

No. 8733

**UNITED KINGDOM OF GREAT BRITAIN
AND NORTHERN IRELAND
and
CHILE**

Exchange of notes constituting an agreement for the execution of a Technical Co-operation Programme concerning proposed Irrigation Schemes at La Paloma and in the Aconcagua Valley. Santiago, 4 August and 7 October 1966

Official texts: English and Spanish.

Registered by the United Kingdom of Great Britain and Northern Ireland on 22 August 1967.

**ROYAUME-UNI DE GRANDE-BRETAGNE
ET D'IRLANDE DU NORD
et
CHILI**

Échange de notes constituant un accord relatif à l'exécution d'un programme de coopération technique concernant les projets d'irrigation envisagés à La Paloma et dans la vallée de l'Aconcagua. Santiago, 4 août et 7 octobre 1966

Textes officiels anglais et espagnol.

Enregistré par le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord le 22 août 1967.

No. 8733. EXCHANGE OF NOTES CONSTITUTING AN AGREEMENT¹ BETWEEN THE GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND AND THE GOVERNMENT OF THE REPUBLIC OF CHILE FOR THE EXECUTION OF A TECHNICAL CO-OPERATION PROGRAMME CONCERNING PROPOSED IRRIGATION SCHEMES AT LA PALOMA AND IN THE ACONCAGUA VALLEY. SANTIAGO, 4 AUGUST AND 7 OCTOBER 1966

I

Her Majesty's Ambassador at Santiago to the Minister for Foreign Affairs of Chile

BRITISH EMBASSY

No. 6
CD 2333/7/66

Santiago, 4 August, 1966

Your Excellency,

I have the honour to address Your Excellency in connexion with the discussions which have taken place between representatives of this Embassy and the Government of the Republic of Chile about the execution of a technical cooperation programme consisting in the preparation of feasibility studies for irrigation schemes at La Paloma, Coquimbo Province, and in the Aconcagua Valley, Valparaíso and Aconcagua Provinces. As a result of the discussions and on the instructions of Her Majesty's Principal Secretary of State for Foreign Affairs, I now have the honour to propose that:

(a) The Government of the United Kingdom of Great Britain and Northern Ireland, through the agency of the Ministry of Overseas Development, shall make available at their expense the services of the firm Messrs. Rendel, Palmer & Tritton of London, hereinafter referred to as the Consultants, who will carry out feasibility studies for the proposed irrigation schemes in accordance with the terms of reference contained in annexes to the present Note.

(b) The Government of Chile, through the agency of the Irrigation Department of the Ministry of Public Works, at Santiago and on site, contribute the following services to the Consultants free of charge:

Office accommodation;
A secretary;
Stationery;

¹ Came into force on 7 October 1966 by the exchange of the said notes.

Office equipment and facilities;
All local transport;
Boring, sampling and laboratory testing including analysis of soil samples as required by the Consultants;
The services of Chilean engineers as agreed between the Consultants and the Ministry of Public Works;
Incidental labour as required by the Consultants;
Survey equipment as required by the Consultants;
Air mosaics, plans and drawing office service as may be required by the Consultants.

If the above proposals are acceptable to the Government of the Republic of Chile, I have the honour to suggest that this Note and Your Excellency's reply to that effect shall be regarded as constituting an Agreement between the two Governments in this matter.

I avail myself of this opportunity to renew to Your Excellency the assurances of my highest consideration.

R. D. J. SCOTT FOX

ANNEXURE I

TERMS OF REFERENCE FOR THE PALOMA PROJECT

The Consultants will:

1. Examine all available surveys, plans, reports, exploratory borings, records and data relating to the Paloma Development Project;
2. Carry out an agricultural survey of the project area (comprising approximately 57,000 hectares), including examination, check and analysis of soil surveys carried out by the OEA/BID to establish the ownership, potential use and value of these soils under regular irrigation, the cropping patterns suitable for the various sectors, and the extent to which cultivation and production can be increased;
3. Carry out climatological and hydrological studies to establish the present and future water requirements of the area and present and future availability of supplies; examine the present system of irrigation and propose new techniques where appropriate, to give increased irrigation efficiency;
4. Make a study of the population of the areas covered by the project, and of employment and wages, and availability of population for an increased agricultural development, location of markets and communications;
5. Study the present agricultural system, land tenure and rural administration in the area, and make recommendations for the constitution of a modern agrarian system with cooperative farming, and for the provision of adequate technical assistance to farmers, research and demonstration farms, etc.;

6. Analyse the technical characteristics of the Paloma and complementary works, and check the distribution of cost of these works among the various sectors of the project area in relation to the new rates for irrigation;
7. Prepare a programme for carrying out the development in suitable stages, having due regard to the labour and material resources available in the area;
8. Study the present level of employment, education, sanitation, hospitals, housing, etc., in the area, and propose such improvements as may be necessary to bring these to the standard appropriate to the improved agricultural development;
9. Prepare estimates of the capital and annual costs of implementing the development programme in suitable stages and bringing the new irrigation scheme into operation including the cost of infrastructure works;
10. Prepare estimates of gross and net revenue accruing from the project year by year, based on the anticipated cropping pattern and yields of farm-produce and increased land values;
11. Carry out a study of the economic soundness of the project including a financial forecast of expenditure and revenue throughout the period of loan repayment and up to full development of production;
12. Make suggestions for the financing of the Development Project.

ANNEXURE II

TERMS OF REFERENCE FOR FEASIBILITY STUDY OF THE IRRIGATION PROJECT IN THE ACONCAGUA VALLEY

The Consultants will carry out the following:

1. Examination of all available surveys, plans, exploratory borings and data in connection with studies carried out by the Directorate of Irrigation for the irrigation of the Aconcagua Valley;
2. An agricultural investigation including a survey and sampling of soils to ascertain the agricultural capabilities of the area included in the project (comprising approximately 100,000 hectares), determination of the increase in agricultural production which could be obtained in those areas at present irrigated as well as in areas where it would be advantageous to develop irrigation and fix the period in which the areas will reach full production;
3. Climatological and hydrological studies to establish the present and future water requirements of the irrigated areas and those to be irrigated, having regard to the variety of crops and cropping patterns recommended; Make the necessary recommendation for better methods of irrigation;
4. Make an assessment of the present population of the area covered by the project, farm sizes, ownership, present operating pattern, and availability of population for the new areas to be developed, location of markets and communications;
5. Estimate the hydrological resources of the valley, both of surface and underground water, in order to determine their better use and to undertake the preliminary design of the necessary engineering works to achieve this purpose. They will also study how the factors leading to the loss of water, such as filtration, evaporation, parasitic vegetation can be eliminated and will make the necessary recommendations;

6. A technical study of all available plans, records and data relating to the design of dams in the area, and advise on such modifications as the Consultants may consider necessary to adopt to effect improvement;

This investigation will more particularly cover the following:

- (a) Hydrology of the catchment area, including run-off and maximum flood flow graphs;
- (b) Optimum capacity of the reservoir, with allowance for siltation;
- (c) Topography and geology of the dam or dams, and valley or valleys selected;
- (d) Engineering features such as:
 - (i) Dam type and section
 - (ii) Foundations
 - (iii) Headworks, type and capacity
 - (iv) Material for construction available in the area
 - (v) Such further investigations as may be required.

7. Based on surveys and other data, the preparation of a preliminary layout most appropriate to the area for main and subsidiary channels for areas actually under irrigation and for those proposed to be irrigated, including calculation of channel capacities and design of the best sections, principal structures and distribution and control works;

8. A study of the underground water conditions in the existing and additional irrigated areas, and design of a suitable layout of a drainage system for removal of surplus, surface and underground water;

9. Prepare a programme of construction of the necessary works for the regulation of the irrigation in the area including the dams, works in connection with the use of underground water, canals, drainage, re-use of drainage water, having due regard to the labour and material resources available in the area;

10. Fix a system and organisation to offer technical assistance to farmers of the area included in the project; Advise on the installation of a satisfactory number of experimental and demonstration farms, estimate the cost of this both in relation to the initial capital outlay as well as annual costs of operation;

11. The preparation of estimates of capital cost of the project, including interest during the period of construction and giving the break-down as between foreign exchange and local expenditure;

12. The preparation of estimates of annual cost thereafter, covering the cost of maintenance and operation, interest charges and amortisation, for the period established in paragraph 2;

13. The preparation of estimates of gross and net revenue based on anticipated cropping pattern and yields of farm produce envisaged, and on the increased land values in the project area; for fresh irrigation areas the cost of bringing irrigation into operation is to be taken into account;

14. A study of the economic soundness of the project including a financial forecast of expenditure and anticipated revenue for agricultural use covering the period laid down in paragraph 2;

15. Determine the benefit-cost ratio for the project for the period when the zone comes into full production.

« 13. Prepararán cálculos estimativos de los ingresos brutos y netos sobre la base del sistema de siembras, esquema de cosechas y rendimientos contemplados de éstas, y tomando en cuenta la plusvalía de los terrenos del área del proyecto. Y respecto de las nuevas áreas que han de irrigarse, se tomará en cuenta en dichos cálculos el costo de dejar funcionando el respectivo sistema de riego.

« 14. Realizarán un estudio respecto de la solidez económica del proyecto, incluyéndose en él una proyección financiera de los gastos y de los ingresos que se estima se percibirán para destinarlos a los objetivos agrícolas del período a que se hace referencia en el párrafo N° 2.

« 15. Determinarán la proporción costo/beneficio del proyecto para el período en que la zona alcanzará su pleno nivel de producción. »

En respuesta a la mencionada Nota, tengo el agrado de poner en conocimiento de Vuestra Excelencia que el Gobierno de Chile acepta en todas sus partes el Acuerdo que antecede en los términos precedentemente transcritos.

Aprovecho esta oportunidad para reiterar a Vuestra Excelencia las seguridades de mi más alta y distinguida consideración.

Pedro Jesus RODRIGUEZ

[TRANSLATION¹ — TRADUCTION²]

REPUBLIC OF CHILE
MINISTRY OF FOREIGN AFFAIRS

Santiago, 7 October, 1966

Sir,

I have the honour to acknowledge receipt of Your Excellency's Note No. 2333.7.66 of the 4th of August, in which the Diplomatic Mission proposes to the Secretary of State an Agreement referring to the execution of the Technical Cooperation Project consisting of the preparation of feasibility studies for the irrigation projects in La Paloma, Coquimbo Province, and the Aconcagua Valley, in the Provinces of Valparaíso and Aconcagua, the text of which is as follows:

[See note I]

In reply to the above-mentioned Note, I have the honour to inform Your Excellency that the Government of Chile accepts in all its parts the Agreement as transcribed in the preceding paragraphs.

I avail myself of this opportunity of renewing to Your Excellency the assurances of my highest esteem.

Pedro Jesus RODRIGUEZ

¹ Translation by the Government of the United Kingdom.

² Traduction du Gouvernement du Royaume-Uni.