

## The Overlooked Perspective of Midriver States in Transboundary Basins

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**ABSTRACT:** What differentiates the perspectives of midriver states from those of upriver and downriver states in transboundary freshwater basins? Most academic literature on transboundary river basins classifies all states as either upriver or downriver. This paper was developed from original research conducted in the Nile River basin, and finds that midriver states are geographically and behaviorally distinct from their upriver and downriver counterparts, and should be analyzed as such. They can understand the concerns of both their upriver and downriver neighbors. This paper introduces the idea that midriver states, could potentially provide an opportunity for strengthened cooperation in often contentious transboundary negotiation processes.

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<sup>1</sup> This paper is the result of C. Aletta Brady's independent research and does not represent the findings of the EPA OIG or necessarily represent the views of the EPA, EPA OIG or the United States.

## INTRODUCTION

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“The Nile is the life of the nation.”<sup>2</sup>

- Director of Policy, Ministry of Water, Ethiopia, July 2014

“The Nile for Egypt is life.”

- Secretary General of the Arabic Water Council, Egypt, August 2014

The goal of this paper is to answer the question: What unique perspectives do midriver states bring to transboundary freshwater negotiation and allocation processes in the Nile River basin?

When we attempt to boil the behavior of countries in transboundary basins down into a dichotomy—upriver or downriver—we lose nuance. As a result, we lose room for more nuanced analysis of transboundary cooperation and negotiation dynamics.

The majority of research on transnational cooperation in the Nile River basin (and elsewhere) has failed to note the distinct perspective of midriver states.<sup>34</sup> Most academic literature on transboundary river basins classifies states solely as upriver or downriver states, even though they may align themselves with the interests of either their upriver and downriver counterparts, depending on the situation. In asserting this dichotomy, the nuance of the needs of states that have water flowing both into and out of their borders is lost. Midriver states have a more complex perspective of their “rights” based on their combined upstream/downstream interests and this aspect is being ignored under contemporary analysis.

Midriver states have often been characterized as ‘upriver’ or ‘downriver’ depending on who they have most recently or most frequently allied themselves with. But, an allegiance only demonstrates that the midriver state was served in some way by that partnership. Alliances of midriver states in the Nile River basin have fluctuated over time, with midriver states shifting positions based on current need. Thus, a more accurate picture can be seen if these states are analyzed separately—as states that are torn between the need to have water upstream preserved, and their desire to utilize the water within their borders.

Freshwater is a finite natural resource that suffers globally from poor management and over-allocation. Countries already struggle with existing water supplies, and the amount of available freshwater per capita is continuously dwindling due to water resources and population growth. Between 1962 and 2011, the stock of freshwater available per

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<sup>2</sup> Names of those quoted, during primary interviews conducted for this paper, are excluded for the purpose of confidentiality.

<sup>3</sup> An upriver state is a state that water flows out of. A downriver state is a state that water flows into.

<sup>4</sup> Cascão 2008, Melesse et al. 2014; Rahman 2013; Selby et al. 2014, Stetter et al. 2011, Tvedt 2009; Waterbury 2002

person globally decreased by 54%.<sup>5</sup> Both Sub-Saharan Africa and the Middle East & North Africa experienced depletion rates higher than the world average, declining by 75% and 71% respectively.<sup>6</sup> Furthermore, nearly 40% of the world's population experiences either physical or economic water scarcity,<sup>7</sup> and that number is only growing. Therefore, cooperation and negotiation around scarce freshwater resources is becoming increasingly important.

The problem is, transboundary basins are particularly challenging to conserve due to the economic phenomena of the Tragedy of the Commons. In the absence of regulation, states are incentivized to utilize the shared resource more than they otherwise would because the future cost of not having the resource is split among states. The ability to manage transnational waters vital to avoiding a Tragedy of the Commons scenario in which freshwater systems fall victim to overuse and exploitation.

Multilateral negotiation, management, and cooperation among states that share a freshwater source is imperative to sustaining natural freshwater systems and resources. An important component of cooperation and successful negotiation is mutual understanding among states. Midriver states—as states that understand the needs of both their upriver and downriver neighbors—provide an invaluable resource that could potentially create strengthened understanding among transboundary states.

The role of midriver states in basins spanning many states may be particularly important given that, as Scott Barrett explains, “cooperation is harder to sustain, the larger... the number of countries that contribute to or are affected by an externality.”<sup>8</sup> There are 263 transboundary river and lake basins in the world, and they cover close to one half of the world's land.<sup>9</sup> 148 countries—close to 74% of the world's countries—have a transnational freshwater basin partially within their borders.<sup>10</sup> There are 13 basins in the world that travel through five to eight states, and six basins that share their water between more than nine.<sup>11</sup> The Nile River is one of these six, passing through eleven countries on its way to the Mediterranean Sea.

This paper analyzes the behavior and role of midriver states in transboundary freshwater basins using the Nile River basin as a case study. The Nile has attempted to institute cooperative freshwater management for over five decades and faces significant barriers including being religiously, linguistically, politically, and culturally diverse. This paper looks at the ways that the Nile's midriver states (Sudan, Uganda, South Sudan) behave differently than its upriver states (Burundi, the Democratic Republic of the Congo, Eritrea, Ethiopia, Kenya, Rwanda, and Tanzania) and its downriver state (Egypt). The Nile Basin's cooperative efforts have included the 1959 Nile Waters

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<sup>5</sup> Rayne 2013

<sup>6</sup> Rayne 2013

<sup>7</sup> UNDB 2006

<sup>8</sup> Barrett 2003, 136

<sup>9</sup> FAO 2011

<sup>10</sup> UN-Water 2013

<sup>11</sup> UN-Water 2013

Agreement (NWA), the 1999 Nile Basin Initiative (NBI), and the currently debated Cooperative Framework Agreement (CFA). This analysis highlights that, given their unique situation as states that understand both upriver and downriver concerns, midriver states may have a distinct and important role to play in transboundary cooperative efforts.

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## ANALYSIS

A midriver state, as defined by this paper, is a country that has water from a discrete river flowing both into and out of its territory. Midriver states can espouse the desires of both upriver and downriver states, depending on who they are dealing with. Currently, there is not a framework that analyzes midriver states as states with interests distinct from their upriver and downriver neighbors. Most literature on transboundary freshwater basins categorizes states dichotomously—as either upriver or downriver. This paper, by introducing the midriver state, seeks to add nuance to that analysis.

An upriver state is a country out of which water in a river flows. Such states generally advocate for their right to the *equitable and reasonable utilization* of the waters of a transboundary river, the right for each state in a basin to use a fair share of the water resources within their boundaries. This principle delineates each state's right to access and exploit an equitable portion of a shared resource. It corresponds with the international *principle of territorial sovereignty* that champions the right of each state to unequivocally act as they like within their own borders. Upriver states in the Nile River basin, during interviews conducted in 2014, expressed greater concern about being allowed to use the waters of the Nile than about maintaining the quantity of water that flows out of their borders into downriver states. They argue that they should have the same right as downriver states to utilize the Nile waters.

A downriver state is a country into which a river flows. Downriver states tend to advocate for the *principle of no significant harm*, desiring water flow upriver to be preserved in its near-natural state until it reaches their downriver territory. This principle places the burden on upriver states to refrain from utilizing a shared resource in any way that would harm the quality or quantity of the resource flowing into a downriver state. This principle corresponds with the international *principle of territorial integrity*. In the Nile River basin, the downriver state—Egypt—wants upriver states to moderate their use of the Nile waters in order to preserve Egypt's historic water share.

The Nile River basin has three mid-river states: Sudan, Uganda, and South Sudan. Academic literature has largely classified these states incorrectly as either upriver (Uganda, South Sudan) or downriver (Sudan) based on political allegiance and economic interest. Sudan is usually categorized as a downriver state because of its historical

allegiance to Egypt. Similarly, Uganda's advocacy for a fair share of the Nile River, in conjunction with Nile Basin upriver states, has led to its classification as an upriver state.<sup>12</sup> These binary categorizations, however, do not accurately characterize the behavior and interests of these two states in the Nile Basin. These states' decision to align with certain neighbor states during negotiation processes does not imply that those standpoints fully and accurately reflect their needs and desires, but only that that stance better catered to their needs in that specific instance.

Midriver states in the Nile River basin—namely Sudan and Uganda<sup>13</sup>—have, in practice, not behaved strictly as either upriver or downriver states. They have instead fluctuated between advocating for the *principle of equitable and reasonable utilization* and the *principle of do no harm*. This contrasts with the other states in the basin, whose positions have rarely fluctuated. The Nile's downriver state has consistently advocated for its right to have the Nile River water preserved by citing the *principle of do no harm* and the *principle of territorial integrity*. Conversely, the basin's upriver states have traditionally advocated for their right to utilize the Nile waters by citing either the *principle of territorial sovereignty* or the *principle of reasonable and equitable utilization*.

The states in between, however, have historically exhibited a vacillation in allegiance between their upriver and downriver neighbors. In 1929, Egypt and Great Britain signed the Nile Waters Agreement. It was the first multilateral treaty in the Nile River basin to focus specifically on Nile water resources, and include a sovereign Nile state (Egypt) as party to negotiation. The initial purpose of the treaty was to establish large-scale irrigation schemes in Sudan, but this was later derailed. In 1925, a British commission was appointed to the Nile River to “examine and propose a basis on which irrigation in Sudan could be carried out.”<sup>14</sup> This angered Egypt because Egypt wanted the river upstream in Sudan to be preserved in its natural state before flowing into Egypt's borders. This highlights an example of Egypt advocating as a downriver states for territorial integrity. Because of Egypt's disapproval, the reach of the treaty was diminished.

The British signed the 1929 NWA on behalf of Sudan. The treaty conceded most of the power in the basin to Egypt, and only granted Sudan a twelfth of the Egyptian water share. When Sudan achieved independence in 1959, it officially denounced the legitimacy of the 1929 NWA. In their disapproval of the 1929 treaty, Sudan acted, not as a downriver state seeking to preserve water upstream, but as an upriver state in relation to Egypt wanting to use the Nile waters to develop its own hydropower and large-scale irrigation.

Sudan signed an updated version of the NWA in 1959—The Agreement for the Full Utilization of the Nile Waters—with Egypt. The 1959 NWA gave 18.5 bcm and 55.5 bcm to Sudan and Egypt, respectively. Egypt and Sudan agreed to work together to handle

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<sup>12</sup> Saleh introduced the “midstream doctrine,” acknowledging Sudan but failed to acknowledge Uganda.

<sup>13</sup> South Sudan became the third midriver state upon independence in 2011

<sup>14</sup> Tvedt 2004, 142

upriver claims to Nile water shares and, in the case that an upriver state successfully petitioned for a water share, they agreed to split the losses evenly. In this instance, Sudan benefited from allying itself with Egypt because it gained a larger share of the Nile River, and a partner in protecting against claims from states further upriver to utilize the Nile waters.

In 1991, Sudan signed a bilateral agreement with Ethiopia that established a joint technical committee for data sharing and exploring mutually beneficial projects, and that recognized a commitment to the *principle of equitable and reasonable utilization* of the Nile waters. The 1991 agreement focused on the management of the Blue Nile and the Atbara River, eastern tributaries of the Nile. In this instance, Sudan found a relationship with Ethiopia beneficial to help assert Sudan's right to utilize its own water, and have a partner in developing projects towards that utilization. This reinforces that Sudan is best classified as a midriver state, constantly seeking agreements that further its own individual interests, rather than blindly ascribing to either upriver or downriver doctrines that do not fully benefit Sudan's unique situation.

Project D3—a legal project intended to investigate each Nile state's need for water—was introduced in 1995 at the annual meeting of the Nile Basin Council of Ministers for Water Affairs (Nile-COM). Egypt was opposed to the project and stated the importance of avoiding “causing appreciable harm to other riparian states.” Egypt did not want water to be utilized upstream. Conversely, upriver states expressed that Project D3 “would be accorded high priority and be implemented immediately.” Sudan did not fully align itself with either the upriver or downriver perspective in the debate over D3. Instead, it emphasized the importance of joint-technical projects around water conservation efforts, and referred to Project D3 as a “consideration.”<sup>15</sup> Sudan acted in its own interest as a midriver state—both interested in technical projects that preserve the quantity available in the Nile, and legal work to equitably divide water shares among the basin states.

In 2012, Sudan expressed support for Ethiopia's Grand Ethiopian Renaissance Dam (GERD) against the counsel of Egypt. If completed, the GERD will provide Sudan with cheap electricity and decrease siltation in the Sudanese dams, which will augment storage capacity. A Sudanese expert of NBI relations explained in August of 2014 that Sudan was unofficially negotiating a deal with Ethiopia to buy electricity.<sup>16</sup> In exchange, Sudan offered Ethiopia access to the Red Sea.<sup>17</sup>

Given that they collaborate with both upriver and downriver states at different points in time, Sudan cannot be accurately characterized as solely an upriver or a downriver state. Sudan's actions and statements over the course of the past century support a much more complex analysis. They demonstrate a midriver country, in prioritizing their own needs

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<sup>15</sup> Abu Shora 1996

<sup>16</sup> Professor 1, American University of Cairo. Sudan. August 2014.

<sup>17</sup> Professor 1, American University of Cairo. Sudan. August 2014.

and interests, find themselves sometimes aligning with their upriver neighbors and sometimes aligning with their downriver neighbors. It is, quite literally, caught in the middle.

Similar to Sudan, Uganda's actions cannot be accurately characterized as solely those of an upriver or downriver state. The Ugandan government opposed Egypt's 1929 NWA because there were no benefits or water allocation given to Uganda. But, when Egypt supported the joint-technical institutions, HYDROMET (1967-1992) and TECCONILE (1993-2002), Uganda became a member alongside Egypt. HYDROMET was the first attempt at a joint-technical project. HYDROMET's purpose was to understand the hydrology of the regions surrounding the equatorial lakes, provide technical training for in-country technicians, and produce a database on hydrometeorology in the participating states. Egypt preferred investing in joint-technical institutions, instead of pursuing legal water allocation negotiations, because the pursuits of joint-technical institutions had the promise of leading to water conservation that could maintain or increase the amount of water accessible to Egypt. Similarly, Uganda wanted to explore possibilities of technical cooperation that could increase the amount of water flowing into its border from upstream.

Most upriver states did not support TECCONILE, but Uganda did. Ethiopia and Burundi wanted legal cooperation that granted upstream states an equitable water share of the Nile River and saw TECCONILE, a technical institution, as a distraction from legal allocation processes. In comments recorded from the 1995 annual meeting of the Council of Ministers for Water Affairs (Nile-COM), Burundi explained that it would not join TECCONILE unless it "completed [an] institutional framework... [that] must guarantee equitable benefits to all." Uganda supported TECCONILE because it thought that it could lead to large investments in the basin. This is another instance where, even though Uganda is often characterized as an upriver state, Uganda acted in opposition to Nile Basin upriver states.

More recently, Uganda made the decision to support Ethiopia's GERD. In 2014, during an interview, a Ugandan official explained that Ethiopia's GERD "was the right thing to do," even though, at the time, Egypt vehemently disapproved of the project. The Ugandan president unofficially supports the GERD because it opens the door for Uganda to do the same thing.<sup>18</sup> Uganda has planned to bring top Ugandan officials to visit the GERD for motivation. These actions show that Uganda, like Sudan, sometimes aligns itself with upriver neighbors and sometimes aligns itself with downriver neighbors, depending on circumstance.

During interviews conducted in 2014, Ugandan and Sudanese government officials, in similar interviews, identified both the desire to 'utilize' and 'maintain' their waters as high priorities, underscoring their intermediary positions as midriver states in the basin. In

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<sup>18</sup> Professor 1, Makerere University. Uganda. July 2014.

contrast, Ethiopian officials ranked the desire to utilize Nile waters as far more important than the desire to maintain the quantity of the water, which aligns with their position as an upriver state advocating for the principle of equitable and reasonable utilization. Similarly, Egyptian officials, in alignment with their position as a downriver state, emphasized maintaining the quantity of water as much more important than utilizing the water, which aligns with their advocacy for the principle of no significant harm.

When South Sudan gained statehood in 2011, media outlets and publications immediately began discussing South Sudan as an upriver state. However, while South Sudan's time as an independent nation has been brief, it has already demonstrated tendencies of mixed allegiances to its downstream and upstream neighbors. For example, soon after its independence, South Sudan's Minister of Irrigation and Water Resources stated in an interview that it was "inevitable" that South Sudan would sign the CFA, which has long been opposed by Egypt. However, South Sudan has yet to do so. South Sudan's emergence as the newest basin state should be viewed as an addition to the midriver cohort in the basin rather than an additional upriver state.

The behavior of the Nile River Basin's midriver states highlights the danger of lumping midriver states into the category of either upriver or downriver because, ultimately, they are states caught in the middle—wanting to utilize their own water, while also wanting to preserve the water upstream. This leads to behavior and decisions that, over the course of time, do not align neatly with the behavior of either their upriver or downriver neighbors.

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## IMPLICATIONS

Where transnational basin agreements and negotiations are approached as bilateral in nature (with the two positions being of upriver and downriver states), negotiators will likely miss key interests and perspectives of the intermediary stakeholders. Moreover, approaching negotiations with a bilateral framework puts midriver states in the uncomfortable position of choosing which neighbor to side with, even when their interests do not fully align. This could lead to midriver states reneging on agreements, or shifting allegiances, as seen in the Nile River Basin. This, in turn, could increase tensions.

A trilateral framework encompassing the midriver classification would better describe the relationships and interests of nations in the midriver position. When negotiation processes and cooperative efforts allow for more than two perspectives, there are more ways to envision zones of possible agreement, and, as a result, more routes to agreement. The findings presented in this paper have important implications for transnational freshwater negotiation, and could lead to decreased regional tensions.

As the effects of climate change, drought, and large-scale natural disasters continue to increase, and populations continue to grow, water scarcity and shortages will become increasingly common, making successful transboundary freshwater management a global imperative. This analysis is necessary to inform scientists and policy makers about



the unique data needed to facilitate equitable and sustainable management of transboundary river basins; Midriver states, with distinct interests from their upriver and downriver neighbors, must have data collection tailored to their particular situation, and be able to communicate and act consistently with their unique interests.

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## LIMITATIONS & ROUTES FOR FUTURE RESEARCH

This paper is limited by both its scope and its predictive ability. With regards to scope, this project only analyzes one transnational river basin—the Nile River Basin. But, there is preliminary evidence to suggest that similar tendencies to categorize midriver states as either upriver or downriver exist in academic work pertaining to other basins as well: Meijerink mentions that while geographically there are upriver, midriver, and downriver states “there are only two relative geographical positions, namely up[river] and down[river] positions.”<sup>19</sup> Kibaroglu accurately depicts Syria as a midriver state but does not interrogate how this unique position differentiates its actions in the Euphrates-Tigris river basin from those of Turkey and Iraq.<sup>20</sup> These examples demonstrate the need for greater investigation into the application of the findings of this paper more broadly. And, that investigation should not only examine whether midriver states have been misclassified, but also, and more importantly, examine whether midriver states in other transboundary river basins similarly exhibit distinct behavioral patterns from their upriver and downriver neighbors with regards to transnational cooperative efforts.

Secondly, future research should examine if there is any potential, in river basins that do have midriver states, for those states to play the role of intermediary in transboundary freshwater negotiation and cooperative processes.

Finally, future research should explore whether differently positioned states behave distinctly in other types of freshwater basins. For example, are there distinct positions and roles of Caspian Sea states—do certain states have a greater potential to aid cooperation due to their geographic position than others?

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## SECTION V: Conclusion

One hundred forty-five countries have territory in at least one of the globe’s 263 transnational basins, and thus share water resources with other nations. These basins are vital for navigation, fisheries, hydropower, and agricultural systems—for global livelihood and development in general. Furthermore, nearly 40% of the world’s population experiences either physical or economic water scarcity, and that number is only growing.

Transnational resources such as shared rivers and lakes are the most difficult sources of freshwater to preserve because they are prone to the Tragedy of the Commons. They are both a point of tension between countries, and an opportunity for integration; depending on how they are managed, they can either divide or unite the countries through which

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<sup>19</sup> Meijerink 1999

<sup>20</sup> Kibaroglu et al. 2005

they flow. If managed properly, they have the potential to be an entry-point for communication and collaboration between diverse countries, and a point of cooperation in regions torn by conflict.

Opportunities for agreement in negotiation settings are potentially lost by assuming a dichotomous—upriver and downriver—framework when analyzing multifaceted basins. The global crisis of increasing water scarcity poses far-reaching implications for international and regional stability, domestic efficacy, and individual livelihood. Transnational freshwater management is extremely difficult, especially when states experience economic or physical water scarcity.

This paper highlights that, given their position as states that understand both upriver and downriver needs and desires, midriver states could play an important intermediary role in conflict resolution and mediation. But first, they must be recognized as distinct from upriver and downriver states, and treated as such. The behavior of midriver states tends to fluctuate between espousing the *principle of equitable and reasonable utilization* and the *principle of do no harm* because they, in fact, benefit from the implementation of both principles. When midriver states are grouped in with either their upriver or downriver neighbors, capacity to understand their behavior is lost, and with it important nuance in any analysis of their motivations.

This paper shows that, in transboundary river basins, midriver states may intimately understand the needs of both their upriver and downriver neighbors. Understanding and analyzing the behavior and motivations of midriver states, has the potential to create new opportunities for negotiation and cooperation in these basins.

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