

THE NEW HYDRO-POLITICAL SITUATION IN AFRICA

CHALLENGES FOR NILE RIVER BASIN COUNTRIES

The Nile river basin is located in the water scarce arid/semi-arid region of the African continent, where eleven riparian countries struggle to satisfy their own water requirements. Therefore, managing and sharing Nile water in an equitable manner is a complex matter, especially with respect to the existing power balance in the region. For the past decade, the Nile basin has undergone many economic and political changes that are likely to encourage modifications in the balance of power. Powerful lower riparian countries, particularly Egypt and Sudan, exercise their hegemonic and historical rights to utilise a larger share of river water, whereas other comparatively weaker upper riparian states like Ethiopia strive to enhance their water share or even get their legitimate due. With the emergence of South Sudan, the situation in the basin has become even more complex.

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INTRODUCTION

Hydro-politics examines conflicts and cooperation in countries over shared water resources. Globally, the strategies used in hydro-politics are being modified due to changes in regional power balances and weak international institutions. Political processes that include the water sector in

any region, construct the hydro-political relations between countries, ranging from benefits through cooperative water use to inequitable aspects of hegemonic leadership. This results in competition over water use in the different water sharing countries and to the establishment of hydro-hegemony. Hydro-hegemony is the consolidated control over water resources, which favours the most powerful country in the region and determines the use of water. (Mark Zeitoun and Jeroen Warner, "Hydro-Hegemony: A Framework for Analysis of Transboundary Water Conflicts", *Water Policy*, vol8, no5, 2006, p435) Antonio Gramsci (*Selections from the Prison Notebooks*, London: Lawrence and Wishart, 1971) first developed and defined the concept of hegemony as "the political power that flows from intellectual and moral leadership, authority or consensus as distinguished from armed force". That is, the political power so obtained becomes the dominant hegemony by authority rather than coercion. Hegemony involves legitimacy and some form of understanding resulting from consent. Both the theoretical concepts of hegemony and counter-hegemony are influenced by Gramscian theory as well as neo-Gramscian views.

Various factors affect a riparian state's ability to technically control, utilise and allot water resources. The Nile river waters are shared by eleven countries and over a long period of time there has been a clearly inequitable distribution of resources. The hydro-politics in the region have been largely marked by Egyptian hegemony and to a lesser extent by Sudan. The 1929 treaty was renegotiated by Egypt and Sudan in 1959, guaranteeing a hundred percent water rights to them. These two states out of the eleven basin countries utilise all the Nile water for agriculture, drinking water, local and national economics, electricity, etc, Ethiopia despite being a major water contributor lags behind due to its weak position in the basin. Water management in the area is already under challenge from growing populations, land-use changes, political upheavals, regional conflicts, economic development, climate change, etc. Additionally, the political shifts in basin countries have increased the complexity of the management of Nile water. Recognising the challenges, various countries have

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started unilateral and bilateral development plans and projects. For example, to contest the status quo, Ethiopia has begun constructing various projects on the Blue Nile and its tributaries. With the independence of South Sudan, the situation in the basin will become even more conflictual if not peacefully negotiated and managed. The hydro-politics of the region is best understood by examining the cases of the hydro-hegemonic and counter-hegemonic states in the Nile basin.

EGYPT'S HYDRO-HEGEMONY

“He who controls the Nile controls Egypt”. (Halford L Hoskins, “The Suez Canal in Time of War”, *Foreign Affairs*, 1936, quoted in David Phillips, Marwa Daoudy, Stephen McCaffrey, Joakim Öjendal and Anthony Turton, *Transboundary Water Cooperation as a Tool for Conflict Prevention and for Broader Benefit Sharing*, Global Development Studies no4, Prepared for the Ministry for Foreign Affairs Sweden, 2006)

“Water flows towards the powerful and the rich”. (Philip L Fradkin, *A River No More: The Colorado River and the West*, New York: Alfred A Knopf, 1981, quoted in Phillips, Daoudy, McCaffrey, Öjendal and Turton, *ibid*)

Egypt is located in the northeastern part of Africa with a predominantly hot climate of moderate winters and dry summers. As the Sahara desert occupies a large part of the country, settlements are found along the Nile in a narrow strip of land covering less than five per cent of the total area (Organisation for Economic Cooperation and Development, *Development and Climate Change in Egypt: Focus on Coastal Resources and the Nile*, 2004, online at <http://www.oecd.org>) and Egypt depends completely on Nile water resources. Although upper riparian countries have the geographical advantage of location, some are still among the least developed and poorest nations in the world confronted by hunger, poverty as well as continuous droughts and famines. The inequality between upper riparian and lower riparian countries have led to imbalanced development levels. Egypt, labelled a hydraulic state by Karl A Wittfogel (*Oriental Despotism: A Comparative Study of Total Power*, New Haven: Yale University Press, 1957) has been the main hegemon in the Nile basin. It has productively and considerably mobilised the river's water for millennia. From the nineteenth to the mid twentieth century, the hydro-politics of the area was shaped by colonial powers. Most agreements related to the Nile river basin were made among the colonisers or are bilateral agreements between two important basin countries, Egypt and Sudan.

There were three important phases in the strategies of resource capture that

led to Egypt's present hydro-hegemonic status. (Thomas Homer-Dixon, "Environmental Scarcities and Violent Conflict", *International Security*, vol19, no1, 1994, pp5–40) In the nineteenth century, Khedive Muhammad Ali started the first phase by bringing about the large-scale enlargement of the agricultural base. The second phase began in the British colonial era with various political and technological standards that launched new hydro-projects to intensify agricultural production. The third phase falls in the period of Arab nationalism, when Gamal Abdel Nasser started various projects and reached the most decisive point with the building of the Aswan high dam in 1971. For Egyptian political leaders, ensuring the continuous and stable supply of Nile water has been the most important national interest. (Fiona Flintan

and Imeru Tamrat, "Spilling Blood over Water: The Case of Ethiopia" in Jeremy Lind and Kathryn Sturman (Eds), *Scarcity and Surfeit: the Ecology of Africa's Conflict*, African Centre for Technology Studies, Institute for Security Studies, Pretoria, 2002, pp243–319)

Egypt utilised many approaches—economical, legal, political and technical—to secure possession over the Nile waters and prevent other upper riparian states from diverting that resource. The imbalance in the water sharing is explained by the power relations between the riparian states, which provided Egypt hegemonic status in the Nile basin. This status was due to three power determinants as defined by Zeitoun and Warner: (*ibid*)

1. Material Power, which refers to the political condition, level of military might, economic development and access to foreign political influence and financial support.
2. Bargaining power, which is decided through the condition of possession, the shape of the agenda and the capability to influence negotiations.
3. Ideational power, which is shaped by the capability to affect knowledge and build discourse.

Historically, Egypt has been the strongest riparian state in all the above-mentioned dimensions of power. Its economic strength and geostrategic location are the main factors for its hegemonic status. Cairo also maintains relations with international donors like the United States of America, the European Union and various countries of the Middle East. In addition, strong military and bargaining power have contributed to it influencing hydro-political issues of the basin including multilateral and bilateral political relations. (Anthony H Cordesman, *The Military Balance in the Middle East*, Westport: Praeger, 2004 and Steven Lukes, *Power: A Radical View*, Second Edition, Hampshire: Palgrave MacMillan, 2005) Other riparian states have weak bargaining strategies and are not able to draft their agendas for negotiations effectively. (J Anthony Allan, *The Nile Basin: Evolving Approaches to Nile Waters Management*, Water Issues Group Occasional Paper 20, School of Oriental and African Studies, University of London, June 1999, online at <https://www.soas.ac.uk>) For instance, Egypt has successfully convinced other states of its absolute dependency on Nile waters and defined availability as a matter of national security. (Mohamed H Heikal, "Egyptian Foreign Policy", *Foreign Affairs*, vol56, no4, 1978, pp714–27, online at <https://www.foreignaffairs.com>) In this securitisation, Cairo has been encouraged by various conventional ideas that are favourable to its status.

As Egypt's claims are enshrined in the 1959 Nile Waters Agreement with Sudan, its aim is to preserve its "gained rights", its status in the region and its modified policies. With the growth of population and increase in pressure over "old" land in the Nile valley and delta area during the last few years, Cairo has confronted many difficulties. Consequently, central governments have opted for a policy of shifting the population living in the "old valley" towards new areas where several agricultural projects have been developed. These include the desert area of the West Delta Irrigation Project, the South Valley/Toshka Development Project and the North Sinai Agriculture Development Project. These three projects have been going on since the late 1990s. (Habib Ayeb, "Hydraulic Politics: The Nile and Egypt's Water Use: A Crisis for the Twenty-First Century" in Ray Bush (Ed), *Counter-Revolution in Egypt's Countryside: Land and Farmers in the Era of Economic Reforms*, London: Zed Books, 2002, pp76–100) Their main goal is to irrigate and settle thousands of hectares of land. (Ministry of Water Resources and Irrigation, Government of Egypt, *National Water Resources Plan for Egypt 2017*, Cairo, 2005) The South Valley/Toshka Project, which started in 1997 aims to recover 1.5 million acres of land and is estimated to require over five billion cubic metres of water annually. (Robert O Collins, "Negotiations and Exploitation of the Nile Waters at the End of the Millennium", *Water International*, vol31, no1, 2006, pp116–26) Throughout the last two decades, Egypt has been transporting water from Lake Nasser to the Toshka project region by a large pumping station and waste weir. The project has been strongly criticised by neighbouring riparian states, particularly Ethiopia. ("Nile Restrictions Anger Ethiopia", *BBC News*, 3 February 2005, online at <http://news.bbc.co.uk>)

SUDAN'S HYDRO-HEGEMONY

Sudan has historically coordinated its Nile policies with Egypt, giving the latter a chance to exploit the river waters first. This was because Egypt gained independence in 1922 and Sudan only attained freedom in 1956. Sudan started development of a hydro-infrastructure base in its part of the basin under Anglo-Egyptian rule and this has grown since independence. (Terje Tvedt, *The River Nile in the Age of the British Political Ecology and the Quest for Economic Power*, Cairo: The American University in Cairo Press, 2006)

The 1929 agreement signed by Great Britain and Egypt, granted the latter veto power for all projects in the upper stream, allotted 48 cubic kilometres (km³) of water to Egypt and four km³ of water to Sudan while the other countries remained unallocated. The 1959 bilateral agreement between Egypt and Sudan was for the optimal utilisation of Nile water. Later, the annual total runoff at the Aswan dam was estimated at 84 km³ from which Egypt was allotted 55.5 km³ and Sudan 18.5 km³. The remaining 10 km³ of water represented evaporation loss at the reservoir made by the dam and again, other riparian states were not included. Egypt's Aswan dam and Sudan's Roseires dam were constructed in keeping with this agreement. The primary importance given to the wide-ranging interests of these two countries, which do not contribute to the river flow, has prevailed for a long time.

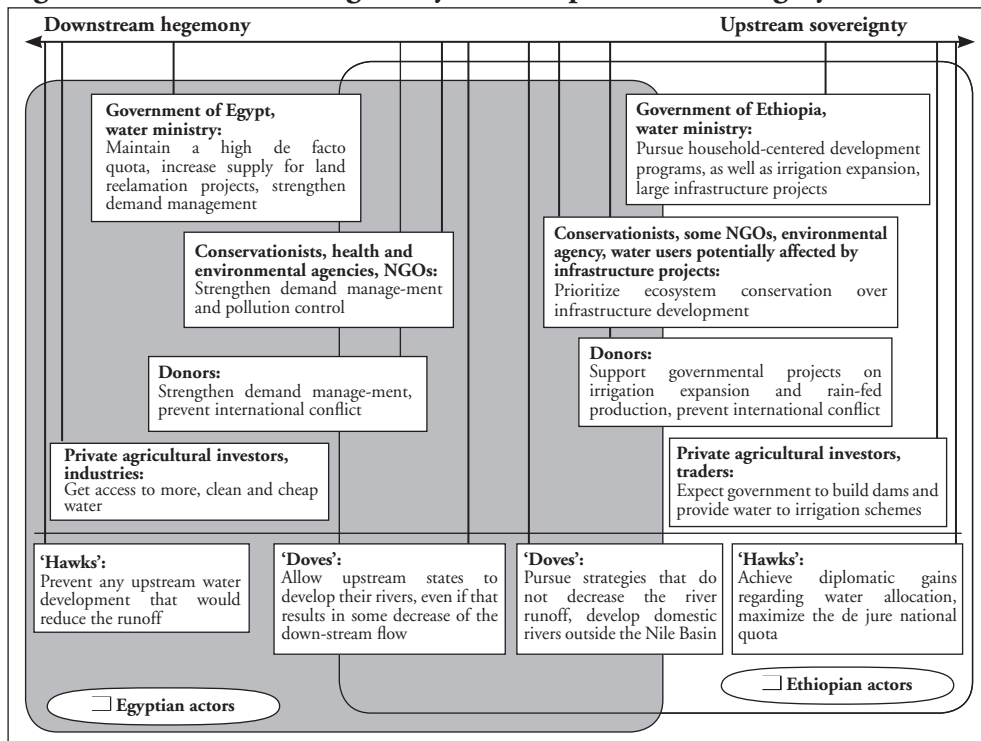
The perceived hydro-hegemony Egypt and Sudan exhibit growing concerns over Ethiopia's move to obtain its share of the Nile river water for hydroelectricity and irrigation purposes despite it contributing 86 per cent of the water in the Nile. Cairo and Khartoum suspect that the favourable colonial legal agreements signed between them and Britain in the allocation of the water could be in danger. (Ana Elisa Cascao, "Power Relations, Conflict and Cooperation in the Eastern Nile River Basin" in Sharif S Elmusa (Ed), *The Burden of Resources: Oil and Water in the Gulf and the Nile Basin*, Cairo: The American University in Cairo Press, 2011)

This is particularly worrisome to Egypt as about 86 percent of its land area is classified as extremely arid and the rest as arid because of the scarcity of rain. (Daniel Kendie,

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Egypt and the Hydro-Politics of the Blue Nile River, Michigan: Michigan State University Press, 2009) For Egypt and other riparian states, water is often part of discourses and practices of securitisation and militarisation guided by fear, mistrust and zero-sum politics. As Okbazghi Yohannes (“Hydro-Politics in the Nile Basin: In Search of Theory beyond Realism and Neoliberalism”, *Journal of Eastern African Studies*, vol3, no1, 2009, pp74–93) has stated, “Now all the Nile basin countries define water resources in terms of national security, hence the elevation of water resources to the status of high politics”. Stefan Deconinck (*Security as a Threat to Development: The Geopolitics of Water Scarcity in the Nile River Basin*, 2009, online at <http://www.waternet.be>) argues that both Egypt and Sudan refer to their historic and legal rights, obtained under British colonial rule to expand their consumption of Nile water, while they refuse to accept the needs of upstream riparian countries. However, this does not necessarily mean that upper riparian states such as Ethiopia and South Sudan are powerless in the face of these hegemonic instruments. (Cascao, 2011, *ibid*)

Figure 1: Downstream Hegemony versus Upstream Sovereignty



Source: Adapted from Samuel Luzi, *Double-Edged Hydro-Politics on the Nile: Linkages between Domestic Water Policymaking and Transboundary Conflict and Cooperation*, PhD Thesis, Swiss Federal Institute of Technology, Zurich, 2007, online at <http://www.css.ethz.ch>

In the region, Sudan has the highest capability for water resources development and appears to have decided to increase its utilisation of Nile water. New hydropower dams and irrigational projects are being developed, with earlier ones reformulated and other schemes developed for the future. Khartoum has so far been a hydro-political ally of Cairo's in the Nile basin. However, it may prove to be the most prominent challenger to the present hydro-political scenario and pose a threat to Egypt's hydro-hegemonic status. Successive national governments have been determined to build several programmes of hydro-infrastructure within their territory. According to Sudanese politicians, the main aim is to meet the country's growing needs for energy due to speedy economic development. ("Beshir says New Dam will Help Reduce Poverty in Sudan", *Sudan Tribune*, 20 March, 2005, online at <http://www.sudantribune.com>) The hydropower generation by old dams of about 300 megawatts was insufficient to satisfy the growing needs. (Osman El-Tom Hamad and Atta El-Battahani, "Sudan and the Nile Basin", *Aquatic Sciences*, vol67, no1, 2005, pp28-41)

Sudan obtained financial support and assurances from Arab institutions and Gulf countries as well as from its new international funding partner China. (Dams Implementation Unit, Sudan, "Funding", *Merowe Dam Project*, 2008, online at <http://merowedam.gov.sd>) The donors invested in two main programmes. The first project started in 2002 began functioning in 2009. The large-scale Merowe dam is mainly a hydropower project that may include irrigation projects in the future that would withdraw more water from the Nile system. (Cristian Teodoru, Alfred Wüest and Bernhard Wehrli, *Independent Review of the Environmental Impact Assessment for the Merowe Dam Project (Nile River, Sudan)*, Swiss Federal Institute of Aquatic Science and Technology, EAWAG Aquatic Research, Kastanienbaum, 2006, online at <https://www.dora.lib4ri.ch>) The other project for upgrading the old Roseires dam that started in 2008 enhances both the dam's hydropower generation capability and its capacity to store water, making more water available for irrigation. ("Sudan, China Sign \$396 Million Contract to Heighten Roseires Dam", *Sudan Tribune*, 28 April 2008, online at <http://www.sudantribune.com>) The dynamics of the political situation in Sudan shows that its relative powerlessness in relation to its northern neighbouring country Egypt is now diminishing.

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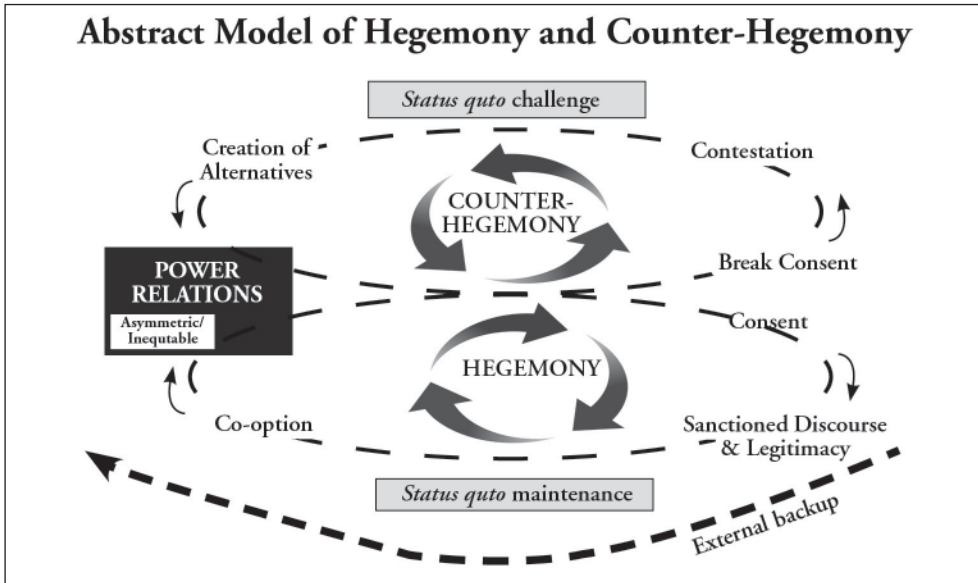
Sudan is benefitting from the huge revenues received from foreign investments in the country, which are likely to increase in the future. Its regional geopolitical power is thus growing and it could emerge as an essential centre of basin hydro-politics in the coming years.

ETHIOPIA'S COUNTER-HYDRO-HEGEMONY

Greg Shapland (*Rivers of Discord: International Water Disputes in the Middle East*, London: Hurst and Company, 1997) and Ana Elisa Cascao were the first scholars to formulate and use the concept of counter-hydro-hegemony in 1997 and 2005 respectively. An academician associated with the London Water Research Group, Cascao's basic concept of the theory of counter-hydro-hegemony is rooted in the hydro-hegemony framework proposed by Zeitoun and Warner. (*ibid*) Using the same concept of power, she defines hydro-hegemony and conflict relations and expands on their work. (Cascao, 2011, *ibid*) The concept of counter-hegemony refers to conflicts against the existing hegemony with the intent of promoting an alternative option. (John Baylis, Steve Smith and Patricia Owens, *The Globalisation of World Politics: An Introduction to International Relations*, Oxford: Oxford University Press, 2008)

The main challenge to Egypt's Nile access comes from Ethiopia, which has advocated sharing the resource so that it can also use the water. Addis Ababa wants to achieve self-sufficiency in food production to meet its growing requirements and thus needs an increased quantity of water for domestic usage. It has strongly challenged the unequal and unjust hydro-political settings in the basin by encouraging a coeval idea of fair, sustainable usage and better management of Nile river water resources. These new concepts have received praise both nation-wide and basin-wide. However, mega hydroelectric dams on the Blue Nile are contested by Egypt. According to John Waterbury (*Nile Basin: National Determinants of Collective Action*, New Haven: Yale University Press, 2002) only Ethiopia can be said to have defected from the basin quasi-regime. While all riparian states say they want a new regime, only Ethiopia has taken steps to promote a vision that contrasts with that of Egypt, Sudan and Uganda. The other riparian states mainly have a "wait-and-see" attitude. As Figure 2 below shows, the goal of counter-hegemonic riparian states is to challenge and possibly modify the status through negotiations and the creation of alternatives. (Ana Elisa Cascao, "Ethiopia: Challenges to Egyptian Hegemony in the Nile Basin", *Water Policy*, vol10, no2, 2008, pp13–28)

Figure 2: Cascao’s Abstract Model of Hegemony and Counter-Hegemony



Source: Adapted from Cascao, 2008, *ibid*

The spread of knowledge and new ideas related to “benefit sharing” such as evaporation and flood control as well as hydro-electricity (David Grey and Claudia W Sadoff, “Sink or Swim: Water Security for Growth and Development”, *Water Policy*, vol9, no6, 2007, pp545–71) or the contested “shared control” are some of the steps taken to counter a unilateral hegemonic approach to hydro-geopolitical relations in the Nile basin. (Cascao, 2008, *ibid*) Previously, Ethiopian expertise about Nile water usage was limited compared to that of Egypt and this precluded Addis Ababa from acquiring bargaining power. (*ibid*) Today however, there are many Ethiopian water experts educated in environmental sciences, hydrology and other technical fields who are able to challenge and counter Egypt’s unilateral position. (*ibid*) For instance, economically “shared control” and construction of a hydro-dam in the upper riparian states would actually benefit not only Ethiopia, but also Egypt and Sudan as downstream riparian states.

“As Nile water flows north towards the Mediterranean, much is lost from evaporation and seepage. For each cubic meter of water that leaves Lake Tana in Ethiopia, about 40 per cent is lost by the time it reaches the Mediterranean, assuming none is withdrawn for irrigation along the way”. (Dale Whittington, Xun Wu

and Claudia Sadoff, "Water Resources Management in the Nile Basin: The Economic Value of Cooperation", *Water Policy*, vol, no3, 2005, pp227–52)

The optimal and sustainable usage of the Nile river from its point of departure to its destination should be taken into consideration for further development projects with multiple usages such as the Grand Ethiopian Renaissance Dam (GERD). A study should also be undertaken from the social and human development perspective for saving the scarce resource upstream and capturing the rest downstream, as part of long-term cooperative strategies. Egypt utilises the maximum percentage of Nile water for agricultural production but at the same time, it is the largest importer of various food commodities among all the basin countries. It imports around 75 per cent of oil, 38 per cent of grams and 35 per cent of sugar, etc for its domestic consumption. (Alaa El-Sadek, "Virtual Water Trade as a Solution for Water Scarcity in Egypt", *Water Resource Management*, vol24, no11, 2010, pp2437–48)

Ethiopia joined the Nile Basin Initiative (NBI) in 2001 as part of its cooperative agenda strategy. One of the many reasons behind its counter-hegemonic policy is that any legally acceptable cooperative arrangement based on "equitable" and "sustainable" usage of the Nile water could nullify the 1959 bilateral agreement between Egypt and Sudan. (CA Mumma Martinon, "Nile Basin Initiative: A Possibility of Turning Conflicts into Opportunities" in Bernard Calas and CA Mumma Martinon (Eds), *Shared Waters, Shared Opportunities: Hydro-Politics in East Africa*, French Institute for Research in Africa, Nairobi, 2010, p55) In addition, by joining the NBI, Addis Ababa aimed to notify both Egypt and Sudan that the onus was on them to join the club. It also hoped to create possible investment opportunities for hydraulic projects, as the NBI is heavily supported financially by the United Nations Development Programme and the World Bank. (Cascao, 2008, *ibid*)

The other steps taken by Ethiopia involve cooperative legal arguments through the NBI and the Cooperative Framework Agreement, knowledge and expertise about the Blue Nile waters, basin-wide benefits of hydro-dams and the mobilisation of international funding from China, France, Italy, Norway, Sweden, the African Development Bank, the World Bank, etc. (*ibid*) These ideational power strategies are not new to Ethiopia but are now better framed and used more actively than before. According to Yacob Arsano (*Ethiopia and the Nile: Dilemmas of National and Regional Hydro-Politics*, Swiss Federal Institute of Technology, Zurich, 2007) "Ethiopia's active participation in the NBI can be described as an active measure to increase the country's water development strategy" to reduce poverty domestically and regionally. Addis Ababa's growing counter-strategy relies on garnering

international funding, especially from China as a new external player in economic development. The Ethiopian Diaspora also cannot be ignored, as its mobilisation across the globe has been essential in terms of not only funding mega dams, but also publicising their country's case to the international community. The Diaspora has served well the new counter-hegemonic strategy. A major reason behind Ethiopia's new factor to mobilise funding from other sources is Egypt's continuous hegemonic strategy of "blocking funds" from international donors like the African Development Bank, various United Nations agencies and the World Bank. (*ibid*)

To counter Egyptian hegemony, Ethiopia managed to fund its small and medium sized water-related projects bilaterally with France, Italy, Japan and Norway. (*ibid*) Norway for instance, offered five million dollars in financial support for the Baro-Akobo hydroelectric power station in southern Ethiopia while the World Bank stepped in to finance major hydraulic structures for water storage, hydropower and irrigation. (Okbazghi Yohannes, *Water Resources and Inter-Riparian Relationships in the Nile Basin: The Search for an Integrative Discourse*, Albany: State University of New York Press, 2008) However, the World Bank until 2010 had continued to refuse to provide financial support for major hydropower projects on the Blue Nile due to their sensitive nature for Egypt. (Richard N Tutwiler, "Nile Basin Water Management: National Strategies and Prospects for Cooperation" in Elmusa, *ibid*) Despite the many challenges, Ethiopia has come out strong in challenging and influencing Egyptian hydro-hegemony since 1991 through various counter-hegemonic strategies. One is the idea of "cooperation", which has been praised by most upstream riparian states including Sudan and reduces the existing negative effects of the unequal power relations among Nile basin countries. (Zeitoun and Warner, *ibid*) The challenge remains to bring Egypt into the cooperative basin-wide benefit sharing arrangement. Ana Elisa Cascao ("Changing Power Relations in the Nile River Basin: Unilateralism versus Cooperation", *Water Alternatives*, vol2, no2, 2009, pp245–68) has used the counter-hegemonic framework to analyse the Nile river basin and in particular to critically analyse Ethiopia's counter-hegemonic procedures versus Egypt. This

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important study provides the first conceptual and empirical backdrop against which theoretical power changes in an international river basin can be assessed. Both consent and controversy to hegemony coexist, as all hegemony is rooted in both consent and compulsion.

SOUTH SUDAN: A NEW RIPARIAN STATE IN THE NILE RIVER BASIN

The birth of South Sudan in 2011, as a sovereign state increased the number of riparian countries to eleven. With regard to Nile water resources, the interests and concerns of Ethiopia, Sudan and Egypt are categorised as very high; for Uganda as high; for Kenya, Tanzania, Rwanda and Burundi as moderate and for Eritrea and the Democratic Republic of Congo as low. (Waterbury, *ibid*) Due to the size of the Nile in South Sudan, the huge water loss in the flooded areas and the preservation potential of a large portion of such water, the interests and concerns of the country may be categorised as very high. Egypt and Sudan allotted the whole runoff of the Nile at Aswan for their own use. Although they heard the call of other riparian states to share the water of the Nile, they earmarked for themselves the final right to determine the water shares. The two states also invested a Permanent Joint Technical Committee with the right to manage and monitor the utilisation of shared water. This status has been entirely rejected by the other riparian states that consider it a move to support the control of Sudan and Egypt on the Nile's resources. These countries have also denounced the 1929 agreement that gives Egypt veto power over any project in Sudan, Kenya, Tanganyika and Uganda (then British Colonies). (Albert H Garretson, "The Nile Basin" in Albert H Garretson, Robert D Hayton and Cecil J Olmstead, Richard Baxter and Ludwick A Teclaff (Eds), *The Law of International Drainage Basins*, New York: Oceania, 1967, pp256–97) These states also raise the Nyerere Doctrine that provides for agreements to be resolved or renegotiated within two years, otherwise they would lapse. (Yilma Makonnen, *The Nyerere Doctrine of State Succession and the New States of East Africa*, Arusha: Eastern Africa Publications, 1984)

While Sudan and Egypt argue that their historical and current rights and usage are guaranteed by international law, the other riparian states also invoke international rule in support of their claim over the Nile water resources. They add that as nearly the whole runoff of the Nile flows-up through their national territories they are eligible for an equal and fair share in the runoff. Under the 1959 agreement, Egypt and Sudan can pursue projects for the conservation of

swamp water to enhance the total runoff of the Nile with the costs and advantages of those projects divided between them. The agreement allows Egypt to do so if its requirement for water is greater than Sudan's. When Sudan wishes to utilise its water share then it compensates Egypt for its share of water. Therefore, the marshes and swamps in South Sudan were seen by Sudan and Egypt as major possible sources of extra water for their usage.

RECENT DEVELOPMENTS IN THE NILE BASIN

The present situation shows some dynamism. Ethiopia and Sudan, both now with enhanced economic and political leverage, are beginning to implement their respective projects, highlighting the emerging challenges to the basin's hydro-political regime. The advances made by upper riparian states in the Cooperative Framework Agreement mark a shift in the Nile river basin discourse that manifests the primacy of modern transboundary water resource management principles over those of the primitive colonial era regime.

In early 2011, during the Arab Spring when Egypt and other Arab countries were plagued by revolutions and turmoil, Ethiopia started construction of the GERD over the Nile. Two months after the deposition of Hosni Mubarak, the then Egyptian president, Ethiopia inaugurated this mega dam, a multipurpose project with an initial planned generating capacity of 5,250 megawatts. ("The River Nile: A Dam Nuisance,

Egypt and Ethiopia Quarrel over Water", *The Economist*, 20 April 2011, online at <http://www.economist.com> and Jonno Evans, "The Big Challenge for a New Egypt: Water", *The Guardian*, 7 December 2011, online at <http://www.guardian.co.uk>)

While Egypt at the outset had been against the construction of the dam, its reaction was less belligerent later on. (Terje Oestigaard, *When Everything Depends on the Rain: Drought, Rain-fed Agriculture and Food Security*, Nordic Africa Institute, Uppsala, 2012)

Rather, the two most important Nile basin countries finally pursued a cooperative dialogue to evaluate the GERD's potential consequences on the flow of the Nile. (Michael Hammond, *The Grand Ethiopian Renaissance Dam and the Blue Nile: Implications for Transboundary Water Governance*, Global Water Forum Discussion Paper 1307, 2013, online at <http://www.globalwaterforum.org>)

Ethiopia's unilateral dam building construction confirms the changing discourse in the Nile basin

Ethiopia's unilateral dam building construction confirms the changing discourse in the Nile basin region—from Egypt's hydro-hegemony towards negotiations for water sharing in a cooperative manner.

region—from Egypt’s hydro-hegemony towards negotiations for water sharing in a cooperative manner. The other shift in the political landscape of the region occurred with the independence of South Sudan on 9 July 2011 and later in 2012 when it was accepted as a member state of the NBI. (*State of the Nile River Basin Report 2012*, Nile Basin Initiative, online at <http://www.nilebasin.org>) As Sudan has lost its oil fields to South Sudan, it has an added interest in the water resources of the Nile to develop its economy based on agriculture.

CONCLUSION

Collective action is a problem in the Nile region as is the case in other transboundary river basins. The pursuit of separate agendas by the nations sharing a basin does not lead to optimal outcomes. The tendency to maximise benefits in the national interest provides a powerful incentive to exploit resources unilaterally. The Nile river basin countries are facing the challenge of reaching collaborative solutions to manage and allocate common property resources and avoid the tragedy of the commons. There is little cooperation among riparian countries over dealing with extant agreements. Regional disputes may occur among these states if the problems related to water rights are not dealt with. Egypt’s refusal to compromise has driven upper riparian states to work in tandem to uphold their interests. Although Egypt has offered financial support in the quest for options, its conservation strategies and irrigation projects have been met with suspicion in upper riparian countries.

An important reason for the unequal allocation of the water resources of the Nile river is the existing transboundary water regime. However, in the past few years upper Nile basin countries have unilaterally taken steps that grant them greater capacity for water utilisation. Hence, the main issue is that of building a legal framework to utilise the waters in a manner that is acceptable to all. The challenges are mainly linked to the lack of regulations that could ensure equitable utilisation of water resources. Growing economic, environmental and demographic pressures are pushing the Nile basin states to question the 1959 agreement and demand a new water regime. A new framework based on benefit sharing could promote growth and development through cooperation and integration among all riparian countries. ❧