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THE PERMANENT JOINT TECHNICAL COMMISSION FOR NILE WATERS:
EGYPT-SUDAN

Permanent Joint Technical Commission
for Nile Waters

The conservation of water, and the regulation of rivers for irrigation and generation of hydroelectric power are matters of great economic importance in the world today, particularly in arid countries. Increases in populations and demand for higher standards of living dictate that natural resources be developed to the maximum for the benefit of mankind.

Lately, the international community has drawn the attention of the world to the gravity of the situation created by increasing shortages of water and food, which are expected to become acute by the turn of the century unless drastic measures are taken for the development of water resources, especially in the developing countries. New strategies are urgently needed for development of the agricultural potential available in most of the developing countries. In implementing such plans, the regulation of water supplies must occupy a prominent place both for the extension of irrigation areas and for better management of the present irrigation systems.

The subject of this study is the River Nile, the second longest river in the world, which passes through nine countries, Burundi, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Uganda, United Republic of Tanzania and Zaire. Besides being a direct source of livelihood for the inhabitants, it is the main source of irrigation and the site of hydropower activities in riparian countries. The conservation, control and regulation of the Nile and its tributaries has, therefore, a major bearing on the economic development of the entire area, particularly in respect of irrigation, drainage, swamp reclamation, hydroelectric power generation, navigation and provision of community water supplies.

Egypt and Sudan have recognized that countries sharing the same river basin must foster closer co-operation by conducting joint studies, exchanging relevant information and formulating plans for the conservation, control and regulation of common river basins in order to ensure the best possible utilization of the waters for the benefit of all riparian States. A complete network of hydrological stations has been installed to measure most of the tributaries during all seasons, to survey the tributaries and observe the morphological behaviour of the river.

As the River Nile requires further projects for its full control and maximum yield Egypt and the Sudan have concluded several agreements, the last and foremost being the Agreement for the Complete Utilization of the Nile Waters, signed at Cairo, 8 November 1959. 1/ The main points of the agreement may be summarized as follows:

(a) Each country's share of waters was agreed, taking into consideration (i) the acquired right of each country to the waters used prior to the signing of the agreement; and (ii) the future development of each country;

(b) Because considerable quantities of the Nile waters were being lost in the swamps of Bahr El Gebel, Bahr El Zeraf, Bahr El Gazal and the Sobat River, it was considered essential that these losses be prevented and the yield of the river

increased for use in agricultural expansion. The two parties agreed that the Sudan would construct projects in the above-mentioned regions, with the participation of Egypt. The net yield of these projects would be divided equally between the two countries and each of them would contribute equally to the costs;

(c) In order to ensure technical co-operation between the two countries and continuation of research and study necessary to control the Nile and increase of its yield, as well as continuation of the hydrological survey of its upper reaches, the two Governments agreed to form a Permanent Joint Technical Commission for Nile Waters.

A. Institutional and legal arrangements of the Permanent Joint Technical Commission

Membership and functions

The Permanent Joint Technical Commission comprises four members from Egypt and the Sudan, respectively. All of the members are engineers. The main functions of the Commission are:

(a) Drawing up basic outlines of projects to increase the Nile yield and supervision of studies needed to complete the designs of such projects so that they may be submitted to the two Governments for approval;

(b) Supervising the implementation of the approved projects;

(c) Drawing up working arrangements for, and supervising works to be constructed on the Nile within the boundaries of the Sudan, and also for those to be constructed outside the boundaries of the Sudan, by means of agreements with the authorities concerned in the countries in which such works are to be constructed;

(d) Devising a fair arrangement between the two countries in the event of a series of low flow years, resulting in a succession of low levels in the Sudd El Aali Reservoir to an extent that does not permit in any one year the drawing of the full requirements of either country.

Thus, the functions of the Technical Commission are deliberative, investigatory, supervisory and advisory.

Geographic area covered

The Commission assumes full technical responsibility over the section of the Nile within the territories of Egypt and the Sudan. However, if it becomes necessary to hold negotiations concerning the Nile waters with any riparian State outside the boundaries of the two countries, the Governments of Egypt and the Sudan will agree on a unified view after the subject has been studied by the Technical Commission, the said view to be the basis of any negotiations by the Commission with the States involved. If the negotiations result in an agreement to construct any works on the river outside the boundaries of the two countries, the Commission will after consultation with the authorities in the Governments of the States concerned, draw up all the technical execution details and the working and maintenance arrangements. After the sanction of these by the Governments concerned, the Commission will supervise the carrying out of the technical agreements.

Mechanisms and procedures in the decision-making process

The Technical Commission holds its meetings in Cairo or in Khartoum, and, subject to the approval of the two Governments, lays down regulations for the organization of its meetings and its technical and administrative activities.

Each of the two heads of the Egyptian and Sudanese panels of the Commission acts as chairman for one year in annual succession.

The Commission selects from among its members an executive member to be responsible for preparing the agenda and the minutes of meetings, for the drafting of resolutions, and correspondence, and dealing with personnel affairs. He is selected from the panel other than the one to which the chairmanship belongs for the same year.

The quorum for the meetings is at least two members from each panel. Decisions must be unanimous and differences within the Commission are raised to the two Governments for settlement.

The Commission has a secretariat with office in Khartoum and with staff from both countries consisting of a number of technical and clerical personnel. The Commission does not maintain a large staff, as all its investigations and supervisory functions are carried out by the staff of the national water agencies of the two countries under the technical supervision of the Commission. The Commission has its own budget supplied by both Egypt and the Sudan.

Relation to national authorities and institutions

There is full co-ordination between the Commission and the concerned departments of both the Egyptian and Sudanese ministries of irrigation. The Nile Water Department of the Sudanese Ministry of Irrigation and the Egyptian Irrigation Service in the Sudan serve as executive organs for the Commission.

There is co-ordination between the Commission and the executive organ of the National Council for Development Projects in the Jonglei Area, which is responsible for the implementation of socio-economic projects in the area directly affected by the Jonglei Canal, the first of a series of projects designed to increase the Nile yield for the benefit of both Egypt and the Sudan. The chairman of the Sudanese panel of the Commission is a member of the National Council for Development Projects in the Jonglei Area.

The Commission collaborates with Sudanese ministries in combating the water hyacinth which infests the White Nile and its tributaries. It contributes to the budget of the water hyacinth control programme, takes part in drawing up the annual control programme and receives monthly progress reports.

The Commission submits its annual current budget to the Sudanese and Egyptian ministries of finance for approval. The annual expenditure is audited by the concerned auditing bureaus in both countries. Proposed projects and their cost estimates are submitted by the Commission to the ministries of planning in both countries for approval and inclusion in the phased development budgets.

Relation to international institutions

The Commission co-operates with the riparian countries of the Nile basin in conducting joint hydrometeorological survey of the catchments of lakes Victoria, Kyoga and Albert. The survey has been in operation since 1967 assisted by UNDP with the World Meteorological Organization as executing agency. The first phase of this project (1967-1972) comprised the establishment of a network of stations for the collection and analysis of hydrological and hydrometeorological data. The second phase of the project, which was successfully completed in December 1980, comprised the development of a mathematical model simulating the Upper Nile basin, water resources development studies in the project area and continuation of data collection. The project will continue through a follow-up period of another two years to be followed by a third phase. The primary objective of this co-operative project among the Nilotic countries is to assist the participating Governments in the conservation, control, development and best utilization of the waters of this important international river basin.

The Commission takes active part in the African regional water resources activities, and in the activities of the United Nations, and of intergovernmental and non-governmental organizations.

Funding arrangements

The Governments of Egypt and the Sudan both contribute to the provision of funds for the operating budget of the Joint Technical Commission. The Commission receives, through the two Governments, bilateral technical assistance in the form of consultancy services for the projects it undertakes.

B. Progress in co-operative arrangements

Consultation and notification

The executive organs of the Technical Commission within both ministries of irrigation in the two countries collect, analyse, publish and exchange pertinent information and data. Hydrological data are collected almost on a daily basis.

Use of shared water resources

The 1959 Nile Water Agreement under which the Commission was established provides for the apportionment of the Nile waters between the two countries as follows:

- (a) The acquired rights of Egypt and the Sudan were established at annual amounts, 48 billion m³ and 4 billion m³ respectively, measured at Aswan;
- (b) In order to regulate the river waters and control their flow into the sea, the two countries agreed that Egypt should construct the Aswan High Dam as the first link in a series of projects on the Nile for long-term storage;
- (c) In order to enable the Sudan to utilize its share of water, the two countries agreed that the Sudan should construct the Roseires Dam on the Blue Nile;

(d) The net benefit from the Aswan High Dam reservoir is calculated on the basis of the average natural river yield of water at Aswan, estimated at 84 billion m³ annually. From this the total acquired rights of the two countries (52 billion m³), and the average losses due to long-term storage of the Aswan High Dam (10 billion m³) are subtracted. The net benefit (22 billion m³) is divided between the two countries at the ratio of 14.5 billion m³ for Sudan and 7.5 billion m³ for Egypt. These shares are added to their acquired rights. Any yield in excess of the average natural river yield is equally divided between the two countries.

If it becomes necessary to hold negotiations concerning the Nile waters with a riparian State outside the boundaries of the two countries, the Governments of Egypt and the Sudan will agree on a unified view after the subject is studied by the Commission. The said unified view is the basis of any negotiation by the Commission with the riparian States.

Should other Nile riparian States claim a share in the Nile waters, the two countries have agreed that they will jointly consider, and reach a unified view on, said claims. Should the two countries agree to allocating an amount of the Nile water to one or the other of the above States, the agreed amount will be deducted from the shares of the two countries in equal parts, as calculated at Aswan. In these cases, the Commission will make the necessary arrangements with the States concerned, in order to ensure that their water consumption does not exceed the amount agreed upon.

River basin planning

The Commission is responsible for the advance planning of all projects for the increase of the Nile yield, but other national single or multi-purpose projects for the development of water resources for irrigation, hydropower generation or navigation purposes are the sole responsibility of each country.

Pursuant to the 1959 Nile Waters Agreement, projects are now under consideration for:

- (a) Enhancing the contribution to the Nile flow from the Sobat River by reducing the latter's losses in the Machar Marshes;
- (b) Reducing the losses which occur in the Bahr El Gazal basin;
- (c) Investigating the carrying capabilities of the White Nile in view of the increase in its flow projected as a result of the above projects;
- (d) The training of the Bahr El Gebel and Bahr El Zeraf to reduce the losses from the sudd region swamps (Jonglei Canal project).

Criteria for quantification of the benefits resulting from the utilization of the net yield for each of the two countries are the sole concern of both countries.

The legal status of facilities, the guarantee of international loans, the liability of the participating countries for damage, the standardization of design criteria and construction standards, and criteria for the operation and management of facilities are agreed upon for each co-operative project or programme separately, on its own merits.

Pollution and health management

The Technical Commission is concerned with the control and abatement of pollution of the Nile waters and since 1958 has been combating the water hyacinth in co-operation with the concerned Sudanese ministries. The water hyacinth, which infests the Upper White Nile reaches, is harmful in that it increases the rate of evapotranspiration losses and causes obstacles to canals and navigation routes.

Water quality analysis is conducted by the concerned national authorities in both countries.

Prevention of harmful effects of shared water resources

No explicit agreement exists regarding the control and prevention of floods, soil erosion and salt-water intrusion. Such effects are dealt with in co-operation with the concerned and directly affected riparian States whenever they arise.

C. Economic and financial considerations

Sharing of benefits and costs

The Nile Water Agreement provides for the equitable participation of the two co-operating countries in projects and programmes for the conservation of the waters lost in the Upper Nile swampy regions.

The net yield of these projects is divided equally between the two countries and each of them contributes equally to the costs. The Sudan finances the above-mentioned projects out of its own funds and Egypt pays its share of the costs in the same ratio of 50 per cent allotted for Egypt in the yield of these projects.

Evaluation of environmental aspects

The studies of the role of environmental factors in the design and implementation of co-operative projects for the increase of the Nile yield are taken into consideration, and the costs of the necessary studies and remedial measures are borne by both countries.

D. Outlook for the future: the Nile Basin Commission

Following the resolutions of the United Nations Water Conference (held at Mar del Plata, Argentina, in 1977) relating to international co-operation regarding various aspects of water management, and recognizing that the River Nile basin constitutes a hydrological unit providing a formidable base for reinforcing and fostering fruitful co-operation, Egypt and the Sudan submitted a draft proposal to the Nilotic riparian States for the establishment of a Nile Basin Commission. The Commission - which would be composed of one representative from each country - would assist the riparian States in co-operating in rational plans for the conservation, allocation and development of the water resources of the entire Nile basin.

The draft proposal is under consideration by the Nile basin States: Burundi, Egypt, Ethiopia, Kenya, Rwanda, the Sudan, Uganda, the United Republic of Tanzania and Zaire.

Notes

1/ Text in: United Nations Legislative Series (United Nations publication, Sales No. 63.V.4) p. 143.