



International Rivers and Lakes

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Niger River Commission transformed into Niger Basin Authority

On 21 November 1980, the member States of the Niger River Commission (Benin, Chad, Guinea, Ivory Coast, Mali, Niger, Nigeria, United Republic of Cameroon, Upper Volta) signed a convention at Faranah, Guinea agreeing to a complete overhaul of the Commission and to its transformation into a Niger Basin Authority.

For purposes of promoting the integrated development of the water and water-related resources of the basin, the Niger Basin Authority has been entrusted with a broad range of executive, rule-making and judicial responsibilities. The executive and rule-making responsibilities of the Authority are spelled out in great detail in the Convention under the following headings: statistics and planning; infrastructure; water control and utilization; environment control and preservation; navigation control and regulation; land and agro-pastoral development; and financing of projects and works. Under its most significant tasks, the Authority has been given responsibility for drawing up a master plan and an integrated development programme for the Basin, identifying priorities among alternative uses, projects and sectors; designing, study and construction of hydraulic facilities; establishment of norms and measures for the uses of basin waters by the member States within the framework of environmental protection; and implementation of programmes for the rational use of waters for domestic, industrial and agricultural purposes. All these tasks are to be carried out within the framework of a regional policy for the utilization of the surface and underground waters in the Basin which it is the Authority's responsibility to chart out and monitor. In addition, the highest decision-making body of the Authority - that is, the Summit of the Heads of State and Government - is vested with the judicial responsibility of settling all disputes among member States on matters dealt with by the Convention, and the Authority's determinations are final.

As a result, the sphere of the Authority's responsibilities is considerably broader and articulated than the Niger River Commission's co-ordinating, study and limited rule-making role. The Authority's formidable new executive and rule-making tasks are backed up by the formal commitment of member States of the Authority to (a) inform the Authority of national development projects in the basin, prior to their undertaking; and (b) refrain from undertaking national projects which may pollute the waters or modify the biological features of the fauna and flora. A similar commitment was reflected in the legal arrangements for the Niger River Commission, but comparable language in the new Convention seemingly embodies a more cogent pledge.

The institutional structure of the Authority substantially reflects the arrangements which had been made for the Niger River Commission, as amended at various points in time. The Summit of the Heads of State and Government, the Council of Ministers, and the Executive Secretariat continue in their respective roles of orientation and decision, control and execution. A Technical Committee of Experts, however, now functions in what appears to be an advisory capacity to the Council of Ministers. In addition, important

details as to the extent of the Executive Secretary's authority, various financial matters - including provisions for financial control and auditing - and the legal status of the Authority, which had all been left undetermined under the previous treaty régime, have been provided for in the new Convention.

The shift in the Authority's orientation from co-ordination and study to basin-wide planning and execution of projects and programmes is further reflected in separate arrangements made by the Niger basin States for the establishment of a Niger Basin Development Fund.

By a Protocol of the same date and place as the Convention, the Niger basin countries agreed to establish a Fund for the collection of the financial resources needed for the implementation of the development projects and programmes of the Niger Basin Authority, and for guaranteeing relevant loans. The Fund is managed by the Council of Ministers of the Niger Basin Authority and by an Executive Secretary. Several important operational aspects of the Fund, however, have been left in limbo in the Protocol. They range from the location of the Headquarters of the Fund, to its legal status, immunities and privileges, to the structure and organization of its Secretariat, to the modus operandi of the Fund, to budgeting, accounting and auditing requirements.

The Protocol's shortcomings notwithstanding, the new institutional arrangements for co-operation in the development of the Niger river basin reflect the will of the basin member States to revitalize the existing framework for co-operation and give it the teeth it has lacked so far.

The Convention Creating the Niger Basin Authority, and the Protocol Relating to the Development Fund of the Niger Basin have been ratified by the required two-thirds majority of the Niger basin countries, and are currently in force.

Guinea Joins the Mano River Union

On 25 October 1980 Guinea became a member of the Mano River Union, joining Liberia and Sierra Leone. The Mano River Union was established in October 1973 with the aim of fostering economic co-operation and economic integration among its member States. The Union has engaged in activities designed to promote co-operation and integration in the fields of trade, including customs, industry, agriculture, transport, communications, power, standards, metrology, education, training and research, and tourism. The Union is currently engaged, among other projects, in the Mano River Basin Development Project (see below). A major achievement of the Union was the full liberalization of intra-Union trade with the adoption of the corresponding arrangements on 1 May 1981.

Feasibility studies of the Mano River Basin Development Project completed

The feasibility studies of the Mano River Basin Development Project were completed in the course of 1981. These studies, funded by the European Economic Community, were undertaken to ascertain the viability of the development potentials of the Mano River basin primarily for hydro-electric generation and irrigation purposes. Additional related development purposes include tourism, fisheries, forestry and transportation. The project consists of the construction of a high dam on the Mano River some 60 km upstream from its mouth on the border between Liberia and Sierra Leone, with an installed hydro-electric generating capacity of 180 MW. In the assessment of the Union secretariat, it has been shown that the scheme is technically, economically and financially feasible for hydro-electricity and associated sub-projects covering forestry, fisheries, agriculture and tourism.

The final stage of the project, involving detailed design and the calling for tenders, is scheduled to last two years with an expenditure estimated at \$10 million. Various financial sources, including the European Economic Community, the World Bank and the African Development Bank have indicated interest in the project. Potential donors, however, will wait for the results of a comparative study in which the economic merit of three national hydro-power projects will be evaluated as an alternative to the Mano River Basin Project. The projects to be evaluated involve the development of the St. Paul River (Liberia), the Bobuna River (Sierra Leone) and the Konkoure River (Guinea). The results of the comparative economic study are due by the end of the current year.

Relief from pollution of the Rhine from salt discharges in sight?

During the current month of December 1982, the International Commission for the Protection of the Rhine Against Pollution is to meet in the Hague, the Netherlands, to be informed of plans by France to meet her obligations under the Convention for the Protection of the Rhine Against Pollution from Chloride (France, Federal Republic of Germany, Luxembourg, the Netherlands, and Switzerland - Bonn, 3 December 1976). Under the terms of the Convention, France undertook to stop discharging into the Rhine 3 million tons a year of salt discharges from Alsatian salt mines by injecting them deep underground. Relevant expenses would be contributed to by the other four countries. Because of bitter regional opposition, however, the Convention has never been ratified by the French Parliament, thus bringing to a halt the process of implementing the Convention's pollution control provisions. Through the International Commission for the Protection of the Rhine Against Pollution, a compromise was reached in November 1981, whereby France would reduce her salt discharges into the Rhine by 1 million tons a year in lieu of the 3 million tons originally stipulated - two-thirds whereof to be injected underground and the balance to be used in a salt works to be constructed in France. A recently completed study on the environmental impact of the proposed underground injections has reportedly yielded no major counter-indication to the plan (source: International Herald Tribune, 4-5 December 1982, p. 2).

Fifteenth Session of the Interim Mekong Committee

The Interim Committee for Co-ordination of Investigations of the Lower Mekong basin (Lao People's Democratic Republic, Thailand, Viet Nam) held its fifteenth session in Bangkok, Thailand, from 6 to 11 September 1982. Among the actions taken, the Committee approved five projects, involving an expenditure of approximately \$ US 5 million. The approved projects concern construction of three micro-hydropower projects in northern Thailand; establishment of a pilot fish farm at Iam Dom Noi, Thailand; water quality monitoring network in the lower Mekong basin; watershed management; fruit and forest tree propagation and planning project, Phase I - Lao PDR; and on-farm development for Huai Mong (Thailand) project area (source: Mekong News, July-September 1982).

First biennial report on the quality of the Great Lakes waters

Under the terms of the 1978 Great Lakes Water Quality Agreement between Canada and the United States, the International Joint Commission issued in July 1982 its first Biennial Report on progress towards the achievement of the goals embodied in the Agreement. Based primarily on the 1981 Report on Great Lakes Water Quality prepared for the Commission by one of its principal advisory bodies, the Great Lakes Water Quality Board, the Commission's own Report reviews the state of progress, identifies relevant issues of concern, and formulates pertinent recommendations to the Canadian and United States federal Governments.

In reviewing the state of implementation of the ambitious ecosystem approach embodied in the 1978 Agreement, the Commission's Report addresses, among other topical issues, the control of toxic and hazardous substances; eutrophication; and the control of non-point sources of pollution. On the first issue, the Commission - fully cognizant of the complexities involved in achieving effective and long-term control of toxic and hazardous substances - lays down the outlines of a control strategy for the shorter term. This is articulated in the adoption of a master list of chemicals of concern; the identification, among the listed chemicals, of those deserving priority attention, and of the areas in which they occur; and the targeting of monitoring and surveillance programmes to priority chemicals in the areas of likely occurrence. In the Commission's own assessment, "this suggested approach emphasizes control at the source and is based primarily on the water quality impacts of individual chemicals" ^{1/}. On the subject of eutrophication, the Commission reports that the federal, state and provincial Governments have been substantially successful in achieving phosphorus control levels in the Lower Great Lakes (Lakes Erie and Ontario) compatible with the targets set in the 1972 Canada-United States Great Lakes Water Quality Agreement. However, little progress has been made toward achievement of the comprehensive phosphorus control goals reflected in the 1978 Agreement, and implementation of relevant Agreement programmes for point and non-point source control. Accordingly, the Commission's recommendations call for, among others, compliance throughout the system with the phosphorus effluent standard

^{1/} International Joint Commission, First Biennial Report under the Great Lakes Water Quality Agreement of 1978, (1982), p. 13.

mandated for municipal sewage treatment plants by the 1972 Agreement; and development and implementation of phosphorus control programmes for non-point sources - including atmospheric inputs. The broader issue of non-point source pollution control is viewed by the Commission as an essential element of the overall comprehensive management strategy needed for the Great Lakes basin ecosystem. Little action has been taken thus far by the Governments concerned toward devising and implementing programmes for the control and prevention of pollution from soil conservation and drainage practices, hazardous or toxic waste disposal sites and atmospheric inputs of toxic and hazardous substances. In recommending that action be taken to correct the existing situation, the Commission suggests that efforts be focused in the short-term on identifying and quantifying non-point sources of pollution.

The Commission's Report further dwells on concerns over the level of resources commitment from the United States side and its impact on the implementation of the 1978 Agreement; new and revised water quality objectives for a number of substances; the general environmental problems and consequences that may result from the future use of "dirtier" energy sources; agreement on deadlines and timetables, non-compliance with most of which has prompted the Commission to recommend that the Governments review the existing deadlines and timetables, and agree on a revised schedule for meeting them; and institutional issues. With regard to the latter, the Commission is concerned, in particular, with the lack of effective inter-jurisdictional co-ordination mechanisms which could ensure that individual jurisdictions take into account the negative effects of their pollution on other jurisdictions in the Great Lakes basin. In addition, the Commission voiced its concern over some subtle institutional changes brought about by the 1978 Agreement in regard to the composition of the Commission's principal advisory body for water quality matters, namely, the Great Lakes Water Quality Board; and in regard to the role of the Windsor-based Great Lakes Regional Office of the Commission.

Activities of the United Nations Economic Commission for Europe

The activities of the United Nations Economic Commission for Europe (ECE) in the field of shared water resources management and development in the year ending at the beginning of April 1982 have been focused on two main subjects: (a) a Decision on International Co-operation on Shared Water Resources and (b) a programme on monitoring and evaluation of transboundary water pollution.

The Decision on International Co-operation on Shared Water Resources had been elaborated by the Group of Experts on Aspects of Water Quality and Quantity as a follow-up to the ECE Meeting on International River Commissions (see below). The operative paragraphs of the Decision identify appropriate action to be taken by the ECE member countries and by ECE toward sustained co-operation in shared water resources management. In particular, the Commission invited member Governments "to promote and strengthen international co-operation through international river commissions by improving their efficiency and by establishing new ones where they do not already exist, through regional conventions and through the harmonization of

different long-term national plans of riparian States and of national monitoring systems, as well as, at a second stage, if necessary, to take steps for the possible elaboration of a joint plan for the entire basin" 2/.

The Decision was adopted by ECE at its thirty-seventh session (March - April 1982) 3/.

According to the Terms of Reference adopted by the ECE Committee on Water Problems at its thirteenth session 4/, the programme on Monitoring and Evaluation of Transboundary Water Pollution has for Objective "the setting up and/or improving of monitoring and evaluation systems for transboundary water pollution on bilateral and multilateral bases in the ECE region". The activities envisaged are the exchange of information and experience available; and one or more pilot projects on monitoring systems, subject to the agreement of the countries concerned. At its thirty-seventh session, ECE acknowledged the terms of reference for the programme, but refrained from endorsing them 5/.

Prior ECE interest in shared water resources management issues had been reflected in a Declaration of Policy on Prevention and Control of Water Pollution, Including Transboundary Pollution (1980), and in a Meeting on International River Commissions (Geneva, 1-3 September 1980). Relevant sections of the Policy Declaration call on States sharing water resources to take concerted pollution control action by means of binding instruments. Suggestions for relevant action include the exchange of information; consultations at an early stage of proposed development; setting of water quality and emission standards; and strengthening existing institutional arrangements for co-operation, or establishing new ones 6/. The Policy Declaration was adopted by ECE at its thirty-fifth session (15-26 April 1980).

The Commission convened a Meeting on International River Commissions at Geneva, from 1 to 3 September 1980. The Meeting, which preceded the United Nations Interregional Meeting of International River Organizations held at Dakar, Senegal, in May 1981 (see the first issue of this Newsletter, p. 2), was attended, among others, by representatives of a number of international river organizations of the ECE member countries (Europe and North America). Discussions focused on the multi-disciplinary aspects of water resources

2/ Draft Decision on International Co-operation on Shared Water Resources, in Economic Commission for Europe, Committee on Water Problems, "Report of the Thirteenth Session" (ECE/WATER/28), annex I.

3/ Decision D (XXXVII) in Economic Commission for Europe, Annual Report (9 April 1981 - 2 April 1982), Official Records of the Economic and Social Council, 1982, Supplement No. 9, vol. 1 (E/1982/19), p. 89.

4/ Economic Commission for Europe, Committee on Water Problems, op. cit., annex II.

5/ Decision E (XXXVII), in Economic Commission for Europe, Annual Report, op. cit., p. 91.

6/ Economic Commission for Europe, "ECE Declaration of Policy on Prevention and Control of Water Pollution, Including Transboundary Pollution" (E/ECE/1014), para. 13.

management; the responses of co-operating countries to relevant challenges through their joint institutions were reviewed. As a result, the Meeting agreed, among others, that (a) the improvement and preservation of the quality of water bodies, including estuaries and coastal waters, is one of the important issues of integrated management of shared water resources, and that the quality of transboundary rivers and international lakes is closely related to the quantitative aspects of their respective management; (b) that monitoring of pollution in transboundary rivers and international lakes should be given full consideration by the respective international river commissions; and (c) that factors which are not directly related to water management as such might have an impact on co-operation activities on shared water resources ^{7/}.

World Meteorological Organization projects under way

The World Meteorological Organization has under way, or has recently completed, a number of projects concerning international river basins. The Hydrological Forecasting System for the Niger River Basin (HYDRONIGER), financed by the United Nations Development Programme, OPEC and the European Economic Community, is one of the largest in the area and concerns the riparian countries of the Niger River. Although its execution began late, progress has been made through the efforts of WMO and the Niger Basin Authority, the counterpart organization representing the Governments. National and international experts are now working together in the fields of hydrology, telecommunications and data processing to achieve the objectives of the first phase of the project. The main achievements include: the tendering of the data-acquisition system, on which several firms were consulted; the preparation of preliminary plans for the buildings of the International and National Forecasting Centres; the placement of candidates for training in hydrology; and the procurement of hydrological equipment and vehicles for the national Services. Subcontracts have been negotiated for the processing of data received from the different countries and which will be used later on for the development of the forecasting model. A technical committee composed of one representative of each member country has been participating in the discussions and decisions regarding the technical aspects of this project.

The project on Water quality and impact model of the Upper Nile Basin is a joint WMO/UN Environment Programme venture implemented in co-operation with the countries of the Nile basin: Burundi, Egypt, Kenya, Rwanda, Sudan Uganda, United Republic of Tanzania and Zaire. It was started in 1977 and is scheduled for completion by June 1983, following an extension from its initial completion date of December 1981. The project is designed to obtain information on the water quality of the lakes of the Upper Nile and to develop a model of the related ecological processes for use in the future environmental management of these water resources. The final technical report on this project including a manual for the operation of the model should be available shortly.

The Hydrometeorological Survey of the Catchments of Lake Victoria, Kyoga and Mobutu Sese Seko (Phase II) terminated in 1981. As a result,

^{7/} Economic Commission for Europe, Committee on Water Problems, "The Meeting on International River Commissions, 1-3 September 1980, report" (WATER/AC.3/2).

the mathematical model of the Upper Nile basin has been built and used for different purposes, including analysis of Nile regulation studies and studies of water quality of the lakes. Work continued on the development of regulation plans for Lakes Victoria, Kyoga and Mobutu Sese Seko. Hydrometric field stations in Uganda and the United Republic of Tanzania have been re-established. The extension of project activities to Zaire has not been undertaken due to communication problems. The rehabilitation of the Entebbe Headquarters has almost been completed. Training courses in the use of the mathematical model have been organized in Nairobi and Bujumbura. The major objectives of Phase II of this project have been accomplished, and all the activities and equipment have been transferred to the counterpart Governments. A final report on project activities will be published and it is foreseen that new activities will be developed in the area through regional co-operation between the riparian countries of the Nile. The participating countries are planning to start a Phase III of the project which is scheduled to last for five years starting January 1983.

Work of the United Nations International Law Commission

At its thirty-fourth session (Geneva, 3 May - 23 July 1982), the International Law Commission appointed Mr. Jens Evensen (Norway) as special rapporteur on the topic of the law of the non-navigational uses of international watercourses.

Mr. Evensen replaces the former special rapporteur, Mr. S. Schwebel (United States), who had resigned from the Commission in 1981 upon his election to the International Court of Justice. While the Commission did not address the topic in its substantive discussions, it undertook to "make substantial progress in the first reading of the draft articles" on the topic by the end of the five-year term which began in 1982 ^{8/}. The topic was not addressed in substantive fashion in debates within the Sixth Committee of the United Nations General Assembly at its thirty-seventh session. However, the new special rapporteur, Mr. Evensen, made a statement in which he indicated his intention to prepare a complete first draft for consideration by the Commission at its next session. Furthermore, continued interest in the progress of the topic was recorded in statements made by a substantial number of delegations.

In the meantime, a third report on the topic was circulated in 1982 ^{9/}. The third report, which is now available in all six official United Nations languages (Arabic, Chinese, English, French, Russian, Spanish) was prepared by the former special rapporteur, Mr. S. Schwebel. The report, which is quite comprehensive in scope and coverage, will be presented in the next issue of the present Newsletter.

^{8/} Report of the International Law Commission on the Work of its Thirty-fourth Session (3 May - 23 July 1982), Official Records of the General Assembly Thirty-Seventh Session, Supplement No. 10 (A/37/10), para. 263.

^{9/} International Law Commission, "Third report on the Law of the Non-navigational Uses of International Watercourses" (A/CN.4/348 and Corr. 1).

Montreal Conference of the International Law Association

International Water Resources Law was a main agenda item of the Sixtieth Conference of the International Law Association, held at Montreal at the end of August 1982. The Association's Committee on International Water Resources Law, having at previous Conferences sought and obtained full Conference approval of sets of rules on a number of other shared water resources topics 10/, put forward for consideration at Montreal its final texts on "Rules on water pollution in an international drainage basin", developed over a period of years under the rapporteurship of Professor Charles Bourne of the University of British Columbia. Following open debate, the draft articles were approved in the Conference's final plenary session. The rules contain 11 articles, deemed by the Association to be existing rules of general international law applicable in the absence of agreement on the subject matter. The rules are, generally speaking, meant to be consistent with an extension of the Association's Helsinki Rules. In the Committee Report, commentary is appended under each article.

The Association's Committee on Legal Aspects of the Conservation of the Environment also reported to the Montreal Conference. After extended debate, the Environment Committee's proposed articles were, however, not found acceptable - in part because of inconsistencies with other rules adopted by the Association and with the draft water pollution articles pending at the same Conference.

During the Conference, the Water Resources Committee separately held a meeting in which the "Intermediate report on the Law of International Groundwater Resources", including three "black letter" rules put forward tentatively by the rapporteur and working group chairman, Professor Robert Hayton, was considered. Further discussion of the topic by the Committee will take place at its next meeting (planned for Rome, August 1983).

Also taken up at the Montreal meeting of the International Water Resources Law Committee was a study recommending that some provisions be added to the Belgrade articles on the regulation of the flow of international watercourses, authored by Professor B.R. Chauhan with the assistance of Dr. Dante Caponera. This item, too, was continued for further discussion.

10/ On flood control, and on marine pollution of continental origin (New York, 1972); maintenance and improvements of naturally navigable waterways separating or traversing several States (New Delhi, 1974); protection of water resources and water installations in times of armed conflict and administration of international water resources (Madrid, 1976); regulation of the flow of international watercourses and relationships of international water resources with other natural resources and environmental elements (Belgrade, 1980).

Publications received

Abbas, Aziz Timur, B.M. The Ganges Waters Dispute. Bangladesh, University Press Ltd., 1982. 151 p.

Waterbury, J. Riverains and lacustrines: toward international co-operation in the Nile basin. Princeton, United States of America, Princeton University Press, 1982. (Woodrow Wilson School of Public and International Affairs, Research Program in Development Studies, Discussion paper No. 107).

International Joint Commission, Canada-United States of America, First biennial report under the Great Lakes Water Quality Agreement of 1978. June 1982.

Mano River Union. Mano River Union Annual Report 1980-81. Freetown, Sierra Leone.

River Niger Commission, Documentation Centre. Index, May 1980. The Index consists of three parts: (a) a bibliographical list of 2,500 documents concerning economic and social development of the Niger River basin, giving for each document its references and a complete indexing synopsis; (b) an author-title index listing all authors alphabetically together with the titles and reference numbers of their works; and (c) an analytical index of descriptors. The Index is available at a price from the River Niger Commission Documentation Centre, P.O. Box 933, Niamey, the Niger.

World Health Organization. Selected bibliography on water resources development and health. 1982. The Selected Bibliography contains a considerable number of entries on specific Water Resources Development Projects concerning international rivers, lakes and basins (Doc. PDP/82.2).

Call for documents and participation in the information exchange

In view of the scope and purpose of this Newsletter, documents and information on projects, programmes, institutional or legal developments and issues at large concerning the development, conservation and use of shared rivers, lakes, basins and aquifers, which you believe may be of interest to others, will be most welcome for possible inclusion in future issues.

The United Nations Department of Technical Co-operation for Development is prepared to respond - within the limits of its capabilities - to requests from international river and lake organizations, Governments, intergovernmental and non-governmental organizations, for assistance and information.

Please indicate any required correction of addresses, names and titles of responsible officials to whom this Newsletter has been mailed. Please indicate offices and officials - with relevant addresses - who wish to receive individual copies.

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