N° 976.

ITALIE ET ROYAUME-UNI

Echange de notes concernant la réglementation de l'utilisation des eaux de la rivière Gâch. Rome, les 12 et 15 juin 1925.

ITALY
AND UNITED KINGDOM

Exchange of Notes respecting the Regulation of the Utilisation of the Waters of the River Gash. Rome, June 12 and 15, 1925.


Textes officiels anglais et italien communiqués par le Ministère des Affaires étrangères de Sa Majesté Britannique et le Ministre des Affaires étrangères d'Italie. L'enregistrement de cet échange de Notes a eu lieu le 19 octobre 1925. English and Italian official texts communicated by His Britannic Majesty's Foreign Office and by the Italian Minister for Foreign Affairs. The registration of this exchange of Notes took place October 19, 1925.

TEXTE ITALIEN. — ITALIAN TEXT.

No. 1.

SIGNOR MUSсолINI TO SIR R. GRAHAM.

MINISTERO DEGLI AFFARI ESTERI.

SIGNOR AMBASCIATORE,

Ho l'onore di portare a conoscenza di Vostra Eccellenza che il Regio Governo approva l'accordo raggiunto tra S.E. Jacopo Gasparini Governatore della Colonia Eritrea, ed il Signor Wasey Sterry, Reggente il Governo Generale del Sudan, entrambi debitamente autorizzati e convenuti a Khartum il 12 dicembre 1924 per procedere al regolamento della utilizzazione delle acque del fiume Gash.

Tale accordo risulta dai seguenti documenti, annessi in copia e rispettivamente in traduzione autentica alla presente nota, della quale essi fanno parte integrante:

1. Lettera diretta dal Governatore dell'Eritrea al Reggente del Governo Generale del Sudan in data 12 dicembre 1924 (con annesso un rapporto—e relativo allegato—in data 25 novembre 1924 a firma degli esperti MacGregor, Tornielli).
2. Lettera diretta dal Reggente del Governo Generale del Sudan al Governatore dell'Eritrea in data 12 dicembre 1924 (con annesso un rapporto—e relativo allegato—in data 25 novembre 1924 a firma degli esperti MacGregor e Tornielli).
3. Lettera diretta dal Governatore dell'Eritrea al Reggente il Governo Generale del Sudan in data 12 dicembre 1924.
4. Lettera diretta dal Reggente del Governo Generale del Sudan al Governatore dell'Eritrea in data 12 dicembre 1924.

Nel pregare l'Eccellenza vostra di volermi far conoscere se da parte sua il Governo di S. M. Britannica approva il suddetto accordo e se è disposto a darvi esecuzione.

Le rinnovo, ecc.,

MUSSолINI.
1 Traduction. — Translation.

Ministry for Foreign Affairs.

Sir,

I have the honour to inform your Excellency that the Italian Government approves the agreement arrived at between His Excellency Jacopo Gasparini, Governor of the Colony of Eritrea, and Mr. Wasey Sterry, Acting Governor-General of the Sudan, both duly authorised and met at Khartoum on the 12th December, 1924, to proceed to the regulation of the utilisation of the waters of the River Gash.

This agreement is the result of the following documents, duly certified and annexed to the present note, of which they form an integral part:

1. Letter addressed by the Governor of Eritrea to the Acting Governor-General of the Sudan, dated the 12th December, 1924 (with a report and document attached, dated the 25th November, 1924, and signed by the experts, Mr. MacGregor and Signor Tornielli).

2. Letter addressed by the Acting Governor-General of the Sudan to the Governor of Eritrea, dated the 12th December, 1924 (with a report and document attached, dated the 25th November, 1924, and signed by the experts, Mr. MacGregor and Signor Tornielli).

3. Letter addressed by the Governor of Eritrea to the Acting Governor-General of the Sudan, dated the 12th December, 1924.

4. Letter addressed by the Acting Governor-General of the Sudan to the Governor of Eritrea, dated the 12th December, 1924.

In begging your Excellency to inform me whether His Britannic Majesty’s Government on its part approves the above mentioned agreement and is disposed to put it into execution.

I renew, &c.

Mussolini.

No. 2.

Sir R. Graham to Signor Mussolini.

British Embassy.

Rome, June 12, 1925.

Your Excellency,

I have the honour to acknowledge the receipt of your Excellency’s note of the 12th instant, to the effect that the Royal Government approve the agreement reached between His Excellency Jacopo Gasparini, Governor of the Colony of Eritrea, and Mr. Wasey Sterry, Acting Governor-General of the Sudan, both properly authorised, who met at Khartoum on the 12th December, 1924, to proceed to the regulation of the utilisation of the waters of the River Gash.

This agreement is shown in the following documents, properly certified and annexed to the present note, of which they form an integral part:

1. Letter addressed by the Governor of Eritrea to the Acting Governor-General of the Sudan, dated the 12th December, 1924 (with a report and document attached, dated the 25th November, 1924, and signed by the experts, Mr. MacGregor and Signor Tornielli).

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1 Communicated by His Britannic Majesty’s Foreign Office.

No. 976
2. Letter addressed by the Acting Governor-General of the Sudan to the Governor of Eritrea, dated the 12th December, 1924 (with a report and document attached, dated the 25th November, 1924, and signed by the experts, Mr. MacGregor and Signor Tornielli).

3. Letter addressed by the Governor of Eritrea to the Acting Governor-General of the Sudan, dated the 12th December, 1924.

4. Letter addressed by the Acting Governor-General of the Sudan to the Governor of Eritrea, dated the 12th December, 1924.

I have the honour to inform your Excellency that His Majesty's Government approve on their side the above-mentioned agreement and are disposed also to put it into effect.

I take, &c.

R. GRAHAM.

TEXTI ITALIEN. — ITALIAN TEXT.

ENCLOSURE No. i.

IL GOVERNATORE DELL'ERITREA AL SIGNOR REGGENTE DEL GOVERNO GENERALE DEL SUDAN.

KHARTUM, 12 dicembre 1924.

SIGNOR REGGENTE IL GOVERNO GENERALE,

In attuazione dei principi stabiliti collo scambio di note Prinetti-Currie del novembre-dicembre 1901, ho l'onore di notificare alla Signoria Vostra Illustissima che, nei riguardi delle opere in corso per l'utilizzazione delle acque del Gash a Tessenei, il Governo dell'Eritrea adotta le conclusioni alle quali sono addivenuti di comune accordo gli esperti Britannico e Italiano sui quesiti formulati nell'atto di Erkowit del 25 maggio 1914.

Tali conclusioni risultano dal rapporto in data 25 novembre 1924 a firma MacGregor-Tornielli che viene unito alla presente nota come parte integrante di essa.

In conseguenza dell'accoglimento delle proposte degli esperti, l'erogazione delle acque del Gash a Tessenei sarà regolata nel modo seguente:

1. Il deflusso delle acque sino alla portata di 5 m³ rimane completamente a disposizione del Governo dell'Eritrea per le opere di Tessenei.

2. Il deflusso delle acque superiore alla predetta portata di 5 m³ sarà utilizzato per le opere di Tessenei in proporzione tale che, procedendo progressivamente in conformità delle proposte contenute nel rapporto degli esperti e relativo allegato, si giunga ai 20 m³ derivandone dieci per le opere predette e lasciando defluire gli altri dieci a favore della Provincia di Cassala.

3. Il deflusso delle acque per le portate superiori ai 20 m³ verrà utilizzato per metà delle opere di Tessenei fino alla quantità necessaria all'irrigazione della pianura di Tessenei.

GASPARINI.

1 TRADUCTION. — TRANSLATION.

THE GOVERNOR OF ERITREA TO THE ACTING GOVERNOR-GENERAL OF THE SUDAN.

KHARTUM, December 12, 1924.

SIR,

In execution of the principles laid down by the Prinetti-Currie exchange of notes of November-December 1901, I have the honour to inform your Excellency that, with regard to the works in

1 Communiquée par le Ministère des Affaires étrangères de Sa Majesté Britannique

1 Communicated by His Britannic Majesty’s Foreign Office.
progress for the utilisation of the waters of the Gash at Tessenei, the Government of Eritrea adopt the conclusions at which the British and Italian experts jointly arrived on the questions formulated in the Erkowit document of the 25th May, 1924.

These conclusions are shown in the report dated the 25 November, 1924, signed by Mr. MacGregor and Signor Tornielli, which is attached to the present note and forms an integral part of it.

In consequence of the acceptance of the experts’ proposals, the use of the waters of the Gash at Tessenei will be regulated in the following manner:

1. The supply of water up to the discharge of 5 metres cube remains entirely at the disposal of the Government of Eritrea for the works at Tessenei.

2. The discharge of water above the aforesaid 5 metres cube will be utilised for the works at Tessenei in such proportionately progressive manner, in conformity with the proposals contained in the experts’ report attached, that when 20 metres cube is reached, 10 will be used for the above-mentioned works, the other 10 being allowed to flow on for the benefit of the Province of Kassala.

3. The discharge in excess of 20 metres cube will be utilised as regards one-half by the works at Tessenei up to the quantity necessary for the irrigation of the plain of Tessenei.

GASPARINI.

TEXTE ITALIEN. — ITALIAN TEXT.

SUB-ENCLOSURES IN ENCLOSURE NO. 1.

UTILIZZAZIONE DELLE ACQUE DEL GASH.


In seguito all’incarico ricevuto dai rispettivi Governi, noi sottoscritti abbiamo preso visione dei quesiti a noi sottoposti; ed avendo ispezionato la regione del Gash in Eritrea e in Provincia di Cassala, ed esaminati tutti i dati a nostra disposizione, siamo giunti di comune accordo alle conclusioni seguenti:

Quesito n. 1.

Riteniamo che una portata media di 15 metri cubi al m” per 50 giorni, ossia una quantità totale di circa m³ 65,000,000 sarebbe necessaria per l’irrigazione della pianura di Tessenei, l’area della quale è di circa 20,000 ettari.

Sul sistema della derivazione, riteniamo concordemente che essa possa essere effettuata secondo le modalità indicate nel progetto Nobile del 31 luglio 1909, salvo alcune modificazioni di dettaglio, che stimiamo necessarie per l’applicazione delle conclusioni relative ai quesiti 4 e 5.

Risulta poi che vi sono altre zone irrigabili dalle acque del Gash (Tolè–Accorfarè–Grenfit–Togolel–Gulsà) con una estensione complessiva da 20,000 a 25,000 ettari.

Quesito n. 2.

L’effetto della diga sarà di soprarelevare il pelo dell’acqua di massima piena di circa m. 1,85 sulla massima altezza delle piele rilevate.

Avendo esaminato le condizioni del fiume e dei terreni ad esso vicini a monte della stretta di Tessenei, sino a dove potrà farsi sentire l’influenza dello sbarramento, riteniamo che il regime
Le portate superiori a 20 m³ verrebbero divise in parti eguali sino alla quantità delle acque necessarie per l’irrigazione della piana di Tessenei, raggiunta la quale, le acque verrebbero lasciate defluire liberamente sopra le opere di sbarramento.

In allegato a parte sono esposte più dettagliatamente le modalità che potrebbero essere adottate per l’esecuzione dell’attuale proposta.

Quesiti nn. 6 e 7.

I dati attualmente a nostra disposizione sono insufficienti per dare una risposta esauriente a questi quesiti. Pur ritenendo che le perdite per evaporazione e specialmente per l’assorbimento del terreno siano considerevoli in queste regioni, tuttavia non si potrebbe fissarne con sicurezza l’entità, senza avere precedenti sicure e minute osservazioni, che al momento attuale ci mancano.

Riteniamo inoltre che le conclusioni cui siamo giunti sui quesiti precedenti non rendano necessario, per ora almeno, un esame più approfondito di tale questione.

ASMARÀ, 25 novembre 1924.

R. M. MacGregor.
Federico Torrielli.

ALLEGATO

ALLA RELAZIONE DEGLI ESPERTI IN DATA 25 NOVEMBRE 1924 SUI QUESITI DI ERKOWIT.

Per l’esecuzione della proposta contenuta ai punti nn. 4 e 5 della relazione, proponiamo di eseguire nel corpo della diga uno sfioratore ad una o più luci avente la soglia alla quota che sarà raggiunta dall’acqua nel canale moderatore per l’immissione di 5 m. c. nel canale di derivazione.

Per ottenere la divisione delle portate superiori ai 5 m³ secondo la proposta da noi fatta, occorrerà assegnare al detto sfioratore una larghezza tale che permetta il deflusso di 10 m³ quando tale portata verrà immessa nel canale derivatore, ed analogamente per portate maggiori.

La Direzione dei lavori di Tessenei potrà fissare la ubicazione e la forma più conveniente da darsi allo sfioratore nonché le sue dimensioni, che dipenderanno dalla determinazione delle portate da assegnarsi al canale derivatore, tenendo anche conto della quantità di acqua che occorrerà lasciare defluire dalle luci di scarico pel buon funzionamento delle opere di presa.

In base poi ai dati pratici dell’ esperienza, tale sfioratore potrà subire quelle modificazioni che risulteranno necessarie per assicurare nel miglior modo possibile l’esecuzione della nostra proposta.

R. M. MacGregor.
Federico Torrielli.

ENCLOSURE No. 2.

THE ACTING GOVERNOR-GENERAL OF THE SUDAN TO THE GOVERNOR OF ERITREA.

Khartum, December 12, 1924.

Excellency,

I have the honour to acknowledge receipt of your Excellency’s note, dated to-day, in which you inform me of your acceptance of the conclusions of the British and Italian experts contained in their report, dated the 25th November, 1924, of which I attach the English text.

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I also accept their conclusions, and I take note of the fact that the use of the water of the Gash at Tessenei will be regulated in the following manner:

1. The discharge up to 5 metres cube per second will be entirely at the disposal of the Government of Eritrea for the works at Tessenei.

2. The discharge from 5 metres cube per second up to 20 metres cube per second will be divided in the manner defined in the report of the experts, so that, when a discharge of 20 metres cube per second is reached, 10 metres cube per second will be taken by the works at Tessenei and 10 metres cube per second will be passed on for the Province of Kassala.

3. The flow in excess of 20 metres cube per second will be divided in equal parts up to the discharge required for Tessenei.

I accept these proposals, but I should be glad to know what total quantity of water and what maximum discharge will be taken from the Gash for irrigation in Eritrea.

I understand that the Italian authorities will take all necessary precautions to prevent the river being diverted from its course.

WASEY STERRY.

SUB-ENCLOSURES IN ENCLOSURE No. 2.

UTILISATION OF THE WATERS OF THE GASH.

Report of the experts, Mr. R. M. MacGregor, Irrigation adviser to the Government of the Sudan, and Signor Federico Tornielli di Crestioli, Principal Civil Engineer, Italian Public Works, on the questions formulated at Erkowit on the 25th May, 1924, by their Excellencies the late Sir Lee Slack, Governor-General of the Sudan, and Dr. Jacopo Gasparini, Governor of Eritrea.

In compliance with the charge imposed upon us by our respective Governments, we, the undersigned, have considered the questions submitted to us; and, having inspected the region of the Gash in Eritrea and in the Province of Kassala, and having examined all the data at our disposal, we arrive jointly at the following conclusions:

Question No. 1.

We find that a mean discharge of 15 cubic metres per second for fifty days, or a total of about 65,000,000 cubic metres, would be necessary for the irrigation of the plain of Tessenei, the area of which is about 20,000 hectares. With regard to the mode of extraction, we agree that this can be effected by the method proposed in the Nobile project of the 31st July, 1909, with certain modifications in detail which we consider necessary with reference to the conclusions relating to questions Nos. 4 and 5. We are informed that there are other plains irrigable from the Gash (Tôle, Accofare, Grenfit, Togolel and Guls) extending to about 20,000 to 25,000 hectares.

Question No. 2.

The effect of the dam will be to raise the level of the highest known flood at Tessenei by about 1.85 metres. Having examined the conditions of the river and the neighbouring land upstream of the gorge of Tessenei for the distance to which the influence of the dam would be felt, we consider that the régime of the river will not be seriously disturbed, and in particular that there will be no danger of the Gash being diverted from its natural bed.

Any such tendency which might become apparent would, in any case, in the interest of the Italian works themselves, be overcome by suitable embankments.
Question No. 3.

According to Sir William Garstin's report of 1901, it appears that about sixty years previously a canal had been made to take the waters of the Gash for the irrigation of the vast plain to the west of Kassala, and, after being in use for about thirty years, it had been abandoned on account of silt. From other reports it appears that, before the Dervishes, the cultivated area in the Province of Kassala amounted to about 3,000 hectares, and that, after the insurrection, the cultivation of cotton was gradually abandoned for the cultivation of dura.

In the year 1907 the only irrigation was that of the small native canals and the areas naturally inundated. We have no precise data as to the areas irrigated, but Signor Tornielli believes, from information at his disposal, that at this time the area cultivated was not more than 600 hectares.

In 1910 the total extent of the land irrigated was about 2,000 hectares, of which about 800 were irrigated by the Kassala Canal, constructed in 1905-06, and the rest by the small native canals.

From 1910 to 1922 there were constructed several canals, both for cotton and for food crops. In the latter year the area under cotton was about 2,000 hectares, and an equal area was under irrigation for food crops.

In 1923 two new canals were constructed at Mekali and Hadaliya, and the area under cotton was increased to about 4,000 hectares. During the current year a new canal was constructed at Magauda and the Mekali Canal was extended. The total area actually irrigated this year, according to Mr. MacGregor's information, is about 6,000 hectares, of which 2,800 hectares were irrigated at Hadaliya, and 2,000 hectares at Mekali.

Besides this, the flood of the Gash serves for flooding the areas used for wells, for grazing, and also for the cultivation of food crops, as to which we do not consider it necessary to go into details.

Questions Nos. 4 and 5.

Having considered these two questions, we think it desirable to combine them, the one being the direct consequence of the other. In the first place, we do not consider it to be technically practicable to have a single system which would serve for the irrigation of both territories. In consequence, the projects relating to the territories of Eritrea and Kassala must be independent, except for certain arrangements for the division of the water, necessary to safeguard the interests of both territories.

The works of Tessenei will not, so far as the barrage itself is concerned, have any influence on the wells of Kassala, which are fed by inundation and not by subsoil flow. So far as concerns the extraction of the water, according to the project of Nobile, the interests of Kassala will not be injured during the periods of normal flood. But, on the other hand, during certain periods of prolonged scarcity, the water remaining available below the dam might not be sufficient for the needs of Kassala if a discharge of 10 cubic metres per second were taken continuously from the river as provided for in the project in question. Therefore, to safeguard in the best possible manner the interests of the two territories, it will be desirable to divide the water in the following manner:

Since it would not be for the practical advantage of either territory to divide the very small supplies, we would leave the first 5 cubic metres per second at the complete disposal of Tessenei. The division of the supply from 5 up to 20 cubic metres per second should be made in such proportionately progressive manner that, when 20 cubic metres per second is reached, the partition will be 10 cubic metres per second to each.

The discharge above 20 cubic metres per second should be divided in equal parts until the discharge required for the irrigation of the plain of Tessenei is reached. Above that, the water will be passed freely below the barrage.

In a separate annexure are elaborated the details of the arrangements by which effect could be given to the above proposals.

Questions Nos. 6 and 7.

The information at our disposal at the present moment is insufficient to enable us to answer these questions exhaustively. Admittedly, the losses due to evaporation, and specially to absorption,
must be very considerable in this region. But it would not be possible to determine them without having previously made detailed and minute observations, which are lacking at the present moment. We think, at the same time, that the conclusions to which we have come on the previous questions render no longer necessary a detailed examination of these matters.

R. M. MACGREGOR.
FEDERICO TORNIELLI DI CRESTVOLANT.

ASMARA, November 25, 1924.

ANNEX

TO REPORT OF EXPERTS, DATED NOVEMBER 25, 1924, ON THE QUESTIONS OF ERKOWIT.

To carry out the proposals made in points 4 and 5 of the report we propose to provide in the body of the dam a spillway of one or more vents, having its sill at such level as will be reached in the "Canal Moderatore", when 5 cubic metres per second is being admitted to the canal.

To provide for the division of discharges in excess of 5 cubic metres per second in the manner proposed by us, the spillway will be made of such a width as to permit the passage of 10 cubic metres per second when this discharge is entering the canal, and similarly for larger discharges.

The technical staff of Tessenei will be able to fix the position, most convenient form, and dimensions of the spillway, which depend on the discharge of the canal, taking into account also the quantity of water which must be passed through the escape sluices for the proper working of the canal regulator. In accordance with practical experience, these spillways can be modified as required to give effect to our proposals in the best possible manner.

R. M. MACGREGOR.
FEDERICO TORNIELLI.

TEXTE ITALIEN — ITALIAN TEXT.

ENCLOSURE No. 3.

IL GOVERNATORE DELL' ERITEA AL SIGNOR REGGENTE DEL GOVERNO GENERALE DEL SUDAN.

Khartum, 12 dicembre 1924.

SIGNOR REGGENTE IL GOVERNO GENERALE,

In risposta alla nota odierna della Signoria Vostra Illustrissima ho l'onore di comunicarle che la quantità d'acqua del fiume Gash che il Governo dell'Eritrea utilizzerà per le opere di irrigazione ammonta complessivamente a 65 milioni di m³, e che la portata complessiva delle acque derivate dal fiume non supererà i 7 m³ al. 1", restando convenuto che l'acqua eccedente tale quantità sarà lasciata defluire a favore della Provincia di Cassala.

In relazione poi alle conversazioni avute sull'argomento sarà grato alla Signoria Vosta Illustrissima se vorrà fissare il modo mediante il quale il Governo Generale del Sudan vorrà riconoscere la quotazione che colle presenti negoziazioni viene a determinarsi nei riguardi della quantità d'acqua eccedente i 65 milioni di metri cubi che il Governo dell'Eritrea si impegna a lasciare defluire a favore della Provincia di Cassala.

GASPARINI.
1 TRADUCTION. — TRANSLATION.

THE GOVERNOR OF ERITREA TO THE ACTING GOVERNOR-GENERAL OF THE SUDAN.

Khartum, December 12, 1924.

SIR,

In reply to your Excellency’s note of to-day’s date, I have the honour to inform you that the quantity of water from the River Gash, which the Government of Eritrea will utilise for the irrigation works, amounts altogether to 65 million cubic metres, and that the total discharge of the waters derived from the river will not exceed 17 cubic metres per second, it being agreed that the water in excess of this quantity will be allowed to flow on for the benefit of the Province of Kassala.

With reference to the conversations which have taken place on the subject, I shall be grateful if your Excellency will be good enough to determine the manner in which the Government of the Sudan would be willing to recognise the position established by the present negotiations in respect of the quantity of water in excess of the 65 million cubic metres which the Government of Eritrea undertake to allow to pass on for the benefit of the Province of Kassala.

GASPARININI.

ENCLOSURE No. 4.

THE ACTING GOVERNOR-GENERAL OF THE SUDAN TO THE GOVERNOR OF ERITREA.

Khartum, December 12, 1924.

EXCELLENCY,

I have the honour to acknowledge receipt of your Excellency’s note, dated to-day.

In reply to your question as to the method in which the Government of the Sudan would be willing to recognise the situation which comes to be determined by the present negotiations as regards the quantity of water exceeding 65 million cubic metres, which the Government of Eritrea pledges itself to allow to flow down for the benefit of the Province of Kassala, I beg to confirm the agreement reached at our conversation of this morning, which is as follows:

The Sudan Government will make payment to the Government of Eritrea each year a share of the sum which it receives in respect of cultivation by irrigation of land in the Gash delta, amounting to 20 per cent. of such sum received by the Sudan Government in excess of a fixed amount of £50,000 annually.

The sums referred to above, to which the Sudan Government is entitled, are fixed according to its agreement with the Kassala Cotton Company, and I shall be glad to give you full statements each year showing how the amount payable to you under this agreement is arrived at.

Copie certifiée conforme.
(Signé) MUSSOLINI.

WASEY STERRY.

1 Communicated by His Britannic Majesty’s Foreign Office.