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Transboundary governance of the Nile River Basin: Past, present and future

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ABSTRACT

Transboundary waters face a multiplicity of governance challenges. Transboundary waters are water resources that are shared by two or more sovereign states, and include international freshwater, international groundwater and international Large Marine Ecosystems (LMEs).

In crafting effective institutional design to govern transboundary waters, there can be no one-size-fits-all approach. Differences in approach are necessarily dependent on various political, social, economic and ecological drivers. These drivers provide the context against which the institutional architecture can be assessed and the environment within which institutional architecture should function.

This note is a case study documenting the effectiveness of transboundary governance of the Nile River Basin. It comments on the approaches to and drivers of the Basin's institutional design, and concludes with a discussion on the challenges to effective transboundary governance in the region moving forward.

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1. Introduction

The world's 263 transboundary water basins cover nearly one half of its land surface, account for an estimated 60% of global freshwater flow and support roughly two billion people globally.¹ They link

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¹ There are approximately 145 nations that have territory within transboundary water basins, with 30 nations lying entirely within them. There are 19 international freshwater drainage basins shared by 5 or more riparians countries. The Danube travels within the territory of 18 nations. The Congo, Niger, Nile, Rhine and Zambezi drainage basins are shared by

populations both within and between countries, and create hydrological and economic interdependencies (United Nations-Water, 2008).² Naturally, the utilization of transboundary waters is a potential source of friction among basin states vying for scarce resources. Sharing water resources ‘creates intricate diplomatic challenges... [often linking] states in asymmetric upstream/downstream relationships, at a time when pressures on the world’s water supplies are increasing substantially’ (Conca et al., 2006).

The competing roles in international water basins—engines of regional economic development and critical sites of biodiversity conservation make governance particularly challenging.³ When basins encompass multiple sovereign states, a paramount concern is how to design and sustain institutions to equitably share and protect water resources (Sneddon and Fox, 2006; Stinnett and Tir, 2009).⁴

A review of the literature confirms that international water treaties that utilize formal institutions will be more likely to prevent riparian conflicts and alleviate the deleterious consequences of water scarcity for international security.⁵ For example, specific institutional provisions can help monitor behavior, facilitate enforcement, resolve disagreements over treaty obligations, and help boost the capacity of member countries. ‘By coordinating and collaborating together via a single entity, parties will be able to generate more data and information for the shared resource, enhance collective expertise in basin characteristics and management, and develop a cadre of managers and experts who have a unique knowledge of the particular basin’ (Eckstein, 2009). Institutions also ‘play an important role in mitigating conflict and promoting cooperation by allowing resource users to handle rapidly changing physical or political conditions’ (Berardo and Gerlak, 2012).

Since transboundary waters⁶ exhibit a wide range of existing water resource issues, there is no one-size-fits-all approach to transboundary basin management (Schreiner et al., 2011; Eaux Partagees, 2002). Partly, these differences are dependent on various political, social, economic and ecological drivers. These drivers provide the context against which the international architecture can be assessed and the environment within which it should function. In other words, the nature and characteristics of the shared water resource will drive its institutional design (Pegram et al., 2009).

This note is a case study documenting the effectiveness of transboundary governance of the Nile River Basin. It comments on the approaches to and drivers of the Basin’s institutional design, and

(footnote continued)

between nine and 11 countries. And there are 13 international freshwater drainage basins that are each shared by between five and eight riparian countries.

² See also: International Bureau of the Permanent Court of Arbitration, *The Resolution of International Water Disputes: Papers emanating from Sixth PCA International Law Seminar 08 November 2002* Kluwer Law International, The Hague/London/NewYork at xix; See also Wolf (2000), *Development and Transboundary Waters: Obstacles and Opportunities*. In *River Basin Management: Its Role in Major Water Infrastructure Projects*. World Commission on Dams Thematic Review.at 30.

³ In this context it has been observed that, despite predictions of conflict, quite a number of international river basins have seen the establishment of international agreements and also the setting up of river basin organizations. Agreements regarding governance of international waters serve not only to protect and promote sustainable development, but also affect security throughout an entire area. These international agreements tend to stabilize and enhance security at the regional level, and the security return generated is independent of the concrete ecological and economic benefits produced by such agreements. Severe deforestation, soil erosion, salinization, toxic contamination, resource exploitation, habitat destruction, drought, flooding, air pollution and water pollution are just some of the environmental calamities that can increase international tension and lead to war over international waters. Conversely, the very process of reaching accommodation while developing bilateral resources and environmental and other mechanisms for cooperation in an international waters context creates a stabilizing and more transparent atmosphere. The mere fact of negotiation usually widens political participation, builds stability and spreads confidence between sovereign states.

⁴ See also: Dombrowsky (2008), *Institutional Design and Regime Effectiveness in Transboundary River Management—the Elbe Quality Regime*. *Hydrol. Earth Syst. 12*: 223–238, stating, “The literature on transboundary river management suggests that institutions play an important role in bringing about cooperation”.

⁵ See: Paisley (2004), *International Water Law, Transboundary Water Resources and Development Aid Effectiveness*. *Indian Jurid. Rev. 1*: 67; See also Wolf et al. (1999), Wolf, A., Natharius, J.A., Danielson, J.J., Ward, B.S., Pender, J.K., 1999. *International River Basins of the World Int. J. Water Res. Dev. 15*, 387–427 McCaffrey (2007), *The Law of International Watercourses* (2nd Ed). Oxford University Press.

⁶ “International waters,” and interchangeably, “transboundary waters”, are water resources that are shared by two or more sovereign states and include international freshwater, international groundwater and international Large Marine Ecosystems (LMEs). International waters also include “boundary” water resources where the boundary between two or more sovereign states is formed by an international lake or river, and they include “successive” water resources where an international river (or underground aquifer) flows from one sovereign state to another.

concludes with a discussion on the challenges to effective transboundary governance in the region moving forward.⁷

2. Background

2.1. Geography, hydrology and climate

The Nile River Basin extends through eleven countries and has two major tributaries, the White Nile and the Blue Nile. The White Nile flows from Lake Victoria and the mountains of Burundi, Rwanda, and the Democratic Republic of the Congo (“DRC”). The Blue Nile is composed of waters from Ethiopia, Eritrea, and Sudan. The Blue Nile and White Nile meet at Khartoum, Sudan, to form the main body of the Nile, which then flows through Egypt to empty into the Mediterranean Sea.⁸

The Nile Basin drains a total of approximately three million square kilometers of territory in eleven riparian states: Ethiopia, Sudan, South Sudan, Egypt, Rwanda, Tanzania, Uganda, Burundi, DRC, Eritrea, and Kenya (Fig. 1). Its catchment area encompasses 10% of Africa’s landmass (United Nations Economic Commission for Africa, 2004). The Basin’s climate ranges from tropical in the equatorial region of the Great Lakes area and the Ethiopian highlands, to arid in Sudan and Egypt.

About 300 million people rely on the waters of the Nile, and population growth rates in the region are projected to soar (Salman and Salman, 2013).⁹ Much of this population relies almost exclusively on the Nile as its source of freshwater. The Nile, for example, is essentially Egypt’s only source of water.¹⁰ The vast majority of Egypt’s rapidly expanding population lives in the Nile Valley, and the agricultural sector, which constitutes a significant portion of the Egyptian economy, is heavily dependent on crops that require extensive irrigation. Ethiopia’s population is growing at an even faster rate than Egypt’s population, establishing a compelling need for increased food production and more extensive use of the Nile waters for agricultural purposes (Brunnée and Toope, 2002).

Based on measurements taken at Aswan at Lake Nasser in Egypt, the Nile’s flow has diminished over the last century. The Nile’s flow is also highly seasonal—approximately 80% of its flow occurs from August to October.

The Nile Basin is also thought to be particularly sensitive to the impact of climate change and prone to climate-induced water scarcity (Eckstein, 2009). These factors are especially notable in a river basin where many riparians are already considered “water scarce” by 2050 (Brunnée and Toope, 2002).

Despite the limited amount of available water, many riparians, particularly Egypt and Ethiopia, have ambitious plans to use more water and develop hydroelectricity projects along the Nile. Egypt has also embarked on the New Valley Project (also known as the Toshka Project), designed to redirect 10% of its allotment from the Nile (approximately 4.94 billion cubic meters) to essentially establish and maintain a second Nile Valley and increase habitable land in Western Desert.¹¹

In addition to water scarcity issues, Nile riparians are also facing degrading water quality. Runoff from upstream and downstream agriculture causes contamination from pesticides and fertilizers, and is

⁷ This case study is one of a series of in depth case studies prepared as part of a Global Environment Facility (GEF) International Waters Governance project conducted by the Global Transboundary International Waters Governance Initiative at the University of British Columbia in Vancouver, Canada. Each case study has been peer reviewed by one or more experts with direct knowledge of the agreement being analyzed. For a detailed description of the provisions of the Nile Basin Initiative, see: White and Case (2011), UNDP-GEF International Waters Good Practices Project, International Waters: Review of Legal and Institutional Frameworks 201 (2011), available at <http://governance-iwlearn.org> (last viewed April 30, 2013).

⁸ See generally: Melesse (2011). Nile River Basin: Hydrology, Climate and Water Use. Springer.

⁹ See The FAO: Population Prospects in the Nile Basin (2013); The FAO: Population Prospects in the Nile Basin. This poster presents population densities in the Nile countries in 2005 and projections for 2030. According to the United Nations Population Division (UNPD), the countries will hit a medium estimate of 654 million in 2030 from 372 million in 2005. Currently 54% of the total population lives within the Nile basin. Available online: <http://www.fao.org/nr/water/faonile/PopulationProspects.pdf> (from April 30, 2013).

¹⁰ Ninety-five percent of the freshwater reaching Egypt originates outside the country, with 86% of the Nile River originating in the Ethiopian Highlands. See Eckstein (2009). Water Scarcity, Conflict and Security in a Climate Change World: Challenges and Opportunities for International Law and Policy. *Wis. Int. L. J.* 27:3, 409–461.

¹¹ Toshka Project–Mubarak Pumping Station/Sheikh Zayed Canal (2013). <http://www.water-technology.net/projects/mubarak/> (last visited April 30, 2013).

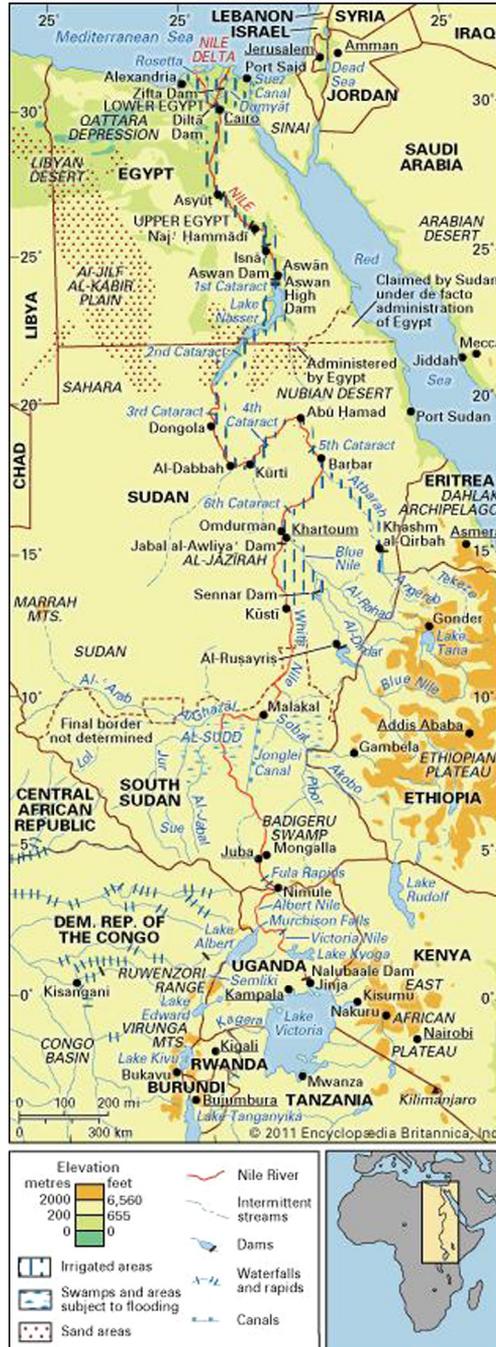


Fig. 1. Nile River Basin. (Nile River Basin, Map, from Encyclopædia Britannica Online, accessed May 1, 2013, Available at: < <http://www.britannica.com/EBchecked/media/204/The-Nile-River-basin-and-its-drainage-network> >.).

particularly severe in the Nile Equatorial Lakes Region.¹² This problem is exacerbated by the Nile's seasonal pattern of flooding and receding. In addition, rapidly growing populations have led to an increase in residential and industrial waste that, due to improper treatment, has ended up in the Nile.

In short, current uses of Nile waters are unsustainable. Nevertheless, the demand for water continues to climb as the amount of available uncontaminated water is declining, and some go so far as to suggest that “[t]here is simply not enough water in the Nile to complete the irrigation plans of Ethiopia and Egypt, much less to satisfy the ambitions of all the Nile riparians.” (Brunnée and Toope, 2002).

2.2. Political context

Several historical bilateral and trilateral treaties dating from the colonial era that addressed water allocation in the Nile River continue to be politically relevant to contemporary negotiations. In an effort to protect their interests in Egypt, the British oversaw the signing of agreements affecting the use of the Nile River that supported Egypt's downstream water interests over those of other Nile riparians. The 1902 Exchange of Notes between Ethiopia and Britain (on behalf of Sudan) prevented Ethiopia from developing any construction that would alter the flow of the Nile. In exchange Ethiopia received British recognition of Ethiopian independence. Ethiopia later repudiated this agreement in 1941.¹³

The 1929 Nile Waters Agreement between Sudan and Egypt¹⁴ further prioritized Egyptian water needs and purported to give Egypt the right to veto future hydroelectric projects in British colonies (which then included Kenya, Sudan, Tanganyika, and Uganda) along the Nile. (Brunnée and Toope, 2002). According to the text of the exchange of notes the original 1929 agreement is between Great Britain and Egypt and while focused on development in Egypt and Sudan, the agreement also concerns other regions under British control. The agreement is generally rejected by Nile riparians other than Egypt. However, Egypt uses the international law principle of state succession to argue that this treaty is still valid. Sudan and Egypt subsequently replaced the 1929 treaty in 1959 with the *Agreement for the Full Utilization of the Nile Waters*, which essentially allocated the entire flow of the Nile at the Aswan Dam to Sudan and Egypt. Unsurprisingly, this has caused regional tension amongst the other riparians, who invoke the Nyerere Doctrine,¹⁵ and general principles of international water law to contest the 1959 Agreement and claim a share of Nile waters.¹⁶

Regional tensions further complicate Nile cooperation efforts. For example, Ethiopia and Egypt have a long history of distrust and Egypt and Sudan, as well as Eritrea and Ethiopia, have long unresolved border disputes.¹⁷ In addition, many Nile riparians have been wracked by internal conflicts and instabilities that make international relations even more challenging. Sudan is perhaps the most dramatic example. After many decades of civil war, Sudan has now recently split into two separate states.¹⁸

3. Negotiation and development of the Nile basin Initiative

3.1. Negotiation

As previously mentioned there is clear disagreement among the Nile riparian states as to the relevance of the apportionment of water pursuant to the colonial-era treaties governing the Nile.

¹² The recently inaugurated Lake Victoria Environmental Management Project under the LVBC is a key intervention in reversing environmental degradation.

¹³ See generally: Swain (1997). Ethiopia, the Sudan and Egypt: The Nile River Dispute. *J. of African Studies*, 35:4, 675–694.

¹⁴ See generally: Lumumba (2007). The Interpretation of the 1929 Treaty and its Legal Relevance and Implications for the Stability of the Region. *African Sociological Review*, 11:1, 10–24. See generally: Yohannes and Yohannes (2013). Turmoil in the Nile River Basin: Back to the Future? *Journal of Asian and African Studies*, 48, 195–208.

¹⁵ The Nyerere Doctrine was named after Tanzanian president Joseph Nyerere, and gives treaties concluded during the colonial era two years to be renegotiated, after which time unresolved treaties would lapse. See Salman and Salman (2011): The new state of South Sudan and the hydropolitics of the Nile Basin, *Water International*, 36:2, 154–166 at 159.

¹⁶ See generally: Metawie (2004). History of Co-operation in the Nile Basin. *Int'l J. of Water Res. Dev.* 20:1, 47–63.

¹⁷ Brunnée and Toope (2002).

¹⁸ For a detailed discussion of the implications of the new state of Southern Sudan and hydro-politics in the Nile Basin see: Salman and Salman (2011). The New State of South Sudan and the Hydropolitics of the Nile Basin. *Water Int.*, 36:2, 154–166.

This is the case because those treaties predominantly benefited the downstream states, Sudan and Egypt, without much benefit to the now nine upstream states (Bulto, 2009). The effect of the treaties is to generally try to freeze upstream projects to secure a continuous and undiminished flow of water to Sudan and Egypt. Egypt, and to a lesser extent Sudan, have adopted a view consistent with those treaties that they have an “historical” and “natural” right to the full volume of the Nile and that upstream states may not disturb that right by impeding or otherwise affecting that flow (Bulto, 2009).

In direct opposition to this view is the view of Ethiopia, and to some extent, the other Nile riparian states. Ethiopia has argued that it has a complete sovereign right to exploit the waters that flow within its territory. This includes utilizing Nile waters in a reasonable and equitable manner even if there is a decrease in the quantity and quality of flow into Sudan and Egypt (Bulto, 2009). As a result of these geographic and political circumstances, relations in the Nile Basin have often been cited as an example “of unremitting and open conflict, or at least incipient and barely camouflaged competition.” (Brunnée and Toope, 2002).

There is a long history of unsuccessful negotiations over allocation and development of Nile water resources. In light of the political and geographic context described above, many have predicted that tensions over the waters of the Nile would lead to open violent conflict between riparians.¹⁹ However, as a result of decades of interaction and the involvement of external agents, the Nile riparians have been able to take at least a first step toward cooperation by entering into the Nile Basin Initiative (“NBI”) in 1999. The NBI agreement, to be described in greater detail below, was supposed to lead to the adoption of a comprehensive permanent Nile River Basin legal and institutional framework. Negotiations toward such an agreement have yet to be successfully completed.²⁰ However, a cooperative framework agreement (CFA) has now been signed by a number of the Nile riparian states with the notable exceptions of Egypt, Sudan and South Sudan.²¹

Beginning in the early 1980s, a series of overlapping initiatives were developed to consult on largely technical issues arising in the Nile Basin. With the support of the United Nations Development Programme (“UNDP”), a series of hydrometeorological studies was undertaken in the early 1980s including by Egypt, Sudan, Kenya, Tanzania, and Uganda. Among other things and despite some setbacks, this led to the further exploration of a basin-wide management system for the Kagera River, which feeds Lake Victoria and is therefore a remote source of the Nile.²²

In 1983, UNDUGU (“brotherhood” in Swahili) was formed at Egypt’s behest. UNDUGU included all Nile riparians except Kenya and Ethiopia, which participated as observers. The goal of UNDUGU was to foster economic, social, cultural, and technical ties, although individual Nile riparians may have been motivated to participate for varying reasons. Some argued that while many of the riparians were interested in fostering “self-reliance and African inter-dependence,” for Egypt, UNDUGU was “an exercise in hegemonic influence.”²³

Despite arguable domination by Egypt, UNDUGU’s lasting impact was to provide a forum for information sharing. “UNDUGU served as an institutional locus for sharing expertise” and allowed for the riparians to become “accustomed to treating the Nile as a whole, not as less than the sum of its national parts.”²⁴

¹⁹ As most of these water agreements and treaties took place when the majority of the countries were under colonial rule they are perceived by some as a colonial imposition that needs to be reviewed. Furthermore, many of these agreements do not include any monitoring provisions, do not delineate specific allocations, and have no enforcement mechanism. More recent agreements have focused on cooperation in sharing the water resources and in promoting socio-economic development in the basin. Interview with Emmanuel Olet, Program Officer Water Resources Development, Nile Basin Initiative, (March 27, 2011).

²⁰ See generally: Yohannes, O., Yohannes, K., 2013. Turmoil in the Nile River Basin: Back to the Future? *Journal of Asian and African Studies*, 48, 195–208.

²¹ The Agreement on the Nile River Basin Cooperative Framework can be found at International Water Law Project (2013), available at <http://www.internationalwaterlaw.org/documents/regionaldocs/Nile_River_Basin_Cooperative_Framework_2010.pdf> (last viewed April 30, 2013).

²² The Kagera River originates in Burundi and forms part of the borders between Burundi and Tanzania, Rwanda and Tanzania, Burundi and Rwanda, and Tanzania and Uganda, before emptying into Lake Victoria.

²³ Brunnée and Toope (2002).

²⁴ *Id.* at 133.

In December 1992, following a series of consultations with Nile Basin countries, the ministries responsible for water affairs met in Kampala to approve the establishment of the Technical Cooperation Committee for the Promotion of the Development and Environmental Protection of the Nile Basin (“TECCONILE”). TECCONILE aimed to contribute in the development of the Nile Basin in an integrated and sustainable manner through basin-wide cooperation and the determination of equitable sharing of its waters. The objectives were to develop infrastructure, techniques and build capacity for the management of water resources and to formulate national master plans and integrate them into a Nile Basin Action Plan.

TECCONILE became operational on 1 January 1993 with the signing of the TECCONILE Agreement by Ministers from Egypt, Sudan, Rwanda, Tanzania, Uganda and Zaire. Ethiopia and Kenya refused to join as full members.²⁵ These two Nile riparians objected to TECCONILE because its framework did not address the fundamental issue of equitable water apportionment. In addition, Egypt was again perceived to dominate.²⁶

Nevertheless, as part of the meetings of TECCONILE, the Nile River Basin Action Plan (“Action Plan”) was created. All of the Nile Basin states were involved in the creation of this plan, which was formerly adopted by the Council of Ministers for Water Affairs of all the Nile Basin (“Nile-COM”) states in February 1995. The majority of the Action Plan was devoted to a series of development projects, however, the Action Plan also envisioned “the establishment of a basin-wide, multidisciplinary framework for legal and institutional arrangements.” Few of the provisions of the Action Plan were implemented, in part because of resource constraints, but also because of various Nile riparians’ continued competitive behavior toward one another.²⁷ However, TECCONILE made significant contributions to Nile-related data and information, country capacity in technical monitoring, and, through the 2002 Nile Conferences and development of NILE-HYCOS, encouraged riparian cooperation.²⁸

In addition to the TECCONILE meetings, other meetings fostered cooperation between the Nile riparians. A series of additional, informal meetings were held, that were collectively known as the “2002 Nile Conferences,” which began in 1993 in Aswan, Egypt, and continued on a yearly basis in various basin states until 2002, at which time they continued as the Nile Basin Development Forum.²⁹

The 2002 Nile Conferences were based on the theme of “comprehensive cooperation” and were typically structured as sessions on individual topics of urgency, though with time also reserved for open discussion. Although the 2002 Nile Conferences were supposed to be largely technical in nature, the issues discussed often ranged into legal and normative topics.³⁰ The 2002 Nile Conferences were supported by the Canadian International Development Agency (“CIDA”), as well as the UNDP and the World Meteorological Organization.³¹

All the Nile basin states sent participants to the 2002 Nile Conferences, and the informal structure of the conferences meant that none of these participants held any particular status during the sessions. Notably, all the participants sat together, presented papers, and participated in the discussion and in the drafting of any joint statements on behalf of the conference participants. The lack of formality was thought to foster direct and open discussions that might not have occurred had the 2002 Nile Conferences been structured as formal negotiation sessions.³² The series also provided a forum for discussing sub-regional organizations within the Nile Basin. Given the tensions between the Nile riparians and the geographic breadth of the Nile Basin, more local arrangements could provide additional forums for cooperation.³³

²⁵ *Id.* at 133–34.

²⁶ *Id.* at 134.

²⁷ Brunnée and Toope, at 134–35.

²⁸ Olet, *supra* note 19.

²⁹ Nile Basin Initiative, *Nile Basin Development Forum, 17–19 November 2008*, NileBasin.org, <http://www.nilebasin.org/NBDF2008/doc/conference_program_ver3.pdf, 2>.

³⁰ Brunnée and Toope, at 136.

³¹ *Id.* at n.186.

³² *Id.* at 135.

³³ *Id.* at 136.

3.2. Development

Third party involvement, particularly the World Bank and the UNDP was critical in the development of the NBI. The Nile states did not have the resources to implement the Nile River Basin Action Plan, and thus looked to international organizations for support.³⁴ Nile-COM first requested the World Bank's assistance to coordinate donor involvement and establish a Consultative Group to raise financing for cooperative projects in the Nile Basin.³⁵ UNDP and CIDA also agreed to play lead roles in developing Nile Basin cooperation.³⁶

The World Bank, UNDP, and CIDA reviewed the Action Plan and recommended consultations with Nile countries, further review of the Action Plan by an International Advisory Group ("IAG"), refinement of a proposed priority portfolio, presentation of findings to Nile-COM, definition of projects, and a process leading to the International Consortium for Cooperation on the Nile (a donor consortium).³⁷

As a result of this review process, and with further negotiations, the Action Plan was superseded by a new program, the Nile River Basin Strategic Action Program.³⁸ With TECCONILE having reached the end of its implementation term, the riparian ministers in charge of water affairs agreed to expand TECCONILE's mandate with a new transitional institutional mechanism, and launched the NBI in 1999.

As part of the review, the IAG concluded that the necessary elements for Nile cooperation were: a shared vision, transition from planning to action on the ground, proactive facilitation, simultaneous promotion of country and inter-country dimensions, and trust and confidence building. One of the key issues, therefore, was how to develop a shared vision among riparians used to competing with one another for the Nile. In this regard, the work of the World Bank's Senior Water Advisor for the Africa Region World Bank was important in facilitating the development of the NBI.

This water advisor developed a framework with "the potential to move from national agendas that are unilateral, to national agendas that incorporate significant cooperation, and converge upon a shared cooperative agenda."³⁹ He proposed to achieve this shift by having the parties to the negotiation concentrate on the widest possible range of potential benefits achievable under cooperation.⁴⁰ Thus, rather than focusing only on the divisive issue of allocating water rights, the parties would instead negotiate the sharing of baskets of benefits derived from cooperation.⁴¹

In the context of the Nile, this meant the Nile riparians would have to move away from the issue of allocating percentages of the flow of the Nile among states, and realize that cooperating could create a larger pool of benefits from which all the Nile riparians could share. For example, hydroelectric projects could be built upstream in countries like Ethiopia that would generate new power to share amongst upstream and downstream countries.

However, several other points of contention existed. For example, and as mentioned above, Ethiopia had long been skeptical of Egypt's dominance over meetings of Nile Basin countries. Historically, Ethiopia was excluded from treaties concerning the Nile, and wanted clear recognition of its rights. In particular, Ethiopia initially viewed the concept of prior notification as an affront to its sovereignty. This rule is a general rule of international law that governs the conduct of states in relation to international watercourses and requires that a riparian provide other riparians with advance notice of uses or changes in existing uses with risk of significant harm, together with relevant technical information, and also obliges riparians to consult with one another about any new use or change in existing uses. As an upstream Nile riparian who has not made use of much of the Nile, Ethiopia initially balked at the idea of having to notify and consult with countries like Sudan and

³⁴ Carroll (1999). Past and Future Legal Frameworks of the Nile River Basin. *Geo. Int. Environ. L. Rev.* 12:297

³⁵ The World Bank and the NBI (2013), available at <http://www.nilebasin.org/newsite/index.php?option=com_content&view=article&id=71%3Aabout-the-nbi&catid=34%3Anbi-background-facts&Itemid=74&lang=en> (last checked April 30, 2013).

³⁶ Carroll, *supra* note 33 at 298.

³⁷ *Id.* at 298-99.

³⁸ Olet, *supra* note 19.

³⁹ Sadoff and Grey (2005). Cooperation on International Rivers: A Continuum for Securing and Sharing Benefits. *Water Int.* 30:4, 420-427.

⁴⁰ *Id.* at 2.

⁴¹ *Id.* at 3.

Egypt before using water from the portion of the Nile that flows through Ethiopian territory. Ethiopia also pointed to the fact that Egypt had never given notice of its planned projects, even though it later pointed to them as existing uses that could not be harmed by Ethiopia's new uses.

Ethiopia eventually agreed to accept the rule of prior notification, partly because Ethiopia was accorded sufficient recognition and respect through the NBI process. In addition, as part of the negotiation process, Ethiopian officials were made to understand that prior notification was, and is, a well-established, fundamental principle of international law.

Another issue of contention was where to locate the NBI headquarters, the award of which would create jobs and funnel resources into the host country. Although the NBI's headquarters were ultimately located in Entebbe, Uganda, by way of compromise other NBI-related offices were spread out in various riparians. For example, the Eastern Technical Regional Office is based in Addis Ababa, Ethiopia, and the Coordination Unit for projects in the Nile Equatorial Region is based in Kigali, Rwanda.

The major stumbling block, however, was and continues to be the question of water security and existing treaties, to be discussed in more detail below. In short, Egypt and Sudan still cling to the conviction that their national security depends on guaranteeing current flow levels, and insist on maintaining their purported rights pursuant to the 1959 Nile Agreement. Although the NBI was entered into despite the failure to resolve this issue, water security has thus far proven to be a significant impediment to moving beyond the transitional NBI to a permanent agreement.

In February 1999, the water ministers of nine of the then ten Nile riparians (Eritrea participated only as an observer) agreed to replace TECCONILE with the NBI.⁴² The primary purpose of the NBI was to seek "to develop the river in a cooperative manner, share substantial socioeconomic benefits, and promote regional peace and security."⁴³ One of its primary goals of the NBI was to negotiate a "cooperative framework agreement" that would supersede past bilateral treaties and provide for sharing of the Nile's resources.

While such a cooperative agreement was being negotiated, the Strategic Action Program ("SAP") was developed to allow the NBI to develop Nile Basin water resources. The SAP achieves this objective through the Shared Vision Program ("SVP") and investment in various activities at the sub-basin level. To date, the SVP has numerous projects, most of which are largely complete, and includes such activities as training water professionals in sustainable water management, increasing participation among various stakeholders, and facilitating the development of regional power markets.⁴⁴

The NBI is financed by the Nile riparians through the collection of annual dues of \$35,000 from each country. Substantial financing is also provided by various international donors, primarily the World Bank, UNDP, and CIDA.

The NBI does not have a specific dispute resolution mechanism. All major decisions are made by the Nile-COM.

4. Implementation and monitoring

The NBI has been fully operational and most of the SVP and sub-regional projects were completed by 2012. The NBI, however, has had formal legal status as an institution only in Uganda where it is headquartered, Rwanda, where the NELSAP is headquartered, and in Ethiopia, where ENSAP is headquartered.⁴⁵

The Nile-COM is the highest decision-making body of the NBI. The Technical Advisory Committee ("Nile-TAC") renders technical advice and provides assistance to Nile-COM. The Nile Basin Initiative Secretariat ("Nile-SEC") renders administrative services and advice to Nile-TAC and Nile-COM.

⁴² For a more detailed description of the provisions of the NBI, see White & Case, UNDP-GEF International Waters Good Practices Project, 2011. International Waters: Review of Legal and Institutional Frameworks 201. Available at <http://governance-ivlearn.org> (last viewed April 30, 2013).

⁴³ Nile Basin Initiative, 2013. *About the NBI*, NileBasin.org, <http://www.nilebasin.org/> (last visited April 30, 2013).

⁴⁴ *Id.*

⁴⁵ Olet, *supra* note 19.

5. Assessing the NBI

As discussed previously, the NBI allowed for the development of a number of projects that have been successfully implemented. However, the NBI was not intended to be a permanent institution and was only meant to exist until a permanent Cooperative Framework Agreement came into force. As negotiating this framework has unexpectedly stretched on for more than a decade, the NBI has been in existence for longer than might have been expected.⁴⁶ This has had implications for the perceived strength of the NBI. A consultant hired to assess the effectiveness of the NBI also noted that prolonged negotiations of the Cooperative Framework Agreement has led to those within the NBI suffering from “deepened “transition thinking”” coupled with a high turnover of Nile-COM members.⁴⁷

On the one hand, the NBI has had various notable successes, including the successful negotiation and implementation of the Nile Basin Interim Procedures for Data and Information Sharing and Exchange in 2009 and the Operational Guidelines for Implementation of the Nile Basin Interim Procedures for Data and Information Sharing and Exchange in 2010.

On the other hand, individual riparian country financial contributions have unfortunately often been late and/or below the level needed to adequately and properly fully fund the NBI and its activities.⁴⁸

6. Beyond the NBI

The riparians met on numerous occasions during a more than 10-year period to draft a Cooperative Framework Agreement (“CFA”). Despite the opposition of Sudan and Egypt, five riparians, Ethiopia, Uganda, Tanzania, Rwanda, and Kenya, signed the CFA in May 2010. The agreement gave the other Nile Basin riparians, Burundi, DRC, Egypt, Sudan, and Eritrea, one year to sign the pact, which Burundi did in February 2011. Egypt and Sudan reacted by calling for a freezing of their own NBI activities until the “legal ramifications” of the signed CFA can be resolved.⁴⁹

The draft agreement will create a Nile River Basin Commission to replace the NBI.⁵⁰ The CFA does not, however, provide any concrete figures with respect to water allocation—it is instead meant to refer to equitable sharing implicitly through all of its mechanisms.⁵¹ It also does not include a formal mechanism for resolving disputes and does not contemplate a mechanism for data exchange. Rather the CFA lays out a series of principles that would be binding on all signatories. These include cooperation, equitable and reasonable utilization of water, doing no significant harm to other riparians, and regularly exchanging data and information.

The primary issue that has prevented the universal adoption of the CFA is that of “water security,” as articulated in CFA Article 14. In Article 14, the draft CFA provides that:

...Nile Basin states recognize the vital importance of water security to each of them. The States also recognize that cooperative management and development of the waters of the Nile River System will facilitate achievement of water security and other benefits. Nile Basin states therefore agree, in the spirit of cooperation:

(a) to work together to ensure that all States achieve and sustain water security.⁵²

⁴⁶ This being said, it should be noted that the NBI was never implemented with a specific time frame in mind. Olet, *supra* note 19.

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.* And Rutagwera, P. 2013, Burundi Signs the Nile Cooperative Framework Agreement, NILEBASIN.ORG, <http://www.nilebasin.org/newsite/index.php?option=com_content&view=article&id=70%3Aburundi-signs-the-nile-cooperative-framework-agreement-pdf&catid=40%3Alatest-news&Itemid=84&lang=en> (last visited April 30, 2013).

⁵⁰ Eckstein, G., 2010. Accord or Discord on the Nile? Part II, International Water Law Project Blog (Jul. 26, 2010, 3:55 PM), <<http://www.internationalwaterlaw.org/blog/?p=271>>.

⁵¹ Olet, *supra* note 19.

⁵² Mekonnen (2010). The Nile Basin Cooperative Framework Agreement Negotiations and the Adoption of a “Water Security” Paradigm: Flight into Obscurity or a Logical Cul-de-sac? *Eur. J. Int. Law*, 21:2, 421–440.

The current draft of the CFA has set aside 14b and empowered the new Nile River Basin Commission to resolve the matter within six months of its establishment. In an original draft of the CFA, Article 14b provided that states agreed “not to significantly affect the water security of any other Nile Basin State.”⁵³ Arguably, if adopted, this provision could be used to hold states responsible for violating the provision and thus limit states’ water withdrawals.⁵⁴ By contrast, Egypt and Sudan have insisted that states agree under Article 14b “not to adversely affect the water security and current uses and rights of any other Nile Basin State.”⁵⁵ This language attempts to redefine water security in relation to current uses and withdrawals. As Egypt’s current uses are based on the disputed historical treaties, other riparians have objected to this redrafting because it would perpetuate the historical arrangements that they have already rejected.

As a result of this disagreement, deadlock emerged, prompting the signing of the CFA without 14b and despite the objections of Egypt and Sudan. It is unclear how this will be resolved or what the effect of CFA will be if Egypt and Sudan continue to hold out. While Egypt and Sudan recently indicated interest in further negotiations over the CFA, it is unclear to what extent, if any, their positions on water allocations have changed.⁵⁶ Nevertheless, there is a case for starting the process of cooperative sharing of the Nile’s resources with the view of eventually obtaining full participation.⁵⁷

7. The way forward

Given the cooperative spirit that initially gave rise to the NBI, why has the negotiation of the CFA been so excruciatingly slow and seemingly unsuccessful?

First, the NBI arguably did little to address the fundamental schism over the options regarding rights and obligations that differ between upstream and downstream riparians.

Second, relatively little appears to have been done about problematic water use by certain Nile riparians, including unsustainable practices such as the development of new settlements in the desert, the farming of relatively water-intensive crops and the storing water in reservoirs with relatively high evaporation rates. Attempts appear to have been made to bridge these gaps by legal word smithing including by introducing the concept of “water security” in the draft CFA. However, the inclusion of this language does not seem to have resolved the issue. On the one hand, Egypt and Sudan seem to think that “water security” supports their view that water allocations set out in colonial-era treaties should be maintained.⁵⁸ On the other hand, the other Nile riparians have argued that “water security” supports their view of a more equal division of the Nile’s waters.

Third, the process of negotiating the NBI and the CFA has arguably not been sufficiently inclusive. For the most part, only government officials from the Nile riparians and representatives from the World Bank, UNDP and/or CIDA have been in attendance at the negotiations. Very few additional stakeholders have been allowed to participate in the negotiations and opportunities for public involvement have not been substantial. Even after the CFA was signed by multiple countries (with significant press coverage of the signing) the text of the agreement was initially difficult, if not impossible, to find.⁵⁹ According to Eckstein, “Agreements forged behind closed doors, even those that merely give the appearance of secrecy, often falter because of the lack of public support.”⁶⁰

Fourth, Ethiopia, one of eight upriver states and the source of most of the Nile waters that reach Egypt, is reportedly now building the largest dam in Africa.⁶¹ Located on the Blue Nile 25 miles from

⁵³ Eckstein, *supra* note 49. See generally: Nicol and Cascão (2011): Against the flow—new power dynamics and upstream mobilization in the Nile Basin, *Review of African Political Economy*, 38:128, 317–325

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ Salem (2011), Egypt and Sudan New Nile Agreement with Upstream Nations. Al-Masry Al-Youm. Available at <<http://www.almasryalyoum.com/en/print/379327>> (last viewed April 30, 2013).

⁵⁷ Olet, *supra* note 28.

⁵⁸ Mekonnen, *supra* note 51 at 430–31.

⁵⁹ Eckstein, *supra* note 49.

⁶⁰ *Id.*

⁶¹ Carlson (2013). Who Owns the Nile? Egypt, Sudan and Ethiopia’s History-Changing Dam. *Origins*, 6:6. Available at <<http://origins.osu.edu/article/who-owns-nile-egypt-sudan-and-ethiopia-s-history-changing-dam>> (last viewed April 30, 2013).

the Ethiopian border with Sudan, the Grand Renaissance Dam begins a new chapter in the long, bellicose history of debate on the ownership of the Nile waters, and its effects for the entire region could be profound.⁶² This is only one of many of the new dams either proposed, or under actual construction, in the Nile Basin, which are being built, usually by China, without World Bank money and without World Bank international environmental and labor safeguards.⁶³

Fifth, Sudan, South Sudan and now Egypt have recently been undergoing unusually strong political turmoil, even by Nile standards, and only time will tell when they are ready, willing and able to focus on the Nile again.

All to say that rather than continue to pull back, now is the time for the international community to redouble efforts to move toward a new Nile River Basin-wide comprehensive governance regime marked by cooperation and joint management of transboundary resources in contradistinction to one of only partial cooperation and unilateralism which might well dominate for the Nile River Basin decades to come.⁶⁴

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⁶² *Id.*

⁶³ *The Economist*, 2010, Dams in Africa: Tap that Water. Available at <http://www.economist.com/node/16068950> (last viewed April 30, 2013).

⁶⁴ Awulachew et al. (2012), Awulachew, S.B., Smakhtin, V., Molden, D., Peden, D (Eds.), 2012. *The Nile River Basin: Water, Agriculture, Governance and Livelihoods*. Routledge., London, p. 250.

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