

Development of International Water Law in the Lake Chad Basin

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Introduction

Two significant trends characterize the recent evolution of international water law: (1) geographically, a gradual shift of focus away from the traditional "law-giving" rivers and lakes of Europe towards a new multitude of international watercourses in other parts of the world; and (2) economically, a shift away from the historical interests of inland navigation towards a widening range of non-navigational water uses.

The first trend merely acknowledges a statistical reality: in Africa alone there are no less than 64 first-order international drainage basins (*i. e.* basins shared by two or more States, and communicating directly with the sea or inland lakes) — more than in any other region of the world¹⁾. Yet although the law of African international watercourses has begun to attract

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¹⁾ 54 "international river basins" in Africa are listed in tables and maps by G. D e k k e r, Problems of International Co-operation, in: UN Economic Commission for Africa and World Meteorological Organisation, The Role of Hydrology and Hydrometeorology in the Economic Development of Africa, WMO Publication No. 301 (Geneva 1972) vol. 1, pp. 151—160. The UN Secretariat "Report on Technical and Economic Aspects of International River Basin Development" for the 3rd Session of the ECOSOC Committee on Natural Resources, E/C.7/35 (27 October 1972) Annexe III, p. 1, lists 55 international river basins in Africa, as compared to 60 in the Americas, 45 in Europe and 40 in Asia. A recent survey carried out by the FAO Legislation Branch on the basis of all available treaty documentation indicates, however, that the number of first-order drainage basins common to more than one jurisdiction in Africa is actually 64. When counting only the larger international basins covering more than 100,000 km², Africa again has the greatest share (17) as compared to Asia (16), the Americas (14) and Europe (5).

mounting scholarly attention²⁾, some current reference works³⁾ still hardly even mention the most active and most consistently effective among Africa's new institutions for joint water management: viz., the Lake Chad Basin Commission established in 1964, which completed its 18th regular session in December 1973. This very omission would justify an attempt at redressing the balance.

The second trend, from navigational to non-navigational water uses, is equally notorious⁴⁾, yet it may be doubted whether the actual and potential impact of this changing *finalité économique*⁵⁾ is being fully realized in contemporary international water law. For not only has the spectrum of legally relevant economic interests widened from a single predominant use to multipurpose integrated water management⁶⁾, thus forcing a transition from "use-oriented" to "resource-oriented" and "system-oriented" water

²⁾ See generally J. C. André, L'évolution du statut des fleuves internationaux d'Afrique Noire, *Revue juridique et politique: indépendance et coopération* vol. 19 (1965), pp. 285—310; L. V. Korbut/Y. Y. Baskin, *Mezhdunarodnopravovoy rezhim rek Afriki*, 1968 *Sovetskiy Ezhegodnik Mezhdunarodnogo Prava* (1969), pp. 247—256 (English summary at pp. 256—258: Contemporary Regime of International Rivers in Africa); R. Yakemtchouk, Le régime international des voies d'eau africaines, *Revue belge de droit international* vol. 5 (1969), pp. 480—515; and cf. the specific sources cited *infra* notes 31—42, 65, 97. See also the pertinent chapters in L. A. Teclaff, *The River Basin in History and Law* (The Hague 1967), pp. 174—179; F. Wodie, *Les institutions internationales régionales en Afrique occidentale et centrale* (Paris 1970), pp. 142—162; R. Yakemtchouk, *L'Afrique en droit international* (Paris 1971), pp. 122—155; J. Dräger, *Die Wasserentnahme aus internationalen Binnengewässern* (Bonn 1970), pp. 69—74; and P. Pondaven, *Les lacs frontières* (Paris 1972), pp. 30—49, 215—217.

³⁾ E.g., see A. H. Garretson/R. D. Hayton/C. J. Olmstead (eds.), *The Law of International Drainage Basins* (Dobbs Ferry/N.Y. 1967); and particularly the draft report of the UN Panel of Experts on the Legal and Institutional Aspects of International Water Resources Development (R. D. Hayton ed., mimeo New York 1972).

⁴⁾ See the UN compilation of Legislative Texts and Treaty Provisions Concerning the Utilization of International Rivers for Other Purposes Than Navigation, ST/LEG/SER.B/12 (New York 1963); Organización de los Estados Americanos, *Ríos y lagos internacionales: utilización para fines agrícolas e industriales*, OEA/SER.I/VI, CIJ-75 rev. 2 (Washington 1971); and cf. M. Wolfram, *L'utilisation à des fins autres que la navigation des fleuves, lacs et canaux internationaux* (Paris 1964). Historically, acknowledgment of the trend may be traced back to the League of Nations; see W. A. Quint, *Nouvelles tendances dans le droit fluvial international*, *Revue de droit international* (3e série) vol. 12 (1931), pp. 325—340; and W. A. Quint, *Internationaal rivierenrecht betreffende gebruik tot andere doeleinde dan de scheepvaart* (The Hague 1930).

⁵⁾ C. A. Colliard, *Evolution et aspects actuels du régime juridique des fleuves internationaux*, *Recueil des cours de l'Académie de droit international* (RdC), vol. 125 (1968-III), pp. 356—357.

⁶⁾ E.g., see UN Department of Economic and Social Affairs, *Integrated River Basin Development*, E/3066/Rev.1 (New York 1970); and UN Economic Commission for Europe, *River Basin Management*, ST/ECE/WATER/3 (New York 1971).

policies⁷). There also has been a spectacular increase of consumptive water uses (for domestic water supply, agriculture, and a growing number of water-intensive industries⁸), as compared to the formerly predominant non-consumptive uses (such as water transport, fisheries, hydropower), thus leading to a new emphasis on water conservation in quantity and quality⁹). The development of international water law in the Lake Chad Basin strikingly illustrates these new economic-ecological objectives.

By Resolution 2669 (XXV) of 8 December 1970, the UN General Assembly recommended that the International Law Commission "should, as a first step, take up the study of the law of the non-navigational uses of international watercourses with a view to its progressive development and codification". The priorities so postulated — which must be seen in the context of a continuing debate in the UN and in a number of other international organizations¹⁰ — were reinforced by the recommendations of the UN Conference on the Human Environment at Stockholm in June 1972, which call for machinery and principles of international law to govern the management and conservation of shared water resources¹¹). The present paper is intended to contribute to this aim by a case study based on African regional experience. It may also serve to evaluate the effectiveness (and the limitations) of outside technical assistance for the progressive development of international law¹²).

⁷) See the classic study by H. A. Smith, *The Economic Uses of International Rivers* (London 1931); and the conclusions of the 1972 UN Experts Report (*supra* note 3). Note, however, that the "main end use" concept remains useful for functional division of responsibilities between agencies engaged in international water development projects; see *infra* note 59.

⁸) While "consumption" does not mean permanent withdrawal from the natural hydrological cycle, or from the water balance of specific hydrological systems, it results in a net reduction of available surface water. See generally H. Eek, *The Hydrological Cycle and the Law of Nations*, *Scandinavian Studies in Law* vol. 9 (1965), pp. 49—91.

⁹) See M. Holý, *Water and the Environment*, FAO Irrigation and Drainage Paper No. 8 (Rome 1971), prepared for the UN Conference on the Human Environment.

¹⁰) See the International Law Commission's Survey of International Law, 23rd Session, A/CN.4/245 (23 April 1971), pp. 141—145. In response to the above-mentioned General Assembly Resolution, and a follow-up Resolution 2926 (XXVII) of 28 November 1972, the UN Secretariat is currently preparing a supplementary study on the legal problems relating to the non-navigational uses of international watercourses, with specific reference to pollution problems.

¹¹) UN Conference on the Human Environment, Recommendations for Action Nos. 51—54, A/CONF.48/14, sections II and XI (1972). Cf. R. E. Stein, *The United Nations Environment Program and the Development of International Environmental Law*, Basic Paper for the "Informal Consultation of International Legal Experts on Environmental Problems" (UN Environment Programme, Geneva, July 1973), p. 24.

¹²) On the constant need for evaluation and follow-up after termination of external assistance see particularly R. G. A. Jackson, *A Study of the Capacity of the United*

The Natural and Human Environment of the Lake Chad Basin

The international legal regime of the Lake Chad Basin is partly determined by environmental characteristics which can only be summarized briefly here, on the basis of the most recent technical information available¹³). It is worth noting at the outset, however, that the very compilation of this technical information on a number of previously controversial points of fact, through the Lake Chad Basin Commission with the assistance of the competent specialized agencies of the United Nations, had a notable "dispute-preventing" effect which may indeed be considered as one of the most important contributing factors for the solution of legal problems in the basin¹⁴).

Geography and Hydrology

Lake Chad (Lac Tchad in French usage) is situated in the centre of North Africa, in the mostly arid or semi-arid "Sahelian zone" just south of the Sahara desert. It is an extremely shallow (4 to 10 metres) body of fresh water, which since the turn of the century has varied in surface area between 10 000 and 25 000 square kilometres (*i. e.*, from about the size of Lebanon to almost the size of Belgium) according to seasons and years. Most of the principal water supply of the lake, from the Chari-Logone catchment, originates in the Central African Republic which, though not a riparian State of Lake Chad, thus contributes over 40 percent of the total inflow¹⁵). The "conventional Lake Chad Basin" — as designated by the 1964 Fort Lamy Treaty between the four riparian States of Cameroon, Chad, Niger and Nigeria¹⁶) — comprises the lake and parts of the riparian States' adjoining territory, totalling 427 300 square kilometres. However, the "hydrographic Lake Chad Basin" — the natural drainage area of the lake and its tributaries as circumscribed by the watershed limits — covers a much larger region of approximately 2 451 000 square kilometres (*i. e.*, almost the size of Argentina). In addition to territory of the riparian States, it would comprise a large part of the Central African Republic and

Nations Development System, UN/DP/5 vol. 2 (Geneva 1969), pp. 188—214; and cf. generally A. O. Hirschman, *Development Projects Observed* (Washington 1967).

¹³) See FAO Technical Report No. 1, "Surface Water Resources in the Lake Chad Basin", AGL:DP/RAF/66/579 (Rome 1972); and the UNESCO Report, *infra* note 60; cf. S. K. Sikes, *Lake Chad* (London 1972).

¹⁴) See text at notes 19 and 110 *infra*.

¹⁵) FAO Report No. 1 (note 13 *supra*), p. 95; and cf. Latham, *infra* note 99.

¹⁶) Text in Annex; cf. note 36 *infra*.

certain border areas of Algeria and the Sudan, all of which may thus hydrographically be considered as "basin States". While essentially a self-contained inland drainage area, the basin during flood time loses a minor amount of river overspill to the Niger River via its Benoué tributary at the Chutes Gauthiot (MacLeod Falls)¹⁷). The artesian aquifer which is known to exist beneath Lake Chad has no noticeable connection with the hydraulicity of the lake¹⁸).

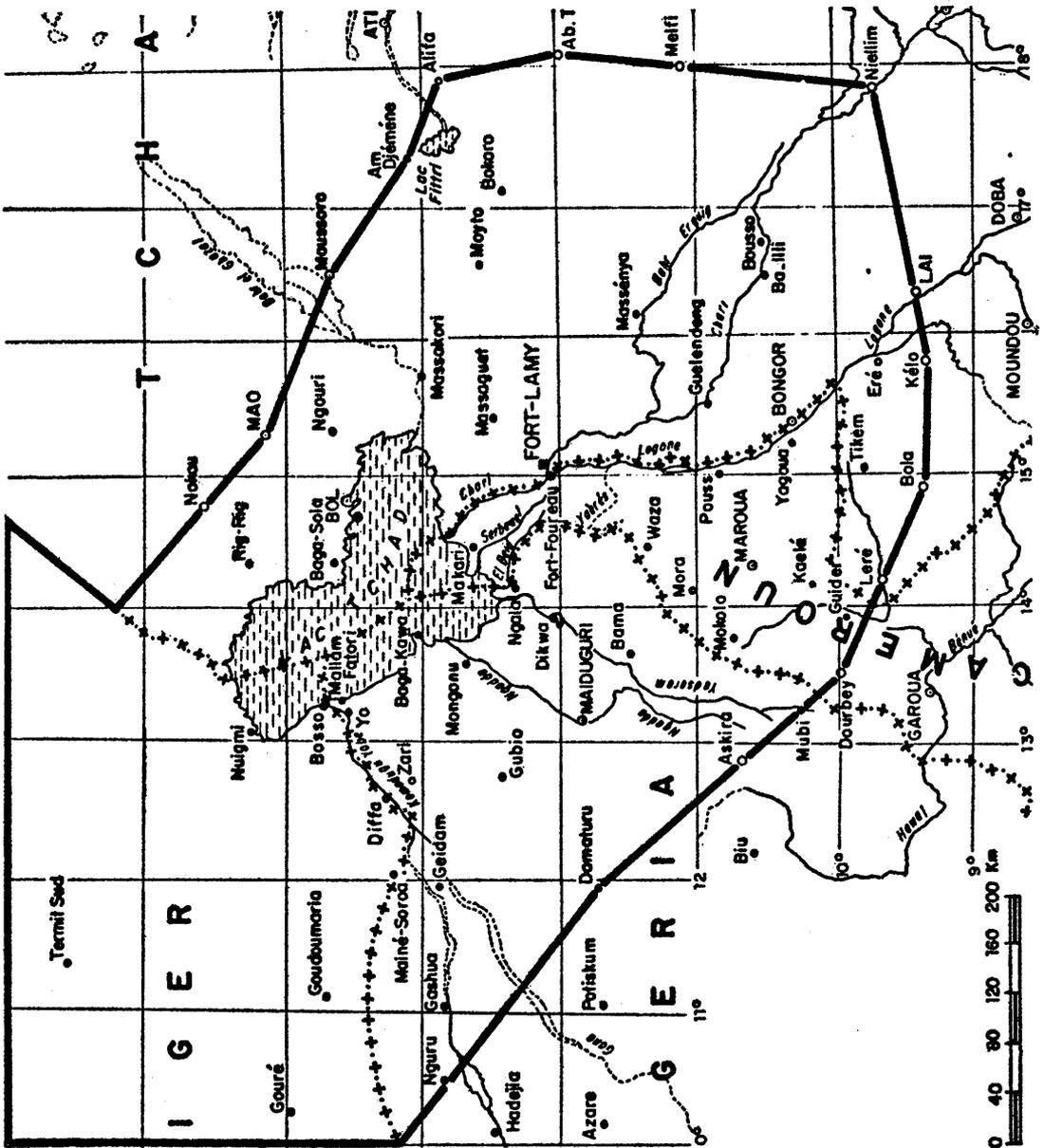
Although lake level observations since 1908 would seem to discount the hypothesis of a long-range natural decline, and rather indicate cyclical behaviour¹⁹) correlated to the flows of the Chari River (which in turn show a striking correlation to the Nile flows at Aswan) counter-balanced by evaporation losses or "savings", apprehensions have been expressed that the lake might gradually be wasting. Together with the severe droughts which affected the entire Sahelian zone in recent years²⁰), these fears undoubtedly had a psychological effect on the viewpoints of different riparian

¹⁷) This natural phenomenon was the subject of a separate UN pre-investment study, on the basis of a Plan of Operation of 30 November 1966 between the UN Development Programme (Special Fund) and the Governments of Cameroon and Chad; see the UN Feasibility Study for the Diversion of the Logone River, C. L o t t i Co. (Rome 1970); and E. F a n o, *The Role of the United Nations in Water Resources Planning and Development*, Water Resources Bulletin vol. 8 (1972), p. 378.

¹⁸) On the exploitation of groundwater resources in the basin see the survey by the UN Economic Commission for Africa, *Les eaux souterraines de l'Afrique*, ST/ECA/147 (New York 1971), pp. 87, 140—141, 181; and FAO Technical Report No. 5, *Groundwater Resources in the Lake Chad Basin*, AGL:DP/RAF/66/579, 2 vols. (Rome 1973).

¹⁹) FAO Report No. 1 (note 13 *supra*), p. 66, based on a study by the Office de la Recherche Scientifique et Technique Outre-Mer (ORSTOM), *Monographie hydrologique du lac Tchad* (Paris 1969). Theories and speculations on the hydraulic regime of Lake Chad date back to early exploration reports by D e n h a m / C l a p p e r t o n / O u d n e y, *Narrative of Travel and Discoveries in Northern and Central Africa in the years 1822, 1823 and 1824* (London 1826); and by Heinrich B a r t h, *Reisen und Entdeckungen in Nord- und Central-Afrika in den Jahren 1849—1855* vol. 2 (Gotha 1857).

²⁰) See Resolution 1759 (LIV) adopted by the UN Economic and Social Council on 18 May 1973, implemented through the Office of the Sahelian Relief Operation (OSRO) and the FAO Sahelian Zone Trust Fund; see UN Monthly Chronicle vol. 10 No. 6 (1973), p. 64. As a result of the droughts, the water level of Lake Chad has fallen so low that by July 1973 (as previously in 1907) the lake was actually divided into two separate parts, the northern one of which no longer received any river inflow. On the alarming economic and ecological consequences see the report: *Le lac Tchad a son plus bas niveau depuis le début du siècle, Afrique contemporaine* vol. 12 No. 68, p. 25. There is some evidence that the macro-climatic causes of the droughts (*i.e.*, the diversion or suppression of the monsoons) are related to a global increase in atmospheric carbon dioxide due to air pollution; see R. A. B r y s o n, *Drought in Sahelia: Who or what is to Blame?* *Ecologist* vol. 3 (1973), pp. 366—371.



Lac Tchad Basin conventionnelle (FAO, AGL: DP/RAF/66/579, Technical Report No. 5 [1973]).

States as regards the international regime of water use and water development in the basin.

Economy and Ecology

The population of the "conventional Lake Chad Basin" is estimated at 5 450 000 (the most densely populated and most developed part being the Nigerian sector), with complex ethnic sub-divisions adapted less to modern political boundaries than to a common environment whose single most important parameter is the hydrological cycle.

As compared with the negligible navigational use of Lake Chad and its tributaries²¹⁾, the chief economic benefits from the basin's water resources are traditionally provided by fisheries. Through a unique combination of natural and sociological conditions, and in spite of archaic methods of fishing, fish processing, transportation and marketing, the commercial volume of fish produced from the lake area and traded to population centres as distant as Lagos is considerable and supports a regional structure of fishermen's tribes whose livelihood depends on the annual inundations. Modernized techniques and growing food demands, though bound to raise the current net yield of approximately 55 000 metric tons of lake fish *per annum*²²⁾, also imply a mounting risk of wasteful and harmful resource exploitation in the absence of uniform protective regulations²³⁾.

Similarly, seasonal irregularity of water and grazing resources traditionally determines the life-styles of indigenous stock-raising tribes, most of whom migrate with their herds in order to survive²⁴⁾ (concentrating on the

²¹⁾ Transportation is possible only during two or three months of the year on the lake and on parts of the Chari-Logone river system; see J. N e n d i g u i, *Les problèmes des transports au Tchad, Etudes et Statistiques de la Banque Centrale des Etats de l'Afrique équatoriale et du Cameroun*, No. 182 (March 1973), p. 152; cf. USAID, *Lake Chad Basin Transport Survey*, Experience Inc. and King-Gavaris Inc. (New York 1970); and UN Economic Commission for Africa, *Some Aspects of Inland Navigation on African Rivers*, in: Report of the Interregional Seminar on Technico-Economic, Organizational and Administrative Aspects of Inland Waterborne Transport, ST/TAO/SER.C/114 (New York 1970), p. 52.

²²⁾ According to observations carried out in 1969/70 by A. S t a u c h, *Proposals for a Project for the Extension and Modernization of Fishing on Lake Chad*, POL. 19/S-2, UNDP/FAO Project: Survey of the Water Resources of the Chad Basin for Development Purposes (Fort Lamy 1970), p. 2.

²³⁾ See the comparative study by F. B. Z e n n y, *Wildlife and Inland Fisheries Legislation in Member Countries of the Chad Basin Commission*, FAO/LA:SF/69/33 (Rome 1969).

²⁴⁾ See J. P. G i l g, *Mobilité pastorale au Tchad occidental et central*, *Cahiers d'Etudes Africaines* vol. 3 (1963), pp. 491—510; J. G a l l a i s, *Les sociétés pastorales ouest-africaines face au développement*, *Cahiers d'Etudes Africaines* vol. 12 (1972), pp. 353—368; cf. the Report of the FAO Expert Consultation on the Settlement of Nomads in Africa and the Near East, FAO/RP No. 20 (Rome 1972).

lakeshore area only during the dry season), although there are also sedentary herdsmen in precarious co-existence with the nomads. Mounting population pressures already resulted in animal over-stocking and over-grazing throughout the region, and the approximately 4 750 000 head of cattle estimated for 1972 in the "conventional Lake Chad Basin" far exceed the carrying capacity of the land²⁵). In the absence of uniform controls as to herd size and grazing reserves, additional water development may in some cases have tended to hasten the further degradation of marginal grasslands, instead of contributing to the desired improvements in animal husbandry²⁶).

Finally, while hydro-power development so far remains a distant prospect, the potential of irrigation has been demonstrated for parts of the basin area, particularly in the Nigerian sector where conditions of both soil capability and capital investment are most suitable²⁷) and where a 400 hectare pilot project using lake water is now operational, with a 16 000 hectare expansion projected for 1982²⁸). These and similar forecasts of irrigation development (also with respect to groundwater use) were indeed the principal cause of concern voiced by other riparian States as regards the long-range effects of rising water abstraction on lake level and shoreline recession.

As in most developing areas of the world, the most pressing environmental problems of the Lake Chad Basin are thus seen as quantitative resource depletion rather than qualitative resource degradation. In the absence of urban-industrial wastes or major agricultural salinity hazards,

²⁵) FAO Technical Report No. 4, "Prospects for Animal Husbandry in the Lake Chad Basin", AGL:DP/RAF/66/579 (Rome 1972), pp. 31—32.

²⁶) In contrast with the technological optimism regarding further groundwater development as reflected in the UN Report cited *supra* (note 18), p. 141, the ecological risk of overgrazing has rightly been pointed out by G. H a r d i n, *The Tragedy of the Commons*, Science vol. 162 (13 December 1968), p. 1244. Cf. the examples cited by F. M. M i f s u d, *Customary Land Law in Africa*, FAO Legislative Series No. 7 (Rome 1967), pp. 62—65; and L. C. C h r i s t y, *Legislative Principles of Soil Conservation*, FAO Soils Bulletin No. 15 (Rome 1971), pp. 33—35.

²⁷) See A. K. M a g o b u n j e, *Water Resources and Economic Development in Nigeria*, in: *Ecology and Economic Development in Tropical Africa* (Berkeley 1965), pp. 147—159; US Bureau of Reclamation, *Reconnaissance Study of Land and Water Resources in the Lake Chad Basin*, prepared for the Federal Government of Nigeria and USAID (Washington 1969); J. S. O g u n t o y i n b o, *Irrigation and Land Reclamation Projects in Nigeria*, *Nigerian Agricultural Journal* vol. 7 (1970), pp. 53—69; M. G. B a w d e n / D. M. C a r r o l l / P. T u l e y, *The Land Resources of North East Nigeria* vol. 3 (London 1972).

²⁸) FAO Report No. 1 (note 13 *supra*), p. 65.

pollution is not at present considered a problem²⁹). Nevertheless, the Lake Chad Basin Commission has in the course of its work had occasion to deal with matters of environment protection, including water quality control and wildlife conservation³⁰).

The Institutional Framework of Joint Water Management

The mechanism of international cooperation in the Lake Chad Basin can, of course, be fitted into a world-wide "taxonomy" of inter-governmental institutions for joint water management, and thus may be compared to its functional equivalents, e. g., in the Mekong or River Plate Basin³¹). On the other hand, it must also be seen as part of the contemporary movement towards closer economic integration in Africa, with distinct regional objectives and methods of its own³²). While not neces-

²⁹) *Ibid.*, p. 98; but compare G. Fryer, Conservation of the Great Lakes of East Africa: A Lesson and a Warning, Biological Conservation vol. 4 (1972), pp. 256—262; and T. Petr, Lake Volta: A Progress Report, New Scientist vol. 49 (1971), pp. 178—182. On environmental health components of an IBRD irrigation project in the Logone River Basin see J. A. Lee/P. C. Muncie, The World Bank and the World Environment, Journal of Environmental Planning and Pollution Control vol. 1 No. 2 (1973), pp. 4—11, at pp. 8—9.

³⁰) See the report to the 11th meeting of the Commission by F. B. Zenny, Inland Fisheries and Wildlife Regulations, FAO/WS/A3229 (Rome 1970), and note 23 *supra*; cf. note 112 *infra* and generally J. D. Ogundere, The Development of International Environmental Law and Policy in Africa, in: A. E. Utton / D. H. Henning (eds.), Environmental Policy: Concepts and International Implications (New York 1973), pp. 236—251; and V. A. Chichvarin, Okhrana prirody i mezhdunarodnye otnosheniya (Moscow 1970), pp. 130—146. The OAU "Declaration on African Cooperation, Development and Economic Independence" of 28 May 1973 specifically calls on African countries to be "always guided by the principles adopted by the Stockholm Conference on the Human Environment"; see text in International Legal Materials vol. 12 (1973), pp. 996—1013, at p. 1005 (section A. 44). Among the first projects financed by the new UN Environment Programme (UNEP) also is a UNEP/FAO pilot project for the conservation of animal genetic resources (the unique Kuri cattle breed) in the Lake Chad Basin; see UNEP Project Document 0604—73:002 and annexed Memorandum of Understanding between UNEP and FAO (signed in January 1974), which envisages subsequent implementation through the Lake Chad Basin Commission.

³¹) E. g., see Teclaff, *op. cit. supra* (note 2); P. K. Menon, Institutional Mechanisms for the Development of International Water Resources, Revue belge de droit international vol. 8 (1972), pp. 80—100; and the UN Experts Report (*supra* note 3). See also R. E. Stein, The Potential of Regional Organizations in Managing Man's Environment, in: J. L. Hargrove (ed.), Law, Institutions and the Global Environment (Dobbs Ferry/N.Y., Leiden 1972), pp. 253—293, at 280.

³²) E. g., see Wodie, *op. cit. supra* (note 2); M. S. Wionczek (ed.), Economic Cooperation in Latin America, Africa and Asia (Cambridge/Mass. 1969); and L. B. Sohn, Basic Documents of African Regional Organizations, 4 vols. (Dobbs Ferry/N.Y. 1971/72).

sarily compatible, both perspectives are essential for an understanding of its dynamics.

Background of the 1964 Fort Lamy Treaty

Plans for the joint development of water resources in the Lake Chad Basin already dated back to the pre-independence period. Following earlier initiatives by Francis Borrey³³), recommendations to this effect were formulated at a meeting of geologists and hydrologists in Fort Lamy in 1960, and at the 1962 "Inter-African Conference on Hydrology" of the Commission for Technical Cooperation in Africa (CCTA, established in 1950 and subsequently integrated into the Organization of African Unity) in Nairobi³⁴). A meeting of fisheries experts of the four riparian States of Lake Chad was held in March 1962, another CCTA expert meeting in October 1962, and a conference of heads of governments in December 1962 at Fort Lamy; and in November 1963 the government of Chad established a permanent secretariat there to prepare the ground for an inter-governmental Lake Chad Commission³⁵). After a drafting meeting at Maiduguri (Northern Nigeria) in April 1964, a treaty comprising the "Convention and Statute of the Chad Basin Commission" was adopted at a conference of heads of governments on 22 May 1964³⁶).

While the "Convention" mainly deals with matters of diplomatic form and procedure, the "Statute" lays down detailed functions of the Commission, and certain principles of substance, including the basic compromise formula of Article 5 which requires member States to consult with the Commission before undertaking new projects likely to have an appreciable

³³) Then Director of the "PROHUZA" project (Problèmes humains dans les zones arides); see P. Renier, *La mise en valeur commune du bassin Tchadien, Europe — France Outre Mer* No. 412 (1964), p. 56. Cf. H. Schiffers, *Am Tschadsee das »Herz Afrikas« entwickeln*, *Neues Afrika* vol. 6 (1964), pp. 309—312.

³⁴) See I. O. Agoro, *The Establishment of the Chad Basin Commission, International and Comparative Law Quarterly* vol. 15 (1966), p. 542; and C. E. Giscler, *A Hydrological Synthesis of the Chad Basin, Nature and Resources* vol. 3 (1967), p. 9.

³⁵) Giscler, *ibid.*, p. 10, and Renier (who was the first officer of the secretariat) *op. cit. supra* (note 33); see also P. Renier, *Un exemple de coopération inter-africaine: la mise en valeur de la cuvette tchadienne, Europe — France Outre Mer* No. 408 (1964), pp. 48—49.

³⁶) See the Annex *infra*. On the drafting history see Agoro, *op. cit. supra* (note 34) and Wodie, *op. cit. supra* (note 2), pp. 159—160. Although Article 4 of the Convention provides for UN registration, this does not appear to have been done. The text appearing in Nigeria's Treaty in Force 1960—1968 (Lagos 1969), pp. 217—224, differs considerably from the English version as promulgated by Décret No. 64-DF-225 (22 June 1964) in *Journal Officiel de la République Fédérale du Cameroun* No. 18/

effect on the overall water balance or water quality of the basin, except as regards specified categories of existing projects (the so-called "Nigerian proviso")³⁷).

It is useful to view the Fort Lamy Treaty in the light of other related instruments, especially the Niger Basin treaties of 1963 and 1964³⁸) to which all riparian States of Lake Chad are also parties, and which served as models during the Maiduguri drafting meeting to the point of near-verbatim identity of certain provisions³⁹). Some formal correlation can also be shown with the 1921 Barcelona Convention and Statute on the Regime of Navigable Waterways of International Concern⁴⁰). However, these analogies have their limits; while the duty of "prior consultation" in Article 5 of the Fort Lamy Statute may indeed be clarified by the drafting history of the Niger Basin treaties (where an identical term was expressly preferred over the alternative concept of "prior consent" unsuccessfully proposed by the Niger Republic)⁴¹), Article 3 of the Fort Lamy Statute

1964, p. 1002. The French text *ibid.* corresponds to the one reproduced by André, *op. cit. supra* (note 2), pp. 306—309, and by R. Rainiero, Documenti della Organizzazione Africana (Padua 1967), pp. 493—498. The English text reproduced by Sohn, *op. cit. supra* (note 32) vol. 3, pp. 1045—1052, is the Nigerian version.

³⁷) On the drafting background of this article see Agoro, *op. cit. supra* (note 34), p. 544 note 12.

³⁸) Niamey Act of 26 October 1963, and Niamey Agreement of 25 November 1964, United Nations Treaty Series (UNTS) vol. 587, p. 9 (including the textual rectification of 3 January 1968); compare also the (now superseded) Conventions of Bamako (25 July 1963) and Dakkar (7 February 1964) regarding the Senegal Basin (French texts in André, *supra* note 2, pp. 299—305), to which in turn some of the Niger basin States were also parties at the time. See the works cited *supra* notes 2 and 3; cf. M. Schreiber, Accord relatif à la Commission du fleuve Niger et à la navigation et aux transports sur le fleuve Niger, *Annuaire français de droit international* vol. 10 (1964), pp. 813—817; and J. C. Gautron, L'aménagement du bassin du fleuve Sénégal, *ibid.* vol. 13 (1967), pp. 690—702. On subsequent developments see J. S. Mc Nown, The Niger River Basin, *Africa Report* vol. 12 (1967) No. 6, pp. 27—30; J. C. Gautron, Les métamorphoses d'un groupement sous-régional: L'Organisation des Etats riverains du Sénégal, *Année Africaine* (1970), pp. 143—159; R. Bornstein The Organization of Senegal River States, *Journal of Modern African Studies* vol. 10 (1972), pp. 267—283; M. Ould Amar, L'Organisation pour la mise en valeur du fleuve Sénégal, *Journal of African Law* vol. 16 (1972), pp. 299—303.

³⁹) E. g., articles 12, 13, 14, 17 of the Fort Lamy Statute and articles 5 and 6 of the Convention correspond to articles 6, 7, 8, 11, 17, 18 of the Niamey Agreement, and the latter two articles in turn go back to articles 14 and 15 of the Bamako Convention.

⁴⁰) Yakemtchouk, *op. cit. supra* (note 2), pp. 479, 499, 514; see also M. Schreiber, Vers un nouveau régime international du fleuve Niger, *Annuaire français de droit international* vol. 8 (1963), p. 872. — Text of the Barcelona Convention and Statute of 20 April 1921 in League of Nations Treaty Series (LNTS) vol. 7, p. 35.

⁴¹) See Schreiber, *op. cit. supra* (note 40), pp. 874—875.

expressly rejected "internationalization" of navigation in the basin (as guaranteed on the Niger River)⁴²) in favour of exclusive use by riparians only, reflecting a rigid territorial approach consistently advocated by the Republic of Chad⁴³).

Finally, the riparians' simultaneous (and partly overlapping) mutual legal obligations through other international instruments must be kept in mind, including membership in the UN, its specialized agencies and its regional Economic Commission for Africa (ECA), in the Organization of African Unity (OAU), and in certain global treaties such as the 1965 UN Convention on Transit Trade of Land-Locked States (ratified by Chad, Niger and Nigeria, and signed by Cameroon and the Central African Republic)⁴⁴). Only Nigeria formally acceded to the 1921 Barcelona Conventions on Freedom of Transit and on the Regime of Navigable Waterways in 1967⁴⁵). Cameroon and Chad concluded a bilateral protocol regarding the development of the Logone River in 1970, including mutual limitations on seasonal water pumping from the river⁴⁶). Another potentially relevant treaty, because of its provisions on shared water resources (including a duty of consultation pursuant to Article 5 paragraph 2), is the 1968 African Convention on the Conservation of Nature and Natural Resources (ratified by the Central African Republic in 1969)⁴⁷). Pertinent sub-regional

⁴²) See T. O. Elias, *The Berlin Treaty and the River Niger Commission*, *American Journal of International Law* (AJIL) vol. 57 (1963), pp. 873—882; and Schreiber, *op. cit. supra* (note 40). For historical reference cf. A. Pillet, *La liberté de navigation du Niger d'après le traité de Berlin du 26 février 1885*, *Revue générale de droit international public* vol. 3 (1896), pp. 190—223, vol. 5 (1898), pp. 829—844, and vol. 6 (1899), pp. 28—45.

⁴³) On the drafting history of this article see Wodie, *op. cit. supra* (note 2), pp. 160—161: the compromise formula adopted at Fort Lamy does not guarantee mutual freedom of navigation but a mere obligation to facilitate transportation on the lake and its navigable tributaries.

⁴⁴) Of 8 July 1965, UNTS vol. 579, p. 3; see M. I. Glassner, *Access to the Sea for Developing Land-Locked States* (The Hague 1970); and A. H. Tabibi, *The Right of Land-Locked Countries to Free Access to the Sea*, *Osterreichische Zeitschrift für öffentliches Recht* vol. 23 (1972), pp. 117—146. Cf. G. Sautter, *Les liaisons entre le Tchad et la mer: essai d'analyse géographique d'une situation de concurrence dans le domaine des transports*, *Bulletin de l'Association des Géographes Français* (1959), pp. 280—281.

⁴⁵) UN, *Multilateral Treaties in respect of which the Secretary General performs depositary functions: List of signatures, ratifications, accessions, etc. as at 31 December 1971*, ST/LEG/SER.D/5 (1972), pp. 437—439 (3 November 1967, with a reciprocity reservation on the Protocol).

⁴⁶) Article 7, «Protocole d'accord concernant le régime hydraulique du Logone», unpublished (1970, concluded for a period of 15 years).

⁴⁷) Done at Algiers on 16 September 1968; for English text see W. E. Burhenne, *The African Convention for the Conservation of Nature and Natural Resources*, Biolo-

instruments, though including some of the riparian States only, are the Inter-African Committee for Hydraulic Studies (CIEH) founded in 1960 (Chad, Niger)⁴⁸, the Central African Economic Community (UDEAC) founded in 1964 (Cameroon, Chad)⁴⁹, the African and Malgasy Common Organization (OCAM) founded in 1966 (Cameroon, Chad, Niger)⁵⁰, and the West African Economic Community founded in 1967 (Niger, Nigeria)⁵¹.

The Lake Chad Basin Commission and Multilateral Technical Assistance

In November 1964, the Chad Basin Commission (subsequently renamed "Lake Chad Basin Commission") held its inaugural session at Fort Lamy, its permanent headquarters. As provided by the Rules of Procedure then adopted, the Commission has held two regular sessions annually (the 18th

gical Conservation vol. 2 (1970), pp. 105—114; on the drafting background see K. Curry-Lindahl, *The New African Conservation Convention*, *Oryx: Journal of the Fauna Preservation Society* vol. 10 (1969), pp. 116—126; Ogundere, *op. cit. supra* (note 30); and A. Chedal, *La conservation de la nature en Afrique et le droit international de l'environnement* (La Convention d'Alger 1968 et la Conférence de Stockholm 1972), *Verfassung und Recht in Übersee* vol. 6 (1973), pp. 153—171. Ratification by the Central African Republic authorized by CAR Ordinance No. 69—66 of 18 November 1969. Note also the establishment of a Joint Commission between Cameroon and the Central African Republic; ratification of by-laws authorized by CAR Ordinance No. 72—052 of 4 July 1972. See F. B. Zenny, *Ratification of the African Convention on the Conservation of Nature and Natural Resources 1968*, *FAO Report for the 11th Meeting of the Lake Chad Basin Commission*, WS/A3228 (Rome 1970); F. B. Zenny, *Comparative List of Wildlife Species Protected Under the African Convention 1968 and the Legislation of Member Countries of the Chad Basin Commission*, *FAO WS/A4185* (Rome 1970); and cf. notes 23 and 30 *supra*.

⁴⁸ Comité interafricain d'études hydrauliques, with headquarters in Ouagadougou (Upper Volta).

⁴⁹ Union douanière et économique de l'Afrique centrale, done at Brazzaville on 8 December 1964, text in Sohn, *op. cit. supra* (note 32) vol. 2, p. 734; see K. M. Bour, *Industrialization in West Africa: The Need for Sub-Regional Groupings within an Integrated Economic Community*, *Journal of Modern African Studies* vol. 10 (1972), p. 357, at 371. Only Cameroon currently participates; see P. Tchangué, *L'Union douanière et économique de l'Afrique centrale*, *Journal of African Law* vol. 16 (1972), pp. 339—342. On the risk of overlapping with functions of the Lake Chad Basin Commission see P. Robson, *Economic Integration in Africa* (London 1968), p. 242.

⁵⁰ English translation of the Tananarive Charter of 27 June 1966 in *International Legal Materials (ILM)* vol. 6 (1967), p. 53; see A. B. Tall, *L'Organisation commune africaine, malgache et mauricienne*, *Journal of African Law* vol. 16 (1972), pp. 304—309.

⁵¹ Done at Accra on 4 May 1967, text in UNTS vol. 595, p. 287. Both countries also acceded to the Geneva Convention and Protocol Relating to the Simplification of Custom Formalities (of 3 November 1923), LNTS vol. 30, p. 371. Only Niger participates in the more recent Community established by the Bamako Treaty of 3 June 1972; see A.

in December 1973)⁵²). It is serviced by a small permanent secretariat under the direction of an Executive Secretary (usually a Nigerian fluent in both English and French).

The Commission is generally described as an advisory and coordinating body⁵³). Its eight members (two for each member State) are subject to appointment, instructions and dismissal by their governments; decisions must normally be unanimous⁵⁴) (unlike the two-thirds majority rule of the Niger Basin Commission)⁵⁵), thereby giving each State a veto; and they require government approval in order to become effective (contrary to a Nigerian draft proposal to give immediate effect to "common regulations" adopted by the Commission)⁵⁶).

From the outset, however, the Commission also assumed a special supervisory role as a result of the technical assistance arrangements which accompanied (and to some extent conditioned) its establishment⁵⁷). The basis of this multilateral assistance provided through the UN Development Programme (UNDP Special Fund) were two complementary "plans of operation" agreed in 1966 with the riparian States⁵⁸). Following the usual

Tamboura, *La Communauté économique de l'Afrique de l'Ouest*, *Journal of African Law* vol. 16 (1972), pp. 310—338.

⁵²) See the mimeographed Minutes of Sessions (in French and English) issued by the Commission, and the summary of the first eight sessions (from the *Africa Research Bulletin/Economic Series*) in Sohn, *op. cit. supra* (note 32) vol. 3, pp. 995—996. Cf. B. O. Towe, *The Lake Chad Basin Commission*, *Journal of African Law* vol. 16 (1972), pp. 343—344.

⁵³) E.g., see N. Ely / A. Wolman, in: Garretson/Hayton/Olmstead (eds.), *op. cit. supra* (note 3), p. 133; Teclaff, *op. cit. supra* (note 2), p. 178.

⁵⁴) See Article 10 of the Statute (exception: recommendations concerning staff matters, articles 12 and 15).

⁵⁵) See Article 4 of the Niamey Agreement, *supra* note 38.

⁵⁶) See Wodie, *op. cit. supra* (note 2), p. 162 note 9.

⁵⁷) See Agoro, *op. cit. supra* (note 34), pp. 548—549. By insisting on formal establishment of the Commission as a prerequisite for assistance, the UN Development Programme may have played an indirect "treaty-making" role similar to that of the World Bank in the case of the Indus River. See G. Fischer, *La Banque internationale pour la reconstruction et le développement et l'utilisation des eaux du bassin de l'Indus*, *Annuaire français de droit international* vol. 6 (1960), pp. 669—684; R. R. Baxter, *The Indus Basin*, in: Garretson/Hayton/Olmstead (eds.), *op. cit. supra* (note 3), pp. 443—485; and cf. H. R. Kütz, *Further Water Disputes Between India and Pakistan*, *International and Comparative Law Quarterly* vol. 18 (1969), p. 718, at pp. 737—738.

⁵⁸) 19 July 1966 and 11 November 1966; see the UN Experts Report (*supra* note 3), pp. 88—89, for a summary of the agreements. A Memorandum of Understanding signed in November 1973 between the Lake Chad Basin Commission and UNDP settles some controversial procedural issues and confirms the special role of the Commission in the implementation of field projects. Cf. generally J. M. van Wouw, *Formal Aspects of the Technical Assistance Agreements Concluded by the UN Family of Organizations*, in:

division of work with regard to water resources projects within the UN system⁵⁹), UNESCO was designated as executing agency for a hydrological synthesis of the basin⁶⁰), and FAO as executing agency for a "Survey of the water resources of the Chad Basin for development purposes"⁶¹). The Lake Chad Basin Commission was designated as the local counterpart agency for both projects, and was authorized by the member States to act on their behalf within the terms of the UNDP plans of operation. The Executive Secretary of the Commission was furthermore designated as project co-manager, cooperating with the project managers appointed by the two executing agencies.

This unique arrangement in actual practice turned out to give the Commission an important "watchdog" function. Critical review of project progress (justified also by the budgetary contributions to the UNDP projects by the riparian States)⁶²) rapidly became a major agenda item for the semi-annual Commission meetings. While criticism inevitably focused on the performance of the outside technical assistance so reviewed⁶³), it also

K. Zemanek (ed.), *Agreements of International Organizations and the Vienna Convention on the Law of Treaties* (Vienna 1971), pp. 105—126.

⁵⁹) Water resources development has been a subject of considerable controversy and rivalry between the UN Resources and Transport Division on the one hand, and several of the specialized agencies (FAO, UNESCO, WHO, WMO, IAEA) on the other. Attempts at delineating areas of administrative jurisdiction through the Administrative Committee on Coordination (ACC) of the UN Economic and Social Council were only partly successful; see W. R. Sharp, *The United Nations Economic and Social Council* (New York 1969), pp. 134—140. The current basis for inter-agency coordination in this field is a consensus reached at the 16th Session of the ACC Subcommittee on Water Resources at Rome in August 1969, endorsed by the 49th ACC Meeting. The basic policy underlying the "Rome agreement" (*i. e.*, allocation of project responsibility to the organization most concerned with the main end use of a water development project) was questioned again recently, however, at the 3rd Session of the UN/ECOSOC Committee on Natural Resources at New Delhi in February 1973.

⁶⁰) See Gischler, *op. cit. supra* (note 34); UNESCO, *Study of Water Resources in the Chad Basin*, Technical Report (Paris 1969) and Report on the Results of the Project (Paris 1970), summarized in: *Nature and Resources* vol. 6 (1970), No. 2, pp. 6—10.

⁶¹) See the technical reports cited in notes 13, 18 and 25 *supra*; and the FAO Terminal Report on Project Results: Conclusions and Recommendations, WS/D9535 (Rome 1973). The various legal documents prepared in connection with the project are also listed in the 1970 UN Juridical Yearbook, ST/LEG/SER.C/8 (New York 1972), pp. 227—228.

⁶²) Amounting to approximately \$ 100,000 in the case of the UNDP/UNESCO project, and \$ 567,000 in the case of the UNDP/FAO project; see Gischler, *op. cit. supra* (note 34), p. 9, and Yakemtchouk, *Le régime...*, *op. cit. supra* (note 2), p. 509.

⁶³) Severe criticism was expressed against both executing agencies by the Commission, to the point where the Commission "authorized the Executive Secretary to seek the intervention of other international organisations to arbitrate in respect of the unfinished UNESCO Report"; Minutes of the 15th Session (Fort Lamy, June—July 1972), p. viii.

contributed to the newly-found consensus and solidarity among Commission members, which in turn facilitated discussion of more controversial regional problems. In full realization of this catalytic potential of the Lake Chad Basin Commission as a framework for cooperation on a range of subjects sometimes far exceeding the functional scope of water management, the UNDP agreed in 1971 to provide follow-up assistance for the strengthening of the Commission. With a view to eventual financial self-sufficiency after completion of the original UN-assisted pre-development projects, an "Agreement for the Establishment of the Lake Chad Basin Commission Development Fund" was signed by the heads of member governments on 22 October 1972, together with Financial Regulations and an amendment to the Fort Lamy Treaty, empowering the Commission to negotiate external loans⁶⁴).

Specific Aspects of International Water Law

It has been pointed out that watercourses in Africa tend to serve as a pretext for general economic cooperation among riparian States⁶⁵). Confirming this observation, the Lake Chad Basin Commission has indeed dealt with a wide variety of common legal issues, ranging from the harmonization of fisheries and wildlife regulations⁶⁶) to a draft trade agreement on livestock and meat products⁶⁷). Yet the main focus of the Commission's legal work invariably remains the problem of sharing the water resources of the basin.

⁶⁴) For English text see the Annex *infra*; the Commission's Financial Regulations and Staff Regulations are reproduced as Annexes L and M in the Minutes of the 16th Session (Fort Lamy, December 1972). On the background of the Fund Agreement (particularly a Nigerian proposal at the meeting of heads of State of the Lake Chad Basin Commission at Fort Lamy in July 1972) see O. Aluko, Nigeria's Role in Inter-African Relations, African Affairs vol. 72 (1973), p. 145, at p. 152. On current investment projects see Tonwe, *op. cit. supra* (note 52), p. 344; on national development projects of riparian States cf. Banque Centrale des Etats de l'Afrique Equatoriale et du Cameroun, L'exploration du Lac Tchad et la mise en valeur du bassin tchadien, Etudes et Statistiques No. 155 (June—July 1970), pp. 375—381.

⁶⁵) J. M. Bipoun-Woum, Le droit international africain: problèmes généraux, règlement des conflits (Paris 1970), pp. 84—85.

⁶⁶) *Supra* notes 23, 30 and 47. At the request of the Commission, the FAO Legislation Branch also prepared a "Draft Agreement on the Free Movement of Fishermen in Waters of Lake Chad" (1971); cf. the Terminal Report, note 61 *supra*, p. 48.

⁶⁷) Lake Chad Basin Commission, Minutes of the 15th Session (Fort Lamy, June—July 1972), p. 20, and Appendix 0 (Draft Trade Agreement on Cattle, Meat and Agricultural Products Among Members of the Lake Chad Basin Commission).

Water Boundaries

The political basis for international boundary settlement in the Lake Chad Basin was provided by a formal declaration at the Fort Lamy Conference of heads of governments in December 1962, where all riparian States agreed to recognize the existing national boundaries of the lake⁶⁸), and by the subsequent solemn resolution of the Organization of African Unity in July 1964 that its member States undertake to respect the frontiers existing at the time when they became independent⁶⁹). It may be concluded, therefore, that pre-independence agreements between colonial powers continue in effect (regardless of State succession practice in general) to the extent relevant for the determination of boundaries between basin States.

From this principle (sometimes referred to as the *uti possidetis* rule) follows a need for careful documentary research to determine the historical origins and current validity of the water boundaries agreed upon between the then colonial powers in the Lake Chad Basin, *i. e.*, Great Britain, France, and (until 1919) Germany⁷⁰). The relevant sources are the British-German agreements of 1893⁷¹), 1902⁷²) and 1906⁷³), with boundary pro-

⁶⁸) On 21 December 1962; see Agoro, *op. cit. supra* (note 34), p. 542 note 7.

⁶⁹) OAU Resolution AHG/16—1 of 24 July 1964 (with Somalia dissenting). On the background of this resolution see S. Touval, *The Organization of African Unity and African Borders*, International Organization vol. 21 (1967), pp. 102—127; cf. generally I. W. Zartman, *The Politics of Boundaries in North and West Africa*, Journal of Modern African Studies vol. 3 (1965), pp. 155—173; and C. G. Widstrand (ed.), *African Boundary Problems* (Stockholm 1969).

⁷⁰) Most of the treaties listed hereafter are reproduced (English and French texts or translations) and annotated in P. H. Sand, *International Water Boundaries in the Lake Chad Basin*, FAO Working Paper for the Lake Chad Basin Commission, WS/A7022 (Rome 1970); cf. generally E. Hertslet, *The Map of Africa by Treaty*, 3 vols. (3rd ed. 1909, reprint London 1967; hereinafter cited as Hertslet); and S. Bono, *Le frontiere in Africa* (Milan 1972).

⁷¹) Agreement on the Delimitation of Spheres of Influence in the Gulf of Guinea, signed at Berlin on 15 November 1893; Hertslet vol. 3, p. 913; G. F. Martens, *Nouveau recueil général de traités* (Göttingen/Leipzig, hereinafter cited as Martens) vol. 20 (2nd series), p. 276. For a chronological record of British-German boundary delimitations in the Lake Chad Basin see A. von Danckelman, *Grenzfestsetzungen*, in: *Deutsches Kolonial-Lexikon* vol. 1 (H. Schnee ed., Leipzig 1920), pp. 755—756.

⁷²) Agreement Respecting the Boundary from Yola to Lake Chad, signed at London on 12 December 1902; Hertslet vol. 3, p. 930.

⁷³) Agreement Respecting the Boundary from Yola to Lake Chad, signed at London on 19 March 1906, approved by exchange of notes on 16 July 1906; Hertslet vol. 3, p. 937, Martens vol. 2 (3rd series), p. 691.

ocols of 1904⁷⁴) and 1907⁷⁵); the French-German conventions of 1894⁷⁶) and 1908⁷⁷) (the convention of 1911⁷⁸) having been annulled by the 1919 Versailles Treaty⁷⁹); the French-British conventions of 1898⁸⁰) (annulled

⁷⁴) Protocol for the Survey of the Boundary from Yola to Lake Chad, signed at Ullgo, Lake Chad, on 24 February 1904; *Hertslet* vol. 3, p. 933.

⁷⁵) Protocols Defining the Boundaries from Yola to Lake Chad, signed at Kofa on 12 February and 11 March 1907, approved by exchange of notes on 22 February and 5 March 1909; *Martens* vol. 2 (3rd series), p. 700; cf. the note in *Hertslet* vol. 1, p. 86.

⁷⁶) Convention destinée à préciser les frontières entre les Colonies du Cameroun et du Congo français et à établir la ligne de démarcation des zones d'influence respectives des deux pays dans la région du Lac Tchad; signed at Berlin on 15 March 1894 (based on a Protocol signed on 4 February 1894), ratifications exchanged on 10 August 1894; *Hertslet* vol. 2, p. 657, *Martens* vol. 1 (3rd series), p. 603; English translation in *AJIL* vol. 6 (1912) Suppl., p. 95. — Although this convention was superseded by the 1908 Convention (note 77 *infra*), its boundary determination remained relevant because of a cross-reference in the 1898 French-British Convention (note 80 *infra*). For a chronological record of French-German boundary delimitations in the Lake Chad Basin see *von Danckelman*, *loc. cit. supra* (note 71).

⁷⁷) Convention pour préciser les frontières entre le Cameroun et le Congo français; signed at Berlin on 18 April 1908, ratifications exchanged on 28 July 1908; *Hertslet* vol. 3, p. 1215, *Martens* vol. 1 (3rd series), p. 612. — The two joint demarcation expeditions (in December 1908 and July 1909) pursuant to this Convention were superseded by the 1911 Convention (note 78 *infra*).

⁷⁸) Convention relative aux possessions dans l'Afrique Equatoriale; signed at Berlin on 4 November 1911, ratifications exchanged on 12 March 1912; *Martens* vol. 5 (3rd series), p. 651, English translation in *AJIL* vol. 6 (1912) Suppl., p. 4. — This Convention was part of the controversial Morocco arrangements between France and Germany, confirmed by the Bern Declaration of 28 September 1912. The delimitation of the new boundaries, which after several joint demarcation expeditions (from December 1912 to August 1913) was to be finalized at Brussels in 1914, never materialized because of World War I.

⁷⁹) According to Article 125, Germany renounced "all rights under the Conventions and Agreements with France of November 4, 1911, and September 28, 1912, relating to Equatorial Africa". For background see *O. Steiner*, *Agadir-Fall, Strupp-Schlochauer, Wörterbuch* vol. 1 (Berlin 1960), pp. 14—15.

⁸⁰) Convention for the Delimitation of Possessions to the West of the Niger, and of Possessions and Spheres of Influence to the East of that River, signed at London on 14 June 1898, ratifications exchanged on 13 June 1899; *Hertslet* vol. 2, p. 785, *Martens* vol. 29 (2nd series), p. 116, and vol. 30 (2nd series), p. 249. — In an earlier agreement of 5 August 1890, Great Britain had recognized the French zone of influence "to the south of her Mediterranean possessions up to a line from Saya on the Niger, to Barruwa on Lake Chad"; see *G. Hanotaux*, *Fachoda: Le partage de l'Afrique* (Paris 1909), p. 275. Following a protest by Turkey on 30 October 1890, a corrected line of demarcation was laid down in the present Convention and in the subsequent Declaration of 21 March 1899 regarding the Sudan boundary; *Martens* vol. 30 (2nd series), p. 264 (supplemented later by the Paris Convention of 8 September 1919 and the London Protocol of 21 January 1924, *LNTS* vol. 28, p. 461); cf. generally *E. Rouard de la Card*, *Les territoires africains et les conventions franco-anglaises* (Paris 1901); and *P. Gifford/W. R. Louis* (eds.), *France and Britain in Africa* (New Haven 1971).

in 1936⁸¹⁾, 1904⁸²⁾ and 1906⁸³⁾, with the boundary agreement of 1911⁸⁴⁾, and the bilateral declarations of 1919⁸⁵⁾ and 1931⁸⁶⁾.

All these treaties confirm the principle of the lake's territorial division into sectors determined by a combination of astronomical (latitude/longitude) and geographical reference points⁸⁷⁾. As distinct from the condominium theory sometimes advanced with respect to other international lakes (e. g., Lake Constance)⁸⁸⁾, the riparian States' exclusive jurisdiction over their respective sectors was never questioned on Lake Chad, and is effectively enforced in practice by at least one riparian (the Republic of Chad) by means of a military vessel patrolling the sector.

⁸¹⁾ Denunciation by France effective 22 October 1936; see *Hertslet* vol. 2, p. 785.

⁸²⁾ Convention regarding Newfoundland, and West and Central Africa, signed at London on 8 April 1904, ratifications exchanged on 8 December 1904; *Hertslet* vol. 2, p. 816, *Martens* vol. 25 (2nd series), p. 352, *AJIL* vol. 1 (1907) Suppl., p. 9.

⁸³⁾ Convention for the Delimitation of Boundaries East of the Niger, signed at London on 29 May 1906 (based on a Protocol of 9 April 1906), ratifications exchanged on 29 August 1906; *Hertslet* vol. 2, p. 843, *Martens* vol. 35 (2nd series), p. 463.

⁸⁴⁾ Agreement Respecting the Delimitation of the Frontier Between Possessions East of the Niger, signed at London on 19 February 1910, approved by exchange of notes on 17 May and 1 July 1911; *Martens* vol. 7 (3rd series), p. 362, *British and Foreign State Papers* vol. 103, p. 260.

⁸⁵⁾ Declaration Respecting the Frontier Between the Cameroons Mandated Territories, signed at London on 10 July 1919; *Martens* vol. 15 (3rd series), p. 263, *British and Foreign State Papers* vol. 116, p. 820, and vol. 118, p. 887; confirmed by the Council of the League of Nations on 20 July 1922, and referred to in the respective mandate agreements with Great Britain and France regarding Cameroon. On subsequent criticism of the 1919 "Milner-Simon line" and on French-British negotiations for boundary correction see *A. J. Toynbee, Survey of International Affairs 1929* (London 1930), pp. 293—296.

⁸⁶⁾ Exchange of Notes Respecting the Boundary Between the British and French Spheres of the Cameroons Mandated Territory, dated London 9 January 1931; *Martens* vol. 25 (3rd series), p. 478, *British and Foreign State Papers* vol. 134, p. 238; referred to in the Trusteeship Agreement for the territory of the Cameroons under British Administration, approved by the U.N. General Assembly on 13 December 1946, though not in the otherwise similar Trusteeship Agreement for the territory under French administration; *UNTS* vol. 8, pp. 119, 135 (for termination see *UNTS* vol. 348, p. 344, vol. 397, p. 328, and vol. 410, p. 284).

⁸⁷⁾ See *Pondaven, op. cit. supra* (note 2), pp. 92—93, 388—389. The peculiar psychological background of the partition is perhaps best illustrated by *R. Sieger, Staatsgrenzen und Stromgebiete, Deutsche Rundschau für Geographie* vol. 36 (1914), p. 296: »Am Tschadsee treffen drei Mächte wie an einer Meeresküste zusammen und bewachen sich eifersüchtig, obwohl der See der Schifffahrt wenig bieten kann«. Cf. *Hanotaux, op. cit. supra* (note 80), and *A. A. Heggoy, The African Policies of Gabriel Hanotaux 1894—1898* (Athens/Georgia 1972).

⁸⁸⁾ For a critical review of Austrian claims to this effect see *G. Riva, L'exercice des droits de souveraineté sur le lac de Constance, Annuaire suisse de droit international* vol. 24 (1967), pp. 43—66; *O. L. Brintzinger, Hoheitsrechte am Bodensee, Jahrbuch für internationales Recht* vol. 15 (1971), pp. 448—483.

As regards other international watercourses in the basin (the Chari, Logone, Mayo-Kébi rivers and Lake Tabouris shared by Cameroon and Chad; the Komadougou-Yobé river shared by Niger and Nigeria; and the El Beïd-Kalia river shared by Cameroon and Nigeria)⁸⁹⁾, the historical boundaries designated by the colonial agreements follow either the median line⁹⁰⁾ or the *Thalweg*⁹¹⁾. Contrary to a frequent assumption regarding African water treaties⁹²⁾, the treaties show no apparent or consistent preference for either of these methods of boundary designation, although the *Thalweg* may be more suitable in view of frequent natural variations⁹³⁾; e. g., the village of Dabogo (near Diffa in Niger) was originally situated in Nigeria until the Komadougou-Yobé changed its course. So far there have been no serious boundary disputes necessitating recourse to the settlement procedure envisaged by the Fort Lamy Treaty⁹⁴⁾.

Water Allocation

Besides boundary definitions, several of the colonial treaties regarding the Lake Chad Basin contained provisions reciprocally granting to the subjects of the contracting powers equal rights of fishing, navigation and

⁸⁹⁾ See FAO Report No. 1 (note 13 *supra*), p. 94; and Latham, note 99 *infra*, p. 2.

⁹⁰⁾ E. g., the boundary treaties cited in notes 73, 75, 80, 85 and 86 *supra* (with islands usually allocated on the basis of equitable arrangements *ad hoc*).

⁹¹⁾ E. g., the boundary treaties cited in notes 76, 83, 84 *supra*. The treaty cited in note 82 *supra* designates the median line for one part of the boundary, and the *Thalweg* for another (Article VIII); while the treaty cited in note 77 *supra* designates the median line subsidiarily where "the *Thalweg* proper" cannot be determined (Annex/Article 4).

⁹²⁾ See R. Yakemtchouk, *Les frontières africaines*, *Revue générale de droit international public* vol. 74 (1970), pp. 44—45.

⁹³⁾ The treaties cited in notes 80 and 84 *supra* expressly provide for the eventuality of rivers changing their course; cf. the survey of international practice on this subject by O. Gleditsch, *Rivers as International Boundaries*, *Acta Scandinavica Juris Gentium* vol. 22 (1952), pp. 27—30; and L. J. Bouchez, *The Fixing of Boundaries in International Boundary Rivers*, *International and Comparative Law Quarterly* vol. 12 (1963), pp. 789—817, at 799.

⁹⁴⁾ Article VII of the Convention, referring first to the Lake Chad Basin Commission and subsidiarily to the OAU Commission of Mediation, Conciliation and Arbitration; on the latter see Bipoun-Woum, *op. cit. supra* (note 65); J. P. Quéneudec, *La Commission de médiation, conciliation et arbitrage de l'Organisation de l'Unité Africaine*, *Annales Africaines* (1966), pp. 9—48; J. P. Quéneudec, *Remarques sur le règlement des conflits frontaliers en Afrique*, *Revue générale de droit international public* vol. 74 (1970), pp. 69—77; P. Chapal, *Le rôle de l'Organisation de l'Unité Africaine dans le règlement des litiges entre Etats africains*, *Revue algérienne des sciences juridiques, économiques et politiques* vol. 8 (1971), pp. 875—911; B. A. Ndemicael, *Peaceful Settlement Among African States: Roles of the United Nations and the Organization of African Unity*, *UNITAR Study PS/No. 5* (New York 1972); and cf. generally C. B. Bourne, *Meditation, Conciliation and Adjudication in the Settlement of International Drainage Basin Disputes*, *Canadian Yearbook of International Law* vol. 9 (1971), pp. 114—158.

commerce on the lake and its tributaries⁹⁵). However, as these provisions are not covered by the boundary recognitions of 1962 and 1964⁹⁶), their continued validity would depend on the applicable rules of succession to treaties⁹⁷) — a rather doubtful proposition in view of the divergent diplomatic practice of the basin States⁹⁸). Considering also the silence of the colonial treaties on the question of other water uses, there remains a legal vacuum only partly covered by the rather general principles of the 1964 Fort Lamy Treaty.

In response to requests by the Lake Chad Basin Commission, preliminary working papers on the hydrological and legal aspects of international water allocation in the basin were prepared within the framework of the UNDP/FAO technical assistance project⁹⁹), followed by discussions in the Subcommittee on Water and Geology¹⁰⁰), and an annotated draft agreement submitted in 1971¹⁰¹). After discussion and minor amendments by an expert meeting of the riparian States at Niamey (Niger) in April 1972, a "Final Draft Agreement on Water Utilization and Conservation in the Lake Chad Basin" consisting of 22 articles and 10 Technical Annexes was formulated¹⁰²), further discussed at the 15th meeting of the Commission in

⁹⁵) See the treaties cited in notes 73 (Article 10), 76 (Article 3), 77 (Articles 2, 4), 82 (Article 8) and 83 (Article 2) *supra*.

⁹⁶) Notes 68 and 69 *supra*.

⁹⁷) F. J. B e r b e r, *Rivers in International Law* (London 1959), p. 144, rightly points out that it is not possible to extract rules of customary international law from colonial treaties regarding African watercourses; see also Y. Y. B a s k i n, *Koloniyalnyi razdel Afriki i mezhdunarodnopravovoy rezhim yeyo rek*, *Vestnik Leningradskogo Universiteta (Seriya ekonomiki, filosofiy i prava)* No. 17 (1958), pp. 153—161.

⁹⁸) See UN, *Materials on Succession of States*, ST/LEG/SER.B/14 (New York 1967), pp. 119, 145, 153; and D. P. O ' C o n n e l l, *State Succession in Municipal Law and International Law* vol. 2 (Cambridge 1967), pp. 114, 223 for further references.

⁹⁹) E. W. L a t h a m, *Appreciation of Factors Affecting Level of Water in Lake Chad and the Relative Effect of Abstraction of Water for Irrigation*, POL.20/S-1, FAO-UNDP Survey of the Water Resources of the Chad Basin for Development Purposes (Fort Lamy 1970); P. H. S a n d, *International Legal Aspects*, FAO Working Paper for the 11th Meeting of the Lake Chad Basin Commission, WS/A4155 (Rome 1970); corrigendum recorded in the Minutes of the 11th Meeting (Niamey, June 1970) Appendix H, p. 7.

¹⁰⁰) Lake Chad Basin Commission, *Minutes of the 11th Meeting* (Niamey, June 1970), pp. 33—34; *Minutes of the 12th Meeting* (Fort Lamy, January 1971), p. 11.

¹⁰¹) FAO Legal Office, *Agreement on Water Utilization and Conservation in the Lake Chad Basin*, Draft and Commentary prepared for the Lake Chad Basin Commission, WS/B5206 (Rome 1971); the draft is reproduced as Annex I in FAO Report No. 1 (note 13 *supra*), pp. 125—131. See also the recommendations in the Terminal Report (*supra* note 61), p. 47.

¹⁰²) Lake Chad Basin Commission, *Final Draft Agreement on Water Utilization and Conservation in the Lake Chad Basin*, and Annexes, prepared at Niamey by a Committee of Experts (12 April 1972). — In view of the absence of a Nigerian delegation

June–July 1972¹⁰³) and circulated to member governments with additional data as a basis for diplomatic negotiation and possible adoption in 1974.

As compared to the prolific number of known bilateral water treaties¹⁰⁴), few suitable examples of multilateral agreements were found to exist. Apart from the “Helsinki Rules on the Uses of Waters of International Rivers” (recommended by the International Law Association in 1966)¹⁰⁵), the only directly relevant precedent is the “Convention on the Regulation of Water Abstractions from Lake Constance” (concluded between Austria, Switzerland and West Germany in 1966)¹⁰⁶); the latter treaty in particular offered certain analogies insofar as it balanced the unilateral “development interests” of one riparian (Germany) and the “conservation interests” of the other riparians¹⁰⁷). It must be kept in mind, however, that both the economic and the legal problems of water resources development in the Third World are largely *sui generis*¹⁰⁸). At best, therefore, these extraneous sources can provide guidelines rather than model solutions for the specific problems of the Lake Chad Basin.

It soon became apparent that overall water apportionment by volumes or rates of abstraction (besides introducing unnecessary antagonism)¹⁰⁹)

from the Niamey meeting, the draft does not, however, reflect a consensus among all riparians and thus can hardly be considered as “final”.

¹⁰³) Lake Chad Basin Commission, Minutes of the 15th Session (Fort Lamy, June–July 1972), Appendix J, pp. 3–5.

¹⁰⁴) See the UN compilation cited *supra* note 4; cf. Dräger, *op. cit. supra* note 2; J. G. Laylin/B. M. Claggett, The Allocation of Water on International Streams, in: S. C. Smith/E. N. Castle (eds.), Economics and Public Policy in Water Resources Development (Ames/Iowa 1964), pp. 424–454.

¹⁰⁵) International Law Association, Report of the 52nd Conference (Helsinki 1966), p. 455.

¹⁰⁶) Signed at Bern on 30 April 1966, entered into force on 25 November 1967; UNTS vol. 620, p. 199.

¹⁰⁷) See F. Chavaz, L'expérience suisse en matière d'accords internationaux relatifs à l'aménagement des eaux frontalières et la lutte contre leur pollution, in: Organization for Economic Cooperation and Development, Water Management: Basic Issues (Paris 1972), pp. 383–386.

¹⁰⁸) E. g., compare J. F. Hostie, Problems of International Law Concerning Irrigation of Arid Lands, International Affairs (London) vol. 31 (1955), pp. 61–69; and D. S. Thornton, The Development of Water Resources in Low Income Countries, Mediterranean No. 26 (1968), pp. 622–632.

¹⁰⁹) For a pertinent general discussion of “antagonistic vs. non-antagonistic” development policies see A. O. Hirschman, Journeys Toward Progress (New York 1963), pp. 251–256. — Note, however, that Article VII of the Niamey Draft (note 102 *supra*) would not prevent Member States from entering into water apportionment agreements with each other (e. g., in the framework of the Logone Protocol, note 46 *supra*) or with third States, provided (a) the Commission is kept informed and (b) the “safe maximum rates” of water abstraction (note 110 *infra*) are duly observed.

would be impracticable under the circumstances, and that a regime of equitable utilization was preferable, combined with adequate international safeguards against excessive water abstraction or degradation. The draft agreement thus empowers the Lake Chad Basin Commission to set "safe maximum rates" of water abstraction, which may not be exceeded without prior consultation of the Commission¹¹⁰), to take emergency measures (including amendment or suspension of the "safe maximum rates") when the water falls below specified seasonal "safety levels"¹¹¹), and to set common water pollution standards and regulations¹¹²). Unlike the Lake Constance Convention¹¹³), the draft agreement gives a certain measure of legal protection to water appropriation rights for existing reasonable uses, subject to review by the Commission¹¹⁴). It specifies the duty of prior information and consultation for all major projects involving surface water

¹¹⁰) Niamey Draft (note 102 *supra*) Article VIII: "(1) No Member State shall carry out or permit to be carried out on its territory, unilaterally or jointly with one or more other States, any scheme or project for water abstraction or diversion in excess of the applicable 'safe maximum rates' as determined in Technical Annex No. 3 attached hereto, unless the Commission has given its prior approval.

(2) The preceding provision shall equally apply to any scheme or project for water abstraction or diversion in excess of the applicable 'minimum rates' as determined in Technical Annex No. 2 attached hereto, where such abstraction or diversion would result in utilization of the water outside the Basin".

¹¹¹) *Ibid.*, Article IX: "(1) The Commission shall set seasonal 'safety levels', the measurement of which is to be determined in Technical Annex No. 4 attached hereto.

(2) When the water falls below the seasonal 'safety levels' so determined, the Commission shall amend or suspend the applicable 'safe maximum rates' or 'minimum rates', or take other emergency measures as specified in Technical Annex No. 5 attached hereto".

¹¹²) *Ibid.*, Article XI: "The Commission shall set common water pollution regulations and standards in Technical Annex No. 6 attached hereto, including requirements for Member States to report, restrict or prohibit all pollutions which are likely to have a serious harmful effect on water utilization in one or more of the other Member States". Cf. note 29 *supra*; the principle of protecting the "sanitary conditions of the waters" of the Lake Chad Basin is already expressed in Article V of the Fort Lamy Statute (see Annex *infra*); suitable examples of international regulation for this purpose are the Steadborn Convention of 27 October 1960 on the Protection of the Lake of Constance Against Pollution (UN collection cited *supra* note 4, p. 438) and the Ottawa Agreement of 15 April 1972 on Great Lakes Water Quality, ILM vol. 11 (1972), p. 694.

¹¹³) Note 106 *supra*, Article 3 paragraph 2 (and Final Protocol), rejecting claims based on the mere fact of prior water abstraction; for a different approach (express preservation of prior rights of water abstraction) see, e. g., Article 9 of the Kathmandu Agreement of 4 December 1959 between Nepal and India (UN collection cited *supra* note 4, p. 298).

¹¹⁴) Articles IV and V of the Niamey Draft (note 102 *supra*; amending the FAO Draft, note 101 *supra*) are based on the principle of "equitable utilization" formulated in the Helsinki Rules (note 105 *supra*, particularly Articles VII and VIII). A Nigerian proposal to provide for compensation in case of restrictions imposed by the Commission was not accepted by the other delegations; Minutes of the 15th Session, cited *supra* note 103, p. 3.

abstraction or diversion ¹¹⁵) (reserving the right of the Commission to extend its control to groundwater uses that are likely to have serious trans-frontier effects) ¹¹⁶), as well as procedures for objections and dispute settlement ¹¹⁷). The Commission is empowered to verify compliance through specified means of data collection, including regular measurement and inspection procedures ¹¹⁸).

Finally, rather than attempting to "legislate" on technical matters where flexibility is essential, the draft agreement delegates certain rule-making

¹¹⁵) Niamey Draft, Article VI: "Each Member State shall in due course inform the Commission of all schemes or projects for water abstraction or diversion in excess of the applicable 'minimum rates' as determined in Technical Annex No. 2 attached hereto, in pursuance of Article V of the Fort Lamy Statute and of Rule 9 of the Commission's Rules of Procedure". See note 41 *supra*; cf. Article 5 paragraph 2 of the Algiers Convention (note 47 *supra*), and generally C. B. Bourne, Procedure in the Development of International Drainage Basins: The Duty to Consult and Negotiate, Canadian Yearbook of International Law vol. 10 (1972), pp. 212—234; and UN General Assembly Resolution 2995 (XXVII) of 15 December 1972; see L. B. Sohn, The Stockholm Declaration on the Human Environment, Harvard International Law Journal vol. 14 (1973), p. 423, at 496—502. On the "objections" procedure of the Niamey Draft see note 117 *infra*; as regards a related amendment of Rule 9 of the Rules of Procedure, see Lake Chad Basin Commission, Minutes of the 11th Meeting (Niamey, June 1970), p. 35.

¹¹⁶) Niamey Draft, Article II paragraph 2; cf. note 18 *supra*. A further reference to "atmospheric water resources" was deleted at the 15th Session of the Commission (Minutes cited *supra* note 103, p. 3). In view of the growing importance of weather modification (cloud seeding) techniques, and of their interrelation with water management, this may be regretted; e. g., see the recent study by the Comité Interafricain d'Etudes Hydrauliques (CIEH, note 48 *supra*), Etude des possibilités de production de pluie provoquée en Afrique Tropicale (Ouagadougou 1972); and cf. P. H. Sand, Atmospheric Water Resources for Agriculture: Law and Policy of Weather Control Operations, FAO Paper for the UN Panel of Experts on Water Resources Development Policies, WS/A3083 (Rome 1970); R. F. and H. J. Taubenfeld, Some International Implications of Weather Modification Activities, International Organization vol. 23 (1969), pp. 808—833.

¹¹⁷) Niamey Draft, Articles X and XX, further elaborating the procedure provided in Article VII of the Fort Lamy Convention (note 94 *supra*). See also Art. XII of the Niamey Draft (which corresponds to Articles 4 and 5 of the Bern Convention, note 106 *supra*): "(1) Where as a result of water abstraction, diversion or other utilization, including pollutions within the meaning of the preceding Article, a Member State suffers damage which is subject to compensation under international law, the aggrieved Member State shall notify the Commission of such damage, and the Member States concerned shall endeavour to reach agreement on its evaluation, compensation and future prevention. (2) Where damage occurs as a cumulative effect of water utilization by several Member States, these Member States shall share in the compensatory and preventive measures in proportion to their respective amounts of utilization which caused the damage. (3) Where no agreement has been reached within six months after the Commission was notified of the damage, Article X (3) and (4) of the present Agreement shall apply accordingly". According to a Nigerian proposal at the 15th Session of the Commission (Minutes cited *supra* note 103, p. 4), evaluation of the damage should always be entrusted to the Commission.

¹¹⁸) Niamey Draft, Article XIII, and Technical Annexes 7 to 9.

and standard-setting functions through a system of Technical Annexes¹¹⁹⁾ to be revised and supplemented directly by the Commission, assisted by a committee of experts, and without having to undergo the cumbersome formal process of diplomatic negotiation and ratification¹²⁰⁾. Paradoxically, then, the best measure of successful legal drafting for an international water treaty may be the extent to which the treaty will eventually make diplomats and lawyers expendable.

Annex

Convention and Statute relating to the Development of the Chad Basin

Signed at Fort Lamy, Chad, 22 May 1964¹⁾

The Federal Republic of Cameroon, the Republic of Chad, the Republic of Niger and the Federal Republic of Nigeria,

Having noted the Charter of the United Nations Organisation of 26th June, 1945;

Having noted the resolution of the Economic and Social Council of the United Nations Organisation relating to international co-operation in the regulation and use of waters, especially No. 417 (XIV) of 2nd January, 1952, 533 (XVIII) of 2nd August, 1954, 599 (XXXI) of 3rd May, 1956 and 675 (XXXV) of 2nd May, 1958;

Having noted the Charter of the Organisation of African Unity of 25th May, 1963;

Recognising the need to formulate principles for the utilisation of the resources of the Chad Basin for economic purposes, including the harnessing of the water;

Considering that Member States of the Organisation of African Unity have resolved to co-ordinate and intensify their co-operation and efforts to achieve a better life for the people of Africa;

Considering that since schemes drawn up by the respective Member States for the utilisation of the water in the Chad Basin are liable to affect the regime of

¹¹⁹⁾ According to Article XIX of the Niamey Draft, amendments or supplements of the Technical Annexes shall come into force 90 days after their unanimous adoption by the Commission.

¹²⁰⁾ Cf. Article 24 paragraph 3 of the Algiers Convention (note 47 *supra*); on further precedents and analogues see P. C o n t i n i / P. H. S a n d, *Methods to Expedite Environment Protection: International Ecostandards*, AJIL vol. 66 (1972), pp. 37—59.

¹⁾ Text from Nigeria, Federal Ministry of Justice, *Nigeria's Treaties in Force, 1960—1968* (Lagos, 1919), pp. 217—24.

the Basin and thereby its exploitation by the other Member States, it is desirable to create a commission to prepare general regulations, to ensure their effective application, to co-ordinate the research activities of Member States, to study projects prepared by Member States, to recommend plans for the execution of surveys and works in the Chad Basin, and, in general, to maintain liaison between the Member States;

Resolved to conclude a Convention for the purpose of achieving the foregoing objectives;

Have agreed as follows:

Article 1: The Present Convention hereby establishes a CHAD BASIN COMMISSION, hereinafter referred to as "the Commission".

Article 2: The annexed Statute shall be an integral part of this Convention.

Article 3: 1. This Convention shall be subject to ratification by the Member States.

2. The instruments of ratification shall be deposited with the Government of Chad which shall notify the other Member States of such deposit.

3. This Convention shall enter into force immediately upon receipt by the Government of Chad of the last instrument of ratification.

Article 4: This Convention shall, after due ratification, be deposited by the Government of Chad with the Secretariat of the Organisation of African Unity and registered with the Secretariat of the United Nations Organisation.

Article 5: The present Convention may be denounced by any one of the Member States after a lapse of ten years from the date of its coming into effect. Denunciation shall take the form of a written notice addressed to the Executive Secretary of the Commission who shall acknowledge its receipt. It shall take effect one year from the date of the acknowledgement of its receipt, if not withdrawn earlier. In the absence of agreement to the contrary, it shall not affect obligations relating to any programme of surveys and works agreed to before such denunciation.

Article 6: The Convention and the annexed Statute may be amended upon the request of at least two of the Member States giving written notice to that effect to the Executive Secretary of the Commission. Any such proposed amendment shall be approved by the Member States, and shall take effect six months from the date of its adoption.

Article 7: Any dispute concerning the interpretation or application of this Convention which cannot be resolved by the Commission, shall be referred to the Commission of Mediation, Conciliation and Arbitration of the Organisation of African Unity, for determination.

Article 8: 1. The English and French texts of the present Convention shall be equally authentic.

2. The working languages of the Commission shall be if possible African languages, English and French.

In Faith Whereof, We, the Heads of States and Governments bordering the Lake Chad Basin, have signed this Convention.

Done at Fort-Lamy this 22nd day of May, 1964.

The Federal Republic of Cameroun

Ahmadou Ahidjo

The Republic of Chad

Francis Tombalbaye

The Republic of Niger

Hamani Diori

The Federal Republic of Nigeria

Abubakar Tafawa Balewa

STATUTE

Chapter I: Principles and Definitions

Article 1: The Member States solemnly declare their desire to intensify their co-operation and efforts in the development of the Chad Basin as defined in Article II.

Article 2: For the purpose of this Convention the Chad Basin shall comprise the area as demarcated on the map annexed to the present Convention.

Article 3: The Chad Basin is open to the use of all Member States parties to the present Convention, without prejudice to the sovereign rights of each, as stipulated in the present Statute, revision thereof, or subsequent regulations thereunder or by special agreement.

Article 4: The development of the said Basin and in particular the utilisation of surface and ground waters shall be given its widest connotation, and refers in particular to domestic, industrial and agricultural development, the collection of the products of its fauna and flora.

Chapter II: Domestic, Industrial and Agricultural Utilisation

Article 5: The Member States undertake to abstain from taking, without prior consultation with the Commission, any measure likely to have an appreciable effect either on the extent of the loss of water or on the nature of the yearly hydrogramme and limnigramme and certain other features of the Basin, the conditions subject to which other riparian States may utilise the water in the Basin, the sanitary conditions of the waters or the biological characteristics of its fauna and flora.

In particular, the Member States undertake to abstain from carrying out on the portion of the Basin subject to their respective jurisdiction any hydraulic works or soil scheme likely to have an appreciable effect on the flow of surface and subterranean water in the Basin without adequate notice to and prior consultation with the Commission.

Provided, however, that the Member State shall be at liberty to continue to implement existing schemes and projects or those that are likely to be started within the period of three years after signing this Convention. Provided further

that such schemes and projects will not have adverse effect on the regime of the Chad Basin.

Article 6: In order to achieve maximum co-operation in connection with the provisions of Article V, the Member States undertake to inform the Commission, at the earliest stage, of all studies and projects upon which they propose to embark.

Chapter III: Navigation

Article 7: The Member States shall establish common rules for the purpose of facilitating navigation on the lake and on the navigable waters in the Basin and to ensure the safety and control of navigation.

Chapter IV: The Chad Basin Commission

Article 8: 1. The Chad Basin Commission shall consist of eight Commissioners, two from each Member State.

2. The Commission shall meet at least once a year at its headquarters to be located at Fort-Lamy or at any other convenient place.

3. Any two Member States may request a Special Session of the Commission by addressing a joint letter to the Executive Secretary of the Commission.

Article 9: The Commission shall have the following functions, *inter alia*:

(a) to prepare general regulations which will permit the full application of the principles set forth in the present Convention and its annexed Statute, and to ensure their effective application;

(b) to collect, evaluate and disseminate information on proposals made by Member States and to recommend plans for common projects and joint research programmes in the Chad Basin;

(c) to maintain liaison between the Member States to ensure the most efficient use of the water of the Basin;

(d) to follow the progress of the execution of surveys and works in the Chad Basin as envisaged in the present Convention, and to keep the Member States informed at least once a year thereon, through systematic and periodic reports which each State shall submit to it;

(e) to draw up common Rules regarding navigation and transport;

(f) to draw up Staff Regulations and to ensure their application;

(g) to examine complaints and to promote the settlement of disputes and the resolution of differences;

(h) generally, to supervise the implementation of the provisions of the present Statute and the Convention to which it is annexed.

Article 10: 1. The Commission shall establish its own Rules of Procedure.

2. There shall be a representative from each State before a quorum could be constituted.

3. The decisions of the Commission shall be by unanimous vote.

Article 11: The common Regulations and the recommendations of the Commission shall be transmitted to the Governments of Member States for decision.

Article 12: 1. The Commission shall, by a majority vote, recommend to the Heads of States and Governments, a candidate for appointment to the office of Executive Secretary from among the candidates proposed by the Member States.

2. Each Member State shall be entitled to nominate a candidate for the office of Executive Secretary.

3. The Executive Secretary shall hold office for three years and shall be eligible for re-appointment. The conditions of his service shall be defined in the Staff Regulations.

Article 13: The Executive Secretary shall be assisted in his duties by such staff as the Commission shall determine.

Article 14: The Executive Secretary shall be in charge of the staff. He shall exercise such powers and perform such duties as may be determined by the Commission. He shall be responsible to the Commission.

Article 15: The Commission may, by a majority vote, recommend to the Heads of States and Governments that the Executive Secretary should be removed from office. If the recommendation is approved by the Heads of States and Governments, the Executive Secretary shall be removed from office accordingly.

Article 16: 1. The Commission shall establish a Budget at its first meeting which shall be submitted to Member States for approval.

2. The Member States shall make equal contributions towards the regular budgets of the Commission. All the extraordinary expenditures shall be financed by, and after agreement by, the interested States.

Article 17: 1. The Commission shall have for all purposes the status of an international organisation.

2. The Commissioners and the Executive Secretary shall be accorded diplomatic privileges and immunities by the Member States. The other staff of the Commission shall be accorded such privileges and immunities as are accorded to officials of the Organisation of African Unity of equivalent status.

Agreement Establishing the Lake Chad Basin Commission Development Fund

[Yaoundé, October 22nd, 1972]

Preamble: The Governments of the United Republic of Cameroon, the Republic of Chad, the Republic of Niger, and the Federal Republic of Nigeria,

in pursuance of the objectives of the Convention and Statute of 22nd May, 1964, establishing the Lake Chad Basin Commission:

Noting with satisfaction the orientation of the Commission's activities towards concrete development projects;

Recognising the need to provide, as much as possible, from their own resources, the means of financing the Commission's development projects;

Determined to reinforce and increase economic cooperation among their countries for the common benefit of their peoples; have agreed as follows:

Article I: Definitions: For the purposes of this Agreement:

- (1) The term "Commission" shall mean the Lake Chad Basin Commission.
- (2) The term "Convention" shall mean the Convention relating to the development of the Lake Chad Basin of 22nd May, 1964.
- (3) The term "Statute" shall mean the Statute relating to the development of the Lake Chad Basin of 22nd May, 1964.
- (4) The term "Rules of Procedure" shall mean the Rules of Procedure of the Lake Chad Basin Commission.
- (5) The term "Development Fund" shall mean the Development Fund of the Lake Chad Basin Commission.
- (6) The term "Member States" shall mean the members of the Lake Chad Basin Commission who are automatically Parties to this Agreement.
- (7) The term "National Budget" shall mean the total budget of Member States.
- (8) The term "Unit of Account" shall mean the equivalent of 0.81851265 gramme of fine gold (approximately US \$ 1).

Article II: The Member States signatories to this Agreement hereby establish a Development Fund to be known as the Lake Chad Basin Commission Development Fund.

Article III: Each Member State shall contribute annually to the Development Fund 1/1000th of its national annual budget.

(2) Each Member State may limit its annual contribution to 750,000 units of account, if its contribution for the year, calculated on the basis of 1/1000th of its national annual budget exceeds that amount.

(3) Any Member State whose contribution, calculated on the basis of 1/1000th of its national budget is less than 30,000 units of account, shall pay a minimum contribution of 30,000 units of account.

(4) At the request of the Executive Secretary, the ceiling and floor of the contribution shall be reviewed by the Commission as often as necessary in order to provide for normal rise in costs of equipments and services.

(5) Contributions to the Development Fund shall be made in convertible currencies which shall be converted into the Commission's unit of account, which shall be equivalent to 0.81851265 gramme of fine gold.

(6) Each Member State shall release its contribution to the Commission immediately after its national budget has been voted.

(7) The Executive Secretary shall continue his efforts to obtain loans and grants from other sources for the execution of projects of the Commission.

Article IV: Disbursements from the Development Fund shall be made, according to the Commission's Financial Regulations, exclusively for:

- (a) the planning, implementation and maintenance of specific development projects deemed important and approved by the Commission;

- (b) the settlement of obligations such as the repayment of loans contracted by the Commission or the payment of interest thereon; and
- (c) meeting other financial obligations which the Commission deems necessary for the achievement of the aims for which the Fund is established.

Article V: The resources of the Fund which are not immediately needed for projects may, with the approval of the Commission, be deposited with banking institutions which offer the best advantages. Any interest accruing from such investments shall be credited to the Development Fund.

Article VI: Any Member State who wishes to withdraw from the present Agreement shall do so in accordance with the provisions of Article V of the Convention.

Article VII: Any Member State may propose an amendment to this Agreement. Such an amendment shall take effect upon the unanimous approval of Member States.

Article VIII: Any dispute concerning the interpretation or application of this Agreement which cannot be resolved by the Commission, shall be referred by any of the Contracting Parties to the Commission of Mediation, Conciliation and Arbitration of the Organisation of African Unity, for determination. The Executive Secretary of the Commission shall be informed of any such action by the Contracting Parties.

Article IX: (1) This Agreement shall be subject to ratification by Member States.

(2) The Instruments of Ratification shall be deposited with the Government of the Republic of Chad which shall notify the other Member States of such deposit.

(3) This Agreement shall enter into force immediately upon the receipt by the Government of the Republic of Chad of the last Instrument of Ratification.

Article X: This Agreement shall, after due ratification, be deposited by the Government of the Republic of Chad with the Secretariat of the Organisation of African Unity and registered with the Secretariat of the United Nations Organisation.

Done at Yaoundé on the 22nd of October 1972 in four originals each in the English and French languages, both texts being equally authentic.

In Faith Whereof, We, the Heads of States and Governments, bordering the Lake Chad Basin, have signed this Agreement.

H. E. El Hadj Ahmadou Ahidjo
President of the United
Republic of Cameroon

H. E. Mr. François Tombalbaye
President of the Republic
of Chad

H. E. El Hadj Diori Hamani
President of the Republic
of Niger

H. E. General Yakubu Gowon
Head of the Federal Military
Government of Nigeria