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Abstract

Since the end of the Cold War, the Nile co-basin states have been moving towards constructing a regional water governance regime. The focus has been on how to promote cooperative harmonization of the water needs and growth priorities of all basin countries. Unfortunately, the effort appears to have come to a screeching halt, resuscitating old fears of potential inter-riparian conflicts. This paper examines the evolution of contentious politics of hydrology in the Nile basin in light of the regional and international approaches that have hitherto been employed to bring the co-basin states together on the importance of peaceful utilization of Nile waters.

Keywords

Benefit sharing, equitable utilization, Nile Basin Initiative, Nile Waters Agreement, shared vision, Subsidiary Action Program

Introduction

Shared by Burundi, the Democratic Republic of Congo (DRC), Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda, the Nile River has become a focus of contentious regional politics. Four aspects contextualize this contentious politics.

First, the co-basin countries are categorized into water producers and major water consumers. Ethiopia by itself contributes 85% of the Nile flow while Egypt contributes virtually nothing to the Nile system and, yet, it consumes most of the transboundary water. This reality evokes different degrees of demands and entitlements to Nile waters. Because the co-basin states define their hydrological positions differently, they have developed arguments over the years that are at loggerheads with one another, making harmonization of visions, interests, and actions exceedingly difficult.

Second, the multipolar political character of the Nile system is fraught with complications involving gross deficit in institutional capacity, political accountability, and rule of law. This

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combination of collective deficits complicates any endeavor to fashion a hydrological framework in which all co-basin states can have equitable access to Nile waters. Preoccupied with internal crises of legitimacy, the national elites in the Nile countries do not appear to possess the requisite political will to help fashion a comprehensive transboundary water regime.

Third, all 10 Nile countries are underdeveloped and poor; six of the 10 Nile countries are among the world's 10 poorest nations. If these states are to overcome their structural poverty, they need rapid industrialization as well as rapid promotion of irrigation-based agriculture. These goals, however, require a good supply of Nile waters, fueling the race for water.

Finally, there is the harsh reality of population explosion and hydro-ecological variability. Not only do a third of the 400 million present populations of the 10 Nile countries live in the Nile basin proper, but their number is also projected to double in less than a generation. By 2050, the basin as a whole will host between 750 million and 850 million people (Amdetsion, 2009: 3; Postel, 1999: 34; United Nations Integrated Regional Information Networks [UN IRIN], 2010; Whittington, 2004: 1–24). Moreover, climate projections are pointing to substantial reduction in precipitation in the Nile basin in the coming decades, presaging sharp intra-year and inter-year fluctuations in Nile flow (Agrawala and Möhner, 2004; Whittington, 2004: 1–24). By 2025, the per capita water availability in Egypt is projected to drop to 620 cubic meters; in Ethiopia, it will drop to 980 cubic meters; and in Kenya, it will shrink to 190 cubic meters (Gleick, 1993: 179–210).

This paper is written against the backdrop of the aforementioned factors to examine whether the effort thus far taken has been adequate to use the regional water tensions as an opportunity to fashion a new hydrological governance system from which all co-basin societies can equally benefit. After a brief re-conceptualization of our approach, we shall present the contrasting and complicating arguments of the Nile protagonists. Then the follow up will look at the evolution of the emerging Nile hydrological governance regime and evaluate the merits and shortcomings of the regional development assistance approach used to guide the negotiating process. The paper concludes with remarks on an alternative pathway to collective utilization of Nile water resources in keeping with the requisite conditions of regional distributive equity and hydro-ecological sustainability.

Drawing on the general literature on transboundary natural resources and their impact on the nature of interstate relations, some authors see the Nile basin as a fertile ground for water-related conflicts. These writers predicate their arguments on two contingencies. First, water scarcity, arising from a combination of runaway population growth, economic expansion, and climate change, has pushed Nile waters to the forefront of regional politics, compelling all Nile countries to define water resources in terms of national security, hence the elevation of water resources to the status of high politics. In this view, the competing priorities of the Nile actors, now defined in strategic terms, make the prospect for policy coordination and collaboration among the actors on the equitable utilization of Nile waters problematic. After all, any alteration to the present Nile water regime will, by definition, entail the physical redistribution of the transboundary water resources, involving substantial reduction of flows to Egypt and Sudan in order to increase the share of upstream riparian states. Since scarcity here is presented as inherent to transboundary water resources, a situation is created in which the ensuing collective action problem brings the riparian states into collision.

Second, the same authors see the seemingly huge imbalance of power that exists between Egypt and upstream riparians as a potential cause of war. Given the securitization of water resources, the ability of each Nile country to have unhampered access to Nile waters becomes a function of relative power. Thus in the absence of hydrological security entrenched within international law, it would seem that the only remaining option is to rely on the balance of power, where Egypt would assume the role of a hydro-hegemon by having relative superiority over the other actors to maintain

the existing Nile water regime. Egypt's overwhelming air power, comprising 550 jet fighters including 220 F-16s, possession of huge number of tanks including 700 hi-tech Abram tanks, and its half a million men in uniform are seen as overwhelming assets on which Egypt can count to deter upstream riparians from tampering with the natural course of the Nile. For comparison, Ethiopia has 300 Soviet-era tanks, supported by a dozen Sukhois and another superannuated Soviet-era Mig fighter (Amdetsion, 2009: 11; Gleick, 1993: 179–210; Klare, 2001: 149–151; Starr, 1991: 17–36; Waterbury, 2002: 5–8).

We know that history forecloses nothing, but we believe that the outbreak of hot war between Egypt and upstream states is less likely than what some authors have suggested. Static presentation of the size of an economy or military power is a poor proxy for determining the potential outbreak of war over Nile waters. Egypt and Ethiopia, as the strategic power brokers in the system, are roughly equal in their power potential. Indeed, water wars in the basin are less likely for two reasons.

First, we find solace in the partial exception of historical record in which maintenance of uneasy accommodations among riparian states have been more the norm than hot wars over water. Of the 1,831 international water events studied between 1948 and 1999, for example, two-thirds were characterized as cooperative, while only 28% were conflictive, and the remaining events were either neutral or nonsignificant. In addition, there were 400 water treaties governing inter-riparian relations over the same period (Postel and Wolf, 2001: 60–67; Wolf, 1998: 251–265, 2008: 51–74). The historical record, therefore, suggests an uneasy hydrological accommodation in the Nile basin.

Second, practically, the balance of power in the Nile basin is less favorable to the outbreak of war than to the maintenance of uneasy relations among the riparian states. Contrary to conventional assumptions, Egypt's military preponderance is precarious, dependent on substantial military and financial aid from Washington and the Arab petrostates. This external dependence suggests that Egypt cannot wage a prolonged long distance war to impose its will on upstream states simply by relying on foreign support. After all, insofar as water security is concerned, a temporary victory on the battlefield is insufficient to insure the flow of the resources; permanent occupation of the source of the resources is a requisite condition, which Egypt cannot achieve by any means.

Furthermore, Ethiopia can fall back on the strategy of hydro-segmentation of its resources by carpeting the country with microdams, which are hard for Egypt's fighter planes to pinpoint to destroy. As of 1997, Ethiopia had put in place some 200 microdams with another 500 small dams in the works. If Ethiopia succeeds in building 5,000 dams, irrigating 1.8 million ha in the Blue Nile basin, Nile flow can be reduced by 7.2 bcm a year, excluding evaporation losses from the dams (Postel, 1999: 144). Furthermore, Ethiopian nationalism in conjunction with African nationalism is an important intangible attribute of power, which may deter the initiation of water wars on the part of Egypt. Should Egypt initiate a water war in order to perpetuate the status quo, the conflict is likely to be cast as Arab versus 'black' Africa, with all the racial, political, and moral implications the conflict represents. In light of these reasons, a Nile water regime, created and defended by a nonexistent hegemon, is unlikely to be the answer to the hydrological race in the basin. In our view, the power-based approach to Nile transboundary waters is too state-centric and does not offer much of a useful guide. The Nile basin may be less threatened by interstate than by internal water-related conflicts arising not only from competition over scarce water resources among diverse domestic stakeholders, but also from hydro-climatic variability. Indeed, the recent secession of South Sudan, and the events that unfolded in Egypt as of writing, have exposed the internal weaknesses of the lower Nile countries.

In light of the points made earlier, we hold the view that, rather than the securitization of transboundary natural resources, the hydro-ecological degradation of the Nile watershed and the

sociopolitical fragmentations taking place internally in the riparian countries pose grave threats to the integrity of the Nile River. Thus the answer to the supposed water scarcity in the Nile basin is not how to manage the physical allocation of water resources but, rather, how to deterritorialize Nile water resources and collectively share the benefits thereof. To this extent, we accept the 'benefit sharing' approach to transboundary water governance, as proposed by quite a few scholars and even the World Bank (Qaddumi, 2008; Uitto and Duda, 2002: 365–378; Whittington, 2004: 1–24; Whittington et al., 2005: 227–252; Wolf, 2008: 51–74). However, we differ from the way the World Bank has attempted to apply the concept of 'benefit sharing' in the context of the Nile basin negotiating process.

The point of departure for international institutions and donor countries has been regional geopolitics and foreign assistance. We, however, assign primacy to domestic politics because democratic institutions are generally conducive to overcoming low level equilibrium of distrust, and to fostering accumulation of social capital, collective rationality, joint action, and sustainable collaboration at whatever scale. Authoritarian leaders, who do not share the benefits of domestic resources even with their own citizens, cannot be trusted to share transboundary water resources with external actors. This observation by no means suggests that democracy is a sufficient condition since undemocratic states (such as those in the Mekong River basin) have established relatively successful water regimes. However, democracy in the Nile basin context is a necessary condition to the extent that it creates space for civic organizations to play an important role in how water issues are framed, negotiated and resolved by virtue of the regional linkages they may forge. In addition, removal of the stagnant political systems and rampantly corrupt institutions from throughout the Nile basin can generate the catalyst for stability, predictability and, therefore, mutual confidence among Nile multipartners.

Origins of the Contentious Politics of Nile Hydrology

An Ethiopian critic observed recently that one of the major road blocks to constructing a Nile water governance regime on the basis of shared benefits is the enduring legacy of history, connected with the way British empire builders constructed a water regime, reflecting the temporal convergence of Egypt's existential dependency on Nile waters and British imperial expediency, which underpins the contentious politics of Nile hydrology today (Bulto, 2009: 295–299). Central to the controversy is the 1929 Anglo-Egyptian Nile Waters Agreement. By the terms of this agreement, Great Britain pledged on behalf of its upstream colonial possessions not to construct dams that might interfere with the natural course of the Nile River (Batstone, 1959: 523–558; Howell, 1983: 286–300).

The 1929 Nile waters agreement was crucial in two fundamental respects with far-reaching implications for contemporary inter-riparian relations. First, the agreement explicitly stipulated that Egypt had natural and historical rights to Nile waters, including veto power over what upstream riparians could or could not do. The consequence of this presentation was that the Egyptians would henceforth be socialized into believing that the Nile River was, indeed, naturally theirs. From the Egyptian point of view, the 1929 Nile waters agreement simply represented the legalization of the nation's historic rights to undiminished Nile waters on which its hydraulic civilization depended for millennia.

Second, in its lopsidedness, the 1929 treaty contained the seeds of future contentious politics over Nile waters, not only between upstream riparian states and downstream users, but also between Egypt and Sudan. Since the waters of the Nile were divided between the two latter countries, 48 bcm and 4 bcm respectively, the remainder of the balance would flow to the Mediterranean Sea. While the allocation of 4 bcm of Nile water to Sudan was permanently fixed, Egypt's acquired

rights to 48 bcm could expand if the Nile's yield increased, or if Egypt improved its technological capacity to capture portions of the water that was flowing to the sea. Moreover, the natural Nile flow was off limit to Sudan during the timely season, which meant that Sudan could use only its own stored waters between January and June (Batstone, 1959: 523–558; Howell, 1983: 286–300). In 1959, in response to nagging Sudanese complaints about the inequity of the 1929 agreement, Egypt agreed to raise Sudan's share of Nile waters to 18.5 bcm while itself controlling 55.5 bcm of the 84 bcm of the river's annual flow. The new agreement cleared the way for constructing the Aswan High Dam within Egypt's own territory, giving the country's leaders a false sense of absolute hydrological freedom of action.

From the Egyptian viewpoint, the 1959 Egypto-Sudanese water agreement completes the legal evolution of Nile hydrology. Now, the physical distribution, full utilization, and technical administration of Nile waters would be exclusively a matter for Egypt. Given the unitary character of the Nile River on which Egypt's hydraulic civilization depends by history and temporal prescription, upstream states could no longer tamper with the quantity and quality of Nile waters by constructing works to the detriment of Egypt. According to this logic, since Egypt was the first to use Nile waters (long before any other upstream riparian states even contemplated to do the same), its entitlement to the undiminished natural flow of the Nile is absolute.

If upstream riparian states withdraw water from the Nile, or obstruct its natural flow causing harmful impact on Egypt, then they would be trampling upon its natural and acquired rights (Ahmad, 1994: 352). In addition to relying on various water agreements to defend the presumed hydrological integrity of the Nile and its prior appropriate rights to Nile water resources, Egypt invokes even the familiar principle of customary international law, known as the 'no harm,' rule according to which upstream states may use a watercourse so long as their actions cause no harm to downstream users of the same watercourse (Ahmad, 1994: 352–356; Amer et al., 2005). The first reading of this principle purports that upstream states can use Nile waters so long as they can reasonably justify that their utilization of the water would not harm Egypt. The enigma which such a reading of customary international law poses is whether upstream riparian states can meet their national water requirements without modifying the present water regime in ways that would not reduce the overall flow of Nile waters. Given the fact that it would be virtually impossible not to affect the flow of Nile waters to Egypt after constructing dams and diversion canals in the upper reaches of the Nile system, a second reading of the same customary principle (as interpreted by Egyptians) would ipso facto foreclose the debate over the hydrological dilemma. This is the same as saying that Ethiopia cannot use Nile waters originating within its territory since doing so can actually (or potentially) injure Egypt.

In summary, by emphasizing the perpetuity of treaties and the relative constancy of customary international law, Egypt tries to deflect the debate over the Nile water regime in a different direction. The primary Egyptian focus in this respect is on the salience of technical cooperation among the ten Nile riparian states in order to strengthen the existing water regime. Technical cooperation would have, as its focus, water resources development within each riparian state in terms of efficient utilization and conservation of existing water resources, proper rain harvesting, and helping upstream states to improve their rain-fed agriculture. Promotion of efficient resource utilization through technical synergy rather than revision of the Nile water regime continues to inform Egyptian hydrological posture (Amer et al., 2005: 3–14; Tafesse, 2001: 83–84). Put differently, sharing hydrotechnologies, expertise, and information among riparian states about hydrology, meteorology, watershed protection, and other facets of development in the Nile basin would achieve the desired technical synergy without the need to tamper with the water regime presently in ascendance.

The hydrological problem here becomes one of engineering and not one of water resource allocation. In practice, the net effect of the Egyptian position is that Nile water resources become excludable and rival, which are characteristics of privately owned resources. By demanding that upstream riparian countries should not tamper with the natural flow of the Nile, Egypt in practice seeks to prevent upstream states from the enjoyment of the water resources. This would affirm the excludability rule. The water resources would also become rival because the consumption of the resources by Egypt and Sudan reduces the amounts of the same resources available to upstream states.

Predictably, Ethiopia spares no words to categorically reject Egypt's claims to Nile waters. Ethiopia has consistently made it clear that it would not be bound by any water agreement that constrains its right to fully use all water resources originating within its sovereign territory. Furthermore, since Ethiopia was never a signatory to the 1929 or 1959 water agreement, the country is under no legal obligations to observe any water agreement in part or in whole. From the Ethiopian perspective, a sustainable and equitable water regime requires an entirely new institutional and legal framework, one from which all Nile states can equally benefit (Arsano and Tamrat, 2005: 15–27).

Ethiopia tries to strengthen its legal position by using rational empirical arguments, such as topography and climatic conditions. Ethiopia argues that the whole Nile region, including Egypt, would be well served in the long run if dams are built near Ethiopia's mountains, not in the open desert where evaporation rates are intolerably high. The annual evaporation rates in Egypt range between 2,600 mm and 2,800 mm compared with the annual average evaporation rates of 600 mm in the Ethiopian highlands (Collins, 2002: 193; Tafesse, 2001: 23; Whittington and McClelland, 1992: 144–154). Furthermore, as the argument goes, constructing hydroelectric reservoirs in Ethiopia would not only be cost-effective, but would also promote ecological integrity in the catchment area, thereby increasing available water resources for use, while at the same time reducing the silt load from which both Egypt and Sudan are now suffering (Collins, 2002: 185; Tafesse, 2001: 44). After all, 58% of the total hydroelectric potential of the Nile basin is found in Ethiopia (Tafesse, 2001: 44).

Objectively speaking, the aforementioned rational argument does not necessarily run counter to Egypt's long-range utilitarian interests if situated in the proper hydrological context. In fact, several studies have recently highlighted a number of negative consequences of having a 'century storage' reservoir within Egypt itself in the form of the Aswan High Dam (Agrawala and Möhner, 2004; Ahmad, 2008: 75–86; Collins, 2002: 123–124; Postel, 1999: 72, 149; Stanley and Warn, 1993: 628–634; Whittington et al., 2005: 227–252). First, Egypt historically owed the resilience of its hydraulic civilization to the natural fertilization of its farms from the annual deposition of soupy silts transported by the Nile River from upstream countries. Prior to the impoundment of Nile waters, the Nile annually transported 124 million metric tonnes of alluvial silts to the Nile delta while, at the same time, spreading more silts and sediments along the entire banks of the river in Egypt, regularly replenishing the fertility of the land. This was what made Egyptian agriculture natural and sustainable.

Second, the hydro-ecological evolution and geomorphology of the Nile delta historically depended on the continuous deposition of silts and suspended sediments via Nile flows, critical to its structural stability against erosion, pollution, coastal inundation, and saline intrusion. Since the closure of the Aswan High Dam in 1964, the silts and sediments have been accumulating behind Lake Nasr, not only filling up the dead storage capacity of the dam faster than engineers had projected, but also undercutting the evolution and structural stability of the Nile delta. The northern delta has now become vulnerable to land subsidence, groundwater salinization, coastal erosion,

and salt intrusion. In recent years, land in the northern Nile delta has been subsiding by between 3 and 5 mm per year. Thus the anthropogenic modification of the Nile flood cycle has completely eroded the balance between fluvial and marine processes since freshwater hardly reaches the Mediterranean Sea today. Furthermore, climate change projections do not bode well for the future of the delta. In keeping with global patterns, temperatures in Egypt are projected to increase by 1.4 Celsius by mid-century and by 2.5 Celsius by 2100. If present projections hold, a one meter sea level rise will result in 15% loss of the Egyptian delta, displacing six million Egyptians. Since the delta region represents two-thirds of the country's habitable area, a land loss of this magnitude will be very consequential economically, demographically, and politically.

Third, since much of the Nile water is now allocated to middle Egypt to meet growing demand from irrigation schemes and industrial and urban competitors in the Cairo metropolitan area, farms in the delta region do not receive sufficient water to flush out salt; as a result, all farms in the delta region suffer from salinization. Moreover, the delta region has increasingly become vulnerable to water pollution as urban and industrial waste and agrochemical runoff from middle Egypt overwhelm the region. In light of the above considerations, it is clear that it will be in Egypt's long-term best interest to promote transboundary ecosystem protection and shape watershed management practices across the Nile basin by welcoming the effort towards multipartnership and shared benefits.

If the politics of the Ethio-Egyptian hydrological relation is contentious, the relation between Egypt and the East African states is even more problematic since the latter were not party to any water treaty with any state. Of course, Egypt relies on the notions of state succession to make its case that the equatorial states are equally subject to all international treaties entered into by Great Britain on their behalf. In practice, this means that the water regime Great Britain and Egypt constructed by a series of agreements would remain operative even after Britain gave up its colonial possessions. However, the East African states contend that they, by virtue of their outright exclusion from all matters affecting them, are under no obligation to accept any colonial relic left behind by Great Britain, since African liberation, by definition, is a repudiation of colonialism in all its manifestations (Amdetsion, 2009: 23–25; Collins, 2002: 198). It appears that the East African states stand on solid ground if customary international law is used as a frame of reference to evaluate the relative merits of the contending positions. Indeed, Batstone (1959: 523–558) offers two powerful arguments that cast doubts on the Egyptian case under customary international law.

First, there is a strong presumption that the East African states would not have negotiated away their hydrological rights without direct or indirect benefits accruing to them in return if they were independent in 1929. The 1929 Nile waters agreement gives Egypt the undiminished freedom to develop its irrigation system while, at the same time, requiring the East African states to seek Egyptian permission before using any amount of Nile waters. Thus the resulting subordination of the rights and interests of upstream states to those of Egypt would make the Egyptian position extremely tenuous under customary international law. It would seem implausible under customary international law that one state would have a veto power over the future development of other states without corresponding qualifications on its own development. Second, there is a presumption that British recognition of Egypt's prior appropriative rights to existing uses of Nile waters would not automatically extend to the creation of legal rights to surplus Nile waters, not in use at the time of the 1929 waters agreement.

As the contending positions of the riparian protagonists in the Nile basin demonstrate, customary international law does not offer a lasting solution to water disputes. Even if the legal delineations of water rights and duties are specified to one's theoretical satisfaction, the empirical question of allocation will always remain problematic due to unforeseen future events and developments

such as watershed degradation, pollution or contamination, global warming, and changes in population distribution, as well as changes in the political character of parties to water agreements. It has been against the backdrop of the enduring legacy of history and the contradictory legal arguments of Nile states that the external facilitators have proposed 'benefit sharing' as the only logical course of action to break the regional stalemate over Nile waters.

The Conceptual Promise and Practical Challenges of 'Benefit Sharing'

Inspired more by faith in regional water diplomacy than by international water law, international facilitators began in the early 1990s to shift discursive communications in the Nile basin away from a focus on water 'rights' and towards an emphasis on multilateral agreement of benefit sharing from joint water resource exploitation and management. If 'benefit sharing' were the solution to a potentially destructive transboundary competition over Nile waters, a regional institutional and legal framework was badly needed to provide the mechanism for conflict resolution through negotiation, consultation, and information sharing.

Thus, beginning in 1992, donor countries and institutions actively sought to bring the 10 Nile riparian countries to the concept of 'benefit sharing.' In addition to promising to supply the initial yeast to leaven the dough of hydrological collaboration, the international players agreed to provide adult supervision – as it were – to the riparian states to stay the course on the trajectory of their 'shared vision.' After stumbling forward and backward for seven years, the Nile riparian states finally agreed to form the Nile Basin Initiative (NBI) in February 1999 as a transitional arrangement to serve guiding the agenda setting and negotiation process until a permanent Nile Basin Commission had been put in place. In the meantime, the NBI has been entrusted to prepare the groundwork by simultaneously pursuing a supply augmentation strategy to optimize total water availability, demand management strategy to reduce the growing pressure on the Nile River, and transboundary cooperation strategy to pave the way for regional economic integration and watershed protection (Luzi et al., 2008: 238–268; NBI, n.d.).

Once put in place, the permanent Nile Commission would have legal and institutional authority over the development, use, management and protection of Nile water resources, and would be assisted by two subregional subsidiary action programs in implementing the NBI's 'shared vision program.' In line with the notion of 'benefit sharing,' the new Nile water governance framework would bring all riparian stakeholders together to 'achieve sustainable socioeconomic development through the equitable utilization of, and benefit from, the common Nile basin water resources' (NBI, n.d.).

Meanwhile, the riparian countries set up a consortium for international cooperation to raise financial resources from donor countries to fund multicountry confidence-building projects. In June 2001, this World Bank-run multidonor trust fund managed to raise US\$140 million for 22 projects with further US\$3 billion pledged by donor countries (Uitto and Duda, 2002: 365–378). Under the direction of the World Bank, eight distinct projects have been identified for funding, covering transboundary ecosystem protection, regional hydropower development and trade, human resources development, efficient utilization of agricultural waters, water resources management and planning, confidence building and stakeholder involvement projects, socioeconomic development and benefit sharing projects, and shared vision coordination project (NBI, n.d.). In the meantime, the NBI's technical team produced an impressive document containing 39 articles and 66 subarticles detailing the rights and responsibilities of all Nile riparian countries with respect to the equitable and reasonable utilization, management and protection of Nile water resources.

The expression of zeal in the NBI's 'shared vision' by the riparian actors and the catalog of aspirational programs and projects were so impressive that many writers saw the NBI negotiating framework as a test case in international norm-creation governing shared water resources. However, as years succeeded each other without seeing installation of the expected permanent Nile Basin Commission, the initial optimism about the future shared benefits from Nile water resources has begun to fizzle, as the negotiating Nile states failed to agree on the modalities of the new regime. As before, the division has been between downstream and upstream states. Basically, the contending riparians have retreated to the same arguments and positions covered in the previous section. Egypt and Sudan have withheld their signatures because they found article 14(B) to be radically transformative of the hydrological status quo. The offending article reads: 'Nile basin states agree in the spirit of cooperation to work together to insure that all states achieve and sustain water security and not to significantly affect the water security of any other Nile basin state.' From the Egyptian and Sudanese point of view, this offending subarticle takes away their historical rights to Nile waters as affirmed in the 1929 Nile Waters Agreement. So they have insisted on replacing the second part of subarticle 14(B) by 'not to adversely affect the water security and current uses and rights of any other Nile basin state' (Otieno, 2010).

The upstream states found the Egypto-Sudanese suggestion objectionable because the demand of the downstream states amounts to the preservation of the hydrological status quo. Then, on 14 May 2010, Ethiopia, Kenya, Rwanda, Tanzania, and Uganda signed a new Nile Cooperative Framework Agreement in Kinshasa in the face of strenuous Egyptian and Sudanese objection. After Burundi signed the Kinshasa agreement, the six countries ratified the new Cooperative Framework Agreement in May 2011, technically replacing the 1929 Nile Waters Agreement. Egypt and Sudan have characterized the Kinshasa Nile framework agreement as nonbinding, violating an already established international treaty law. After almost 12 years of formal negotiation, the Nile riparian states are trading threats and counter-threats. The hydrological narrative and counter-narrative have not changed. Egypt's water resources Minister al-din Allam, for example, rehearsed the familiar theme that Egypt had no option other than to defend its historical rights. As he put it:

We still want historical uses of the Nile water to be recognized by other Nile basin countries because this is the only source of water we have, although we also recognize the need for others to use the water. So we want historical rights to be recognized in the agreement before it is signed. (Doya, 2009)

Egypt has not shied away from threatening to use all means, including military action, if its water security is placed in jeopardy. However, upstream riparian politicians are equally defiant. Charity Ngilu (Kenya's Minister of Water Resources and Irrigation) reflected the general mood in upstream riparian states when she said:

Nothing now stops us from using the waters as we wish. It is now up to Egypt and Sudan to come on board in the spirit of cooperation on the basis of one Nile, one basin and one vision. Two states out of nine cannot stop us from implementing this framework. (Menya, 2010)

As of writing, the hydrological conundrum in the Nile basin remains unresolved just as it was before the start of the transboundary dialogue almost two decades ago. The overarching purpose of the NBI has been to de-socialize Egyptians, in particular, from believing that their presumed natural and historical rights to Nile waters are no longer defensible in the face of important changes occurring in the patterns of precipitation, watershed degradation, the precariousness of rain-fed

agriculture, the cycles of droughts, and the consequent food insecurity in upstream riparian countries. Thus far, the negotiating process has failed to achieve that purpose.

The fundamental question that now remains unanswered is: what happened to the idea of 'benefit sharing,' and where have the international development partners gone? There are several reasons that account for the stagnation of the Nile Basin Initiative. The first reason involves the preoccupation of the Nile states with transboundary water issues, with scanty attention being given to political contexts and state practices, making the regime approach to water governance structurally deficient. The political context within which negotiations over transboundary natural resources take place can foster or block conflict resolution. Unfortunately, the Nile system comprises states with dubious political records. Not only do the riparian states not see eye to eye on many issues, but they also stand on shaky grounds in terms of their relationship with their own citizens. In the absence of strong domestic constituencies and mobilization of public support for regional cooperation and without proper political infrastructure put in place, the riparian countries have not been able to display 'good faith.'

Moreover, the riparian states are still clinging to the 20th century paradigm of water resources development, with a particular focus on supply augmentation strategy rather than trying to develop demand management options. As a result, the riparian states never stopped the race to unilaterally put in place a series of highly ambitious water projects in the basin before a new water regime had come into existence, having a corrosive effect on the negotiating process. Even after the formation of the NBI, Egypt proceeded to bring to fruition a series of giant projects in the North Sinai and western deserts at estimated costs of US\$87–145 billion to irrigate over 3.5 million hectares of land and establish about 20 cities supporting almost 10 million Egyptians (Postel, 1999: 144). When completed by 2017, these projects would annually require over 20 bcm of additional water.

Following Egypt's example, all other riparian states began to actively pursue big water projects. In addition to having built a reservoir holding 12 bcm of Nile waters along with 1,250 mw power generation capacity, Sudan continued to allot hundreds of thousands of acres of agricultural land to foreign investors. Sudan's plan to increase its farmland under irrigation from 2 million ha to 4.8 million ha would require 25 bcm of additional water per annum (Waterbury, 2002: 129).

Thus the unilateral actions by downstream states signaled bad faith at a time when upstream riparian negotiators have been working towards equitable and reasonable 'benefit sharing' arrangements from the common transboundary resources. As a result, the hydrological race among the riparian states for Nile waters had not stopped during the 12 years of negotiation. Ethiopia has already built two multipurpose dams without Egyptian approval to go along with 200,000 hectares being prepared for plantations as part of 46 long-term projects (Arsano and Tamrat, 2005: 15–27; Mason, 2005: 115–120). Moreover, in April 2011, Ethiopia's Prime Minister officially laid a cornerstone for the construction of what is called the Grand Renaissance Dam on the Blue Nile. Holding 62 bcm of water when completed in four years, this dam will add 5,250 mw of electricity to the country's existing 2,060 mw hydropower generation capacity. The east African states also have plans to put 1 million ha of land under irrigation by drawing 10 bcm of water from Lake Victoria (Waterbury, 2002: 154). All these 20th century hard water infrastructure projects reflect that the co-basin states are still committed to the supply augmentation strategy to the exclusion of demand management and transboundary socioeconomic cooperation strategies.

The second factor, which has called the credibility of the negotiating process into question, has been the promises made and yet not kept by the development partners. As noted earlier, the operationalization of the 'shared vision' has been contingent on external funding from the international financial institutions and donor governments. The stratagem underpinning the regional development approach has been to create propitious conditions of regional integration by overwhelming

the forces of riparian fragmentation; that is, putting confidence-building projects throughout the basin as expeditiously as possible in order to demonstrate to all watercourse states that there are more gains to be had from 'benefit sharing' than from physical water sharing. The thrust of this neofunctionalist approach has been that the funneling of foreign assistance into the Nile basin would create transboundary networks of socioeconomic structures with significant ramifications for further economic interpenetration and regional collaboration. However, as of December 2009, only US\$130 million from donor countries and US\$14 million from NBI member states had been spent on symbolic and pilot projects (Oxford Analytica Daily Brief Service, 2009). The flow of foreign assistance of such pitiful magnitude can hardly inspire confidence among stakeholders, much less produce tangible results on the ground. The idea of promoting externally-driven transboundary cooperation over Nile water governance is indeed illusory; foreign assistance cannot substitute, but rather supplement internal resource capacity. As Egypt's former water resources Minister Abu Zeid put it, it will take US\$200 billion to achieve the 'shared vision' of the NBI over a period of 30 years (Info-Prod Research, 2007). In our view, in these times of deficits and high unemployment rates in donor countries, the prospects of supplying even a sizable fraction of this magnitude are slim.

The absence of counter-pressure from below has been a third factor underlying the negotiation process. From the start, the NBI negotiating process has entirely been a bureaucratic affair, resistant to civil participation. In fact, the bureaucratic resistance to civic mobilization and participation has been so strong that the International Union for the Conservation of Nature hosted social and environmental activists and helped them create the Nile International Discourse Desk. The aim of the desk has been to carve out a niche in the NBI negotiation process for civil participation. However, even though the bureaucratic negotiators relented and accepted the participation of civic groups in the process, the role of civic stakeholders has never been taken seriously; their inputs disregarded and their voices drowned, civic groups have made little or no contribution to the evolution of the dialogue.

In addition to bureaucratic control of water policy formulation and implementation having the exclusionary effect on civic stakeholder participation, advocacy groups are characterized by organizational weaknesses, lack of financial resources and sufficient public support as well as by the absence of national and regional linkages (Luzi et al., 2008: 238–268). The main point is that national elites, who have effectively shut out civic associations from the national dialogue, would not permit the same associations to have a role in regional or international dialogue. Of course, the greatest conundrum is how to strengthen existing domestic pressure groups and build social institutions from the ground up in order to foster a democratic evolution of inter-riparian relations to which the international facilitators have so far paid scanty attention, despite the ritual expression of the desirability of multistakeholder participation.

Conclusion

Following a series of workshops organized for participants from eastern Nile countries, Simon Mason (2005: 115–120) used scorpion-like and ostrich-like behaviors as metaphors to shed light on the dilemma confronting Nile riparian states. As the story is recounted, a scorpion went all over looking for animals to give him a ride to cross a river. The animals he approached declined to offer him help until a sheep hesitantly agreed to help only after the scorpion reassured the sheep that he would not sting him, since both would sink if he did so while crossing the river. Then, in the middle of the river, the scorpion suddenly stung the sheep. As both began to sink, the sheep cried and asked why, to which, the scorpion replied: 'I could not do anything else; I am a scorpion.' In the context

of the Nile system, any upstream big actor like Ethiopia or a downstream big actor like Egypt may play the role of the scorpion. The lesson here is that the actions of players, who display scorpion-like behavior, will eventually lead to collective destruction.

On the other hand, actors who display ostrich-like behavior bury their head in the sand and ignore what happens or what they do to others. In Mason's view, the Nile states are currently behaving like an ostrich, not caring about each other but only about their individual selves. According to this second metaphor, there is hope that actors can be persuaded to cease their ostrich-like behavior, pull their head out of the sand, and work together towards a common solution. It has been against the backdrop of such hope that the NBI has been launched to help the riparian states change their ostrich-like behavior and channel their efforts towards constructing viable water governance based on collective values and benefits before the current collective action problem escalates to scorpion-like behavior.

As of writing, however, the riparian states appear to be moving away from the 'shared vision' which they together enunciated more than a decade ago, ominously presaging an escalation to scorpion-like behavior. Ultimately, the outcome will depend on how the natural contingencies and political events in the Nile basin play out in the future. In other words, how the environment is protected, how water resources are sustainably used, and how adaptation and mitigation options are developed and applied will depend on the contingency of domestic politics. Politics is about making and managing choices, but choices are always made in the context of power. The crux of the problem in the Nile basin today is not the scarcity of water resources, but rather, the character of national politics. Without belaboring the point, we note that all governments in the basin are either outright dictatorships or quasi-authoritarian. In the interest of political survival and personal wealth accumulation, virtually all leaders in the Nile basin are habituated to exploiting the external markers of identity, be it kinship or ethnicity, religion or region. In the last quarter century, for example, more than eight million people have perished in Sudan, Rwanda, and the DRC alone, not because of interstate wars over Nile waters, but as a result of internal politics. Even today there are a number of flash points of internal conflicts looming across the basin. Indeed, as events in Egypt as of writing have demonstrated, almost every Nile country is a good candidate for implosion. In other words, internal conflicts and local ecological degradation are more likely to have dire implications for the generation and physical distribution of transboundary water resources than water wars over the Nile.

The diplomatic moves being undertaken as of writing by the post-Mubarak Egyptian government does buttress the observation we are making here with respect to the importance of national politics. Since late spring 2011, the Egyptian transitional government has been sending diplomatic feelers to upstream countries, seeking accommodation rather than confrontation over Nile waters. In fact, on 13 May 2011, the Egyptian Prime Minister met his Ethiopian counterpart; the two leaders appeared to have been in agreement on the reasonable utilization of Nile waters.

Egypt's admission of past mistakes to block international financial support for water projects in upstream countries is a good beginning. Likewise, Ethiopia's public declaration that it would not use the new dam for irrigation purposes is another promising step forward. Egypt seems to be making a good start, but the point here is that, without the democratic reconstitution of the state in each Nile riparian country, credible transboundary water governance cannot be securely constructed. The mere regulation or modification of transboundary relations through the NBI alone is surely to fall short of the fundamental aims of the shared vision. When international facilitators and donor countries speak of the necessities and virtues of regional collaborative structures in the Nile basin, a region where warlords, presidential 'dynasties,' and unaccountable military dictators reign unhindered by either legal constraints or international pressure, they may be entertaining collective

illusions. In our view, without the right political context and sufficient resource mobilization, it is very unlikely that the aspirational projects of the 'shared vision' of the NBI will come to fruition anytime soon.

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