INTRODUCTION
For some time now, the issues of access to and equity in the use of the Nile’s waters have become increasingly complex and contentious because of the natural variability and uncertainty in weather patterns, which means less rainfall and diminished flows for food production and other uses in the region. These climate-related changes are exacerbated by other variables, such as rapid population and economic growth, urbanisation and rising demand for food, which stimulate demand for water and degrade watercourses where water is already scarce. These natural and social changes in the Nile Basin have created decades of mistrust, suspicion and sabre rattling among some of the countries sharing the basin. Historically, transboundary river basins have encouraged regional cooperation. But the legacy of the 1929 and 1959 exclusive Nile water agreements, exacerbated by the dwindling Nile water resources and the growing demand for them, has been the major impediment to an inclusive agreement over the use of the Nile waters. And this legacy is still the main factor behind conflict over the Nile waters, which may escalate. The attempts at conflict management in the Nile Basin have not yet brought any tangible, inclusive cooperative agreement, mainly as a result of the divergent positions that the upstream and downstream countries have in relation to the 1929 and 1959 Nile agreements.

However, the Nile Basin has recently witnessing major developments. The new Nile Basin Initiative (NBI) Cooperative Framework Agreement (CFA) was opened for signature in May 2010. Depending on how countries react, this agreement could either exacerbate or ease the tensions surrounding the use of the Nile waters by the countries in the Nile Basin. Other influential developments in the Nile Basin include the outcome of the referendum in South Sudan, which has created a new riparian state in the region. Ethiopia’s establishment of large-scale water development projects on the Blue Nile is believed to have major implications for the politics of the Nile region. The change in Egyptian politics since the 2011 uprising is another recent noteworthy development. Egypt’s intention to cooperate with Ethiopia and other riparian states on the issue of the Nile waters, as expressed by a delegation of politicians and the prime minister of Egypt during their visit to Ethiopia after the Egyptian uprising brought an end to Hosni Mubarak’s regime, is an unprecedented turnaround in the process of conflict prevention, resolution and management in the region. Does this unfolding of events signal the advent of a new era in the sensitive Nile region and a meaningful move from mistrust and sabre rattling to rapprochement in the Nile Basin states?

This paper examines recent developments in the hydropolitics of the Nile Basin and opportunities to bring about effective basin-wide cooperation.

NILE WATERS: MAJOR SOURCE OF CONFLICT
According to the International Network of Basin Organizations, there are 263 large transboundary river basins around the world, of which 59 are in Africa and cover 62 per cent of the continent’s surface area. The Nile Basin is one of the largest; the Nile is the longest river on earth, at 6 875 km, and its tributaries flow through ten countries: Burundi, the Democratic Republic of Congo (DRC), Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, South Sudan, Tanzania and Uganda. The Blue Nile, the major source of the Nile (it supplies 86 per cent of its volume), originates from Lake
projects in downstream countries is also another factor. Such upstream countries as a result of water extraction and new evaporation and absorption before leaving this region. \(^8\)

About half the water here is lost through aquatic vegetation disperses the river water into numerous channels. Thick grasses and sedges cover the floor, and shallow water passages carry a great deal of water. As a result of the Sudd, located in Uganda and South Sudan. Ancient and modern communities in the basin have depended on the Nile for their livelihood, commerce, habitat and the sustaining ecological functions it provides. Throughout history, alterations to the Nile, natural or artificial, have affected the communities living along the river in one way or another.

However, the Nile Basin is a large and complex system with several political entities, broad cultural diversity, a wide range of interdependent ecosystems, complex hydrology and fragile economies. \(^2\) The water balance of the Nile Basin is very complex due to various factors. First, although there is a relatively constant amount of water in the cycle of the Nile system, year-to-year variations in water resources have greatly reduced the amount of water actually available for use. According to El-Moghraby, the annual discharges of the Nile system have decreased during the past two decades. It is postulated that rainfall over the Ethiopian Highlands will decrease by about 15 per cent, which would result in a 30 per cent decrease in the discharge of the Ethiopian tributaries of the Nile. \(^6\) Moreover, explaining the declining trend in the amount of water flow in the Nile, Swain says that at Aswan, where Egypt constructed a very large dam in the 1960s, the average annual flow was estimated at 84 billion cubic metres in the late 19th century, though it has declined significantly for various reasons, including climate change. \(^7\)

Second, as a result of extensive evaporation from swamps, such as those in the Sudd and Jonglei areas on the White Nile in South Sudan and parts of Uganda, it is estimated that only half of the water entering the region flows out of it. The Sudd is a swampy region covering an area of 320 x 240 km, and is fed by the Bahr al-Jebel, Bahr al-Ghazal and Bahr al-Arab headwaters of the Nile. Thick aquatic vegetation disperses the river water into numerous channels. About half the water here is lost through evaporation and absorption before leaving this region. \(^3\)

Potential reduction in the volume of water flowing from upstream countries as a result of water extraction and new projects in downstream countries is also another factor. Such possible reduction is evident, for example, in Ethiopia’s intention to use the Nile waters, as stipulated in the National Water Strategy of Ethiopia. \(^9\) For now, the main focus of Ethiopia’s water development activities on the headwaters of the Nile seems to be on building dams, mainly for generating hydroelectric power to cope with the rapidly increasing demand for electricity for industrial and domestic purposes. Accordingly, construction on a large new hydropower-generating dam, referred to as the Renaissance Dam, on the Blue Nile, started in April 2011, in addition to the hydroelectric dam on the Tekeze River and the multipurpose Tana-Beles hydroelectric power plant. Ethiopia is committed to implementing several other water development projects, now at different phases, on the headwaters of the Nile. Other upstream countries have similar plans to use the water resources of the basin. The Great Lakes countries of the Nile sub-basin are also planning and undertaking water development projects on the Nile. The dam at Bujagali Falls in Uganda is one example. The downstream states of Egypt and Sudan are heavily dependent on irrigated agriculture for food and cotton production, and use 94 per cent of the available Nile water. Egypt, the largest consumer of Nile water, is still implementing new projects and bringing new desert areas under cultivation, thus increasing its dependence on the Nile and relying on what it calls its ‘acquired rights’. \(^10\) Rapid population growth will exert additional pressure on the Nile waters in Egypt. Moreover, Egypt has an ambitious plan to create urban and industrial centres in the middle of the desert, which may accommodate more than one-fifth of its present population. Land reclamation projects in the western part of the country and in Sinai would aggravate the water scarcity in Egypt. In Sudan, the need to feed the rising population and a plan to put more land under irrigation has increased the demand for water from the Nile. Environmental degradation, especially desertification and land degradation, have exacerbated Sudan’s water problem. As a result, more water development activities are being undertaken in addition to the existing ones. Each unilateral project implemented by either upstream or downstream states has the potential to spark conflict, since any project that consumes water reduces the water flow in the river system.

The complex nature of the water balance of the Nile Basin has been exacerbated by the socio-economic problems of the riparian countries, which are mainly characterised by a high rate of population growth, recurrent drought, desertification and abject poverty. Given the water stress facing humanity, Simon writes that it is no exaggeration to say that the disparity between humanity’s growing need for water and the projected supply of usable, potable water could result in the world’s most devastating natural disaster. Per capita water consumption is rising twice as fast as the world’s population, and, according to Simon, unless
something happens to stop it, the consequence could be a disaster.11 Against the backdrop of this environmental pessimism, research about water in the Nile Basin (which confirm Simon’s claims) show that the riparian countries are under serious water stress. The population of the Nile Basin riparian countries has increased by a faster rate than the accepted international standards or replacement rate.12 To make matters worse, data indicate that per capita water consumption is rising at a faster rate than the basin’s population growth. Assuming that the amount of renewable water reserves in the Nile Basin will remain the same from 1995 to 2025, it is estimated that the medium to high level of water stress experienced by most of the riparian countries will continue to increase, as shown in Table 1.

Given that food security and access to water resources are now at the top of the Nile Basin countries’ political agendas, the demand for water in the Nile Basin has become a bone of contention and intensely competitive. The unfolding scenario for Nile water is, therefore, one of increasing concern about access, equity and environmental quality. This is affecting relations within and between nations, between rural and urban populations, between upstream and downstream interests, between agricultural, industrial and domestic sectors, and between human needs and the requirements of a healthy and sustainable environment. Therefore, pressure on the river’s resources is likely to increase dramatically in the coming years, which may trigger violent conflicts unless first the sub-basin and then the much-needed basin-wide integrated management of the water resources is achieved through the NBI. There still appears to be a long way to go, however, before the initiative’s mission of creating basin-wide water governance is accomplished.13

### CONFLICT MANAGEMENT IN THE NILE BASIN

To date, the only existing negotiated Nile water allocations are between Sudan and Egypt. Other riparian countries, including Ethiopia, where most of the Nile water originates, are planning and implementing projects that have necessitated renegotiating a more inclusive treaty. The modern history of conflict management and cooperation among the Nile Basin countries over the use of the Nile waters goes back to 1891. It can be broadly classified into three major phases: exclusive existing agreements (1891–1959); inconclusive cooperation (1967–1993); and the inclusive NBI process and CFA (1995–2011).

#### Exclusive existing agreements (1891–1959)

The impetus for the beginning of the negotiated apportionment of the Nile waters was the shortage of cotton on the world market in the early 20th century, which put pressure on Egypt and the Sudan to turn the then traditional flood-fed method of cotton production into a perennial irrigation method of production to ensure continuous cotton supply to the world market. During this period, Egypt and the Sudan were under Anglo-Egyptian joint authority rule. The first attempts at conflict management regarding the use of Nile water were in the form of a bilateral agreement for the Nile. The first major agreement that followed the negotiations was the exchange of notes between the United Kingdom, on behalf of the Sudan and upstream countries of Lake Victoria, and the Egyptian government, drawn up on 7 May 1929.

#### Table 1: Per capita water yield in Nile Basin countries: comparing 1995 availability to UN low, medium and high projections for 2025

<table>
<thead>
<tr>
<th>Country</th>
<th>1995 standard (m³)</th>
<th>2025 low (m³)</th>
<th>2025 medium (m³)</th>
<th>2025 high (m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>594</td>
<td>300</td>
<td>292</td>
<td>273</td>
</tr>
<tr>
<td>Egypt</td>
<td>936</td>
<td>663</td>
<td>607</td>
<td>559</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1 112</td>
<td>639</td>
<td>602</td>
<td>568</td>
</tr>
<tr>
<td>Rwanda</td>
<td>1 215</td>
<td>506</td>
<td>485</td>
<td>469</td>
</tr>
<tr>
<td>Sudan</td>
<td>5 766</td>
<td>3 482</td>
<td>3 287</td>
<td>3 120</td>
</tr>
<tr>
<td>Tanzania</td>
<td>2 964</td>
<td>1 476</td>
<td>1 425</td>
<td>1 379</td>
</tr>
<tr>
<td>Uganda</td>
<td>3 352</td>
<td>1 603</td>
<td>1 467</td>
<td>1 366</td>
</tr>
<tr>
<td>DRC</td>
<td>22 419</td>
<td>9 916</td>
<td>9 620</td>
<td>8 928</td>
</tr>
</tbody>
</table>

Notes: Numbers in bold represent water stress (i.e. below 1 700 cubic metres); those underlined represent water scarcity (below 1 000 cubic metres). The figures for the DRC include Congo Basin water.

the estimated average annual flow of the Nile was made on the basis of the findings of the Nile Projects Commission, formed in 1920, and the recommendations of a new water commission formed in 1925. Under the 1929 agreement, 4 billion cubic metres of water per year were allocated to Sudan, but the entire timely flow (from 20 January to 15 July, when it is mainly the dry season in the upstream countries and the water flow in the Nile is lower) and a total annual volume of 48 billion cubic metres was reserved for Egypt. Arsano summarises the 1929 agreement between United Kingdom and Egypt: ‘(1) Egypt would take all the waters of the Nile except the 4 billion cubic metres to be retained in Sudan. (2) Egypt would supervise all water-related activities in the entire basin from source to mouth. (3) Britain recognised the “historical” and “natural” rights of Egypt with respect to the waters of the Nile.’ According to the agreement it made with Great Britain, Egypt had been guaranteed a claim to the entire timely flow, with rights to assign on-site inspectors at the Sennar Dam in Sudan, and was guaranteed that the East African riparian countries could not construct any water development projects in the equatorial lakes without consulting the downstream countries of Egypt and Sudan. This historical process of conflict management in the Nile Basin culminated in the second agreement, signed in 1959. The impetus for the 1959 agreement on the use of the Nile water was ascribed to Gamal Nasser’s coming to power in 1952 and Egypt’s proposal to build the Aswan High Dam, with a capacity of 164 billion cubic metres per year, and the increasing trend towards Sudanese nationalism. It was during this period that Sudanese nationalists claimed that the Egyptians were overexploiting the Nile at the expense of the Sudanese, and threatened to ignore the terms of the 1929 agreement by unilaterally carrying out irrigation projects. They insisted on renegotiating a new water allocation agreement that would take full account of Sudan’s present and potential needs to expand irrigation. Whether the proposed Aswan High Dam should be a unilateral or bilateral project was the other basic issue that created friction between the two countries. The Sudanese nationalists’ claim was rejected by the Egyptians, who claimed to have a historical right to the Nile waters. The combination of these factors became a barrier to negotiations between the two countries until 1954, when the first round of negotiations between Egypt and Sudan took place. The dispute between the two countries culminated in a military confrontation in 1958. The stalled negotiation process began again as a result of three major factors emerging after a pro-Egyptian government gained power in Sudan following a military coup in 1958, led by General Ibrahim Abboud. These factors were Abboud’s desire for Egyptian support for his military government; Egypt’s dire need to quicken the construction of the Aswan High Dam; and both countries’ fear of their ex-coloniser, the UK, meddling in the Nile issue.

Finally, the agreement for the full utilisation of the Nile waters (known as the Nile Waters Treaty) was signed on 8 November 1959. Under the treaty, it was agreed that the average flow of the Nile was 84 billion cubic metres per year and that the water lost in evaporation was to be equally divided between Egypt and Sudan. Egypt and Sudan agreed to regulate the storage created by the Aswan High Dam. Sudan was allowed to construct several dams and reservoirs to utilise its own water share. Both parties also agreed to work towards developing the water resources lost in the Sudanese swamps on a cost-sharing basis. Both countries agreed not to negotiate with any third party over the Nile water before they jointly developed a common position. To make this agreement official, the two countries signed a protocol on 17 January 1960, establishing the Permanent Joint Technical Committee, which facilitates technical cooperation on the projects. In general, the Nile waters bilateral agreement of 1959 made between Egypt and Sudan recognised the notion of acquired rights, especially Egypt’s, to use the Nile water as a shared water resource and stipulated that claims by other riparian countries be deducted from the shares of both countries equally. The parties to the negotiations from 1891 to 1959 and to the agreements of 1929 and 1959 were Egypt and Sudan directly and some riparian countries indirectly. These negotiations and treaties excluded the other upstream riparian countries. The negotiations and treaties did have some benefits, both financial and diplomatic. For example, external financing for the construction of the Aswan High Dam was made possible, and the treaties have fostered good relations between Sudan and Egypt. However, the negotiation process and the treaties have also had detrimental consequences. The exclusiveness of the negotiation process and the treaties involving Egypt and Sudan have been at the expense of warm diplomatic relations with their regional upstream neighbours, including Ethiopia. The negotiations and agreements signed between 1891 and 1959 have become contentious and do not address the water conflict in the Nile region because, with the exception of Egypt and Sudan, the riparian countries of the Nile Basin were all excluded from participation and were not part of the decision-making process. Ethiopia, particularly, has officially made it clear from the beginning that it does not recognise the agreements of 1929 and 1959, to which it was not party, and stressed that there is no legal or moral ground that makes the agreements binding on Ethiopia. Exclusion of most of the riparian countries from participation in negotiations in relation to the issue of the Nile is, therefore, one of the major factors that have escalated the current struggle over the Nile waters.

Inconclusive cooperation (1967–1993)

After the Nile Waters Treaty was signed in 1959, there were various attempts at conflict management in relation to the use
of the Nile waters. In May 1967, HYDROMET, a project designed to collect hydro-meteorological information from the catchments of lakes Victoria, Kyoga and Albert within the Nile Basin, was established after being agreed to by Egypt, Kenya, Sudan, Tanzania and Uganda. The United Nations Development Programme and the World Meteorological Organisation supported the idea. The HYDROMET survey came to an end in 1992. In 1991 Sudan and Ethiopia agreed to explore cooperation over the Blue Nile and Atbara River, which alarmed Egypt. However, in 1993, under the framework of general cooperation, Egypt and Ethiopia agreed not to interfere with each other over the Nile in a way that may cause appreciable harm to the interests of the other party.\(^{21}\) After the HYDROMET project terminated, the Technical Cooperation Committee for the Promotion of the Development and Environmental Protection of the Nile Basin (TECCONILE) was formed in 1993 when the water resource ministers from the DRC, Egypt, Rwanda, Sudan, Tanzania and Uganda signed an agreement in Kampala, Uganda. The other four riparian states participated as observers. The signatories agreed that TECCONILE’s secretariat should be based in Entebbe, Uganda; it became operational on 1 January 1993.

The intention of these cooperative initiatives was not in reality to share the benefits of the Nile waters across the basin, but to ensure that the water flow of the river was not obstructed by any upstream activities so that the status quo could be maintained. As a result, the various cooperative attempts during this historical process of conflict management did not produce a clear-cut result. This was partly because of the downstream countries’ outright rejection, sometimes coupled with threatening gestures, of any call by the upstream countries to renegotiate the use of the Nile waters. This meant that the upstream countries unilaterally initiated water resource development planning for hydroelectric power and irrigation, which exacerbated tensions in the region. However, Egypt successfully thwarted attempts by Ethiopia in particular to develop its water resources on the Blue Nile by blocking external funding until Ethiopia inaugurated the 460MW Tana Beles Hydroelectric Plant in May 2010 using its own resources, which indicates that the game rules over the Nile are changing slowly but surely.


After a series of conflict-management attempts, beginning in 1997, the Council of Ministers of water resources of the Countries of the Nile Basin (Nile-COM) reached an agreement over sharing and managing the Nile waters in March 1998 at a meeting held in Arusha, Tanzania, which subsequently led to the launch of the NBI in May 1999. The aim of the NBI is to promote equitable utilisation of the Nile and the sharing of the benefits of its resources. Although a concrete agreement with all the riparian states’ consent has not yet been reached, the NBI is at least the first initiative of its kind to include all the states in the basin in the consultative process. It was with the understanding that a cooperative effort towards the development and management of the Nile waters will bring the greatest level of benefit to the entire region that the NBI was launched; it is an interim initiative until an agreement is reached for the establishment of a Nile Basin–wide commission.

Although the NBI’s planning efforts were supported by the multi-donor Nile Basin Trust Fund, established under the auspices of the World Bank, the organisation was driven entirely by its members, indicating the intent of the riparian states for cooperation rather than conflict over the scarce water resources. The NBI seeks to realise the potential benefits of development in a region that has been subject to rivalry, suspicion and mistrust in the past. The central principle of the NBI is, therefore, the shared vision jointly embraced by all member nations: to achieve sustainable socio-economic development through the equitable utilisation of, and benefit from, the common Nile Basin water resources. Building upon this shared vision, the NBI has two complementary components: a Shared Vision Programme (SVP) and a Subsidiary Action Programme (SAP).\(^{22}\) Throughout the NBI process, priority has been placed on strengthening consultation among member states of the initiative in order to build trust and confidence, though the process has only resulted in the adoption of NBI’s CFA by the majority of upstream riparian states. Many believe that one of the reasons for the slowdown in the pace and output of the negotiation process under the auspices of the NBI is the limited decision-making powers that the members of the Nile-COM have.\(^{23}\) Many share the opinion that cooperative agreements would have been reached earlier if the members of the highest-level policy forum for the NBI, who lead the riparian consultative process, were political executives responsible for ultimate political decision making at the highest level in each riparian state.

**RECENT POLITICAL DEVELOPMENTS IN THE NILE BASIN AND IMPLICATIONS FOR WATER CONFLICT MANAGEMENT**

Recent political and socio-economic developments in the Nile region have raised debates in which some have taken an optimistic view, whereas others remain pessimistic about the prospect of cooperation over the Nile question. Some of the major recent developments in the Nile Basin that have the potential to either exacerbate or ease tensions over the use of the Nile waters are the signing of the NBI’s CFA by the majority of upstream riparian states, the South Sudanese vote for independence, the changing face of Egypt’s politics and Ethiopia’s launch of major water-resource development projects on the Blue Nile.
Adoption of the NBI’s proposed Cooperative Framework Agreement

After a decade of intensified efforts towards cooperation through various meetings and deliberations under the auspices of the NBI, it was not until May 2009, during the Nile-COM extraordinary meeting held in Kinshasa, that the long-awaited NBI CFA on the Nile waters was adopted by seven votes to one. Following the adoption of the CFA, Ethiopia, Kenya, Rwanda, Tanzania and Uganda signed the agreement in May 2010. Burundi joined the group of signatory states in February 2011, bringing the number of signatories to six.

The riparian states’ initiation and formal acceptance of the NBI, participation in the consultation process and the signing of a new pact by no means signal the resolution of the legal, political and economic aspects of the Nile question. There is still a long way to go before the multidimensional contentious issues of the Nile are addressed. What is being witnessed for the last few years is that the downstream countries, especially Egypt, have rejected the framework agreement and tried their best to thwart the NBI’s CFA from being adopted, signed and ratified, since a new Nile water treaty means those states will lose their monopoly over the Nile, and there will be a potential reduction in the water flow to the downstream countries, which will put them in a perceived difficult situation in terms of both pursuing their water development projects and supplying enough water for their existing needs.

Any cooperative framework agreement that does not include both the upstream and downstream riparian countries as signatories, as is the case with the NBI’s CFA, will not be a real and effective solution to the long-standing competition over the Nile waters. The crux of Egypt’s disagreement with the CFA rests on three principles. First, Egypt believes that upstream countries should be required to obtain the approval of downstream countries (i.e. Egypt and Sudan) before beginning any project that may affect the flow of the Nile. Second, Egypt wants the CFA to guarantee its access to an annual quota of 55.5 billion cubic metres of Nile water, which is based on the 1959 agreement signed by Egypt and Sudan. Finally, Egypt feels that Article 14(b) of the CFA should commit NBI states ‘not to adversely affect the water security and current uses and rights of any other Nile Basin state’.24 The proposed version of the CFA reads as follows: ‘Nile Basin states agree not to significantly affect the water security of any other Nile Basin state.’25 Egypt does not seem to be prepared to compromise or renegotiate the 1959 treaty and is apparently committed to maintaining the status quo on the use of the Nile waters, despite ten years of negotiation. A close examination of Egypt’s final position on the proposed CFA indicates that it is determined to get the indirect approval of all the riparian states for the 1959 bilateral agreement.

The upstream–downstream impasse that has followed the CFA’s adoption in May 2009 and its signing by six upstream riparian states has become an obstacle to achieving the long-awaited inclusive cooperation by obstructing the participation of all riparian states in the consultation process of NBI. Instead the upstream states have turned their focus to convincing the downstream riparian states to join the signatories of the NBI’s CFA, and the downstream riparian states are engaged in the difficult job of lobbying upstream riparian states that have signed the agreement from ratifying it. The talks have reached an impasse because the upstream countries are demanding renegotiation of the agreements, whereas the downstream countries are committed to maintaining the status quo.26 The impasse is happening at a time when the socio-economic and ecological realities of the region need a consolidated effort by all riparian countries to find smarter ways to develop and manage the Nile resources, and to find responses appropriate to the circumstances in each particular country before things get worse.

If these polarised positions of the upstream and downstream states continue unabated, the situation can lead to détente in the region. Although the NBI’s decade-long consultation process has resulted in the signing of a new pact by the six upstream riparian countries, it still falls short of being inclusive since the downstream riparian states are not signatories. Individual state-centric approaches to water-resource governance in both the downstream and upstream countries of the Nile Basin have dominated and still prevail, leading to the fragmented and uncoordinated development and management of the resource. In the absence of upstream–downstream integration, competition for this scarce resource will continue to be a fact of life across the basin.

But all is not bad news for the riparian states, though the talks on the Nile waters have reached an impasse. After Burundi signed the new NBI CFA in February 2011, the agreement has achieved the necessary majority in order to be ratified and implemented in the region. There are some indications that this stalemate could be a blessing rather than a curse in opening up a new chapter in the upstream/downstream dialogue and bring about a breakthrough. Egypt is now engaged in diplomatic efforts with the upstream riparian states. It has succeeded in convincing Meles Zenawi, the Prime Minister of Ethiopia, to delay the ratification of the new CFA until a legitimate government assumes power following the political change in the country. The decision by upstream riparian countries, particularly Ethiopia, to delay the ratification of the agreement and engage in dialogue with the new Egyptian government is a possible indication of these countries’ intention to take into account the vulnerability and sense of insecurity of the downstream riparian states. Seen from this perspective, the CFA potentially signals the possibility that major players, such as Ethiopia and Egypt, could leave aside their long-standing mistrust and suspicion...
in favour of sound conflict prevention, management and resolution in using the Nile waters.

South Sudan’s independence

A new political entity has been created in the Nile Basin after nearly 99 per cent of the South Sudanese voted in favour of independence in a referendum held on 9 January 2011, which concluded the Comprehensive Peace Agreement (CPA) brokered six years earlier between the central government in Khartoum and the Sudan People’s Liberation Army/Movement (SPLA/M). Although South Sudan is a recently created independent state in the Nile Basin, it is expected to join the NBI. Originating upstream in the Great Lakes region, the transboundary White Nile crosses the newly created state of the Republic of South Sudan before its confluence with the Blue Nile in Sudan. In addition to other issues, such as citizenship, border demarcation, the disputed Abyei region, sharing Sudan’s external $38 billion debt, and oil resources, the regulation of the Nile River waters is one of the pressing and unavoidable challenges facing the new state of South Sudan. Seen from a geopolitical perspective, the Nile water impacts on and complicates South Sudan’s development prospects, its relations with riparian countries, particularly downstream countries, and the ongoing overall efforts to achieve cooperation on the use of the Nile waters in the region. It is also an additional source of concern for both Sudan and Egypt, which have had a plan to minimise the amount of White Nile waters lost through evaporation by constructing the Jonglei Canal, which was meant to make more water available further down the White Nile by bypassing the swamps in the Sudd.

When signing the CPA during the interim period (2002–2005), which made the January 2011 referendum possible, the Sudanese central government and the SPLA/M in the south agreed on several conventions, such as the right to self-determination and wealth sharing. The convention on wealth sharing addressed the issues of land, natural resources and oil. Whereas revenue from oil was to be split, the issue of the White Nile’s water flow was not addressed. It seems that the SPLA/M negotiators deliberately excluded sharing and management of the Nile in the peace process, as including it would have necessitated a revision of the 1959 treaty. This would not have been accepted or approved by the Sudanese central government, since it would sully its agreement with Egypt. Even if it were possible to negotiate Sudan’s Nile quota of 18.5 billion cubic metres per year, as established under the 1959 treaty, the leaders of the SPLA/M might have found themselves in a complicated diplomatic position with the other upstream countries. This is because these countries have clearly rejected previous exclusive treaties by virtue of their obsolete colonial character and non-inclusiveness.

Notwithstanding the seemingly deliberate exclusion of the issue of water sharing from the interim peace process that culminated in the CPA, the birth of the new riparian country of the Republic of South Sudan has become a reality, which all the riparian states, including the newly created state, have to embrace, and they need to act accordingly in their endeavour to address the Nile question. South Sudan will, therefore, have a very important role to play in the Nile game of diplomacy. As of July 2011, when the new state was officially established, the nation had the White Nile crossing its territory towards the north, enabling it to play an influential role in future water conflict management in the region. In bilateral Egypt–South Sudan talks, the media reported that South Sudan promised to respect previous treaties. But sooner or later, Sudan’s annual 18.5 billion cubic metre share of the 1959 treaty will have to be renegotiated between its two new constituencies and its quota will quickly be reached. The question whether or not South Sudan will join the NBI is also pending, but it is likely that the country will join the upper riparian countries.

As mentioned, another important issue of concern is the reopening of the Jonglei Canal in the Sudd region in South Sudan. The canal was jointly constructed by Egypt and Sudan in 1980 to channel the water before it is lost to evaporation, with the intention of increasing Egypt’s Nile flow by 10 per cent. The project was discontinued in 1984 after the civil war broke out. In its proposed form, the project would simply perpetuate poverty and underdevelopment among the inhabitants of the area. Should there be a renegotiation of water sharing, however, the Jonglei Canal would certainly be used as a political pawn by South Sudan (notwithstanding the potentially strong objection from inhabitants in the area) against Sudan and Egypt. The implication of the creation of the new South Sudan state is, therefore, that riparian states will have to converge to tackle the very complex issues of the Nile Basin through phased diplomatic engagements.

Changing face of Egypt’s politics

In another recent development, the gloomy prospects surrounding the use and allocation of the Nile waters seem to have improved following the 2011 Egyptian revolution that forced Mubarak to resign from power and brought about political change in the country. For some time now, Egypt’s control of the Nile has gradually but steadily loosened due to the changing geopolitical realities of the region. Egypt used to be confident enough to halt any upstream water development activities using its military might and diplomatic advantages. Although the Nile issue is a national priority for Egypt, the government failed to focus on the need for diplomatic engagement with other riparian states. However, the upstream riparian states have begun water development projects on the Nile River despite Egypt’s stance. Mubarak’s regime was known for its outright rejection of any negotiation process concerning the Nile waters. Many, including some Egyptians, believe that the recent political change in Egypt...
will boost the chances of reaching a new deal to equitably share the Nile waters. It seems that Egypt has changed its rules of engagement with upstream countries, particularly Ethiopia, in relation to the Nile question. This sign of rapprochement has been reinforced by the recent visit of a 48-member Egyptian public diplomacy delegation and Egypt’s Prime Minister Essam Sharaf to discuss the Nile River. As mentioned previously, this gesture by Egypt prompted the Ethiopian prime minister to postpone Ethiopia’s ratification of a treaty on sharing the Nile waters until a new Egyptian government takes office to join the negotiations. A popularly elected new government led by Mohammed Mursi is now in place in Egypt. It is expected that negotiations on the Nile waters will follow suit with a change of strategy from the side of Egypt and an emboldened negotiating capacity among upstream riparian states.

**Water-resource development projects on the Blue Nile**

Ethiopia’s official position on the Nile question is that it has a sovereign right to use the Nile waters for hydroelectric power generation and irrigation to meet rising power needs for domestic and industrial purposes and to feed its rapidly growing population by boosting food production. However, because of its doctrinal principle of ‘acquired right or historical right’, Egypt has used various mechanisms to thwart attempts made by upstream countries to use the Nile waters, particularly by Ethiopia. In interviews with the national media, Ethiopia’s Prime Minister, Meles Zenawi, said that Egypt had for a long time been using three strategies to impede Ethiopia’s plans to implement water-resource development projects on the headwaters of the Nile: threatening military action through show of force by building a large army; blocking external funding for Ethiopia’s water development projects by means of its diplomatic advantage; and destabilising the country by supporting unfriendly neighbouring regimes and domestic dissent.

But according to a recent statement by the Ethiopian Ministry of Foreign Affairs, the decision taken by the Ethiopian government to construct the newly launched dam on the Blue Nile was a very clear signal that Ethiopia was prepared to stake its claim to the Nile – whatever it might take – while recognising the huge challenge this poses.²⁹ The statement has made clear Ethiopia’s official position, namely that the country’s sovereign right to the Nile is not negotiable and Ethiopia will take any possible measure to ensure this right by implementing the dam project and by exerting the necessary effort to address the challenges that may arise. Moreover, the statement clearly indicates that the decision to build the dam with domestic capacity is made not only on the basis of a clear understanding of Egypt’s usual strategy of using its diplomatic might in blocking external funding, but it is also a signal that nothing can turn the clock back on Ethiopia’s path to realise its right to use the Nile waters. Ethiopia has declared to the world that it can act independently in the face of adverse campaigns.³⁰

Ethiopia has successfully financed its own water development projects on the headwaters of the Nile.³¹ The multipurpose Tana-Beles hydroelectric power plant on Lake Tana was financed domestically. The construction of the new hydroelectric Renaissance Dam on the Blue Nile is also being financed by domestic funds. The fact that the financial resources for these huge projects on the Blue Nile are internal has two very important implications. First, it will significantly increase upstream countries’, particularly Ethiopia’s, negotiating power on the Nile question with downstream countries, particularly Egypt. And, second, Egypt will most probably be compelled to heed more closely the multilateral NBI Nile negotiation process or engage in bilateral negotiation with Ethiopia, and possibly with South Sudan. This is a result of various factors, including Egypt’s realisation of the rigidity of its policy on the Nile Basin and Ethiopia’s success in thwarting Egypt’s strategies, coupled with the other recent developments in the region, as discussed above – particularly the signing of the CFA by six upstream countries and the creation of the Republic of South Sudan as a new major power broker in the Nile Basin.

Recognising Egypt’s concerns, Ethiopia, in turn, has allowed the establishment of a tripartite team of technical experts to review the impact of the new dam being built on the Blue Nile in addition to delaying the ratification of the new NBI’s CFA. The tripartite team of technical experts has already begun its job and is expected to come up with its final report in less than a year. This implies that both Egypt and Ethiopia have learnt from the pitfalls of past mistrust and contentions in favour of cooperation and mutual development, opening a new chapter in relations between the two states.

**COOPERATION AND MUTUAL DEVELOPMENT IN THE NILE BASIN**

Most of the upstream riparian countries have been unable to get equitable access to the waters of the Nile to address social and economic problems similar to those that the downstream countries face. However, the downstream countries have not yet recognised the upstream countries’ right to use the Nile waters, and this has become one of the major reasons for the absence of a basin-wide cooperative framework governing all the riparian countries in relation to the use of the Nile water. The issue of access and equity can, therefore, be addressed only when all the riparian countries come together and prepare to compromise for the sake of peaceful resolution of their disputes in relation to the use of the Nile’s water. In addition to the natural climatic factors, the availability of water in the river system depends on conservation measures taken by each riparian country. Because of the complex nature of the Nile system, all the
The riparian countries are interconnected and interdependent ecologically, socially and politically – no individual riparian state can exist outside this interconnection and interdependence. Given this state of affairs, it is natural that conflicts will arise over the water resources of the Nile. The main concern is not, therefore, why conflicts arise, but how to resolve the conflicts in a peaceful manner so that all the riparian countries can coexist and pursue growth and development while sharing the benefits of the Nile.

Although upstream water development projects are crucial to the socio-economic development of upstream riparian states, they would not be good news for downstream countries, particularly Egypt, given its long-standing claim to the Nile waters. In spite of the fact that three of the major tributaries of the Nile (the Blue Nile, Sobat and Atbara) originate in Ethiopia and contribute more than 86 per cent of the Nile waters, Egypt claims that it has ‘acquired rights or natural rights’ over the Nile waters, and this has been the guiding principle for any dealings within the basin.30 From Egypt’s point of view, the very existence of these rights implies that any potential or actual reduction of water flowing to Egypt due to water development activities by any upstream country is considered as interfering in its national security and is tantamount to a declaration of war, which has the potential to trigger a fully fledged conflict.

The established wisdom in upstream–downstream interdependence is based on the imperative of recognising downstream vulnerability to upstream activities, but it is also crucial to recognise the rights of upstream users and act accordingly. This is the only way of managing the water resources as a means of prevention and resolution of conflict.31 In order to capitalize on the opportunities brought about by the recent developments in the Nile Basin discussed above, phased negotiations have to be carried out to bring about basin-wide cooperation and mutual development. Of all regions in the Nile Basin, the eastern sub-basin region is very sensitive: it is the main conflict-prone area; and it is where the major contributors and users of the Nile water are located. This is because the relative importance of the Nile waters varies among the riparian states. The hydropolitics of the Nile is of overriding national political and economic concern for Egypt, Ethiopia and Sudan. But hydropolitics is not a priority, though it is an important national concern, for the rest of the riparian states.34 Hence, without the downstream countries, especially Egypt, ratifying the agreement, it will be impractical to move from conflict to all-inclusive cooperation on the Nile question. The recent developments have created a situation where both the upstream and downstream countries cannot ignore the compelling conditions to come to roundtable discussions for cooperation. Therefore, cooperation must come first between the major contributor (Ethiopia) and the major users of the Nile water (Egypt, Sudan and now South Sudan) in order to reach a sustainable basin-wide cooperative outcome to the long-standing upstream–downstream impasse. Irrespective of the reasons for Egypt’s turnaround, it is important to capitalise on the current opportunities and take advantage of its goodwill gesture, either as part of the NBI negotiation process or as a subset of it. This will be a way out of the impasse surrounding access to and equity in the use of the Nile waters.

Thus the Nile water issue can be first dealt with at the eastern sub-basin level, comprising Egypt, Ethiopia and Sudan, and then at the Nile Basin level, involving the Equatorial Lakes sub-basin riparian countries.

CONCLUDING REMARKS

For the past century, there has been a climate of mistrust among the riparian countries over the development and use of the Nile waters. This uncooperative atmosphere has created a fragmented vision and led to unilateral development of the Nile waters, which has served the national interests solely of Egypt and Sudan. Unhealthy competition for the Nile waters has catalysed regional conflict. Despite attempts at conflict management, it has been very difficult to bring about much-needed basin-wide cooperation, since the past attempts were not inclusive, and this served to exacerbate conflict among the riparian countries. Although the issue of the Nile remains complicated and challenging, recent developments in the Nile Basin seem to have eased tension over the use of the Nile waters and provided channels for cooperation. It is a significant achievement that the CFA has been signed by six states, and it means that there is still potential for basin-wide cooperation. And there is a sense of optimism reflected in downstream countries’ recent interest in cooperation. The political gestures of friendship that have been made by both Egypt and Ethiopia and recent political developments in the region have to be exploited in favour of cooperation and mutual development in the Nile Basin.

It has never been an easy task to reach agreement over the Nile issue because the cooperation of all the riparian nations is needed, with their differing values, priorities, resources and levels of wealth. In some areas of the basin, the Nile issue is the overriding national political and economic concern; in other areas, a time may come when it will be. Therefore, achieving cooperation and collaboration (taking into consideration basin-wide needs and concerns) among those states in the basin to which the Nile issue is a major national, political and economic concern should be given priority if the ultimate goal of cooperation is to assist in conflict prevention and resolution, and management of the Nile waters. Until an all-inclusive cooperative agreement is reached and put into effect, all state-centric and fragmented water development projects in the Nile Basin should take into consideration both the needs of the upstream states and the concerns of downstream states in an effort to reduce possible escalation of already existing conflicts and to facilitate future cooperation and collaboration.
engagement of the Nile riparian countries should be a continuous process and respond to the rapidly occurring changes in the political, socio-economic and environmental landscapes of the Nile Basin states. Intensive and extensive sensitisation, education and communication in favour of upstream–downstream cooperation and collaboration at sub-basin and basin-wide levels should be carried out to forge the political will to act. The promotion of broad public awareness is an essential part of basin-wide cooperative efforts to strengthen attitudes, values and actions compatible with the sustainable use and development of the Nile waters.

NOTES

1 This article could not have maintained its current content and form without the meticulous comments from Dr Mehari Taddele Maru. The author is also grateful to Dr Teklehaimanot G/Selassie for his review and other external reviewers of ISS.


3 Ibid.

4 T Kyoshi, H Takashi, W Abdelhadi et al, Role of remote sensing technology on monitoring large irrigation project in Gezira, Sudan, Proceedings of international workshop on participatory management of irrigation systems, water utilisation techniques and hydrology, 3rd Water Forum, Kyoto Shiga and Osaka, Japan, 16–23 March 2003.


8 Brelet, Some examples of best ethical practice in water use.


10 Ibid.


12 Following UN definitions, the replacement rate is the number of children each woman needs to have to maintain current population levels, or what is known as zero population growth. In developed countries, the replacement rate is about 2.1. Since replacement cannot occur if a child does not grow to maturity and have their own offspring, the need for the extra .1 child (a 5 per cent buffer) per woman is due to the potential for death and those who choose not to or are unable to have children. In less developed countries, the replacement rate is around 2.3 due to higher childhood and adult death rates.

13 See Nile Basin Initiative, http://www.nilebasin.org, for more information and a list of members and partners.


15 Yacob Arsano, Ethiopia and the Nile dilemmas of national and regional hydropolitics, PhD dissertation, University of Zurich, 2004.


18 Ibid.

19 Wolf and Newton, Case study of transboundary dispute resolution.

20 Swain, Mission not yet accomplished.

21 Swain, Mission not yet accomplished.

22 See Nile Basin Initiative, http://www.nilebasin.org, for more information and a list of members and partners.

23 Swain, Mission not yet accomplished.


30 Ibid.

31 Swain, Mission not yet accomplished.

32 Arsano, Ethiopia and the Nile dilemmas of national and regional hydropolitics.

33 The Global Water Partnership and the International Network of Basin Organizations, A handbook for integrated water resources management in basins.

34 Swain, Mission not yet accomplished.
If you would like to subscribe to ISS publications, complete the form below and return it to the ISS with a cheque, or a postal/money order for the correct amount, made payable to the Institute for Security Studies (marked not transferable). Please see ISS website for credit card payment and you may also deposit your payment into the following bank account, quoting the reference: PUBSPAY. If you would like to subscribe to the SA Crime Quarterly only, please quote the reference SACQ + your name.

ISS bank details:
ABSA, Brooklyn Court, Branch Code: 632005
Account number: 405 749 8921

Kindly fax, e.mail or mail the subscription form and proof of payment to:
ISS Publication Subscriptions, PO Box 1787, Brooklyn Square, 0075, Pretoria, South Africa
ISS contact details: (Tel) +27 12 346 9500, (Fax) +27 12 460 0998, Email: pubs@issafrica.org

Website: www.issafrica.org

### PERSONAL DETAILS

<table>
<thead>
<tr>
<th>Title</th>
<th>Surname</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Postal Address</th>
<th>Postal Code</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tel</th>
<th>Fax</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please note that the African Security Review (ASR) is now published by Taylor & Francis. Kindly refer to the Taylor & Francis website www.informaworld.com/rasr, subscription inquiries can be forwarded to Helen White (Helen.White@tandf.co.uk). For orders in sub-Saharan Africa, contact Unisa Press, PO Box 392, Unisa, 0003, South Africa. (Tel) +27 12 429 3449; Email: journalsubs@unisa.ac.za

### PUBLICATIONS

<table>
<thead>
<tr>
<th>Publications</th>
<th>South Africa</th>
<th>African Countries*</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISS Monographs (Approx. 10 per year)</td>
<td>R370</td>
<td>US$ 75</td>
<td>US$ 95</td>
</tr>
<tr>
<td>ISS Papers (Approx. 10 per year)</td>
<td>R150</td>
<td>US$ 30</td>
<td>US$ 40</td>
</tr>
<tr>
<td>SA Crime Quarterly (4 issues per year)</td>
<td>R115</td>
<td>US$ 25</td>
<td>US$ 35</td>
</tr>
<tr>
<td>Comprehensive subscription</td>
<td>R600</td>
<td>US$ 130</td>
<td>US$ 170</td>
</tr>
</tbody>
</table>

### SUBSCRIPTIONS

<table>
<thead>
<tr>
<th>Subscriptions</th>
<th>Indicate Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISS Monographs only</td>
<td></td>
</tr>
<tr>
<td>ISS Papers only</td>
<td></td>
</tr>
<tr>
<td>SA Crime Quarterly only</td>
<td></td>
</tr>
<tr>
<td>Comprehensive subscription</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Angola; Botswana; Burundi; Congo-Brazzaville; Democratic Republic of the Congo; Gabon, Kenya, Lesotho, Madagascar; Malawi, Mauritius; Mozambique; Namibia; Reunion; Rwanda; Seychelles; Swaziland; Tanzania; Uganda; Zambia; Zimbabwe (formerly African Postal Union countries).
ABOUT THE PAPER
The purpose of this paper is to examine the implications of the recent unprecedented dynamism in the hydropolitics of the Nile Basin for future basin-wide conflict prevention, resolution, management and cooperation. To this end, the paper first discusses why the Nile waters are a major source of conflict in the Nile Basin, and, then it highlights the past and present bilateral and multilateral attempts at conflict management within the basin and their impact on upstream–downstream relations. It argues that it is imperative to first give priority to the most contentious areas of the Nile Basin by capitalising on the current opportunities presented by Egypt’s gesture of goodwill, to bring about effective basin-wide cooperation.

ABOUT THE AUTHOR
Kidan Kiros Bitsue is a lecturer at the Centre for Federal Studies, College of Law and Governance Studies, Addis Ababa University, and a PhD candidate at the Centre for Environment, Water and Development; College of Development Studies.