball have (one matin admin whither i goo hel to pay & 250 i have sport charges for the sami) No doubt the althouter of this summe by mans of the nature Betterment Inc When thet has ken so tettiched. ? Paty It's Proves the \$77/32- $\varphi_i v$

4. Dis. Partic horte al The Mienorandan Report on the Water bring Service for 1931, & explains in regard to an enoncomes Goil 9 an intention & excuse centains Water tides from the Thank Reserve This report is in time ting and although it shows that water borning operation have her closed sown this may be of advantige in the ting me if it deads to a nounphin of the sense on sein tipo principles the prot a geological survey of the ana so that such tomig to to undertaken will have a good prospert of success, and reck a compation scheme as supported by the DPW so that unnecessary sepsuse is hansport to ball handle (one nation admin what i goo had Kpay & 250 i transport charper for Theo sami) No doubt the altheather ofthis some by mans of the nature Betterment In When thet has ken so takkohed . 23 ntly 115 Pinks Mar. 877/32- ρ_{i}^{D}

viewer been applied for from Kenya. In (10min) January of this year Mr. Morre (the of Essie) showed the me a letter which he had read from the Colony ashing him to ascertain the property of an application to the COARS of Scalphild for write bring. As I was then Sendan of the ctu I advend The Noor that such an application would stand a pool chance of success, on (a) the diget would be the maintenance, on it bet the remediation of an exciting service o the citie had frequestion expressed their relation to relieve - Col Goot of the and the attention ; and (1) the all the plant was strady available in Kenya, a C) 7. grant would be spirit sentendy in the Colony; where the C'te were now concentrating on scheme likely to benefit in I gother the The Torne proprie L So refly accordingly I his consignation of

the Nausti Secutament

. The Poynton Little me that the sheared the

time has britt of a cost meme. To the fourt year, a time in resources will probably in exhausting in supply of the for duct notice expression no on of which can legitimetity be said is come water bring 3. Thus seems to be no enable from the lyroums, condum that water born next be surperdid wild the proceed prochen maproves It is alterfacting to know that when conductions prime a resumption, work with proved in a completing throught art scheme ? when them a the highlyard system but hits prised _ I agree that we cannot see where the additional money for this purpose is to come

It would be a waste of hum a affect in

-2. I doubt whether money will be

fortherming from its Nation Betterment fund

for water boing, at any rate unlit that

147 Kenye E apply

Education

1 the Health

- Alrada Budge

Hinenthim

from, and that therefore we must accept the proposal that water boring should be put into cold storage.

So far as the native reserves are concerned I very much regret the necessity for this, but we cannot indicate to the Governor on what other services he should save the necessary money, and I do not wish to begin suggesting that services should be, saved, simply because we regret their disappearance. Otherwise there is no finality to the expenditure and no possibility of substantial economy.

Jefree B.H.b 13. 7. 32

aque but it is all to the good that meentime. M.H

14.7.32



RECEIVED

- 4 JUL 1932

GOVERNMENT HOUSE, NÄIROBI, Kenya

UNE, 1932.

No 2-17046131

IDENTIAL.

sir,

I have the honour to refer to Lord Passilela's Confidential despatch of 17th March,1951, on the subject of water boring services.

2. The problem of employing the water boring plants at present in charge of the Director of Fublic works to their beat advantage, especially with regard to the mative deserves, has received my earnest consideration and, with this in view, I transmit a Memorahdum prepared by the Director of Public works and also a Report on the water boring service for the year 1931. It will be seen that there were four boreholes sunk in mative Reserves last year and of these three were successfully deepened to secure a purer supply.

3. The meconmendations made by the pirector of Public works in his Memorandum accorded closely with those made by a Sub-Committee of the Provincial Commissioners which had discussed the question in

March 1930, and the only obstacle to applying them

4. Uwing to the present financial stringency

THE RIGHT HONOURABLE MAJOR SIR PHILIP CUNLIFEE-LISTER, P.C., G.B.E., M.C., M.P. SECRETARY OF STATE FOR THE COLONIES, DOWNING STREET, LOBION.S. 4.1.



VED

REGEI

Sir, "

~ 4 JUL 1932

Government House Näirobi, Kenya.

UNE. 1932.

No 2-17046131

KENYA

FIDENTIAL.

I have the honour to refer to Lord Passilela's Confidential despatch of 17th March, 1952, on the subject of water boring services.

2. The problem of employing the water boring plante at present in energe of the Director of Fublic works to their best advantage, especially with regard to the Natire Heserves, has received my earnest obnericeration and, with this is view, i transmit a Memorandum prepared by the Director of Fublic works and also a Meport on the water boring service for the year 1931. It will be seen that there were four boreholes, sunk in hative Reserves last year and of these three were successfully deepened to secure a purer supply.

3. The net commendations made by the Director of Public works in his memorandum accorded closely with those made by a Sub-Committee of the Provincial Commissioners which had discussed the question in March 1930, and the only obstacle to applying them , was the question of rinance.

4. Owing to the present financial stringency

.only

THE RIGHT HONOURAHIE MAJOR SIR FHILIP GUNLIFFE-LISTER, F.C., G.B.E., M.C., M.P. SECRETARY OF STATE FOR THE COLONIES, DOWNING STREET, LOUBON. 5.4.1...

Sec. in also

- 2 -

a

only, two ways by which the sum of £10,000 per area.could be raised were:

(a) through the Local Native Councils;
 (b) by means of a grant from the Colonial Development Fund.

Unfortunately it proved quite impossible for the Local Native Councils to raise the sum without a extraneous help whilst a grant from the Colonial Development sund was not forthcoming.

5. In view of this and or the assurance that the water boring equipment was not likely to deteriorate or become reduced appreciably in value by storage, 1 decided with the concurrence of my Executive-Jouncil to close down operations except for existing or implied commitments and the completion of two more boreholes in Laikipia on Grown Lands where two machines were already at work. This decision was foreshadowed in paragraph 4. of Kenya despatch No. 15 or the 8th January 1932, and the savings since effected have amounted to \$3,500. In accordance with my previous suggestion I am devoting a partion of the savings to the expenses or the Geological Survey now being undertaken by Sir Alfred Kitson.

6. F would add that this decision will not offert in any way the work at present proceeding in the Northern Frontier Frowings in connection with the improvement of water supplies out of the Abyssinian Compensation Fund, which is controlled by the Frovincial Administration and not by the Public.

Forks

only, two ways by which the sum of £10,000 per azea.could be raised were:

(a) through the Local Native Councils;
(b) by means of a grant from the Colonial Development sund.

Unfortunately it proved quite impossible for the Local Native Councils to raise the sum without extraneous help whilst a grant from the Golonial Development sund was not forthcoming.

55 In view of this and of the assurance that Still water boring equipment was not likely to deteriorate or become reduced appreciably in value by storage, I decided with the concurrence of my Executive Jouncil to close down operations except for existing or implied commitments and the completion of two more boreholes in Laikipia on Grown Lands where two machines were already at work. This decision was foreshadowed in paragraph 4. OI Kenya despatch No. 16 of the Sth January 1932, and the savings since effected have amounted to 23,500. In accordance with my previous suggestion I am devoting a partion of the savings to the expenses or the Geological Survey how being under taken by Sir Alfred Kitson.

6: D would add that this decision will not effect in may way the work at present proceeding in the Northbyn Frontier Province in connection with the improvement of water supplies out of the Abyssinian Compendation Fund, which is controlled by the Provincial commission and not oy the Public

WORKS

Works Department.

The porcholes to which reference is made 7. in paragraph S. or Lord Passrield's despatch are the same as those mentioned in the first paragraph of the rirst enclosure to Sir Edward Grigg's Confidential aespatch No. 153. of 19th September, 1950. In this connection I assure you that there is no intention In whatever to exclude any water holes from the matine so Reserve as gaze then by Government Notice 394 or the 13th October, 1926. It is the fact however that tnere are water holes near Simba, which the Lasai nave hern accustomed to dse, cutside that gazetted Reserve and it is probably to these that the Provincial Commissioner refers in His Annual Report and in connection with which he makes the erroneous. statement that it is proposed to excise them from the Reserve. As they have never been in the Reserve it is not possible to excise them from its

8. These water holes are situated in the Hailway No 5 mile Zone and as i informed Lord Passield in my despatch No. 43. of the 17th January, 1931, the disposal of that area is under consideration of this disposal of that area is under consideration of this dovernment and has been referred for advice to the dentral board established under the Mative Lands Trust Ordinance. That Board has given its advice but as implied in my telegram of 30th September, 1931, no motion has been taken on that advice in view of the

prospective Land Commission to whom the problem will be

Teferred in due course. I have the honour to be, Sir, Your most obedient humble servan REPORT ON BORING FOR WATEH DURING 1931.

Forty forcholes were sunk during the year. Of these 29 were successful yielding 833,000 gallons per day in the aggregate, or 28,000 gallons per day average at a mean depth of 236 feet. Of the 11 unsuccessful holes, 5 were abandoned owing to drilling difficulties. 3 were stopped by the applicants at shallow depths and 3 were drilled to a fair depth without yielding a potable supply in excess of one gellon per minute. The percentage of success in drilling operations was, therefore, 72.5. but, if 8. holes which were abandoned at shallow depth for the reasons stated are left out of consideration, the percentage is 90.6. - a highly satisfactory result. The necessity for the abandonment of some holes on. account of fissured, bouldery or highly inclined strata, or other contingency or mishap, can never be completely eliminated even with the utmost vigilance on the part of the driller, and every such occurrence has been fully enquired into. The expenditure during the year was ello, 713, but only a portion of the work undertaken was revenue earning, for some of it was carried out on unalianated Grown Lands and in the Kamasia Native Reserve without any repayment. The actual revenue received during

the year was E5,628.

The demand for boring on payment by European farmers and Local Unitive Councils was very small during the year because of the seconomic depression

OST

 T_{t}

necessitating gradual retrenchment or drill_stair, so that at the end of the year only rive out of fourteen were in the field. Moreover, the spasmodic and uncertain nature of the applications, often from isolated and distant centres, rendered organisation extremely difficult and overheads high; for the cost of moving 15 tons of plant and equipment over long distances - a cost which falls on Government under the negulations - is scarcely justified unless there is a fair programme of work in the vicinity of the centre to which the unit is moved. The Hon. the Ag.Golonial Secretary, Nairobi.

> WATER BORING. Ref.Your No. S/G.WAT. 2/1/14.111.dated 1/12/31.

EUROPEAN AREAS.

f. No. R. 28/119/B

2. # The rollowing possibilities for increasing the demand have been considered:-

(1) Reversion to a charge per day for drilling in place of the footage rate which was tried tentatively to make boring more attractive but has not fulfilled expectations.

(2) Reduction of charges in cases where 6. or more completed applications (supported by bank guarantee) are received from one district of limited area.

3) Amendment of the Land and Agricultural bank Officience, 1930, so as to provide special facilities for obtaining advances for boring for water as has been done in the case of fencing and dipping.

3. Unless Government were prepared to subsidize boring on European farms to a greater extent than has yet been proposed, the rate under para. 2.(1) could not be reduced below £5.10.0. per day. The rate under para. 2(2) might be reduced to £5.0.0, but I am acfinitely of the opinion that under present economic and financial conditions it would not be likely to be possible to get

even

any drilling charge which did not involve very serious loss to Government. As regards 2(3), I see no way in which the Ordinance could be so amended as to provide facilities which would be likely to appeal to farmers at the present time and also give adequate security to Government. Moreover, it seems to me that the arguments in favour of special facilities for fencing and dipping scarcely apply to water boring on farms. BORING IN MATIVE AREAS.

4. I find myself or the opinion, after discussions from time to time with administrative officers, that the present methods or financing and controlling boring in Native Reserves have proved unsatisfactory in practice. I consider that these methods have been responsible for unduly high cost to Government, and sometimes to Native Councils, and for unwillingness in some areas to embark on further boring operations. I regard the unsatisfactory results to have been primarily due to the following circumstances:-

(1) The spasmodic character of boring in individual mative areas, there usually being no fixed programme for a machine in view for any considerable period. This generally causes bigh transport costs, often over difficult country to widely separated sites, and sometimen abandonment of proposals after expanditure has been incurred far in excess of the sum chargeable to the Muitwe Councils under the Boring Regulations. Transport, often under difficult weather conditions, and by slow and indifferent means at the dispession of administrative officers, causes overheads to mount up owing to the drill crew, although helping with the transport, doing no productive work which can be charged for.

Delays caused by difficulties of transport of fuel and water by means at the disposal of administrative officers.

(3) Delays ...

Indegrate supervision of the drill forement themselves in difficultly accessible places.

(4) Unsuitable pumps, tanks, troughs, and other portions of installations purchased and installed by administrative officers under indifferent technical advice, and inadequate attention to them while in operation.

In my opinion, it is not assirable poundertake further boring operations in active Reserves, except on the following general lines. These should, in my view, be applied to each area where it is revenued to improve the water supply.

- (1) The preparation of a completely thought out scheme for the area concerned (not excluding methods other than boring whenever this would adequately fulfil gequirements that be obseper) by the Public forks Department in collaboration with the administrative officers concerned.
- (2) Approval or disapproval or the Schemeby Government.
- (3) It approved, provision of the capital funds required to carry out the scheme,
- (4) Execution of the scheme by the Fublic works
 Department though, of course, in practice,
 as in the case of all works in matire
 Reserves, the work would be done in close
 collaboration with the administrative
 officers.

6. The above procedure would obviate the dirficulties mentioned in paragraph 4. which have been found unavoidable under present-methods. They are, in fact, largely due to the endeavour to apply to hative Councils in Native deserves a set of regulations designed for drilling for individual farmers.

7. Clearly the application of the principles of Deragraph 6. nacessitates the prior provision of capital funds for each area. It would not, in my

opinion

available for each area where the water supply was required to be improved, and this sum would prohably, on the average, justify the employment of 2 machines, taking into consideration the probability that in some areas means for the supply of water other than boring might be found more suitable either in whole or in part.

8. As this is dependent on the provision or capital, funds, it seems out of the question at present to proceed with it, and, in my view, the only guitable alternative is to close down boring in Native Ardas for the time being. BORING ON CROWN TANDS:

9. Boring is at present being carried out on unalienated Grown Lends, North Eastern Laikipia. After visiting this area, I feel of the opinion that there is not justification for continuing the operations at the present time, except possibly to the extent of completing two more successful holes. In parts of this area, water could be provided more cheaply by the construction of small dams to impound flood water than by numping from boreholes. Fork of this kind could be done by the farmar at has own expense. 10. Finally, I recommend that drilling for mater should be abandoned and equipment stored until the financial and economic situation shows a substantial improvement, subject to the following:-

(1) Existing commitments and implied commitments to be carnied out.

(2). Possibly two more boreholes to be completed on Groun-Fands, Laikipia.

I would add that equipment of this character is not likely to deteriorate disto become reduced appreciably in value by storage. Boring apparatus does not vany much in design from

year to year.

ED: H. L. SIKES. DIRECTOR OF PUBLIC WORKS.