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Transboundary Water Law in Africa: Development, Nature, and Geography

ABSTRACT

This article documents and analyzes the largest collection of transboundary water agreements related to Africa. Collection contents are categorized to provide insights into the evolution and geography of transboundary water law in Africa, and – when possible – to situate that law within a global context. The findings reveal that both historic and geographic factors have influenced African agreements. Historically, there is a trend toward increasing robustness generally consistent with global trends. Geographically, agreements vary by the degree and type of water scarcity in associated basins. The findings help answer questions related to current transboundary water management in Africa and provide guidance for future institutional development.

INTRODUCTION

Africa is a land of transboundary waters.¹ With the exception of island states, every African country has territory in at least one transboundary river basin and transboundary basins cover 62 percent of Africa's total land area.² Because of the transboundary nature of most of

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1. As in similar studies, we acknowledge differences in meaning of the term "transboundary." Here we follow the definition provided in U.N. Educ., Scientific & Cultural Org. (UNESCO), World Water Assessment Programme, *The U.N. Water Development Report: Water for People, Water for Life*, at 300, U.N. Doc. FAOCV/18/61 FAO/LOWA/Legislative Study 61 (2003), which classifies transboundary waters simply as those waters that cross national boundaries.

2. U.N. Econ. Comm. for Africa (UNECA), *Transboundary River/Lake Basin Water Development in Africa: Prospects, Problems, and Achievements*, at 2, Map 1 (Dec. 2000), available at http://www.uneca.org/publications/RCID/Transboundary_v2.pdf (last visited Jan. 18, 2006) [hereinafter UNECA] (allowing one to visually determine that the boundaries of all of continental Africa's countries are crossed by at least one transboundary watershed); Aaron T. Wolf et al., *International River Basins of the World*, 15 INT'L JOURNAL WATER RESOURCES DEV. 4, tbls. 2, 5 (1999), available at <http://www.transboundarywaters.orst.edu/>

the continent's waters, most African water management is also, by definition, transboundary water management. The importance of transboundary waters and transboundary water management institutions to Africa has not gone unnoticed. A number of studies have analyzed general issues in African transboundary water management³ while others have examined transboundary institutions in particular basins⁴ or geographic regions.⁵

Absent from past research, however, is a comprehensive and systematic analysis of the development, nature, and extent of transboundary water law in Africa. This knowledge gap severely limits the ability of current and future decision makers to employ a vital tool for developing and improving African transboundary water law in the future—an understanding of its past. One major obstacle to developing such an understanding has been the lack of a complete or near complete collection of African transboundary water law.

This work aims to partially remedy that shortfall through the documentation and analysis of a newly assembled collection of African transboundary water agreements.⁶ The collection, believed to be the largest and most comprehensive in existence, significantly increases the known volume of African transboundary water law and includes more than 150 agreements, treaties, protocols, and amendments⁷ spanning over 140 years and involving more than 20 African basins.⁸ These

publications/register/ (showing on Map 2 that transboundary basins cover 62 percent of Africa's total land area, and on Map 5 that every continental African country contains a portion of a transboundary basin).

3. See Robert Rangeley et al., World Bank Technical Paper No. 250, *International River Basin Organizations in Sub-Saharan Africa* (1994); Rafik Hirji & David Grey, *Managing International Waters in Africa: Process and Progress*, in INTERNATIONAL WATERCOURSES: ENHANCING COOPERATION AND MANAGING CONFLICT (Salman M.A. Salman & Laurence Boisson de Chazournes eds., 1998); UNECA, *supra* note 2; CLAUDIA W. SADOFF ET AL., *AFRICA'S INTERNATIONAL RIVERS: AN ECONOMIC PERSPECTIVE* (2002).

4. Most prominently the Nile.

5. See Dante Caponera et al., Food & Agric. Org. of the U.N. (FAO), *Water Law in Selected African Countries*, FAO Legislative Study No. 17 (1979); BONAYA GODANA, *AFRICA'S SHARED WATER RESOURCES: LEGAL AND INSTITUTIONAL ASPECTS OF THE NILE, NIGER, AND SENEGAL RIVER SYSTEMS* (1985); Tiyanjani Maluwa, *Legal Aspects of the Niger River Under the Niamey Treaties*, 28 NAT. RESOURCES J. 671 (1988); Sam L. Laki, *Management of the Water Resources of the Nile Basin*, 5 INT'L JOURNAL OF SUSTAINABLE DEV. & WORLD ECOLOGY 288 (1998); INTERNATIONAL WATERS IN SOUTHERN AFRICA (Mikayasu Nakayama ed., 2003).

6. A searchable web version of the collection is available online at The African Transboundary Water Law Page, <http://www.africanwaterlaw.org/> (last visited Nov. 21, 2005).

7. While the authors are aware that distinctions in definition may exist between the words "treaty" and "agreement," the two words are nevertheless used interchangeably in this article.

8. Agreements also exist concerning transboundary aquifers in the Sahara.

agreements are analyzed and their contents categorized in order to provide insights into the evolution and geography of transboundary water law in Africa and—when possible—to situate African transboundary water law within a global context. The findings reveal both historic and geographic influences in African treaty content and structure. Historically, agreements tend to follow a path toward increasing robustness generally consistent with global trends. Geographically, agreement content tends to be a function of regional water availability relative to demand, as well as the existence within a basin of a hegemonic state. These findings have clear implications for the future development of both basin-specific law and generalized legal principles.

DOCUMENT COLLECTION AND ANALYTICAL FRAMEWORK

The fundamental problem in analyzing transboundary water law in Africa (and elsewhere) is the lack of a comprehensive compilation of relevant agreements, treaties, protocols, and amendments. The largest published collection relating to African waters includes 41 documents and was produced by the Food and Agriculture Organization,⁹ based largely on earlier work of the United Nations.¹⁰ An expanded online collection of agreements has been made available through the Transboundary Freshwater Dispute Database (TFDD) project.¹¹ The TFDD contains most of the treaties in the Food and Agriculture Organization of the United Nations (FAO) collection and more than 30 other agreements.

To determine if additional agreements were in existence, a systematic search of available literature,¹² published general treaty collections,¹³ and online collections of international environmental law¹⁴

9. Food & Agric. Org. of the U.N. (FAO), *Treaties Concerning the Non-Navigational Uses of International Watercourses – Africa*, FAO Legislative Study No. 61 (1997).

10. U.N. DEP'T OF TECHNICAL CO-OPERATION FOR DEV., *TREATIES CONCERNING THE UTILIZATION OF INT'L WATER COURSES FOR OTHER PURPOSES THAN NAVIGATION – AFRICA*, U.N. Doc. ST/ESA/141, U.N. Sales No. E/F.84.II.A.7 (1984) [hereinafter *TREATIES FOR OTHER PURPOSES THAN NAVIGATION*].

11. Transboundary Freshwater Dispute Database, <http://www.transboundarywaters.orst.edu> (last visited Nov. 21, 2005).

12. See, e.g., SIR EDWARD HERTSLET, *THE MAP OF AFRICA BY TREATY (1909); TREATIES FOR OTHER PURPOSES THAN NAVIGATION*, *supra* note 10; *BASIC DOCUMENTS OF AFRICAN REGIONAL ORGANIZATIONS* (Louis B. Sohn ed., 1971); *The Sharing of Water Resources in River Basins in Africa*, FOREIGN POLICY DOCUMENTS NO. 4 (Great Britain 1978).

13. United Nations Treaty Collection, <http://untreaty.un.org/English/access.asp> (last visited Jan. 18, 2006).

was undertaken, along with interviews with key individuals.¹⁵ Only agreements concerning “water as a scarce or consumable resource, a quantity to be managed, or an ecosystem to be improved or maintained”¹⁶ were included, while those dealing “only with boundaries, navigation or fishing rights”¹⁷ were excluded. This process uncovered more than 80 additional agreements relating to transboundary waters in Africa, bringing the total to over 150.

However, application of these criteria to the FAO and TFDD collections resulted in the exclusion of five of their agreements.¹⁸ Four of these agreements were signed during Africa’s colonial period and discuss water not as a resource in-and-of itself but rather as a means of transportation or source of fisheries. One agreement was signed between South Africa and an “independent” homeland not recognized as sovereign by the United Nations. Despite this small reduction in the initial number of treaties, the known body of African transboundary water law now includes some 153 agreements, expanding the known volume of global transboundary water agreements by approximately 20 percent.¹⁹

While additional agreements are almost certainly missing, we believe the collection assembled is by far the most complete in existence. Even so, it is important to note that only secondary synopses were located for 23 of the documents while no references to the contents of an additional 16 agreements were found,²⁰ leaving 114 agreements for textual analysis. A list of the entire set of agreements identified, including citations and sources, is included as an appendix.

To develop an understanding of the individual agreements, the text (or synopsis) of each document in the collection was examined for

14. International Environmental Agreements (IEA) Database, <http://www.uoregon.edu/~iea/database/index.php> (last visited Jan. 18, 2006); Faolex, <http://faolex.fao.org/faolex/> (last visited Jan. 18, 2006).

15. In particular, Tony Turton of African Water Issues Research Unit (AWIRU).

16. Transboundary Freshwater Dispute Database, International Freshwater Treaties Database, at <http://www.transboundarywaters.orst.edu/projects/internationalDB.html>.

17. Aaron T. Wolf, *The Transboundary Freshwater Dispute Database Project*, 24 WATER INT’L 160 (1999).

18. See app., agreement nos. 2, 5, 7, 65, 133. Hereafter, all agreements mentioned are referred to by their appendix numbers. Full citations, where possible, are given in the appendix.

19. Based on the TFDD, which currently includes some 400 citations and is thought to be the largest single collection of transboundary water agreements meeting the criteria applied here.

20. While the titles or references of the “missing” documents strongly suggest that they meet the criteria for the collection, it is possible that some of these agreements should in fact be excluded.

both basic content and the inclusion of components deemed important in previous studies of transboundary environmental law.²¹ In terms of basic content, analysis focused on such factors as the basin(s) involved, year of signature, signatory status (e.g., colonial powers or independent states), and the goal of the treaty. With regard to specific treaty components, documents were examined for the inclusion of water allocation criteria, use or creation of formal management institutions, consideration of groundwater and water quality, inclusion of amendment and conflict resolution mechanisms, reference to equity, and provision for information exchange.

While no system of analysis is likely to lead to unassailable categorizations of something so complicated and diverse as transboundary water law, even if limited to a single continent, our results combined with contextual knowledge suggested a division of transboundary water law in Africa into three periods for discussion: The Colonial Period (1862–1958), The Early Independence Period (1959–1989), and The Late Independence Period (1990–2004).

PHASE I: THE COLONIAL PERIOD, 1862–1958

Colonialism in many ways defines the early history of transboundary water law in Africa. In a general sense, it was only with the advent of colonialism in the latter half of the nineteenth century that the nation-state concept was widely introduced in (or imposed on) Africa and strict national boundaries were drawn that, as a byproduct, created transboundary waters. The particular manifestations of colonial geography determined the specific internationalization of Africa's waters. For example, the Niger basin was made transboundary in the early colonial period because it was shared by both French and British colonies.²² In contrast, the Senegal basin, entirely within the realm of

21. See Jesse H. Hamner & Aaron T. Wolf, *Patterns in International Water Resource Treaties: The Transboundary Freshwater Dispute Database*, 1997 YEARBOOK, COLO. J. INT'L ENVTL. L. & POL'Y 157; KEN CONCA ET AL., THE HARRISON PROGRAM ON THE FUTURE GLOBAL AGENDA, IS THERE A GLOBAL RIVERS REGIME? TRENDS IN THE PRINCIPLED CONTENT OF INTERNATIONAL RIVER AGREEMENTS (University of Maryland 2003); Kyoko Matsumoto, *Transboundary Groundwater and International Law: Past Practices and Current Implications* (Dec. 2002) (unpublished M.S. thesis, Oregon State University) (on file with Department of Geosciences, Oregon State University); Meredith Giordano, *Managing the Quality of International Rivers: Global Principles and Basin Practice*, 43 NAT. RESOURCES J. 111 (2003); Meredith Giordano & Aaron Wolf, *Sharing Waters: Post-Rio International Water Management*, NAT. RESOURCES FORUM 2003, at 163–71; Ronald Mitchell, *International Environmental Agreements: A Survey of Their Features, Formations, and Effects*, ANN. REV. ENV'T & RESOURCES 2003, at 429–61.

22. BASIL DAVIDSON, MODERN AFRICA: A SOCIAL AND POLITICAL HISTORY 5, 9 (1994).

French colonial influence, was not internationalized until Guinea gained independence in 1958 (followed shortly thereafter by the three other riparians).²³

Written agreements applying to Africa's transboundary waters coincided with the early stages of European colonization of the continent. The earliest agreements²⁴ were primarily related to land acquisition by colonial states and included water only secondarily. An 1862 convention,²⁵ for example, enabled France to acquire land rights from the Danakils, nomadic cattle herders in the Horn of Africa. As a secondary issue, the convention addressed water withdrawal from rivers and springs on the acquired land and allowed France to establish reservoirs "by common consent."²⁶

Another set of agreements forming a large body of early transboundary law attempted to alleviate problems of customary access to water resources arising out of newly created colonial boundaries. One agreement typical of the genre is the *Exchange of notes between France and Great Britain respecting navigation and use of the Great Scarcies River* (1895).²⁷ This agreement, relating to a basin now shared by Guinea and Sierra Leone, was driven by the recognition that imposition of colonial boundaries had separated residents from the resources, including water, on which they had customarily depended. The treaty allows the "riverain inhabitants dwelling on the right bank," put under British rule and cut off from the river by the imposition of a boundary defined in a previous treaty, to "continue to use the river to the same extent as heretofore." A total of 18 agreements from the colonial period deal with such "native" access issues,²⁸ while another²⁹ deals solely with the rather peculiar issue of allowing Italian soldiers and travelers to cross the border between Italian Somaliland and Kenya to obtain drinking water.

Beyond these relatively minor (with respect to water resources) accords, 23 other colonial period agreements exist that deal with more substantive issues.³⁰ The majority of these agreements—approximately 60 percent—apply to the waters of the Nile river basin.³¹ The

23. *Id.* at 127.

24. *See app.*, agreement nos. 1 and 3.

25. *See app.*, agreement no. 1.

26. *Id.* art. VI.

27. *See app.*, agreement no. 8.

28. *App.*, agreement nos. 4, 8, 9, 13, 14, 16, 17, 19, 21, 24, 30, 33, 35, 37, 39, 47, 48, 49.

29. *See app.*, agreement no. 32.

30. Note that three agreements (agreement numbers 2, 5, and 7) were included in other collections but did not meet our criteria and two agreements (agreement numbers 36 and 38) are considered transnational rather than transboundary.

31. *See app.*, agreement nos. 6, 11, 12, 15, 18, 22, 25, 28, 31, 34, 40, 41, 42, 45.

concentration on the Nile is not particularly surprising given the level of water resource utilization in the basin, particularly in its lower reaches, relative to other rivers in Africa at the time and the Nile's importance to the British colonial government with respect to agricultural output and derived revenue.³²

A notable feature of substantive colonial agreements is that all but two are bilateral.³³ While in some cases only two states, colonial or independent, were riparian to the basins in question at the time of signature, others were controlled by multiple state actors. The Nile, for example, had at least six riparians when each of its agreements was concluded.³⁴ Further, as the United Kingdom was signatory to all Nile Basin agreements in the colonial period, one could make the case that no more than one true Nile riparian is included in any single treaty. Since core elements of at least some of these bilateral agreements concerning the Nile still apply, it should come as no surprise that tensions exist between the watershed's ten current riparian states surrounding the allocation and management of the basin's waters.³⁵

Of the remaining nine substantive colonial period agreements that apply to basins other than the Nile, two each deal with the Gash and the Zambezi and one each deal with the Great Scarcies, Cunene, and Congo; an additional two deal with unspecified shared waters, one between French and Spanish Morocco and the other between French and British Togoland.³⁶ Those agreements that apply to the Congo, Cunene, Great Scarcies, and Zambezi are all concerned with hydropower production, while treaties applying to the Gash focus on water sharing for irrigation projects. The remaining two accords, concerning the shared waters of Morocco and Togoland, concentrate broadly on water sharing and division. Interestingly, all of these agreements were signed between or among colonial powers and none of these basins have suffered from the post-independence tensions now found in the Nile. While there may

32. GODANA, *supra* note 5, at 103–08.

33. See app., agreement nos. 18, 43 (both agreements are multilateral).

34. Exchange of Notes Between His Majesty's Government in the United Kingdom and the Egyptian Government in Regard to the Use of the Waters of the River Nile for Irrigation Purposes, U.K.-Egypt, May 7, 1929, 93 U.N.T.S. 44 (Nile riparians included Belgium (representing the Congo, Rwanda, and Burundi), the United Kingdom (representing Uganda, Tanzania, Kenya, and the Sudan), Egypt, France (representing the Central African Republic), Ethiopia, and Italy (representing Eritrea)). With the end of colonialism, the number of Nile riparians has increased.

35. See D. Jovanovic, *Ethiopian Interests in the Division of the Nile River Waters*, WATER INT'L, June 1985, at 82–85; See Hadia Mostafa, *A River Runs Through It*, EGYPT TODAY, July 2004, available at <http://www.egypttoday.com/article.aspx?ArticleID=1743>.

36. See app., agreement nos. 10, 20, 23, 26, 27, 43, 44, 46.

be a number of reasons for the differences in outcomes,³⁷ the situation in the Nile basin suggests that agreements between colonial powers were done on a more equal power basis than those between a colonial government and an independent African state.

Another interesting aspect of colonial period agreements is the relatively large proportion (some two-thirds) that considers water allocation.³⁸ While it has been asserted that the inclusion of flexible water allocation principles is integral to resilient transboundary water law,³⁹ arriving at a basis for actual allocations can prove difficult because of the opposing principles that riparians often adopt in negotiations. Upstream riparians generally argue for "absolute territorial sovereignty," the concept that a state has the right to do as it wishes with the water within its boundaries, while downstream riparians argue for the "absolute integrity of the watercourse," which dictates that upstream riparians can do nothing to impact the quantity or quality of water flowing out of their territory.⁴⁰

According to Dellapenna, actual negotiations tend to move away from these two extreme principles and instead result in a vague compromise position known generally as limited (or restricted) territorial sovereignty, which allows for the "reasonable and equitable use" of international waters so long as "no appreciable harm" is inflicted on co-riparians.⁴¹ In a survey of some 150 treaties from around the world, Wolf found that a variety of allocation principles falling between the two extremes had been applied including prior (historic) use, prioritization of use, and equal division.⁴²

Of the colonial period agreements that include a conceptual basis for water sharing or allocation, most employ criteria based on historic use or historic use combined with an equal sharing of future water usage.⁴³ Two agreements, one related to the Cunene and another concerning an upstream portion of the Nile basin, use an "equal shares" approach, dividing water benefits 50-50 so long as each riparian makes equal investments in water. One final agreement, related to the Gash,

37. Including the fact that some of the agreements are now defunct.

38. While the sample size here is small, Hamner & Wolf, *supra* note 21, at 162, found that globally less than 40 percent of treaties included allocation criteria.

39. Giordano & Wolf, *supra* note 21, at 170.

40. Joseph W. Dellapenna, *The Customary International Law of Transboundary Fresh Waters*, 1 INT'L J. GLOBAL ENVTL. ISSUES 264, 269-74 (2001).

41. *Id.* at 278.

42. Aaron T. Wolf, *Criteria for Equitable Allocations: The Heart of International Water Conflict*, 23 NAT. RESOURCES F. 3 (1999).

43. Note that this rationale was extremely common in agreements applying to the waters of the Nile.

uses what might be called a “needs” approach by quantifying the water required to operate current and possible future irrigation schemes and dividing water to meet those volumes. Irrespective of the conceptual bases used in the treaties, only two—one concerning the Nile and the Gash agreement just discussed—in fact translate stated water allocation criteria into explicit quantities.

Apparently consistent with global norms at the time, none of the colonial-era agreements in Africa provide for the creation of management institutions such as river basin organizations or technical monitoring bodies. No substantive colonial water treaty mentions ground water⁴⁴ and only one makes reference to water quality. That agreement, signed in 1934 in London by Belgium and the United Kingdom over water rights on the border between Tanganyika and Ruanda-Urundi, is notable as one of the world’s first agreements related to transboundary water quality.⁴⁵ It states that “no operations...shall be permitted...which may pollute or cause the deposit of any poisonous, noxious, or polluting substance in the waters of any river...”⁴⁶ Finally, only a quarter of the period’s substantive agreements encourage exchange of hydrological data, and only about one-third contain conflict resolution mechanisms; none contain provisions for amendment or modification.

PHASE II: EARLY INDEPENDENCE PERIOD, 1959–1989

The first transboundary water agreement between post-colonial African states was signed in 1959 between Sudan and the United Arab Republic (Egypt).⁴⁷ Though the agreement followed the colonial period trend in that its focus was the Nile, it was succeeded by a large body of additional treaties that set the early independence period apart for reasons beyond the colonial status of their signatories.⁴⁸ Among other changes, the transition into independence ignited a drastic acceleration in the rate at which agreements were produced. While only 49

44. Though many of the territorial secession and “native” treaties do with respect to well access. See, e.g., Agreement Regarding Water Rights on the Boundary between Tanganyika and Ruanda-Urundi-London, U.K-Belg., Nov. 22, 1934, available at <http://ocid.nacse.org/qml/research/tfdd/toTFDDdocs/45ENG.htm> (last visited Jan. 18, 2006).

45. *Id.* Note that Giordano fails to include this treaty in her analysis. Giordano, *supra* note 21, at 119, 125–236.

46. Agreement Regarding Water Rights on the Boundary between Tanganyika and Ruanda-Urundi-London, U.K-Belg., art. I, ¶ 3, Nov. 22, 1934; app., agreement no. 34.

47. See app., agreement no. 50.

48. In fact, four agreements during the period were signed by at least one colonial power. See app., agreement nos. 54, 59, 66, 78 (The first involves Northern Rhodesia and the latter three involve Portugal.).

agreements were signed during the 96-year colonial period, 72 were completed in the initial 31 years of independence, a four-fold increase in the rate at which treaties were signed.

Of the 72 agreements from the early independence period, 13 could not be located, one did not meet our criteria for analysis,⁴⁹ and an additional 15⁵⁰ were essentially water infrastructure aid packages between an outside, typically Western, country and an African nation or basin organization. While such agreements can clearly impact water use and co-riparian relations, they are closer to what have become known as transnational,⁵¹ as opposed to transboundary, agreements and are thus excluded from the remainder of this discussion.

Analysis of the 43 remaining agreements indicates fundamental changes in treaty nature and content as compared to the colonial period. While most colonial agreements focus on discrete goals such as division of water resources or construction of dams, agreements in the early independence period shifted to less concrete but more expansive concerns and structures. For example, joint management⁵² is a goal in 90 percent of agreements and water development⁵³ is a goal in about three-quarters.⁵⁴

To achieve these new goals, over three quarters of the period's agreements include provisions for water management institutions—usually called river or basin “authorities,” “commissions,” or

49. See app., agreement no. 65.

50. See app., agreement nos. 69, 76, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 99, 100, 119.

51. Transnational agreements, usually facilitating development aid, are between one riparian or riparian organization and one or more non-riparian states. While these agreements apply to transboundary waters and are therefore included in the broad list in the appendix, they do not meet our criteria for analysis and so are excluded from subsequent examination.

52. An agreement was defined to have “joint management” as a goal if it included an explicit statement regarding the creation of an institution or mechanism through which water resources would be collectively managed as a means to achieve overall benefit and avoid potential conflict. An example is the 1980 Convention Creating the Niger Basin Authority, whose objective was to promote “co-operation among member States and to ensure an integrated development of the Niger Basin in all fields, by developing its resources particularly in the fields of energy, water resources, agriculture, animal husbandry, fishing and fisheries, forestry exploitation transport, communications and industry.” Convention Creating the Niger Basin Authority, art. III, Nov. 21, 1980; see app., agreement no. 98.

53. An agreement was defined to have “water development” as a goal if it included an explicit statement regarding increased exploitation of shared water resources. Such increased exploitation generally takes the form of dam construction to facilitate hydropower development and/or expansions in the area of irrigated land.

54. Note that the authors possessed only synopses to some of the relevant agreements. When the inclusion or exclusion of a treaty component could not be determined from synopses, an agreement was disregarded with respect to that component.

"organizations" – to facilitate collective decision making on management of shared water resources. In fact, it is this period that gave rise to the first true transboundary river basin organizations in Africa and saw the formation of the Senegal, Niger, Kagera (a tributary of the Nile), and Gambia basin organizations.⁵⁵ Of the agreements behind these organizations, approximately half were designed with specific provisions for modification or amendment in light of changing circumstances or conditions.

The focus of agreements on joint management and water development in the early independence period stands in stark contrast to the colonial era's focus on more discrete goals such as water allocation. However, while the change might be ascribed to the newly found ability of independent states to assert their desires and preferences in transboundary agreements, it may in fact be more a function of a concurrent shift in thinking imposed, or at least encouraged, by international organizations and lending institutions involved with signatory states. This school of thought, emerging in the 1960s, considered negotiation, as reflected in cooperative management structures within codified agreements, to be more "civilized" or "mature" than strict codifications of allocation or distribution.⁵⁶ The possibility that this change in treaty focus was as much a function of a changing global environment, perhaps imposed by neo-colonialism, rather than the end of colonialism is also consistent with the growth in transnational agreements during the period as well as knowledge of the role of outside institutions in the formation of at least some of the period's transboundary institutions.⁵⁷

Whatever the reason behind the increased emphasis on joint management and development, it can be associated with a concomitant reduction in focus on water allocation, with only about 20 percent of the period's treaties containing any provisions for division. Of this 20 percent, historic use forms the basis for water allocation in two-thirds of

55. The General Act of the Conference of Berlin is sometimes said to have formed the first river basin organization in Africa. In fact, however, the Niger commission it formed dealt only with navigation issues. See app., agreement no. 2.

56. Laura Nader, *Civilization and Its Negotiations*, in UNDERSTANDING DISPUTES: THE POLITICS OF ARGUMENT 39–45 (Pat Caplan ed., 1995).

57. James L. Wescoat, Jr., *Main Currents in Early Multilateral Water Treaties: A Historical-Geographic Perspective 1648–1948*, 7 COLO. J. INT'L ENVTL. L. & POL'Y 39, 40–74 (1996); Joseph W. Dellapenna, *Treaties as Instruments for Managing Internationally-Shared Water Resources: Restricted Sovereignty vs. Community of Property*, 26 CASE W. RES. J. INT'L L. 27 (1994); INTERNATIONAL WATERS IN SOUTHERN AFRICA, *supra* note 5.

agreements, while “needs” and unclear criteria⁵⁸ make up the remaining one-third of early independence period agreements possessing conceptual rationales for water allocation.⁵⁹ Half of treaties mentioning allocation include explicit quantifications of volume. Interestingly, all of the basins to which these treaties apply—the Nile, Cunene, and Orange—are generally thought of as water scarce, with high levels of water resources development and use relative to available supplies.⁶⁰

Another difference between the colonial and early independence period is the geographic distribution of agreements. While substantive agreements during the colonial period involved only seven basins, mostly focused on the Nile, those in the early independence period covered 12 basins. However, there remained a disproportionate concentration of agreements in a few basins during the period, with approximately 23 percent applying to the Niger, 17 percent applying to the Gambia, and 15 percent focusing on the Senegal.

In addition to changes in goals and geographic focus, the early independence period also saw a number of developments in the content and structure of treaties. In particular, there was a shift from almost exclusively bilateral to predominantly multilateral agreements. Indeed, approximately 60 percent of treaties from this period are multilateral, and nearly three-quarters succeed in including all or most riparian countries. Over half of the agreements incorporate conflict resolution mechanisms—usually an arbitration tribunal, such as the OAU or the UN—and over one-third include at least some consideration of water quality, though ground water is ignored. Finally, two-thirds of the agreements encourage exchange of hydrological data.

A final note should be made regarding the increased consideration given to equity in transboundary African water law in relation to global developments. In 1966, the International Law Association adopted the Helsinki Rules, which provide a set of guidelines for ‘reasonable and equitable’ sharing of common

58. Criteria are considered “unclear” when explicit statements of allocation are made but no rationale for the allocation is given.

59. See app., agreement nos. 50, 56, 66, 93, 113, 115. Note that in two cases explicit quantities are allocated to countries in these agreements, yet no obvious rationale or justification is provided for how these allocations are determined. One nevertheless suspects that, as the agreements involve Egypt and South Africa respectively, water apportionments resulted largely from the demands of these regional hegemons.

60. FAO, AQUASTAT (2001), Atlas of Water Resources and Irrigation in Africa (used to determine the natural water endowments of various basins) and Database on African Dams (used to determine the relative levels of water resources development), both available at <http://www.fao.org/ag/agl/aglw/aquastat/gis/index.stm> (last visited Jan. 18, 2006).

waterways.⁶¹ This was followed by the U.N. General Assembly's creation of the International Law Commission (ILC), whose efforts eventually resulted in the Convention on the Law of the Non-Navigational Uses of International Watercourses,⁶² a collection of guiding principles for transboundary water management that continued to highlight the issue of equity. While the convention was not completed until 1997, the process of its formation along with the Helsinki rules behind it did have a clear influence on equity considerations in binding basin-specific transboundary agreements. In the case of Africa, the use of the word "equitable" as a basis for an agreement first appeared in 1986.⁶³ However, only that and one other agreement⁶⁴ from the period refer to the concept in relation to water.

PHASE III: LATE INDEPENDENCE PERIOD, 1990-2004

A total of 36 African transboundary water agreements are known to have been signed in the late independence period. Seven of these were transnational⁶⁵ and the texts of three others could not be located. On the surface, the remaining 26 appear much the same as those in the previous period and follow the trend toward increasing robustness. For example, approximately three quarters of the period's treaties either assume or create water management institutions,⁶⁶ and about half of these institutions contain amendment mechanisms. Further, the percentage of treaties encouraging exchange of hydrologic data increases modestly while fully two-thirds now make mention of water quality. Finally, the proportion of agreements containing conflict resolution mechanisms remained near the earlier, already high, levels.

The principal goals of the late independence period agreements are also outwardly much the same as in the prior period, with emphasis generally placed on joint management of shared water resources and economic development. However, close examination of the treaties reveals a gradual shift from the goal of "water development" to that of "sustainable development" as countries (at least officially) sought to achieve their development goals without placing undue burden on the

61. Dante A. Caponera, *Patterns of Cooperation in International Water Law: Principles and Institutions*, 25 NAT. RESOURCES J. 563, 564 (1985); Dellapenna, *supra* note 40, at 272-73.

62. U.N. GEN. ASSEMBLY 51st Sess., 99th mtg., U.N. Doc. A/RES/51/229 (Aug. 7, 1997).

63. See app., agreement no. 113, available at <http://www.fao.org>.

64. See app., agreement no. 115.

65. See app., agreement nos. 122, 136, 137, 141, 152, 153, 155, all available at <http://www.untreaty.un.org>.

66. Note also that several agreements that do not create joint management structures attempt to create a framework for future creation of such structures.

environment. Of the seven "sustainable development" treaties, environmental concerns appear to play a vital and important role in the agendas and function of three,⁶⁷ while the remaining four—all of which involve South Africa—voice only a general concern for environmental sustainability among other considerations.⁶⁸ Like the shift toward joint management in the previous period, the orientation toward sustainable development in this period may reflect a fundamental change in desires within Africa itself or, perhaps more likely, an acceptance of the changing global resource management paradigm with respect to water.⁶⁹

Less subtle than the evolution of treaty goals is the shift in the spatial distribution of agreements. While treaties in the early independence period disproportionately apply to the shared basins of West Africa, this period's agreements have a definite southern African flavor. Even excluding the two Southern African Development Community (SADC) agreements that apply broadly to all of southern Africa's basins, 27 percent of agreements apply to the Orange River basin and about 19 percent of agreements relate to the waters of the Inkomati.⁷⁰ Further, South Africa itself is involved in half of the period's treaties.

An interesting change occurring in the period relates to the number of signatories associated with each agreement. While most of the treaties in the initial phase of independence were multilateral, over half of the later period's agreements are bilateral. Although difficulties in water division among more than two nations may explain why so many agreements involve only two states, another factor may be the high level of involvement of regional hegemon South Africa and the apparent ability of states in such power positions to gain greater advantage in bilateral rather than multilateral agreements.⁷¹ Whatever the reason, the body of agreements from the period marks a shift back to the colonial period with respect to riparian involvement.

Another development marking a shift back to the colonial era is the increased use of allocation criteria. Indeed, about half of the agreements in the period again possess criteria for dividing a basin's waters. As for the actual criteria used, "equity" becomes increasingly common and is found in a majority of these treaties. "Sustainability" is

67. See app., agreement nos. 123, 139, 156. Note also that there is an agreement, app., no. 138, that is concerned primarily with water quality, available at <http://www.un-treaty.un.org>.

68. See app., agreement nos. 142, 148, 151, 154. This is not to say that the simple inclusion of text expressing a concern for sustainable development is unimportant.

69. WORLD COMMISSION ON DAMS, DAMS AND DEVELOPMENT, A NEW FRAMEWORK FOR DECISION-MAKING ch. 1 (2000).

70. Note that the Inkomati is also spelled Incomati.

71. Nader, *supra* note 56, at 52.

also often incorporated as a basis for water allocation along with "prior use" and "needs." While the inclusion of equity and sustainability concepts could increase vagueness surrounding how water or its benefits might actually be shared, nearly half of the allocation treaties do in fact contain explicit quantifications of allocation rules.

A final note should be made regarding the increased use of the words "equity" and "equitable." It was in the course of this third phase in African water law that the United Nations produced its *Convention on the Non-Navigable Use of International Waters*,⁷² and more than half of the substantive agreements from the period make mention of equity as either an overarching principle or criteria for water allocation. While such treaties were almost certainly influenced by the UN convention and now add to its legitimacy as customary law,⁷³ the impact of the language, if any, on codified allocations within the treaties is unclear.⁷⁴

THE CURRENT STATE OF TRANSBOUNDARY WATER LAW IN AFRICA

One important reason for examining the history and extent of transboundary water law in Africa is to address the question "How well are Africa's transboundary basins governed?" in order to facilitate the establishment of future management and research priorities. Despite the limitations inherent in documentary analysis, it can supply important clues concerning the extent to which key qualities, considered important for the implementation of such central concepts as Integrated Water Resources Management and "successful" transboundary agreements, are taken into account. As discussed previously, these qualities generally include involvement of all basin riparians, consideration of groundwater and water quality, codified conflict resolution mechanisms, and exchange of hydrologic data.

Seemingly unfortunately, then, less than half of African transboundary water agreements include the majority of basin riparians and only about one quarter succeed in incorporating all riparians.⁷⁵ While these statistics might seem to indicate "poor" performance, it should be noted, first, that they do not compare unfavorably with those

72. Jukka Ilomaki, Institutional Challenge of Developing Transboundary Water Resources (Dec. 1999) (Masters Thesis, Helsinki University of Technology).

73. Dellapenna, *supra* note 40.

74. See generally Jonathan Lautze & Mark Giordano, *Equity in Transboundary Water Law: Valuable Paradigm or Merely Semantics?*, 15 COLO. J. INT'L ENVTL. L. & POL'Y (forthcoming 2006).

75. Further, several of these treaties apply to basins with only two riparians. Thus, any transboundary agreement applying to such basins by definition includes all riparians.

presented in the limited global analyses in existence⁷⁶ and second, inclusion of all riparians is not always necessary to improve basin management or to constitute a "good" agreement.

Though definitive benchmarks are far from developed, African treaties also appear to fare quite well in their inclusion of other elements considered important in transboundary water management. Just over half of African substantive transboundary water agreements contain conflict resolution mechanisms, approximately 40 percent make reference to water quality, and over half encourage exchange of hydrological data among signatories. While few contain references to ground water, neither do many agreements outside Africa.⁷⁷ Further, it should be noted that all measures are higher in independent African—as opposed to colonial—agreements, and, thus, the actual state of affairs is probably "better" than these figures suggest.

Perhaps more important for actual transboundary water management in Africa than the continent-wide picture is coverage by basin. Of the continent's 59 transboundary basins, substantive agreements in fact apply to only 19 (though these agreements include most of Africa's large basins). Further, four of these basins (the Gash, Great Scarcies, Cuvelai, and the pools of Dif) possess agreements only from the colonial period and the actual agreements on three others (the Congo, Limpopo, and Ruvuma) are relatively limited in scope.⁷⁸ Of the 12 remaining basins with substantive agreements, one is located in east and northeast Africa, six are located in southern Africa, and five are located in west Africa.

An examination of the totality of agreements that apply to these 12 basins suggests a division into two distinct groupings. One group is comprised of those basins with agreements designed principally for the joint management of shared waters so as to expand water supplies. The second group is made up of basins governed by agreements that primarily emphasize water allocation and division.

76. See generally Hamner & Wolf, *supra* note 21; see also Conca *supra* note 21, at 10.

77. Matsumoto, *supra* note 21, at 18–19.

78. Note that the number of located treaties applying to each of these basins is less than five. In the case of the Limpopo, no agreement applying specifically to the Limpopo is in the authors' possession.

African Transboundary Water Law by Basin	
<i>Area of focus</i>	<i>Basins</i>
Joint Management and Expansion of Water Supplies	Gambia Lake Chad Niger Okavango Senegal Volta
Water Allocation	Cunene Inkomati Maputo Nile Orange
Neither	Zambezi

The first group of basins includes those with agreements focusing on the joint management of shared waters with a principal (stated) goal to facilitate economic development. The focus on joint management is highlighted by the fact that the overwhelming majority of these basins' agreements include most or all riparian states, often evidenced throughout substantial periods of treaty formation. For example, all treaties that apply to the Gambia include most or all riparians, all but two treaties that apply to the Niger involve all major riparians,⁷⁹ and all Senegal River agreements include at least three of four riparians. Treaties applying to the Okavango and Lake Chad similarly include the majority of basin states and call for joint management while making only vague attempts at development of water allocation criteria. Finally, most agreements concerning the Volta basin include the majority of riparian countries and focus on joint management and water development.⁸⁰

Economic development through increased utilization of water resources, the second common component of agreements applying to this group of basins, is indicated both directly and indirectly. Directly, all the agreements declare an intention to harness additional water to promote economic development. Indirectly, the lack of clear and explicit allocation criteria suggests that the focus is on something other than water division. It would seem, then, that the principal motivation behind

79. The area of the basin falling within Sierra Leone is negligible and Algeria's area is virtually unpopulated. See Transboundary Freshwater Dispute Database, Spatial Data, at <http://ocid.nacse.org/tfdd/>. Algeria is nevertheless a party to several Niger River agreements, including numbers 57, 98, 116, and 117. See app.

80. Note that water development is a goal in the Volta's post-colonial substantive water treaties, for example agreement numbers 144, 157, and 158. Also, a Volta basin organization that includes all six riparians is currently under development, evidenced in the text of agreement number 158.

treaty content was the mobilization of investment to reduce "economic water scarcity"—insufficient investment in water resources development—rather than absolute water shortages.

Similar to the first group of treaties, many in the second group call for joint management of shared water resources, the Nile's agreements excepted. However, in contrast to the first set of agreements, less than one-third include all riparians. Further, only in the Cunene, which has just two riparians, were all basin states signatories to all applicable agreements.⁸¹ Interestingly, while the minority of this set of agreements involves all basin riparians, the majority contain allocation criteria—and in most cases such criteria are applied to produce an explicitly quantified allocation. In contrast to the basins in the first group, the focus on allocation suggests absolute water scarcity as the driving consideration.

Agreements pertaining to the Zambezi appear to combine aspects of both groupings. On the one hand, one Zambezi agreement creates a joint management structure including the majority of riparians, making the Zambezi's transboundary water law seemingly similar to those in the first set of basins. On the other hand, criteria for allocating the Zambezi's waters exist between at least two of the riparians, making Zambezi river law perhaps more similar to those of the second group. The dual nature of the Zambezi agreements may reflect a change in basin conditions, as earlier treaties concentrated chiefly on water development while more recent agreements were more concerned with joint management and water allocation.

While there are condition-specific patterns to treaty content as just described, other components such as inclusion of amendment and conflict resolution mechanisms, reference to water quality, and encouragement of information exchange are much more time-dependent than basin-specific. That is, these more peripheral treaty components are found more frequently in later treaties than earlier agreements.

CONCLUSIONS

The more than 140 year history of transboundary water law in Africa has led to the formation of at least 150 agreements in over 20 of Africa's 59 international watersheds, including 13 of its 17⁸² largest

81. However, it should be noted that South Africa signed on behalf of Namibia/Southwest Africa in these agreements. Even in this case, then, it is questionable whether all riparians signed.

82. There are still no agreements concerning the Juba-Shubelli, the Ogooue, the Awash, and Lake Turkana.

(those with an area of more than 100,000 km²). If “new” agreements identified in this study are added to existing treaty collections, Africa would account for more than one quarter of the world’s total known transboundary water law—a somewhat surprising finding given Africa’s scant involvement in other international environmental arenas such as wildlife.⁸³

While some empirical evidence suggests that the existence of any agreement decreases the likelihood of conflict over transboundary waters,⁸⁴ little research has been conducted on how international environmental agreements, including those concerning water, actually impact state behavior.⁸⁵ What appears clear from our analysis, however, is that a count of the total number of agreements almost certainly overstates the degree to which transboundary waters are effectively managed. For example, of the 153 agreements identified in Africa, 19 were related to relatively minor issues (*i.e.*, villager or border guard access to water across a newly formed boundary), 24 were “transnational,” and two others were concerned with territorial cession. As such, only 108 of the total can be considered substantive with respect to transboundary water resources issues. Further, while ascertaining the current legal status of international water agreements is difficult, to say the least, it is probably safe to assume that a large number of the substantive agreements were never implemented in practice or are no longer in force. While there is no basis for comparison to other regions of the world, the findings from Africa at least suggest that future studies on the impact of transboundary water law should go beyond simple quantitative measures of agreement formation.

A key issue for consideration in the development of new basin institutions, or in attempts to apply generalized legal principles such as those embodied in the 1997 U.N. Convention, is the degree to which institutional needs are basin-specific or can be based on global norms. In this respect, analysis of Africa’s transboundary water management history provides new insights. For certain key treaty components, there have been clear evolutionary trends from the colonial period to early independence to more recent years. For example, inclusion of certain treaty components has increased over time, namely the creation of

83. Mark Giordano, *The Internationalization of Wildlife and Efforts Towards Its Management: A Conceptual Framework and the Historic Record* 14 GEO. INT’L ENVTL. L. REV. 607, 615–20 (2002).

84. See Shira B. Yoffe, Aaron T. Wolf, & Meredith Giordano, *Conflict and Cooperation Over International Freshwater Resources: Indicators of Basins at Risk*. 39 J. AM. WATER RESOURCES ASS’N 1109, 1124 (2003).

85. Mitchell, *supra* note 21, at 430.

management institutions, considerations of water quality, provisions for exchange of hydrological data, and provision of mechanisms for amendment.⁸⁶ There has been a similar increase in the inclusion of concepts emerging from customary international water law and elsewhere such as "equity" and "sustainable development." The trend of treaty development in Africa thus seems to be more synchronized with global trends than with basin conditions; indeed, given the level of previous colonial and more recent donor involvement, it is likely that developments in African transboundary water law have been largely driven by these trends.

One major exception to the finding that African transboundary water law is evolutionary is the shift back to colonialism found most notably in the increase in bilateral agreements in the late independence period. It is here that the role of geography in agreement formation becomes apparent. In Sadoff's discussion of hydropolitics and agreement formation in Africa, she notes that hegemonic behavior is not likely to be a major factor in most of Africa, because there are so few regional hegemony—Nigeria, Egypt, and South Africa excepted.⁸⁷ In fact, more than 55 percent of Africa's substantive transboundary agreements involve one of those states,⁸⁸ and agreements signed by South Africa and Egypt are overwhelmingly bilateral. As noted by Nader, bilateral negotiations may place stronger nations at a bargaining advantage vis-à-vis their weaker neighbors,⁸⁹ thus explaining why hegemony are disproportionately likely to be involved in bilateral agreements. The potential to exploit power advantages may also partially explain why such nations are disproportionately likely to participate in any agreement, including those that are multilateral. Basin level hydropolitical dynamics may thus be a critical factor in determining both the formation and nature of transboundary water management agreements.

Further supporting the role of basin conditions in treaty development is the distinct relationship between agreement content and basin level water resource conditions. Agreements in basins where water resources utilization is relatively low (*e.g.*, the Niger, Senegal, Gambia) tend to focus on multilateral cooperation and further water resources development. In contrast, agreements in basins where water resources utilization was already relatively high (*e.g.*, the Nile, Orange, Inkomati)

86. That is to say, treaties have become more robust.

87. Sadoff, *supra* note 3, at 10–11.

88. South Africa alone is signatory to about 30 percent of the continent's transboundary water agreements.

89. Nader, *supra* note 56, at 52–55.

were disproportionately bilateral (though agreements on these basins also tend to involve a regional hegemon) and focused on water allocation.

If the connection between water resource conditions and agreement type holds for other regions, it suggests that a more nuanced view of the role of "clear and flexible"⁹⁰ allocation criteria in the creation of transboundary water agreements is required. In locations with economic water scarcity—that is, sufficient water but insufficient funds for its development—negotiations that ignore the contentious issue of allocation may in fact be more likely to result in an agreement that meets at least some of the current needs of basin states. At the same time, the findings suggest that once water is substantially developed and basins begin to close,⁹¹ allocation issues will likely drive riparian interaction over water. The shift from conditions of economic to absolute water scarcity has already occurred in much of northern and southern Africa, while the process is still underway in some regions and has hardly begun in others. Where absolute scarcity has yet to be felt, it may be sensible, or at least expedient, to ignore allocation issues in the short run to spur investment and development.

At some point, however, water allocation will generally need to be addressed if cooperation is to last. Clearly, this shift from development to allocation will be the product of a variety of factors, and it appears from this analysis that basin-specific conditions have often been reflected in the nature of associated transboundary law. As discussed, however, our research also suggests that other elements of African treaties have been driven not by basin conditions but by global trends. In fact, it appears that inclusion of some of these elements has at times resulted more from external pressure than endogenous conditions. External organizations, both technical and financial, will likely continue to play a major role in future African water agreements. A lesson from this research is that those organizations should place considerable emphasis on basin-specific conditions in developing recommendations and deciding when and how to invoke global norms and principles.

90. Giordano, *supra* note 21, at 170.

91. Meaning all available water has been used or allocated. See DAVID SECKLER, *THE NEW ERA OF WATER RESOURCES MANAGEMENT: FROM "DRY" TO "WET" WATER SAVINGS* (1996).

APPENDIX

List of abbreviations used in citations:

- AWIRU – African Water Issues Research Unit (on file with authors)
- ATS – Australian Treaty Series
- BDARO – Basic Documents of African Regional Organizations, New York, Oceana, 1972
- Rev. jur. Et pol. – Revue juridique et politique-indépendance et coopération
- BFSP – British and Foreign State Papers
- CAOAE – Cahiers Afrique Occidentale Afrique Equatoriale
- DGIRH – Direction Générale de l'inventaire des Ressources Hydrauliques
- FAO – FAO, *Treaties Concerning the non-navigational use of international watercourses: Africa*, FAO Legislative Study No. 61, Food and Agricultural Organization of the United Nations (1997)
- FPD4 – Foreign Policy Documents No. 4. The Sharing of Water Resources in River Basins in Africa: a list of agreements with explanatory notes. Crown Copyright June 1978
- Hertslet – Sir Edward Hertslet, *The Map of Africa by Treaty*, Volumes I-III (3d ed. 1909)
- IEA – International Environmental Agreement database (available online at <http://www.uoregon.edu/~iea/>)
- LNTS – League of Nations Treaty Series
- SRGG – Southern Rhodesia Government Gazette (Extraordinary)
- TFDD – Transboundary Freshwater Dispute Database (available online at <http://www.transboundarywaters.orst.edu>)
- UNLS – United Nations Legislative Series, Legislative texts and treaty provisions concerning the utilization of international rivers for other purposes than navigation, 1963
- UNTS – United Nations Treaty Series
- ZAORV – Zeitschrift für ausländisches öffentliches Recht und Völkerrecht

AFRICAN TRANSBOUNDARY WATER LAW – AGREEMENTS AND TREATIES		
Code	Treaty Title	Citation/Source
1	Convention between France and the Danakils, for the Cession of Obock and Its Territory to France. Paris, 11 Mar., 1862	2 Hertslet 628
2*	General act of the conference of Berlin Respecting: 1) freedom of trade in the basin of the Congo; 2) the slave trade; 3) neutrality of the territories in the basin of the Congo; 4) navigation of the Congo; 5) navigation of the Niger; and 6) rules for future occupation of the coast of the African Continent. Berlin, 26 Feb., 1885	1920 ATS 17
3	Convention between the Sultan of Aussa (Danakils) and Italy. 10 Aug., 1887	2 Hertslet 451
4	Exchange of Notes with regard to the Somali Coast. London, Feb. 2 and 9, 1888	83 BFSP 672, UNLS 118
5*	Agreement between Great Britain and France. 10 Aug., 1889	TFDD
6	Protocol between Great Britain and Italy for the demarcation of their respective spheres of influence in East Africa, from Ras Kasar to the Blue Nile. Rome, 15 Apr., 1891	UNLS 127; 3 Hertslet 949
7*	Treaty between Great Britain and Portugal defining their respective spheres of influence in Africa. Lisbon, 11 June, 1891	TFDD
8	Agreement between Great Britain and France, fixing the Boundary between the British and French Possessions to the North and East of Sierra Leone, so far as concerns the the Navigation and Use of the Great Scarcies River. Paris, 22 Jan. and 5 Feb., 1895	2 Hertslet 757; UNLS 119
9	Treaty between Great Britain and Ethiopia (Frontiers of British Protectorate on Somali Coast). Signed by the Emperor Menelek II, and by Her Majesty's Envoy. Addis Ababa, 14 May, 1897	2 Hertslet 422
10	Convention entre La France et L'Espagne Pour La Délimitation des Possessions Françaises et Espagnoles sur La Côte du Sahara et sur La Côte du Golfe de Guinée. Paris, 27 June, 1900	UNLS 117
11	Exchange of Notes between Great Britain and Ethiopia. Addis Ababa, 18 Mar., 1902	FPD4 paragraph. 40
12	Treaties between Great Britain and Ethiopia, and between Great Britain, Italy, and Ethiopia, relative to the frontiers between Anglo-Egyptian Soudan, Ethiopia, and Erythraea. Addis Ababa, 15 May, 1902	2 Hertslet 431; UNLS 115

13	Exchanges of Notes between the United Kingdom and France constituting an Agreement relating to the Boundary between the Gold Coast and the French Soudan. London, 18 Mar. & Apr. 25, 1904	UNLS 121
14	Echange de Notes Constituant un Accord Entre La France et le Royaume-Uni Pour Fixer La Frontiere entre La Cote D'Or Et La Cote D'ivoire. London, 11 & 15 May, 1905	UNLS 122
15	Agreement between Great Britain and the Independent State of the Congo, modifying the Agreement signed at Brussels, May 12, 1894, relating to the Spheres of Influence of Great Britain and the Independent State of the Congo in East and Central Africa. London, 9 May, 1906	99 BFSP 173; 2 Hertslet 584; UNLS 99
16	Exchange of Notes between France and Great Britain relative to the Boundary between the Gold Coast and French Soudan. London, 19 July, 1906	TFDD
17	Agreement between France and Great Britain relative to the frontier between French and British possessions from the Gulf of Guinea to the Niger (Southern Nigeria and Dahomey). Paris, 19 Oct., 1906	2 Hertslet 849, UNLS 122
18	Agreement between Great Britain, France, and Italy respecting Abyssinia. London, 13 Dec., 1906	2 Hertslet 436
19	Agreement between Great Britain and Ethiopia relative to the Frontiers between British East Africa, Uganda and Ethiopia. Addis Ababa, 6 Dec., 1907	2 Hertslet 445
20	Exchange of Notes constituting an Agreement between the United Kingdom and France respecting the boundary between Sierra Leone and French Guinea. London, 4 Sept., 1913	106 BFSP 763, UNLS 124
21	Exchange of Notes between the United Kingdom and France agreeing to the ratification of the protocol defining the boundary between French Equatorial Africa and the Anglo-Egyptian Sudan. London, 26 Jan., 1925	FPD4 paragraph. 56
22	Exchange of Letters between Egypt and the U.K. 26 Jan., 1925	Godana, p. 117
23	Exchange of Notes between the British and Italian Governments respecting the Regulation and Utilization of the Waters of the River Gash. Rome, 12 & 15 June, 1925	38 LNTS 189, UNLS 128

24	Agreement fixing the frontier between Cyrenaica and Egypt. Cairo, 6 Dec., 1925	133 BFSP 976, UNLS 99
25	Exchange of Notes between the United Kingdom and Italy respecting Concessions for a Barrage at Lake Tsana and a Railway across Abyssinia from Eritrea to Italian Somaliland. Rome, 20 Dec., 1925	121 BFSP 805; 50 LNTS 282
26	Agreement between the government of the Union of South Africa and the Government of the Republic of Portugal regulating the use of the Waters of the Kunene River for the Purposes of Generating Hydraulic Power and of Inundation and Irrigation in the Mandated Territory of South West Africa. Cape Town, 1 July, 1926	70 UNTS 311, UNLS 132
27	Convention between Belgium and Portugal regarding various questions of economic interest in te colonies of the Belgium Congo and Angola. Sao Paulo de Luanda, 20 July, 1927	71 LNTS 436, UNLS 96
28	Exchange of Notes Between His Majesty's Government in the United Kingdom and the Egyptian Government in regard to the Use of the Waters of the River Nile for Irrigation Purposes. Cairo, 7 May, 1929	93 LNTS 43, UNLS 100
29	Exchange of Notes Constituting an Agreement between France and the United Kingdom regarding the protocol and final report of the Commissioners appointed to define the frontier between the British and French Mandated Territories in Togoland. London, 30 Jan. and 19 Aug., 1930	UNLS 127
30	Exchange of Notes between his Majesty's Government in the Union of South Africa and the Portuguese Government Respecting the Boundary Between the Mandated Territory of South West Africa and Angola. Lisbon, 19 Apr., 1931	129 LNTS 157
31	Jebel Awilya Compensation Agreement. 1932	Godana p. 117
32	Exchange of Notes between His Majesty's Government in the United Kingdom and the Italian Government regarding the Boundary between Kenya and Italian Somaliland, together with the Agreement Adopted by the Boundary Commission and Appendices. London, 22 Nov., 1933	145 LNTS 337
33	Exchange of notes between the Union of South Africa and Northern Rhodesia regarding the Eastern Boundary between the Caprivi Strip and Northern Rhodesia and the grant of privileges to Northern Rhodesia natives on the Caprivi Islands. Pretoria and Cape Town, 25 July 1933	136 BFSP 520, FAO

34	Agreement between the Belgian Government and the Government of the United Kingdom of Great Britain and Northern Ireland regarding Water Rights on the Boundary between Tanganyika and Ruanda-Urundi. London, 22 Nov., 1934	190 LNTS 103, UNLS 97
35	Exchange of Notes Constituting an agreement between His Majesty's Government in the United Kingdom and the Portuguese Government, regarding the boundary between Tanganyika Territory and Mozambique. Lisbon, 11 May, 1936	185 LNTS 206, UNLS 136
36	Treaty of Alliance between his Majesty, in respect of the United Kingdom, and his Majesty, the King of Egypt. London, 26 Aug., 1936	UNLS 107
37	Exchange of notes constituting an agreement between the United Kingdom and Portugal regarding the boundary between Tanganyika Territory and Mozambique. Lisbon, 28 Dec., 1937	TFDD, UNTS 4284
38	Exchange of notes constituting an agreement between the United Kingdom of Great Britain and Northern Ireland and Egypt regarding the utilization of profits from the 1940 British government cotton buying commission and the 1941 joint Anglo-Egyptian cotton buying commission to finance schemes for village water supplies. Cairo, 7 & 10 Dec., 1946	105 UNTS 15
39	Exchange of Notes Constituting an Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of Ethiopia Amending the Description of the Kenya-Ethiopia Boundary. Addis Ababa, 29 Sept., 1947	82 UNTS 192, UNLS 116
40	Exchange of Notes Constituting an Agreement Between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of Egypt Regarding the Construction of the Owen Falls Dam, Uganda. Cairo, 30 & 31 May, 1949	226 UNTS 273, UNLS 108
41	Exchange of notes constituting an agreement between the government of the United Kingdom of Great Britain and Northern Ireland and the government of Egypt regarding the construction of the Owen Falls Dam, Uganda. Cairo, 5 Dec., 1949	226 UNTS 273, UNLS 110
42	Exchange of notes constituting an agreement between the government of the United Kingdom of Great Britain and Northern Ireland (on behalf of the government of Uganda) and the government of Egypt regarding cooperation in meteorological and hydrological surveys in certain area of the Nile Basin. Cairo, 19 Jan., 28 Feb. & 20 Mar., 1950	226 UNTS 287, UNLS 112

43	Convention with agreements regarding use of Zambezi waters and effects of the proposed Kariba Dam. Salisbury, 30 & 31 May, 1950	FPD4 paragraph. 27
44	Letters between the irrigation adviser and director of irrigation, Sudan government and the controller of agriculture British Administration, Eritrea. 8 & 18 Apr., 1951	FPD4 paragraph. 26
45	Exchange of Notes Constituting an Agreement between the Government of The United Kingdom of Great Britain and Northern Ireland and the Government of Egypt regarding the Construction of the Owen Falls Dam in Uganda. Cairo, 16 July 1952 & 5 Jan., 1953	207 UNTS 277, UNLS 114
46	Exchange of notes constituting an agreement between her Majesty's Government in the United Kingdom of Great Britain and Northern Ireland and the Portuguese Government providing for Portuguese Participation in the Shiré Valley Project. Lisbon, 21 Jan., 1953	175 UNTS 13, UNLS 138
47	Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland (on their own behalf and on behalf of the Government of the Federation of Rhodesia and Nyasaland) and the Government of Portugal with Regard to the Northern Rhodesia-Angola Frontier. Lisbon, 18 Nov., 1954	210 UNTS 265
48	Agreement between the Government of the United Kingdom and Northern Ireland (acting on their behalf and on behalf of the Government of the Federation of Rhodesia and Nyasaland) and the Government of Portugal regarding the Nyasaland-Mozambique Frontier. Lisbon, 18 Nov., 1954	325 UNTS 308, UNLS 140
49	Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland (on their own behalf and on behalf of the Government of the Federation of Rhodesia and Nyasaland) and the Government of Portugal with Regard to Certain Angolan and Northern Rhodesian Natives living on the Kwando River. Lisbon, 18 Nov., 1954	210 UNTS 280, UNLS 141
50	Agreement between the Republic of the Sudan and the United Arab Republic for the Full Utilization of the Nile Waters. Cairo, 8 Nov., 1959	453 UNTS 63
51	Protocol (to the November 8, 1959 agreement) Concerning the Establishment of the Permanent Joint Technical Committee. Cairo, 17 Jan., 1960	UNLS 143
52	Convention relating to the Development of the Senegal River Basin. Bamako, 26 July, 1963	III BDARO 1015

53	Act Regarding Navigation and Economic Co-operation Between the States of the Niger Basin. Niamey, 26 Oct., 1963	587 UNTS 10, III BDARO 1032
54	Agreement Relating to the Central African Power Corporation. Salisbury, 25 Nov., 1963	TFDD, Southern Rhodesia Government Gazette (Extraordinary), vol. 41, No. 51 (26 Nov. 1963), p. 1
55	Convention Relating to the Statute of the Senegal River. Dakar, 7 Feb., 1964	III BDARO 1019
56	Convention and Statute relating to the Development of the Chad Basin. Fort Lamy, 22 May, 1964	III BDARO 1045
57	Agreement concerning the River Niger commission and the navigation and transport on the River Niger. Niamey, 25 Nov., 1964	587 UNTS 19; III BDARO 1034
58	Convention between Senegal and Gambia. Bathurst, 18 Feb., 1965	FPD4 paragraph. 21
59	Agreement between South Africa and Portugal relating to hydropower development on the Zambezi River. Lisbon, 1 Apr., 1967	FPD4 paragraph. 54
60	Treaty of Association between Senegal and the Gambia. Bathurst, 19 Apr., 1967	640 UNTS 101
61	Joint communique issued at the first meeting of The Sene-Gambia Inter-State Ministerial Committee. 10 June, 1967	FPD4 paragraph. 23
62	Agreement concerning the Oxbow Water Development Scheme. 1 Feb., 1968	FPD4 paragraph. 59
63	Agreement concerning the Niger River Commission and the Navigation and Transport on the River Niger. Done at Niamey, on 25 November 1964 [Rectification]. Niamey, 15 May, 1968	636 UNTS 418
64	Agreement on the Integrated Development of the Gambia River Basin. Bathurst, 31 July, 1968	FPD4 paragraph. 24
65*	African convention on the conservation of nature and natural resources. Algiers, 15 Sept., 1968	54 LNTS 239
66	Agreement between the Government of the Republic of South Africa and the Government of Portugal in regard to the first phase of development of the water resources of the Cunene River Basin. Lisbon, 21 Jan., 1969	FAO
67	Agreement to Purchase electricity from Cabora-Bassa Scheme. Lisbon, 19 Sept., 1969	FPD4 paragraph. 55
68	General Scheme for Development of the Senegal River Basin. 30 Jan. 1970	FPD4 paragraph. 51
69	Development Credit Agreement- Nile Delta Drainage Project (with annexed General Conditions Applicable to Development Credit Agreements). Washington, 17 Apr., 1970	767 UNTS 163

70	Agreement to Establish a Commission for the Koma-Dogou-Yobe. 3 Mar., 1971	Caponera 585
71	Convention Portant Creation de L'Organisation pour la Mise en Valeur du Fleuve Senegal. Nouakchott, 11 Mar., 1972	FAO
72	Convention Relative au Statut du Fleuve Senegal. Nouakchott, 11 Mar., 1972	FAO
73	Agreement establishing the Lake Chad basin Commission development fund. Yaounde, 22 Oct., 1972	34 ZAORV 80
74	Agreement concerning the Niger River Commission and the Navigation and Transport on the River Niger Revised on 2 Feb., 1968 & 15 June, 1973	1346 UNTS 195
75	Agreement for the Creation of Development Fund for the Chad Basin Commission. Yaounde, 10 Oct., 1973	FAO
76	Agreement governing the operations of the Onchocerciasis Control Programme in the Volta River Basin area. Accra, 1 Nov., 1973	FAO
77	Protocol to the Agreement to Establish a Commission for the Koma-Dogou-Yobe. 22 Dec., 1973	Caponera 585
78	Agreement between South Africa, Swaziland, and Portugal. 13 October, 1974	FPD4 paragraph. 58
79	Amendments To The Convention Concerning The Status Of The Senegal River And Convention Establishing The Senegal River Development Organization. Nouakchott, 17 Dec. 1975	IEA
80	Grant Agreement for the environmental assessment of the Senegal River Basin between the Agency for International Development and the Organization Pour La Mise en Valeur du Fleuve Senegal (OMVS). Dakar, 25 Feb., 1976	1084 UNTS 235
81	Grant Agreement between the Agency for International Development and the Lake Chad Basin Commission (Final Engineering Design of Two Road Links). N'Djamena, 25 June, 1976	1086 UNTS 39
82	Grant Agreement for the O.M.V.S. Senegal River Basin survey and mapping between the Agency for International Development (AID) and the Organization Pour La Mise en Valeur Du Fleuve Sénégal. Dakar, 31 Aug., 1976	1113 UNTS 149

83	Agreement between the Government of the Federal Republic of Germany and the Organization for the Development of the Senegal River concerning Financial Assistance. Dakar, 13 Oct., 1976	1715 UNTS 158
84	Project Grant Agreement 677-77-2, January 25, 1977, between the Ministry of Foreign Affairs and Cooperation of the Government of the Republic of Chad (GOC) and the United States of America Acting through the Agency for International Development (AID). N'Djamena, 25 Jan., 1977	1116 UNTS 197
85	Agreement between the Government of the Federal Republic of Germany and the Government of the Arab Republic of Egypt Concerning Financial Cooperation. Bonn, 28 June, 1977	1093 UNTS 303
86	Intermediate Loan Agreement. Washington, 15 July, 1977	1105 UNTS 314
87	Development Credit Agreement. Washington, 15 July, 1977	1105 UNTS 317
88	Loan Agreement.. Washington, 15 July, 1977	1105 UNTS 315
89	Project Agreement. Washington, 15 July, 1977	1103 UNTS 378
90	Agreement for the establishment of the Organization for the Management and Development of the Kagera River Basin. Rusumo, 24 Aug., 1977	1089 UNTS 171
91	Amendment To The Agreement For The Establishment Of An Organization To Manage And Develop The Kagera River Basin. 19 May, 1978	IEA
92	Convention Relating to the Creation of the Gambia River Basin Development Organization. Kaolack, 30 June, 1978	FAO
93	Convention Relating to the Status of the River Gambia. Kaolack, 30 June, 1978	TFDD
94	Protocole D'accord entre la Republique de Guinee et la Republique de la Guinee-Bissau sur L'Amenagement du Fleuve Koliba-Korubal. Conakry, 21 Oct., 1978	FAO
95	Convention concluded between Mali, Mauritania, and Senegal relative to the Legal Statute of Common Works. Bamako, 21 Dec., 1978	FAO
96	Agreement Establishing a Permanent Joint Technical Committee. 18 Aug., 1979	Caponera 585
97	Amendments To The Convention Concerning The Status Of The Senegal River And Convention Establishing The Senegal River Development Organization. 11 Dec., 1979	IEA
98	Convention Creating the Niger Basin Authority. Faranah, 21 Nov., 1980	1346 UNTS 207
99	Development Credit Agreement. Washington, 27 Mar., 1981	1296 UNTS 107

100	Development Credit Agreement. Washington, 27 Mar., 1981	1327 UNITS 107
101	Accession of Uganda to the agreement for the Creation of the Organization for the Management and Development of the Kagera River Basin. Bujumbura, 19 May, 1981	FAO
102	Amendment To The Convention Relating To The Status Of The River Gambia And The Convention Relating To The Creation Of The Gambia River Basin Development Organization. 6 June, 1981	IAE
103	Agreement on the Establishment of the Joint Permanent Technical Committee. Nov., 1982	Caponera 585
104	Agreement between the Government of the Republic of South Africa, The Government of the Kingdom of Swaziland and the Government of the People's Republic of Mozambique relative to the Establishment of a Tripartite Permanent Technical Committee. Pretoria, 17 Feb., 1983	FAO
105	Agreement on the Establishment of the Joint Permanent Technical Committee. Apr., 1983	Caponera 585
106	Agreement on the Establishment of the Joint Permanent Technical Committee. 8 May, 1983	Caponera 585
107	Agreement on the Establishment of the Joint Permanent Technical Committee. Nov., 1983	AWIRU
108	Agreement concerning the Niger River Commission and the Navigation and Transport on the River Niger. Done at Niamey, on 25 November 1964 [Partial Termination]. 13 Jan., 1984	1346 UNITS 362
109	Agreement between the Governments of the Republic of Portugal, the People's Republic of Mozambique and the Republic of South Africa relative to the Cahora Bassa Project Done at Cape Town. Cape Town, 2 May, 1984	FAO
110	Convention Creating the Niger Basin Authority. Faranah, 21 Nov., 1980	1394 UNITS 559
111	Agreement On The Control Of Pollution Of Water Resources In The South African Region. 21 Nov., 1985	IEA
112	Agreement concerning the Niger River Commission and the Navigation and Transport on the River Niger. Done at Niamey, on 25 Nov., 1964 [Amendment]. 10 Feb., 1986	1418 UNITS 366
113	Treaty on the Lesotho Highlands Water Project between the Government of the Republic of South Africa and the Government of the Kingdom of Lesotho. Maseru, 24 Oct., 1986	FAO

114	Agreement on the action plan for the environmentally sound management of the Common Zambezi River system. Harare, 28 May, 1987	FAO
115	Agreement between the Republic of Zimbabwe and the Republic of Zambia concerning the utilization of the Zambezi River. Harare, 28 July, 1987	FAO
116	Reglement Financier Revise de L'Autorite du Bassin du Niger. N'Djamena, 27 Oct., 1987	FAO
117	Convention Revisee portant Creation de L'Autorite du Bassin du Niger. N'Djamena, 29 Oct., 1987	FAO
118	Protocole d'Accord entre la Republique du Niger et la Republique du Mali relatif a la Cooperation dans l'Utilisation des Ressources en eau du Fleuve Niger. Bamako, 12 July, 1988	FAO
119	Relationship Agreement (with Annex). Dakar, 12 Aug., 1988	1968 UNTS 161
120	Agreement on the Establishment of the Joint Permanent Commission for Cooperation (DATE?)	AWIRU
121	Agreement On The Establishment And Operation Of A Common Works Area At The Caledon River For The Purpose Of The Implementation Of The Lesotho Highland Water Project. 12 June, 1989	IEA
122	Agreement concerning financial co-operation. Dakar, 22 May, 1990	UNTS
123	Agreement between the Federal Republic of Nigeria and the Republic of Niger Concerning the Equitable Sharing in the Development Conservation and Use of Their Common Water Resources Done at Maiduguri. Maiduguri, 18 July, 1990	FAO
124	Agreement In Regard To The Development And Utilization Of The Water Potential Of The Kunene River. 18 Sept., 1990	IEA
125	Agreement On General Cooperation And The Creation Of The Angolan-Namibian Joint Commission Of Cooperation. 18 Sept., 1990	IEA
126	Agreement Between the Government of Botswana and the Republic of Namibia on the Establishment of a Joint Water Commission. Windhoek, 13 Nov., 1990	AWIRU
127	Tripartite Ministerial Meeting of Ministers Responsible for Water Affairs Held of the 15th February, 1991 in Swaziland. 15 Feb., 1991	TFDD
128	Protocol IV to the Treaty on the Lesotho Highlands Water Project. London, 19 Nov., 1991	TFDD
129	Treaty on the Development and Utilization of the Water Resources of the Komati River Basin between the Government of the Kingdom of Swaziland and the Government of the Republic of South Africa. 13 Mar., 1992	TFDD

130	Treaty on the establishment and functioning of the joint water commission between the government of the Kingdom of Swaziland and the government of the Republic of South Africa. Mbabane, 13 Mar., 1992	FAO
131	Ancillary Agreement to the Deed of Undertaking and Relevant Agreements between the Lesotho Highlands Development Authority and the Government of the Republic of South Africa. 31 Aug., 1992	TFDD
132	Agreement between the government of the Republic of Namibia and the government of the Republic of South Africa on the establishment of a permanent water commission signed at Noordoewer. Noordoewer, 14 Sept., 1992	FAO
133*	Agreement on the Development and Utilization of the Water of the Komati River Basin between the Government of the Republic of South Africa and the Government of Kangwane. 7 Oct., 1992	FAO
134	Agreement on the Vioolsdrift and Ngordoeur Joint Irrigation Scheme Between the Government of the Republic of South Africa and the Government of the Republic of Namibia. Pretoria, 26 Apr., 1993	AWIRU
135	Framework for General Co-operation Between The Arab Republic of Egypt and Ethiopia. Cairo, 1 July, 1993	FAO
136	Loan Agreement. Rome, 25 Jan., 1994	1933 UNTS 231
137	Technical Protocol on Water Resources between the Ministry of Public Works and Water Resources and the Ministry of Public Works and Regional Planning in Romania. Cairo, 17 May, 1994	LEX-FAOC005129; Official Gazette No. 28, 13 July 1995, pp. 1544- 1548
138	Convention for the Establishment of the Lake Victoria Fisheries Organization. Kisumu, 30 June, 1994	1930 UNTS 127
139	Agreement to initiate a program to strengthen regional coordination in management of resources of Lake Victoria. 5 Aug., 1994	UNTS 32987
140	Agreement between the Governments of the Republic of Angola, the Republic of Botswana, and the Republic of Namibia on the Establishment of a Permanent Okavango River Basin Water Commission (OKACOM). Windhoek, 16 Sept., 1994	FAO
141	Economic and Technical Agreement between the Government of Egypt and the Russian Federation. 9 Nov., 1994	LEX-FAOC006634; Official Gazette No. 12, 23 March 1995, pp. 798- 804

142	Protocol on shared watercourse systems in the Southern African development community (SADC) region. Johannesburg, 28 Aug., 1995	FAO
143	Joint Water Commission Terms of Reference between the Republic of South Africa and the Government of the Republic of Mozambique. 1 Jan., 1996	TFDD
144	Report of the Meeting Between the Ghana Delegation and the Burkina Faso Delegation From the 27th To 30th May 1996 Related to No-Objection of the Ghanaian Government on the Construction of the Ziga Dam. Ouagadougou, 30 May, 1996	Ghana Ministry of Works and Housing, 1998
145	Agreement on the Establishment of the Joint Permanent Technical Commission. 1997	AWIRU
146	Protocol VI to the Treaty on the Lesotho Highlands Water Project. 1 Jan., 1999	TFDD
147	Agreement Between Niger And Benin Regarding The Creation And Hydroelectric Management Of The Site At Dyodyonga On The River Mekrou. 14 May, 1999	TFDD
148	Revised Protocol on Shared Watercourses in the Southern African Development Community (SADC). 7 Aug., 2000	TFDD
149	Agreement 1 - Text between Chad, Egypt, Libya and Sudan concerning the monitoring and exchange of groundwater information of the Nubian Sandstone Aquifer System. 5 Oct., 2000	LEX-FAOC039094
150	Agreement 2 - Text between Chad, Egypt, Libya and Sudan for Monitoring and Data Sharing for sustainable development and proper management of the Nubian Sandstone Aquifer System. 5 Oct., 2000	LEX-FAOC039095
151	Agreement Between the Governments of the Republic of Botswana the Kingdom of Lesotho the Republic of Namibia and the Republic of South Africa on the Establishment of the Orange-Senqu Commission. Windhoek, 3 Nov., 2000	AWIRU
152	Resolution No. 3 of the Minister of Foreign Affairs implementing the Reciprocal Memorandum between Egypt and Japan for the execution of the Floating Pumps Re-qualification Project in Alwajh Alqibly (phase three). Cairo, 11 Apr., 2002	LEX-FAOC044653; Official Gazette, No. 10, 6 March 2003, 1 p

153	Resolution No. 1 of the Minister of Foreign Affairs implementing the Reciprocal Memorandum between Egypt and Japan for the improvement of the potable water in Algeheza City. Cairo, 8 July, 2002	LEX-FAOC044649; Official Gazette, No. 10, 6 Mar. 2003, 1 p
154	Tripartite Interim Agreement Between the Republic of Mozambique and the Republic of South Africa and the Kingdom of Swaziland for Co-operation on the Protection and Sustainable Utilization of the Water Resources of the Incomati and Maputo Watercourses . Maputo, 13 Aug., 2002	AWIRU
155	Resolution No. 13 of the Minister of Foreign Affairs implementing the Memorandum between Egypt and Finland in financing some projects in Egypt. Cairo, 18 Sept. and 3 Dec., 2002	LEX-FAOC044986; Official Gazette, No. 16, 17 Apr. 2003, 1 p
156	Protocol for Sustainable Development of Lake Victoria Basin. Arusha, 29 November, 2003	LEX-FAOC041042
157	Ghana - Burkina Joint Declaration. Accra, 13 Apr., 2004	DGIRH, Burkina Faso
158	Results of The Experts Meeting on the Establishment of a Volta Basin Technical Committee. Ouagadougou, 30 July, 2004	DGIRH, Burkina Faso

* Note that these five treaties are included for reference only. They failed to meet the criteria for analysis in this study.