Securitization in Africa's River Basin Organizations: Implications for Transboundary
Water Governance

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Abstract of Thesis

Securitization in Africa's River Basin Organizations: Implications for Transboundary Water Governance

How do Africa's regional institutions construct and respond to climate-related threats, and do these responses follow the prescriptions of traditional securitization theory? This thesis explores these questions with reference to Africa's River Basin Organizations (RBOs). After summarizing the Copenhagen School's concept of securitization and its associated critiques, this thesis expands the concept of securitization through a framework of three securitization pathways: state, human, and ecological. This is used, along with the evolving literature relating to intergovernmental organizations and climate risk, to analyze the discourse of three RBOs: the Lake Chad Basin Commission (LCBC), the Lake Victoria Basin Commission (LVBC), and the Nile Basin Initiative (NBI).

It finds that basin stakeholders are increasing securitization actioned through state, human, and ecological security pathways. These dynamics are, in turn, influenced by the RBO's construction of water security, its organizational structure, and the degree to which the RBO is embedded in other multilateral structures. While, securitization, can have positive impacts in the short-term, this thesis concludes that it ultimately hinders the ability of RBOs to effectively mediate between basin stakeholders and implement effective long-term water management. As increasingly severe effects of climate change are witnessed across the continent and around the world, this conclusion has significant implications for the future of Africa's security and resilience to environmental change.

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Chapter 1: Introduction

Amid rising levels of water stress in Africa, states, non-state actors, and intergovernmental organizations (IGOs) increasingly invoke the language of security in their policy discourse on water governance.[1] This trend towards greater "securitization" has also been mirrored by an increased focus among academic and policy literature on the concept of environmental security.[2] Within this literature, discourse analysis – the role of language in shaping and understanding environmental issues – has become a key research technique for analyzing securitization dynamics in water governance.[3]

Invoking the language of security in relation to the governance of water implies that water-related security risks represent an existential threat to people, communities, and societies. However, there is wide disagreement about how to best categorize water governance, and, more broadly, environmental issues. For instance, Jon Barnett, a leading environmental security scholar, has argued that invoking the language of security encourages militarized responses, which are ill suited to environmental policymaking and can entrench societal inequality.[4] Conversely, others argue that widening the concept of security to include environmental issues increases the validity of the concept in the 21st

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[1] Angela Oels, "From 'Securitization' of Climate Change to 'Climatization' of the Security Field: Comparing Three Theoretical Perspectives" in J Scheffran, M Brzoska, H Brauch, P Link, J Schilling, eds., *Climate Change, Human Security and Violent Conflict* (Hexagon Series on Human and Environmental Security and Peace, Vol 8. Springer, Berlin and Heidelberg, 2012): 185.

[2] For example, see Lester Brown, *Redefining National Security* (Washington, DC: Worldwatch Paper No. 14, 1977) and Richard Ullman, "Redefining Security," *International Security* 8 (1983).

[3] J.S. Dryzek, "*The Politics of the Earth* (New York: Oxford University Press, 1997) and M Hajer and W Versteeg, "A Decade of Discourse Analysis of Environmental Policy: Achievements, Challenges, Perspectives," *Journal of Environmental Policy and Planning* 19, no. 2 (2005): 255-275. Also see special issue, "Securitization of the Water Discourse," *International Environmental Agreements: Politics, Law and Economics* 15, no. 3 (September 2015).

[4] Jon Barnett, The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era (London: Zed Books, 2001).

century.[5] Finally, the concept of securitization, as conceived by the Constructivist

tradition in International Relations, has been criticized for narrowly defining which actors

can successfully securitize an issue and the limited ways in which they can do it.[6] Despite

this, security discourses are being increasingly used to define environmental issues.

     While academic debates continue, in practice intergovernmental organizations

(IGOs) are in fact responding to environmental issues using the discourse of

environmental security. Examples in Africa include the African Union (AU), Regional

Economic Communities (RECs), and specific environmental mechanisms such as river

basin organizations (RBOs). Despite Africa's dense network of regional organizations,

the burgeoning literature on IGO responses to climate security and water governance tend

to neglect Africa's transboundary governance frameworks.[7] Additionally, few studies

identify the mechanisms through which discursive framing of environmental security

risks are translated into concrete policies designed to address these issues.[8] There is also

little analysis about the role of RBO mechanisms in constructing and producing

securitized outcomes. The water securitization literature has also tended not to focus on

Africa.[9]

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[5] Jessica Tuchman Matthews, "Redefining Security," *Foreign Affairs*, 68 (1989).

[6] Matt McDonald, "Securitization and the Construction of Security," *European Journal of International Relations* 14 (2008): 563-588.

[7] Recent research which does focus on Africa includes Florian Krampe and Malin Mobjork, "Responding to Climate-Related Security Risks: Reviewing Regional Organizations in Asia and Africa," *Current Climate Change Reports* 4, no. 4 (2018): 330-337.

[8] Lisa M. Dellmuth et al., "Intergovernmental Organizations and Climate Security: Advancing the Research Agenda," *Wiley Interdisciplinary Reviews: Climate Change* 9, no. 1 (2018): 2.

[9] Julia Urquijo, Lucia De Stefano, and Abel La Calle, "Drought and Exceptional Laws in Spain: The Official Water Discourse," *International Environmental Agreements: Politics, Law, and Economics* 15, no. 3 (2015): 273-292 and Erika Weinthal, Nedia Zawahri, and Jeannie Sowers, "Securitizing Water, Climate, and Migration in Israel, Jordan, and Syria," *International Environmental Agreements: Politics, Law, and Economics* 15, no. 3 (2015): 292-307.

In sum, despite the increasing articulation of water-related climate risks as environmental security issues in Africa, there has been a lack of research regarding which actors seek to securitize, in what circumstances, and the implications of this discourse. This thesis examines this pressing issue in water governance – the growing securitization of water-related climate risks in Africa within its supranational governance architecture. Specifically, it analyzes how, when, and why basin stakeholders seek to securitize water related issues within RBOs, and the policy implications that follow.

There is significant divergence in how Africa's 14 RBOs invoke security discourse in their mandate and work on water governance. For instance, the Nile River has long been termed one the most securitized natural resources in Africa, with several studies analyzing how this has negatively impacted the ability of the Nile Basin Initiative to effectively provide long-term water governance.[10] Conversely, the Organization of the Development of the Senegal River is considered one of the most integrated and supranational RBOs in Africa, with the secretariat having full legal capacity and the power to request loans and make binding rulings on member states.[11]

Scholars have pointed to various factors that can explain the divergence in how securitization has been used by IGOs. Differences between up-stream and down-stream dynamics, the degree of cooperation in other policy areas between basin stakeholders, and the structure of the water-sharing mechanisms and agreements are all commonly

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[10] Peter Kagwanja, "Calming the Waters: The East African Community and Conflict over the Nile Resources," *Journal of East African Studies* 1, no.3 (2007): 321-337.
[11] Stefano Burchi and Melvin Spreij, "Institutions for International Freshwater Management: Report," World Bank (2003): 14.

cited and discussed.[12] However, while these factors are important, there is a lack of analysis about the context of each factor and the degree to which they influence each other.

Ultimately this thesis argues that securitization of water discourse in RBOs is growing, and traditional assumptions concerning securitization-desecuritization dynamics, whereby the latter is considered positive and the former negative, is insufficient to understand these developments. This has profound implications for how RBOs should engage with basin stakeholders in an environment of increasing water stress.

<u>Structure of the Thesis</u>

Underpinning the discourse surrounding the securitization of water is a set of interrelated assumptions concerning environmental issues, security, and, by extension, the propensity for increased water stress to lead to violent conflict. Chapter 2 develops new framework for analyzing securitization dynamics within climate-related water management issues. Notably, it makes two departures from securitization theory as advocated by the Copenhagen School: 1) it posits security can mean different things to different people depending on the referent object being securitized, and 2) that the securitization-desecuritization dichotomy is insufficient for understanding the complexities of transboundary water governance.

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[12] Jerome Delli Priscoli and Aaron T. Wolf, *Managing and Transforming Water Conflicts* (Cambridge: Cambridge University Press, 2009).

First, this thesis relaxes the requirement of special measures as evidence of securitizing practices. While special measures are indeed evidence of securitizing practices, such a binary approach between "normal politics" and "special measures" limits the analysis of securitizing actions. Rather than emergency action, most security politics is concerned with the management of risk, and security issues can be seen to move on a continuum from normalcy to troublesome to risk to threat and existential threat. The process of securitization is thus better understood as gradual and incremental, and, importantly, an issue can be placed on the security continuum without necessarily ever reaching the category of existential threat.[13] This study defines securitization as actions of collective securitization, occurring when issues advocated by state and non-state stakeholders, frame issues using the language of security.[14]

Second, this thesis broadens the analysis beyond state actors in the management of transboundary water nexus. This includes both the RBOs themselves, as well as relevant institutions within the African Peace and Security Architecture (APSA) and non-state actors within civil society and the business community. As the subsequent analysis makes clear, the degree of varied stakeholder engagement is an important variable in the securitization behavior of states. Additionally, it is important to analyze regional organization behavior independently of the preferences of their constituent member

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[13] Rita Abrahamsen, "Blair's Africa: The Politics of Securitization and Fear," *Alternatives* 30, no. 1 (January): 59.
[14] Jurgen Haacke and Paul D. Williams, "Regional Arrangements, Securitization, and Transnational Security Challenges," *Security Studies* 17 (2008): 808.

states, as these organizations can, in certain cases, act independently of member state preferences.[15]

Chapter 3 provides necessary background information on the state of water management in Africa. It then connects this picture of increasing water stress with the four primary schools linking rising water stress with violent conflict. Three conclusions are drawn from these debates: 1) context is critical in determining potential water-conflict links, 2) social dynamics including framing influence potential climate-conflict linkages, and 3) the importance of multilateral frameworks necessitate a deeper integration of the first two conclusions within cooperation frameworks such as RBOs. Following this analysis, a framework for analyzing RBOs is then introduced.

Chapters 4-6 provide case studies of the Nile Basin Initiative (NBI), Lake Chad Basin Commission (LCBC), and the Lake Victoria Basin Commission (LVBC). Each chapter uses discourse analysis to identify the nature and scope of securitizing behavior by basin stakeholders between 2000 and 2018.[16] First, it provides an overview of the geographical features of the basin, the structure of the river basin organization, as well as a brief hydro-political history of the basin. It then proceeds to outline the securitization dynamics of the different stakeholders: its member states, other multilateral institutions, and non-state actors.

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[15] Michael Barnett and Martha Finnemore, "The Politics and Pathologies of International Organizations," *International Organization* 53, no. 4 (1999): 699-732.

[16] This time period takes into account that the Nile Basin Initiative and Lake Victoria Basin Commission were established in 1999 and 2001 respectively. While the Lake Chad Basin Commission was established in 1964, it has suffered from a lack of consistent funding. The time period also takes into account the growing density of transnational governance in Africa, including the establishment of the African Peace and Security Architecture.

The three case studies were chosen because they represent the diversity of securitization outcomes within transboundary water governance in contemporary Africa. As mentioned, the NBI is often portrayed in the current water security discourse as a classic example of increased water securitization.[17] The LCBC is often portrayed an organization with two sides, with technical water management on one hand and the coordination of the Lake Chad Basin Multi-National Joint Task Force on the other.[18] Finally, the LVBC is often lauded as a key example of successful long-term technical water management, and allows the thesis to draw a contrast between different institutional frameworks. This addresses a key criticism that the qualitative literature tends to only focus on "worst case" studies.[19] In sum, the securitization trends identified across such varied case studies increases the value of this research project.

Chapter 7 investigates the implications of securitizing behavior and connects this evidence to the debates outlined in chapters 2 and 3 to assess the impact of this behavior on policy formulation in RBOs. This thesis finds that the construction of water security risks, the structure of the RBO, and the degree to which an RBO is institutionalized within the wider regional and APSA frameworks strongly influence the extent of securitization within the RBO. These impact the ability of RBOs to effectively mediate between different stakeholders and successfully inform long-term water governance.

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[17] Stefan Deconinck, Security as a Threat to Development: The Geopolitics of Water Scarcity in the Nile River Basin (Brussels: Royal High Institute of Defence, 2009).
[18] Greta Galeazzi, et al., Understanding the Lake chad Basin Commission: Water and Security at Inter-Regional Crossroads (Maastricht: European Center for Development Policy Management, 2017).
[19] Ellie Anderson, "Climate Change and Conflict: New Research for Defense, Diplomacy, and Development," *New Security Beat, Wilson Center*. March 26, 2018. https://www.newsecuritybeat.org/2018/03/climate-change-conflict-research-defense-diplomacy-development/. (May 23, 2019).

Thesis Contributions

This thesis makes several important contributions to understanding of securitized outcomes and the politics of contestation related to regional water management in Africa. It adds to the literature which seeks to problematize the conflict-cooperation paradigm by demonstrating that the two occur simultaneously several African river basins. Beyond providing much needed analysis of RBOs in Africa, this thesis finds that short-term securitization by stakeholders can destabilize long-term governance outcomes in RBOs. It also finds that desecuritization and attempts to move towards technical outcomes as a method for reducing securitization dynamics can entrench existing water inequality and impede equitable long-term water governance.[20] Ultimately RBOs should be mindful of both dynamics when designing institutional procedures.

Methodologically, this thesis adopts a constructivist securitization framework, however it also includes securitizing actions that do not meet the threshold of "special measures" and actors beyond the nation state. This captures the realities of broader securitization dynamics that impact policy outcomes within water basin management.

The policy implications of this thesis are numerous. Securitization should not be seen as inherently good or bad. Rather, it is a multifaceted process, which can have different impacts on the policy process depending on the stakeholder undertaking the securitizing action, the time frame, and the stakeholder's conceptualization of water security. Bearing this in mind, policy options to improve the prospects for RBO water

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[20] While this dynamic has been analyzed in relation to peacebuilding, it has not been identified within regional organizations. See Karin Aggestam, "Desecuritization of Water and the Technocratic Turn in Peacebuilding," *International Environmental Agreements: Politics, Law, and Economics* 15, no. 3 (2015): 327-340.

governance in Africa include: 1) consistent funding to disincentivize securitizing actions to secure short-term funding at the expense of long-term governance solutions, 2) structured non-state actor engagement to increase participation and incentivize long-term planning, and 3), improve coordination between RBO and other multilateral institutions to allow the RBO secretariat's to more effectively mediate between different stakeholders. All of these policy recommendations increase the costs of undertaking short-term securitization actions and incentivizes the use of long-term procedures to reduce water stress. This is vital as growing water stress in the 21st century increases the risk of inequitable outcomes, which in turn encourages securitizing actions.

Chapter 2: Applying Constructivism to the Study of Water, Conflict, and Cooperation

While not explicitly indicated in most analysis, most academic contributions to the hydropolitics discourse subscribe to the neo-realist assumption of an anarchic international system, in which state behavior is not only the product of the state themselves, but also the structure of the international system. Additionally, within a neo-liberal institutionalist perspective, cooperation and collaboration are possible – and even inevitable – under the conditions of anarchy through the establishment of cooperative regimes.[21] However, this approach focuses on the inevitably of conflict on one hand and cooperation on the other. This linear transition between water wars and water peace is invoked throughout the scholarship. This approach ultimately cannot explain how, when, and why river basin stakeholders seek to use the language of security to describe certain climate-related water issues and not others.

Social constructivism seeks to fill this gap by offering a reflectivist theory, which treads a middle ground between positivism and reflectivism. This is because it deals with the features of world politics, which are central to neo-realist and neo-liberal perspectives, and yet is primarily concerned with both the meanings actors give to their actions and the identity of these actors.[22] Within the Copenhagen School of International

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[21] Du Plessis, Charting the Course of the Water Discourse through the Fog of International Relations Theory.
[22] Steve Smith, "Social Constructivism and European Studies: A Reflectivist Critique," *Journal of European Public Policy* 6, no. 4 (1999): 682-91.

Relations several scholars, most notably Waever[23] and Buzan et al.,[24] have

conceptualized the social construction of threats, vulnerabilities, and security through the

theory of securitization. In this view, 'security' becomes a speech act[25] whereby the

securitizing actor attempts to take politics beyond the established rules' 'normal' by

framing the issue as a 'special' kind of politics. This analysis is crucial for a contested

subject such as water security, as any conceptualization of security is a value laden

phenomena.[26] This work and methodology are premised on the assumption that

perceptions affect policies and decision-making, and it can provide useful insights into

the drivers of securitization and desecuritization behavior.

However, the Copenhagen School has been criticized by critical interpretations of

security and its impact on society. First, while the Copenhagen School framework offers

a less state-centered approach compared to positivist international relations theory,[27] it is

nevertheless still primarily focused on the activities of the state. This has led some to

argue that it is analytically biased towards national, rather than human security, issues.[28]

Second, the securitization framework, as advocated by the Copenhagen School, fixes the

meaning of security (existential threat) and the policy response (extraordinary measures).

This has led to several scholars, such as Stripple, to suggest that the Copenhagen School

is "constructivist in regard to social relations, but object in its conceptualization of

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[23] Ole Waever, "Securitization and Desecuritization" in Ronnie D. Lipschultz eds. *On Security* (New York: Columbia University Press, 1995): 46-86.
[24] Barry Buzan, Ole Waever, and Jaap de Wilde, *Security: A New Framework for Analysis* (Boulder, CO: Lynne Rienner, 1998).
[25] Ole Waever, Securitization and Desecuritization, 55.
[26] Pal Arne Davidson, "Hydrosolidarity as Water Security in the Okavango River Basin" in Kai Wegerich and Jeroen Warner eds., *Water Politics: A Survey* (New York: Routledge, 2007): 68.
[27] Jurgen Haacke and Paul D. Williams, Regional Arrangements, Securitization, and Transnational Security, 776.
[28] Oels, From 'Securitization' of Climate Change to 'Climatization' of the Security Field, 192.

security."[29] Bigo, for instance, argues that narrowing the meaning of security to exceptional measures, leads us to only focus on the tip of the iceberg of securitization processes.[30] Essentially, it can be argued that in its traditional form, the Copenhagen School is incapable of distinguishing between competing security discourses and their very different policy implications.[31] Third, the Copenhagen School is highly critical of processes of securitization and recommends strategies of desecuritization in order to bring issues to the 'normal' realm of politics.[32] This simplistic dyad is open to criticism against empirical evidence. Trombetta, for instance, argues that the politicization of the environment has in many cases been achieved through its securitization, employing the reverse logic to that of securitization theory.[33]

By broadening its empirical lens to include institutions and daily practices beyond the states, and broadening the concept of securitizing actions beyond the 'iceberg' of existential threats, it allows researchers to analyze how climate related water issues are constructed as a security issue.[34] This mirrors calls in the hydropolitics literature to, as Kistin states, move "beyond the notion of cooperation as treaties to a more dynamic view of transboundary water cooperation as an ongoing and non-linear process in which state

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[29] Johannes Stripple, "Climate as a Security Issue", in Edward Page and Michael Redclift eds, *Human Security and the Environment: International Comparisons* (Cheltenham: Edward Elgar, 2002): 105–127.
[30] Didier Bigo "Detention of Foreigners, States of Exception, and the Social Practices of Control of the Banopticon", in: Rajaram, Prem Kumar; Grundy-Warr, Carl eds, *Borderscapes: Hidden Geographies and Politics at Territory's Edge* (London: University of Minnesota Press, 2002): 3–33.
[31] Nicole Detraz and Michelle Betsill, "Climate Change and Environmental Security: For whom the discourse shifts," *International Studies Perspectives* 10, no. 3 (2009): 303–320.
[32] Oels, From 'Securitization' of Climate Change to 'Climatization' of the Security Field, 191.
[33] Maria Julia Trombetta, "Rethinking the Securitization of the Environment: Old Beliefs, New Insights", in Thierry Balzacq eds, *Securitization Theory: How Security Problems Emerge and Dissolve* (London: Routledge, 2010): 135–149.
[34] Michel Foucault, "Afterword: The subject and power", in H Dreyfus and P Rabinow eds, *Michel Foucault: Beyond Structuralism and Hermeneutics* (Chicago: University of Chicago Press, 1982): 208–225.

and non-state actors establish, challenge, modify, and legitimize multi-layered

governance structures."[35] The following sections outline this broadening in the context of

water security.

The Construction of Water Security

How water security is constructed and perceived is instrumental in how the

politics of water are securitized at a river basin commission. The concept of security is

inherently a value-laden concept. What you are securitizing for, against what, and for

what time period are crucial distinctions defining a threat agenda.[36] Environmental

organizations themselves were among the first to bring the language of security into the

environmental discourse, as a method for galvanizing action against environmental

destruction and climate change.[37] Since then, other actors have joined the chorus

including defense and environmental ministries, as well as a host of international actors.[38]

The Stern Report, commissioned by the UK government and published in 2007,

emphasized environmental degradation, specifically climate change, as a threat to

economic security.[39] Additionally, the German Advisory Council on Global Change

published *Climate Change as a Security Risk* in 2008.[40] These efforts culminated in the

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[35] Elizabeth Kistin, "Transboundary Cooperation in SADC: From Concept to Implementation," *Paper prepared for the 8th Water/Net/WARFSA/GWP-SA Symposium, Lusaka, Zambai*, 30 October- 3 November (2007).

[36] A set of critical voices have disputed the link between climate change and conflict, which rests on a questioning the assumptions of environmental security, that securitizing the environment can lead to militarized responses, and provide legitimation for the existence of high-military budgets or even for militarized interventions, see Jon Barnett, "The Price of Peace (is Eternal Vigilance): A Cautionary Editorial Essay on Climate Geopolitics," *Climate Change* 96 (2009): 1–6.

[37] Oels, From 'Securitization' of Climate Change to 'Climatization' of the Security Field, 186.

[38] Robert Kaplan was key to bringing these ideas into the mainstream. See Kaplan "The Coming Anarchy: How scarcity, crime, overpopulation, tribalism, and disease are rapidly destroying the social fabric of our planet" in *The Atlantic Monthly* 273, no. 2 (1994): 44–76.

[39] The Stern Report (2007).

[40] WBGU [German Advisory Council on Global Change], World in Transition: Climate change as a security risk (London: Earthscan, 2008): 20-21.

2014 IPCC report, which, for the first time, explicitly addressed environmental security within a human security framework.[41] In sum, these different conceptualizations of security entail different referent objectives, pathways, and securitization processes which are outlined below.

State security

State-based security continues to hold the state as the fundamental object to be secured, and equates national interest with national security and hence with the preservation and expansion of state power. Here, the security sector has had significant input into the debate, primarily through the narrow lens of national security. The Center of Naval Analyses was among the first to explicitly view water-related climate change as a threat to national security and stipulated the possibility that civil and international wars could be fueled in part by environmental impacts, with examples ranging from Africa to the Arctic.[42] Policy recommendations included partial restructuring of forces in order to enhance preparedness for interventions in states where climate change had overwhelmed national capacities, which in turn could lead to humanitarian disaster and thus become a breeding ground for terrorism.[43] In this view, environmental security factors overwhelmingly focused on how it impacts the state's ability to secure itself from internal and external threats.

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[41] W.N. Adger, J.M. Pulhin, J. Barnett, G.D. Dabelko, G.K. Hovelsrud, M. Levy, Ú. Oswald Spring, and C.H. Vogel, "Human security," in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge: Cambridge University Press, 2014): 755-791.
[42] CNA [Center for Naval Analyses Corporation], *National Security and the Threat of Climate Change* (Alexandria, VA: CNA Corporation, 2007).
[43] Ibid.

Human Security

In contrast, human security takes a fundamentally different methodological position, focusing on the individual as its unit of analysis. Tracing its origins to the 1994 UN Development Program Report on human security and encapsulated by the phases, "freedom from want" and "freedom from fear," this approach extends the security studies field into numerous research disciplines including global development and human rights.[44] In other words, human security is a "variable condition where people and communities have the capacity to meet their needs, rights, and values."[45] In this view, the threats can be external or internal to the state in which the individual resides, and environmental threats negatively impact human wellbeing and security.

Ecological Security

From a political ecological perspective, the ability of individuals to cope is a matter of access to sustainable resources that are distributed through political, economic, and cultural institutions.[46] This perspective ties closely to Galtung's concept of structural violence, where unequal access to resources in a society can lead to marginalization and forms of structural oppression and violence.[47] In this view, addressing the root causes of environmental insecurity through sustainable development is the only way to truly achieve environmental security for individuals and communities. This argument is justified by the fact that it tackles the pre-existing vulnerabilities, and second, because it

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[44] UNDP, Human Development Report (New York: UN, 1994): 24.
[45] Ibid.
[46] Jon Barnett, Richard Matthew, Karen O'Brien, "Global Environmental Change and Human Security: An introduction" in Richard Matthew, Jon Barnett, Bryan McDonald, and Karen O'Brien eds, *Global Environmental Change and Human Security* (London: MIT Press, 2010): 13-14.
[47] Galtung, Johan: "Violence, Peace, and Peace Research", *Journal of Peace Research* 6, No. 3 (1969): 167-191.

enhances adaptive capacity.[48] Overall, ecological security holds the environment itself as the referent object, arguing that insecurity at this level impacts the security of individuals and social institutions, including the state.

National, human, and ecological security perspectives differ in the logic of securitization, as they secure different referent objects. In all cases, dividing lines have been drawn between those who want to expand the fields of human and state security to integrate environmental factors, and those who believe that this approach endangers the intellectual value of the original concept,[49] misguides responses to environmental threats,[50] and that by labeling environmental destruction as a security threat allows the global north to securitize global inequalities.[51] Crucially, the securitization of environmental issues can be achieved through any three of the conceptions outlined above. This not only has a clear impact on the stakeholder which might seek to securitize a water related issue, but also the tactics they use, and the response of other basin stakeholders.

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[48] Oli Brown, Anne Hammill, Robert McLeman, "Climate Change as the 'New' Security Threat: Implications for Africa," *International Affairs* 83, no. 6 (2007): 1150
[49] Daniel Deudney, "Environment and Security: Muddled Thinking," *Bulletin of the Atomic Scientists* 47, no. 3 (1991): 22.
[50] Marc Levy, Is the Environment a National Security Issue, 31.
[51] Elizabeth Chalecki, Environmental Security: A Guide to the Issues (Baltimore: Praeger, 2013): 9.

	HUMAN SECURITY	STATE SECURITY	ECOLOGICAL SECURITY
SECURITIZING ACTOR	The subject of human security	State	The subject of ecological security
REFERENT OBJECT	Individual	State control over water resources	The resource itself
THREATS	Pollution Scarcity Sanitation Displacement	Other States, Sub-state groups, Terrorism Climate change	Environmental degradation, industrialization, poor regulation, species decline

Table 1: Conceptions of Security

The tool of securitization theory and its three components – securitizing actor, referent object, and threat – allow us to discern and identify differences within the three conceptions of security outlined above. First, the securitizing actor depends on the type of securitization. Whereas the securitizing actor in the state-based conception is clearly the state, the securitizing actor in the human and ecological security model is not immediately determined. The state-based securitization can be further refined by identifying securitizing within political systems. For instance, ministries, agencies, and even individuals who are in a position to place securitizing actions can influence the discourse.[52] In the human security perspective, attempts to securitize water have mostly been seen from UN organizations, NGOs, and aid agencies. Ecological securitization in relation to water has mostly been seen from NGOs, with Western NGOs being more

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[52] Peter Burgess, Taylor Owen, and Uttam Kumar Sinha, "Human Securitization of Water? A Case Study of the Indus Waters Basin," *Cambridge Review of International Studies* 29, no. 2 (2016): 390.

prominent than their domestic equivalent. This seems to reflect the ecology discourses within Western ecological discourses.

Second, the referent objective for each conception of water related environmental security is completely different. In the state-based model, water itself is immediately securitized, but crucially only in relation to ensuring the security of the state. Through the lens of human security, the individual is the referent object. Threats to water are in this sense only relevant to the degree they carry effects for individuals. Finally, within the ecological securitization prism, water itself – and the protection of it - is the object of the securitizing act.

Third, each conceptualization of security is associated with a different set of threats. In the state model, threats are those that endanger water security in ways which compromise internal and external sovereignty, and the economic and strategic interests of the state. Threats to the individual, through the human securitization lens, consist of threats to everyday security. In the ecological securitization model, threats are what directly impact the quality of the ecological resource, irrespective of the threat's impact on human or state security.
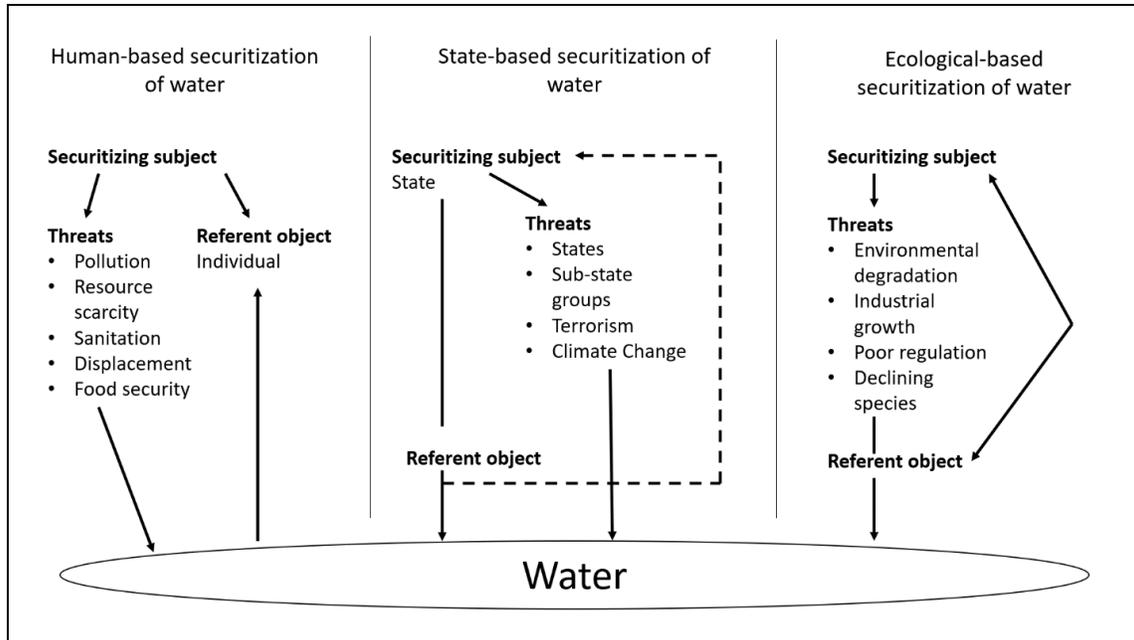
Figure 1: Water Securitization Pathways[53]

<u>Securitization and Desecuritization Dynamics</u>

Within the process of labelling a political issue as a security issue, securitization and desecuritization of issues play a key role in driving behavior. Securitization defines the process by which a political issue is securitized, bringing the issues at stake into the realm of security politics. The implication of this process being that such an issues now can only be dealt with through exceptional measures. Desecuritization entails the process by which a securitized discourse is brought back into the realm of normal politics.[54] Within this process, desecuritization is also correlated with the opening of political space. This section will outline the classical securitization-desecuritization model, before problematizing certain aspects in relation to transboundary water management.

[53] Adapted from Peter Burgess, Taylor Owen et al, *Human Securitization of Water*, 388.
[54] Barry Buzan et al., Security: A New Framework for Analysis, 31.

Securitization

        As an action, securitization can be invoked on any political issue which the actor is seeking to secure. Through securitization, security doesn't equate to simply a matter of survival, but rather survival *and* the ability to enjoy the values that you are securing. Buzan alleges that the security of human collectives and principles is affected by factors located in five different sectors, each of which can be applied to transboundary water management.[55] Moreover, while each sector defines a method of ordering policy priorities, they are all woven together.[56]

        The political sector refers to threats directed against a political entity. While Buzan originally theorized this relationship against the polity of the state in the form of competing ideologies[57], it is important to note that the political security of a sub-state community can be directly impaired by the actions of a state. For instance, the destruction of fishing boats and facilities on Lake Victoria by the Ugandan government arguably degraded the political security of these communities, while that the same time securing the economic and political securing of the Ugandan state.[58]

        The military sector is most typically securitized by state actors invoking a state securitization pathway. It affects all components of the state, and the fact that they involve the direct use of force puts them in a special category when it comes to security. While actual uses of force directed at securing water is rare, threats to use such force by

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[55] Barry Buzan et al., Security: A New Framework for Analysis, 31.
[56] Barry Buzan, "New Patterns of Global Security in the Twenty-First Century," *International Affairs* 67, No. 3 (1991): 443.
[57] Barry Buzan, *People, States, and Fear* (London, ECPR Classics Series: 2007): 120.
[58] Sarah Glazer, "The Death of Open Access in Lake Victoria," *Secure Fisheries*, February 28, 2018, https://securefisheries.org/blog/death-open-access-lake-victoria (June 20, 2019).

many of Egypt's heads of states towards Ethiopia in the context of the construction of the

Grand Ethiopian Renaissance Dam demonstrates how the military sector can be secured

within the water management prism.[59]

The economic sector can be securitized both in terms of state and human security.

Individual economic security refers to basic human needs such as food, water, and

shelter, all of which can be conceptualized in terms of human environmental security.

Paradoxically, threats to economic security of the state can be seen as a national security

issue – as outlined in the Stern Report – since economic power is a key determinant of

power within the international system. A general trend in Southern Africa is that the

population distribution tends to be concentrated in areas that have an unstable water

supply. Within transboundary water dynamics, economic matters are often cast in the

language of security of supply. Major water infrastructure projects such as dams or

pipelines are often portrayed as essential for social and economic security.[60]

The environmental sector demonstrates the propensity for dramatic and emotional

securitizing moves, with small securitizing effects leading to extraordinary measures.[61]

The securitization of the environment plays on everyday fears with different categories of

environmental threats including disruption of ecosystems, loss of biodiversity,

deforestation, and pollution, energy problems, and food problems stemming from

[59] Liam Stack, "With Cameras Rolling, Egyptian Politicians Threaten Ethiopia Over Dam," *New York Times,* June 3, 2013, https://thelede.blogs.nytimes.com/2013/06/06/with-cameras-rolling-egyptian-politicians-threaten-ethiopia-over-dam/ (June 20, 2019).
[60] A Turton, "The Hydropolitical Dynamics of Cooperation in Southern Africa: A Strategic Perspective on Institutional Development in International River Basins" in A Turton, P Ashton, and E Cloete eds., *Transboundary Rivers, Sovereignty and Development: Hydropolitical Drivers in the Okavango Basin (Pretoria: Green Cross International,* 2003).
[61] Barry Buzan et al., Security: A New Framework for Analysis, 71.

environmental degradation.[62] While states can and often do securitize nature, the environmental sector is one that is most open to other actors and stakeholders, as seen in the ability of civil society to render issues relating to water management, such as health and the spread of vector borne diseases as a security issue.[63]

The social sector, while difficult to separate from the political sector, relates to identity and the balance (or lack thereof) that is found within a given state.[64] Securitizing actors may describe threats to the identity to a community through language such as die, perish, wither, weaken, or decline.[65] While the referent objects are generally tribes, clans, nations, minorities and indigenous groups, religions, and race, the media plays a decisive role in defining the situation, constructing stories of 'us versus them', and thus operating as a securitizing actor.[66] Societal claims over water resources are seen within river basin dynamics, with the most pertinent example being Egypt, whose leaders have explicitly invoked a history of Egypt's relationship with the Nile as a securitizing argument to monopolize it use. However, security practices can have detrimental effects on social relations by evoking exceptional politics of crisis and emergency.[67]

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[62] Pal Arne Davidson, Hydrosolidarity as Water Security in the Okavango River Basin, 77.
[63] P Vale, *Security and Politics in South Africa – The Regional Dimension* (Cape Town: University of Cape Town Press, Lynne Rienner Publishers, 2003), 170.
[64] Marianne Stone, "Security According to Buzan: A Comprehensive Security Analysis," Security Discussion Papers Series I (Spring 2009): 5.
[65] P. Roe, "Securitization and Minority Rights: Conditions of Desecuritization," *Security Dialogue* 35, no. 3 (2004): 279-403.
[66] Barry Buzan et al., Security: A New Framework for Analysis, 123.
[67] M. C. Williams, "Words, Images, Enemies: Securitization and International Politics," *International Studies Quarterly* 47, no. 4 (2003): 511-531.

Desecuritization

As the counterpart to securitization, desecuritization entails challenging and deconstructing assumptions that led to securitization and bringing the object of securitization back to the realm of "normal politics". Sadoff and Grey extend this desecuritization argument by providing a simple framework for analyzing benefit sharing in international rivers by distinguishing between four kinds of cooperative benefits that are available to various degrees in river basins.

Cooperation can lead to better environmental management outcomes, improving the availability and quality of resources from the river. In relation, economic benefit can include improved food production, hydropower, and better sanitation.[68] Political cooperation can also reduce the potential costs, as long-term tensions, disputes, and conflicts between riparian actors will generate costs if not prevented or resolved at an early stage. Finally, more indirect benefits might come from rivers being catalytic agents, paving the way for increased interactions and perhaps even integration among states, thus generating benefits beyond the river through issue linkage.

Ultimately, benefit-sharing is possible if riparian states believe and perceive the value of cooperation to be higher than the associated costs. As benefit-sharing can increase the value of such cooperation, it emerges as an important variable when it comes to the desecuritization of water management.[69] However, the ambiguous nature of benefits draw attention to the problems of measurement and operationalization, which

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[68] Claudia Sadoff and David Grey, "Beyond the River: The benefits of cooperation on international rivers," *Water Policy* 4 (2002): 393.
[69] Davidson, Hydrosolidarity as Water Security in the Okavango River Basin, 78.

underscores the need to be realistic with regard to the political applicability of the concept.[70]

What stakeholders, in What Situations, Seek to Securitize

The securitization model allows one to distinguish between actors, threats, and conceptions of environmental security, and the crucial policy actions that result from these actions. However, the securitization-desecuritization dyad and its sectoral approach, while a useful starting point, does not sufficiently differentiate the different actors which seek to securitize as it is biased towards the actions of the state and state-based security outcomes. While scholars have argued that the securitization of water is not a desirable outcome of water resource management, Floyd insists that the securitization of the environment can trigger positive environmental outcomes[71], while desecuritization can be negative in cases where the issue simply disappears from the policy agenda altogether.[72] In this view securitization can give marginalized stakeholders a voice in the decision making process and change the status quo.[73] Aggestam continues this reasoning by arguing that desecuritization processes can lead to technical outcomes which instead of open up political space, entrench political inequalities.[74]

In sum, while the sectoral approach outlined between securitization and desecuritization dynamics is a useful starting point, the dyadic approach should be reject in favor of an incremental approach to measuring securitization, which broadens this

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[70] Ibid, 79.
[71] Floyd, Rita, "Towards a Consequentialist Evaluation of Security: Bringing together the Copenhagen and the Welsh Schools of Security Studies," *Review of International Studies* 33 (2007): 342.
[72] Ibid, 347.
[73] Rita Floyd, Security and the Environment: Securitization Theory and U.S. Environmental Policy (Cambridge: Cambridge University Press, 2010).
[74] Karin Aggestam, "Desecuritization of Water and the Technocratic Turn in Peacebuilding, 328.

study to identify the dynamics which Floyd and Aggestam identify.[75] By combining

multiple securitization pathways with this expanded securitization-desecuritization nexus,

this thesis outlines an effective framework for analyzing securitization dynamics in

RBOs.

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[75] Jurgen Haacke and Paul D. Williams, Regional Arrangements, Securitization, and Transnational Security Challenges, 809.

Chapter 3: Growing Water Stress and Multilateral Responses

Africa's physical environment is changing. Demographic growth, economic development, and climate change are impacting the production and use of water across the continent. Global demand for water has been increasing at a rate of 1% per year as a function of population growth[76], economic development, and changing consumption factors. Furthermore, the vast majority of the growth in demand for water is and continues to occur in countries with developing or emerging economies.[77] This growing demand for water is compounded by poor water infrastructure and management systems. Since 1990, water pollution has worsened in almost all rivers in Africa, as well as Asia and Latin America.[78] The deterioration of water quality is expected to further escalate over the next decades, which will increase threats to human health, the environment, and sustainable development. About 64% of Africans rely on rainfall that is limited and highly variable for their livelihood, compounded by the fact that 40% of irrigated land is farmed unsustainably.[79] Moreover, one-third of people in Africa live in drought prone areas and are vulnerable to the impacts of droughts and floods.[80]

Importantly, Africa is a vast continent, and climatic variation is expected to increase, with some areas of the continent becoming wetter, and others drier. While some regions may experience some economic benefit, most regions will likely be adversely

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[76] United Nations, *World Water Development Report 2018* (Paris: UN Water, 2018): 3.
[77] Ibid, 4.
[78] Ibid, 5.
[79] CJ Vörösmarty, EM Douglas, PA Green, C Revenga, "Geospatial Indicators of Emerging Water Stress: An Application to Africa," *AMBIO A Journal of the Human Environment* 34, no. 3 (2005): 230-6.
[80] Elena Lioubimtseva, "Africa and Global Climate Change: Impacts. Vulnerabilities, and Climate Policies" in Tim Murithi, eds, *Handbook of Africa's International Relations* (New York: Routledge, 2013): 220.

affected.[81] According to the IPCC AR4 Report, there was an increase in the number of warm spells over most of the continent, and a decrease in the number of cold days between 1961 and 2000. During the same period, rainfall increased in spatial and temporal variation.[82] For instance, shorter wet seasons and more intense dry periods are expected to impact river systems such as the Blue Nile, leading to serious water shortages and adverse consequences for human systems. In addition, Africa's high dependence on rainfall agriculture increases human exposure to the changing water resource landscape. Agriculture composes approximately 30% of Africa's GDP and contributes 50% of the total export value, with more than 70% of the continent's population depending on this sector for their livelihood and human security. Furthermore, its comparatively low adaptive capacity is frequently linked to growing vulnerability towards environmental degradation, vulnerability towards climate change, and by extension the risk of tension and conflict.[83] Such arguments have been employed in the growing farmer-herder conflict in Nigeria, where climate change has led to the increased migration of herders into land primarily used to farm, as herders seek new grazing corridors.[84] While the extent to which climate factors are a cause of increased tension and conflict has been questioned, environmental factors certainty play a role in driving conflict dynamics in the Middle Belt of Nigeria and across Africa.

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[81] Ibid.

[82] M Hulme, "Global Warming and African Climate Change: A Re-assessment" in P.S. Low eds., *Climate Change and Africa* (Cambridge: Cambridge University Press, 2005).

[83] Joshua Busby, Kerry Cook, Edward Vizy, Todd Smith, and Mesfin Bekalo, "Identifying Hot Spots of Security Vulnerability Associated with Climate Change in Africa," *Climate Change* 123, no. 7 (2014): 717-731.

[84] Okechukwu Edward Okeke, "Conflict between Fulani Herders and Farmers in Central and Southern Nigeria: Discourse on Proposed Establishment of Grazing Routes and Reserves," *An International Journal of Arts and Humanities* 3, No. 1 (2014): 66-84.

In an attempt to map this growing water stress and resulting vulnerability, vulnerability mapping techniques have sought to identify African states' and communities' most at risk. The most common mapped resources are the DARA Climate Vulnerability Monitor, the Notre Dame Global Adaptation Index (ND-GAIN), and the OneWorld Consultancy.[85] Busby and Cook demonstrate this vulnerability methodology through hot spot assessment of climate change vulnerability, including mapping climate-related hazards and their impact on social systems such as food production and distribution.[86] Their analysis shows that exposure to climate related risks has expanded in areas which significant water resources.[87] This data was then complemented by population density, house and community resilience, and governance and political violence indicators to create a composite index of vulnerability, listing all three case study regions as areas of increasing water vulnerability.[88]

Dividing the Water Security and Conflict Literature

While it is clear that Africa is experiencing increased climate-related water stress, the links between water-related security threats and violent conflict are widely disputed, and debate continues regarding the causal linkages among these variables. Furthermore, there is a lack of consensus surrounding the key question: what social conditions lead to environmental degradation, in turn causing violent conflict?[89] While state and sub-state responses to the risk of socio-environmental violent conflict have been extensively

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[85] For a survey of hot spot climate mapping exercises, see A de Sherbinin, "Climate change Hotspots mapping: what have we learned?" *Climate Change* 123, no. 1 (2014): 23–37.
[86] Joshua Busby et al., Identifying Hot Spots of Security Vulnerability Associated with Climate Change in Africa, 717.
[87] Ibid.
[88] Ibid.
[89] Ide, Toward a Constructivist understanding of socio-environmental conflicts, 70.

documented, the transboundary nature of water management necessitates a deeper

interrogation of transboundary institutional responses to water management and security

challenges.[90] Four primary schools of thought regarding the water security and conflict

scholarship are outlined below.

While the literature of water security and conflict has dramatically increased,

there are few defined schools of thought. Although there is some overlap, each of the

schools below postulate different pathways between water and conflict, and thus come to

different conclusions about the strength of the correlation, the potential windows of

vulnerability that may lead to conflict, and the role of IGOs in improving water security

outcomes.[91]

The first school – best represented by Peter Gleick – seeks to quantify the

relationship between states, water, and conflict. Taking the post-bipolar world as his

starting point, Gleick noted that water is increasingly seen as a strategic resource, as a

source of economic and military power.[92] This operationalization of water for offensive

and defense ends is further expanded through several examples, most notably dams (such

as the Yali River during the Korean War), Irrigation waterways (Syria-Israel conflict in

the 1950s), and desalination plants (as seen in the 1990 Persian War).[93]

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[90] Dellmuth, Intergovernmental Organizations and Climate Security, 2.
[91] Schools are drawn from work by J Peter Burgess, Taylor Owen, and Uttam Kumar Sinha, "Human Securitization of Water? A Case Study of the Indus Water Basin," *Cambridge Review of International Affairs* 29, no. 2 (2016): 382-407. 383.
[92] Peter Gleick, "Water and Conflict: Fresh Water Resources and International Security," *International Security* 18 (1993): 79.
[93] Ibid, 86-88.

The relationship between water and conflict outcomes, as identified by Gleick, is that the misdistribution of water combined with pressures such as population growth and industrial development results in scarcity, which can potentially lead to conflict as actors vie for limited resources. Within this work, water security is broadly defined and environmental resources are given a security value in so far as they have the potential to induce competition and thereafter conflict.[94] As such, security is equated to national or state security. The metrics used to test this theory are 1) ratio of water demand to supply, 2) water availability per population, 3) fraction of water supply originating outside a state's borders, and 4) dependence on hydroelectricity as a fraction of total electrical supply.[95]

The second school of water security and conflict is firmly rooted in what became known as the Toronto School, led by Thomas Homer-Dixon. This school stipulates that resource scarcity, including water, has the potential to undermine national, international, and human security.[96] Most notably, Homer-Dixon's research on environmentally induced conflicts theorized that diminishing environmental resources, intensified by resource capture and ecological marginalization, negatively impact societal relations, and in certain circumstances causes violent conflict.[97] Specifically, Homer-Dixon outlines three pathways between environmental scarcity and conflict. First, supply side scarcity describes how the depletion and pollution of resources reduce the total available volume.

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[94] Ibid, 82.
[95] Ibid, 83.
[96] Ashok Swain, "Managing the Nile Water: The Role of Sub-Basin Co-operation" in Manas Chatterji, Saul Arlosoroff, and Gauri Guha eds., *Conflict Management of Water Resources,* (Aldershot: Ashgate, 2002): 145.
[97] Thomas Homer-Dixon, "Environmental Scarcities and Violent Conflict: Evidence from Cases," *International Security* 19, no. 1 (1994).

Second, demand-side scarcity explains how changes in consumer behavior and demography can cause demand to exceed supply. Third, structural scarcity occurs when some groups receive a disproportionate amount of the total volume of resources, leaving other social groups with small amounts.

Importantly, conflict over water is more likely if two countries share a river; a condition that is further exacerbated when a downstream state is more powerful than the upstream state and when the downstream state is heavily dependent on the river. In addition, this research argues that conflict over water is more likely within states than between states. For instance, the building of a dam can cause social unrest and further marginalize social groups.[98] Ultimately, this research concludes that we will most likely see an increase in violent conflict, which can be at least partly attributed to environment scarcity.[99]

Conversely, a third school, led by Aaron Wolf at Oregon State University, sought to quantify the degree to which states are likely to cooperate over shared water resources. Two aspects of water management dominated this school. First, similar to Homer-Dixon, the supply and demand of the scarce resource, and second, the institutional capacity to absorb short-term changes in water quantity or quality and long-term water stress. According to this theory, disputes regarding transboundary water management are more likely to occur if the rate of change within a basin exceeds the institutional capacity to absorb that change.[100]

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[98] Ibid, 18.
[99] Ibid, 20.
[100] Aaron Wolf, K Stahl, and MF Macomber, "Conflict and Cooperation within International River Basins: The Importance of Institutional Capacity," *Water Resources Update* 125 (2003): 31-40.

Subsequently, Wolf and his colleagues found that cooperation, not conflict, represents 67% of interstate interactions surrounding water between 1946 and 1999.[101] Other theoretical indictors of water conflict such as climate stress, dependence on hydropower, dams or development, or level of development are only weakly correlated with negative interactions between states.[102]

Wolf then identified short-term physical changes and reduced institutional capacity as violence triggers between states. This could include uncoordinated projects which change the water flow and thereby water cooperation is clouded by distrust in other policy areas. This argument that institutions play an important role in buffering the potential stress of water insecurity and scarcity is supported by research conducted by Hensel et al, which concludes that while scarcity can cause conflict, it can be greatly mitigated by institutional design.[103]

A final school of research is housed at the International Peace Research Institute in Oslo (PRIO) and is led by Petter Gleditsch. Using large-N studies, the research evaluated many of the theories outlined in the first three schools, which primary used qualitative case study methodologies. Toset at el. analyzed the relationship between countries that share a river and countries that have had a militarized conflict.[104] It found that countries which share a river are more likely to go to war than those that are contiguous, supporting the work of Gleick and Homer-Dixon. A second study found that

[101] Shim Yoffe et al., "Conflict and Cooperation Over International Freshwater Resources: Indicators of Basins at Risk," *Journal of the American Water Resources Association* 39, no. 5 (2003).
[102] Aaron Wolf et al, Conflict and Cooperation within International River Basins, 31.
[103] P Hensel, M McLauglin, and T Sowers, "Conflict Management of Riparian Disputes," *Political Geography* 25 (2006): 383-411.
[104] HPW Toset, Petter Gleditsch and H Hegre, "Shared Rivers and Interstate Conflict," *Political Geography* 19 (2000): 971-996.

the length of boundary between states did not impact the findings of the first study.[105] A third study sought to differentiate between rivers which demarcate a border and those which cross borders, finding that while demarking rivers did not lead to an increase in violent conflict, sharing a basin was correlated with an increased risk of conflict.[106]

These schools are clearly interlinked in several ways. Gleick and Homer-Dixon find potential for conflict. Wolf and Gleditsch see little history of conflict and opportunities for collaboration. Gleick and Homer-Dixon look at conflict at different levels, while Wolf and Greditsch look at relations between states. Wolf and Greditsch also tend to focus on the links between transboundary management mechanisms, whether they reduce conflict, and the conditions in which they do so.

Ken Conca expanded then on this work, by examining the extent to which principles of international water law have been incorporated into international treaties, as a traditional example of the cooperation-conflict paradigm. Rather than finding a broad trend of norm convergence, he identified two divergence trends of two normative frameworks; one stressing shared river protection, and the other emphasizing states' rights.[107]

Complementing these schools, several meta studies have sought to come to a definitive conclusion regarding the link between conflict and water. Burke and his colleagues produced several quantitative studies that correlated changes in climate and

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[105] K Furlong and Petter Gleditsch, "The Boundary Dataset," *Conflict Management and Peace Science* 20 (2003): 93-117.
[106] Petter Gleditsch and R Nordas, "Climate Change and Conflict," *Political Geography* 26 (2006): 627-638.
[107] Ken Conca, *Water Governance* (Cambridge: MIT Press, 2006).

violence conflict, particularly in Africa, claiming that 'research had successfully

established a causal relationship between climate and conflict'.[108] It claimed

quantitatively that a 1 standard deviation increase in temperature is associated with an

11.1% increase in conflict risk.[109] However, there is no academic consensus on the link

between water stress and violent conflict and many studies have found the opposite. By

modifying the contested elements of this meta-analysis, a study by several prominent

climate-conflict researchers found no 'evidence of findings on climate variability and

civil conflict.[110] Similarly rigorous studies concur with this view, finding no significant

correlation and have criticized meta-studies that have found a causal link for underlying

methodological inconsistencies, causal homogeneity, and sample representativeness.[111]

While these schools differ in their methods, assumptions, and conclusions relating

to water and conflict, each school is limited by their use of a traditional geopolitical

interpretation of security. In addition, both realist and liberal perspectives fail to account

for the dynamic relationships between stakeholders in water politics and the construction

of water-related security threats.[112] In addition, three conclusions can be drawn from

these interlinked debates between the four water security and conflict schools. First, that

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[108] S Hsiang, M Burke, E Miguel, "Quantifying the influence of climate on human conflict," *Science* 341 (2013): 7.

[109] See Hsiang et al., *Quantifying the Influence of Climate on Human Conflict*, 4 and Marshall Burke et al., "Warming Increases the Risk of Civil War in Africa," *PNAS* 106, no. 49 (December 8, 2009).

[110] H Buhaug, J Nordkvelle, TB Bernauer, T Böhmelt, M Brzoska, JW Busby, A Ciccone, H Fjelde, E Gartzke, NP Gleditsch, et al, "One effect to rule them all? A comment on climate and conflict," *Climate Change* 127 (2014): 394.

[111] Ibid, 392-3.

[112] For instance Kathryn Furlong focuses on the influence of the positivist rational IR frameworks and neglects critical perspectives. See K Furlong, "Hidden Theories, Troubled Waters: International Relations, the Territorial Trap, and the Southern African Development Community's Transboundary Waters," *Political Geography* 25, no. 4 (2006): 1-21.

there is strong context dependency of potential climate-conflict linkages.[113] Second, and connected to the first point, the social dynamics of these linkages are dependent on varying conceptions of ecology, politics, and security. Third, given that the empirical evidence suggests that cooperation rather than conflict is the more common outcome with regards to water cooperation between states, analyzing stakeholder dynamics within these intrinsically cooperative multilateral structures such as RBOs is a logistical step.

The Importance of Multilateral Institutions and River Basin Organizations

While IGOs responses to water security have been neglected, the water-conflict literature tends to focus on Africa for several reasons. All major rivers and freshwater lakes and aquifers in Africa are shared by two or more countries – every country on the continent shares at least one body of freshwater with its neighbors.[114] In total there are 263 international lakes and river basins in the world today, 64 of which are in Africa. This unusually high concentration of water-based boundaries is partly attributed to colonialism given that colonial boundaries were generally delineated with regards to resources, especially water.[115] In addition, Africa boasts a high number of transboundary institutions mechanisms for managing its water, with 14 river basin organizations currently in existence.[116]

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[113] Tobias Ide, "Why do conflicts over scarce renewable resources turn violent? A qualitative comparative analysis," *Global Environmental Change* 33 (2015):61–70.
[114] Klaus Toupher, "Preface" in *Hydropolitical Vulnerability and Resilience along International Waters: Africa* (Nairobi, Kenya: United Nations Environmental Programme, 2005): xi.
[115] Jonathan Lautze & Mark Giordano, "Transboundary Water Law in Africa: Development, Nature, and Geography," *Natural Resources Journal* 45 (2005): 1053.
[116] Davison Saruchera and Jonathan Lautze, "Transboundary River Basin Organizations in Africa, *Water Policy* 18 (2016): 1. See Appendix for complete list.
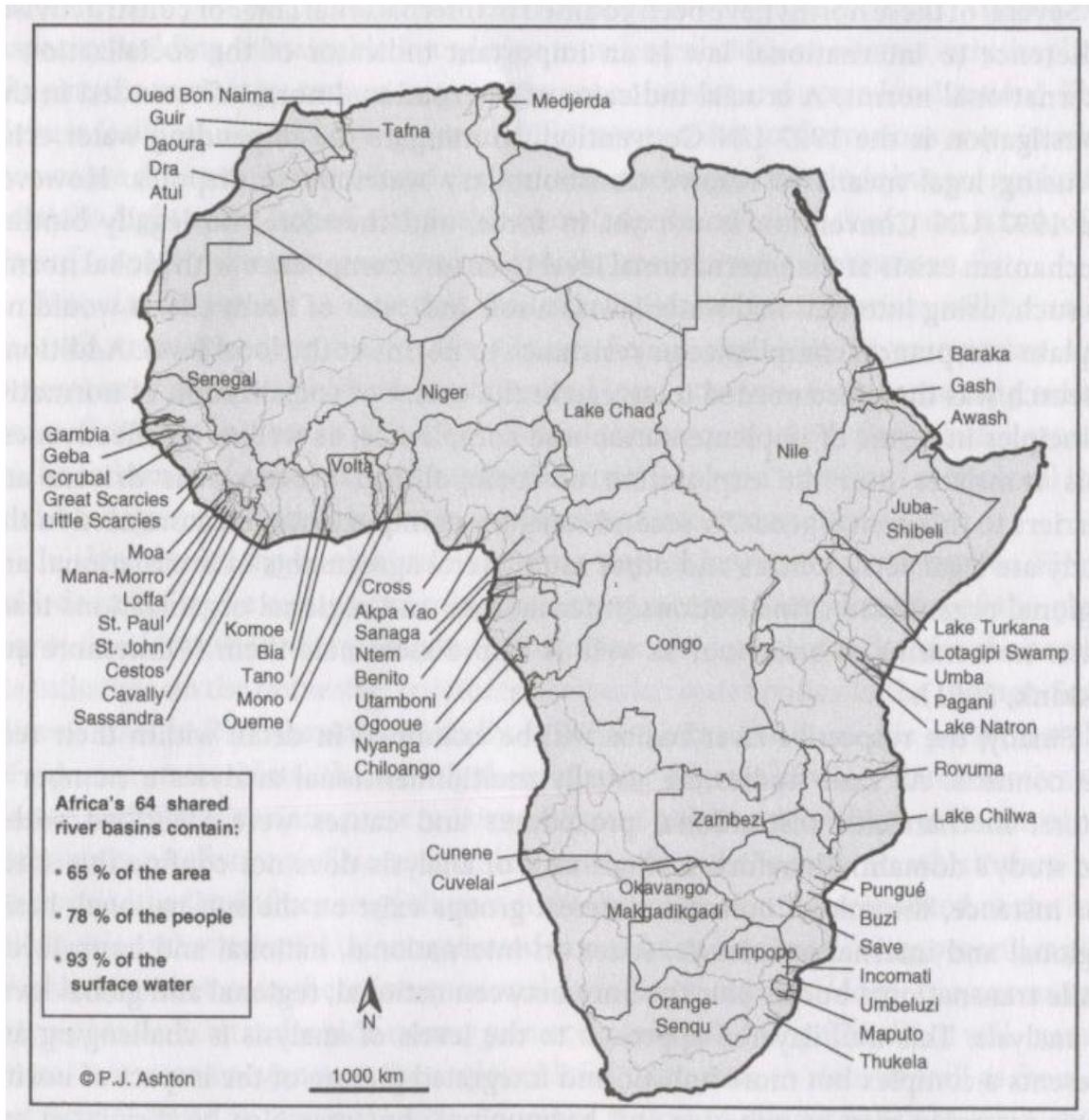
Figure 2: Shared River Basins in Africa[117]

In response to documented growing water stress, and subsequent calls for water security, Africa has witnessed a dramatic growth in its transboundary water management architecture. In the early 1960s, the first RBOs were formalized for Chad (1964) and Niger (1964), both of which reflected a broader approach focused on RBOs with

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[117] Inga Jacobs, *The Politics of Water in Africa* (London: Bloomsbury, 2015): 6.

secretariats. the Organisation pour la Mise en Valeur du Fleuve Sénégal (OMVS) in the Senegal (1972) followed. The establishment of RBOs intensified from 2000 onwards, with institutions being formed such as the Nile Basin Initiative (NBI), Lake Victoria Basin Commission (LVBC), Limpopo Watercourse Commission (LIMCOM), and the Zambezi Watercourse Commission (ZAMCOM) (see appendix for a complete list).[118]

The recent increase in RBOs mirrors – to a certain extent – the similar growth of the African Peace and Security Architecture (APSA), which fundamentally sought to shift the security discourse from a state to a human centered orientation. This included the establishment of the AU, RECs, and RBOs. However, the relationship between these institutions is not uniform. For instance, the Lake Victoria Basin Commission is an institution of the East African Community (EAC), while the Lake Chad Basin Commission (LCBC) is legally outside the structures of its nearest REC, the Economic Community of West African States (ECOWAS).

Two assumptions underpin the proliferation of River Basin Organizations in Africa: 1) the idea that water, by its very nature, must be managed through a transboundary mechanism, and 2) if this does not take place the risk of conflict between stakeholders over climate-related water issues increases. As such, bilateral water agreements, RBOs, and water security related work undertaken by the AU and RECs covers a vast array of topics and issues including development goals such as hydroelectric production and irrigation expansion and the guarding of water rights and

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[118] See appendix for complete list.

responsibilities.[119] Moreover, these agreements serve different purposes to different

stakeholders. Importantly, the proliferation of RBOs – especially those with secretariats –

are linked with donor involvement. For instance, the Nile Basin Initiative was established

with support from the World Bank[120], the Okavango Basin with the support of the U.S.

Agency for International Development (USAID), and the Zambezi Commission with the

support of Gesellschaft fur Internationale Zusammenarbeit (GIZ), and the Danish

International Development Agency. This is indicative of the long-standing lack of

consistent funding for transboundary water management mechanisms.

How RBOs conceptualize climate-related water issues has important implications

for their risk and threat assessments, as well as their policy prescriptions. This importance

is arguably greater for water security risks, as the transnational character of climate-

related security risks often overwhelms the capacity of national governments to respond

adequately.[121] Moreover, little is known about the conditions under which IGOs engage

in integrated governance relating to water related climate security risks and when they do

so effectively.[122]

Connecting this increasing multilateralism to the water-conflict literature and

securitization frameworks, it is important to note that increases in multilateralism do not

automatically translate to better cooperation between states or effective governance

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[119] Coleen Fox and Chris Sneddon, "Transboundary River Basin Agreements in the Mekong and Zambezi Basins: Enhancing Environmental Security or Securitizing the Environment?," *International Environmental Agreements: Politics, Law, and Economics 7* (2007): 237-261.
[120] Timmerman, J. G., *Transboundary River Basin Management Regimes: the Nile Basin Case Study*, Background Report, Tripartite Permanent Technical Committee (2002).
[121] Florian Krampe and Malin Mobjork, Responding to Climate-Related Security Risks, 330.
[122] Ibid, 333.

regimes.[123] For instance, intergovernmental bodies can become a testing ground for increased tensions relating to water management, where stakeholders seek to elevate tensions and securitize particular water related issues.

RBOs sit in the middle of a dense network of basin stakeholders (figure 6) and as such many different actors seek to influence their actions by using the discourse of security. However, there is wide divergence in the funding levels, the level autonomy, and the degree to which stakeholders are imbedded into decision making processes.

First, RBOs are imbedded – to differing extents – into the wider peace and security architecture, including Regional Economic Communities' and the African Union. Second, RBOs consist of different stakeholders, including the member states representatives[124], civil society, and the business community. Furthermore, the relationship between state representatives, often ministries, and officials from member state environmental ministries and the rest of the member state government is also an important. Third, RBOs themselves have different levels of independent autonomy depending on its legal status and the degree of independent funding. The extent to which each level of governance influences each other has important implications for securitization preferences.

It is clear that water is political, and that cooperation and conflict in IGOs can create securitizing behavior. Thus, a research methodology that seeks to analyze changes in securitization behavior on the part of basin stakeholders and the commission itself

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[123] R Dimitrov, "Hostage to Norms: States, Institutions, and Global Forest Politics," *Global Environmental Politics* 5, no. 4 (2005): 1-24.
[124] This can also include observer states that typically have limited voting and decision making power.

must be able to discern both behavior and rhetoric. The construction of water security as well as the competing claims of sovereignty, power, and economic development can lead to securitization dynamics in the name of the security of a particular actor.
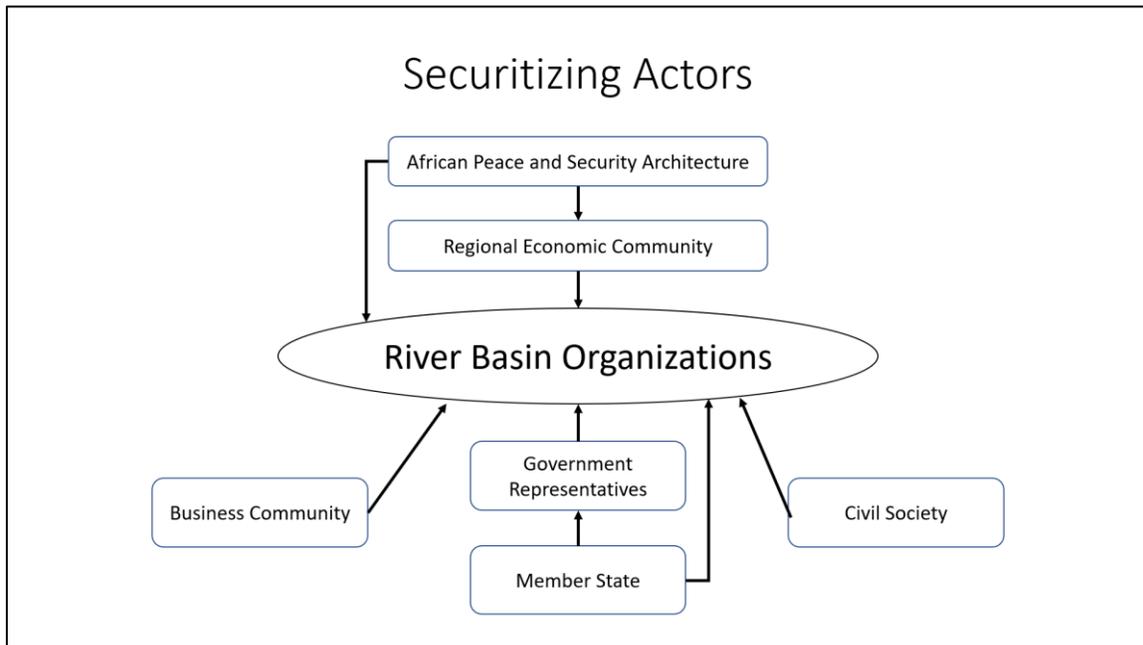
Figure 3: Basin Stakeholders

Case study layout

     Taking the securitization tools – securitizing actor, referent object, and threats – as well the different securitization pathways – state, human, and ecological – outlined above, the following chapter will analyze securitizing actions by River Basin Commission stakeholders. Due to the different timescales in which the RBOs were established, this thesis will analyze the security discourse from 2000 to 2019.

     Each case study was chosen because it illuminates different aspects of the modified securitization framework outlined above. While the Nile Basin Initiative is often referred to as a classic case of water securitization, there has been a lack of analysis

about the NBI's role in exacerbating or mitigating these dynamics. The Lake Chad Basin Commission provides a useful example for examining the degree to which its actions as a military coordination body has impacted its role as a water management body. Finally, the Lake Victoria Basin Commission, with its close association to its REC, provides an example of the new model of RBO management. While, it has been argued that this close association helps the organization to counter the power to member states and incentivize long-term management of the lake's resources. It is unclear the degree to which it has actually reduced securitizing acts and whether this has opened or closed political space related to the long-term management of its water resources.

Each case study will provide a brief overview of the geographical features of the basin, the structure of the river basin commission, and a hydropolitical history of the basin. It will then proceed to outlined securitization dynamics of the different stakeholders; its member states, civil society and the business community, and other regional actors. Due to a lack of data on the internal procedures of RBOs, evidence of securitization will be analyzed through an analysis of various stakeholder actions and RBO documentation, when available.

Chapter 4: The Lake Chad Basin Commission

The Lake Chad Basin Commission (LCBC) was established on May 22, 1964, making it the oldest RBO in Africa. The LCBC was created soon after the independence of its member countries: Cameroon, Chad, Niger and Nigeria. Colonial powers, including France, the United Kingdom, and Germany, had used the lake to demarcate borders and, as a method for maintaining some influence in the basin area, also gave technical support to the newly independent states in setting up the LCBC.[125] Later on, the 1985 summit gave the LCBC the mandate to enlarge the basin organisation, notably to the Central African Republic (CAR), which acceded in 1994. Libya and Sudan subsequently joined, with Egypt, the Republic of Congo, and the Democratic Republic of Congo obtaining observer status.

The LCBC has maintained a functioning permanent executive since 1994. The top organ of the LCBC is the Meeting of Heads of State, which acts as the primary policy unit. It is comprised of the Permanent Secretary and four administrative departments – environment, agriculture, finance, and project execution – which coordinate the policy decisions made by the Meeting of Heads of State. Personnel of the LCBC are recruited from relevant member state government departments, with the executive secretary always from Nigeria.[126] It is further stipulated that personnel from any single member state cannot exceed one third of the total number of personnel.[127] While the LCBC was

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[125] Greta Galeazzi, "Understanding the Lake Chad Basin Commission (LCBC): Water Security at Inter-Regional Cross-Roads," *European Center for Development Policy Management (*2017): 7.
[126] ANBO, *Source Book,* 32.
[127] Ibid, 33.

originally created to promote shared and sustainable management of Lake Chad and other

water resources in the area, it has since expanded its remit to include a wide range of

economic and security issues. [128] However, inconsistent funding and lack of stakeholder

engagement have hampered its reach and ability to effectively act on issues of

environmental and water management, economic development, and security.

The expansion of the LCBC's focus areas beyond its original purview of water

management is due in part to increasing instability in the region and the rise of the Boko

Haram terrorist organization. Furthermore, it has been accompanied by an increasingly

securitized discourse regarding the growing vulnerability in the region and the options to

best address it. The most obvious outcome of this discourse was the creation of the

Multinational Joint Task Force (MNJTF), a regional military coalition designed to

combat the threat posed by Boko Haram. The LCBC plays a key role in this coalition as

the central coordination body, a marked contrast to its traditional role in facilitating

coordination for improved technical water management outcomes. Ultimately, this

increased securitization of the LCBC's remit, through its role in the MNJTF, has reduced

its ability to provide a consistent political space for transboundary water management. In

other words, in this case study the securitization process has reduced time, resources, and

capital that may be spent on water management, and is instead spent on broader security

issues.[129] Other factors, including the lack of stakeholder engagement beyond its member

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[128] Aaron Wolf, *Atlas of International Freshwater Agreements* (Oregon: United Nations Development Programme, 2002): 35.
[129] Barry Buzan et al., *Security: A New Framework for Analysis*, 31.

states and inconsistent funding, have also contributed to the securitized discourse within the LCBC. Both of these factors are further discussed below.

The Lake Chad Basin: Rising Geophysical and Security Vulnerability

The Lake Chad Basin (LCB) is located in western Africa and covers 2,400,000 km.[2] In geophysical terms, Lake Chad is characterized as a terminal depression with the seven basin countries grouped around it, four of which are in direct contact with the lake: Nigeria, Niger, Chad, and Cameroon.[130]

Physical Characteristics of the Lake Chad Basin	
Total basin area	2,400,000 km2
Area rainfall (mm/y)	320 mm per year
Countries that share the basin	Nigeria, Niger, Chad and Cameroon
Basin Population	47 million

Table 2: Physical Characteristics of the Lake Chad Basin

Communities inhabiting the LCB are currently facing severe human insecurity, brought on by a combination of slow-onset environmental degradation, increased human activity, and violent conflict. Since 1960, Lake Chad has shrunk by over 90% with the UN Food and Agriculture Organization calling it an "ecological catastrophe," and predicting that the lake could disappear this century.[131] While recent evidence suggests that the Lake is recovering, it is still far below historic levels.[132] In addition, the growing demand for the lake's natural resources has caused economic, social, and political

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[130] Lemoalle, J. & Magrin, G. (Eds.). 2014. Le développement du lac Tchad / Development of Lake Chad. IRD Éditions. Expertise Collégiale.
[131] https://www.un.org/africarenewal/magazine/april-2012/africa%E2%80%99s-vanishing-lake-chad
[132] Janani Vivekananda, Martin Wall, Florence Sylvestre, and Chitra Nagarajan, *Shoring up Stability: Addressing Climate and Fragility Risks in the Lake Chad Region* (Berlin: Adelphi, 2019).

ramifications for the 2.3 million people, such as agricultural and fishing communities, who rely on it for their livelihoods.[133]

Both climatic and human factors have contributed to the surface area decline of the lake, with reduced rainfall, and increased demographic and economic pressures accounting for the majority of the decline (table 3). In addition, the population of the LCB has grown to 30 million in 2011 and continues to grow rapidly.[134] These factors have forced agricultural communities to turn to groundwater extraction to feed their crops, further increasing water stress.[135] Other economic activities in the region, most notably fishing, hunting, and pastoralism, while providing vital nutrition for the local population, are also climate sensitive and can increase water stress and environmental degradation, especially as the population increases and food demand grows.[136]

Within this context of severe environmental strain, the rise of Boko Haram has further increased social, political, and economic vulnerability, pushing the region to its limits. From its roots in 2003 as a non-violent sectarian Islamic movement, repression by the Nigerian government in 2009 led to the formation of a fully-fledged insurgency in Northern Nigeria. This insurgency, which has subsequently spread to Niger, Cameroon, and Chad, has killed more than 20,000 people and is responsible for the displacement of a

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[133] UN Office for the Coordination of Humanitarian Affairs, "Lake Chad Basin: Crisis Overview," *Relief Web*, March 26, 2018, https://reliefweb.int/report/nigeria/lake-chad-basin-crisis-overview. (November 12, 2018).

[134] R Geerken et al., "Impacts of Climate Variability and Population Pressure on Water Resources in the Lake Chad Basin," In *Global Water System Project Conference of the Global Catchment Initiative (GCI)* (Bonn: The Global Water System Project, 2010): 116-124.

[135] J Lemoalle et al., Recent changes in Lake Chad: Observations, simulations and management options (1973-2011), *Global and Planetary Change* 80-81 (2012): 247- 254.

[136] C Okonkwo & B Demoz, "Identifying anthropogenic "hotspots" and management of water resources in Lake Chad Basin using GIS," *Journal of Natural Resources Policy Research* 6, no. 2-3 (2014), 135-149.

further two million.[137] In 2015, Boko Haram was named the deadliest extremist organisation in the world,[138] and while attacks have decreased in the last few years, they are still ranked among the four most violent extremist organisations in the world.[139]

In sum, human insecurity factors, such as rapid population growth and more vulnerable livelihoods caused by scarcer resources, have dramatically increased in the LCB since 2000, with the rise of Boko Haram accelerating this trend. In response, basin stakeholders have used a variety of securitization pathways to respond to the ecological, social, and economic issues. In this environment, the LCBC has played a critical role in coordinating responses, and as such has provided a forum for the incurably securitized discourse.

Lake Chad Basin: Drivers of Water Stress				
Geophysical	**Ecological**	**Effect on human systems**	**Human responses**	**Feedback**
Groundwater depletion Lower precipitation Higher temperatures Increased precipitation	Desertification Drought Lake Chad Shrinkage	Systematic agricultural stress Famine Loss of livelihoods	Diminished resilience to Boko Haram Resource competition Environmental migration	Extremist violence prevents water infrastructure development and polity implementation

Table 3: Lake Chad Basin: Drivers of Water Stress

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[137] OCHA, "Niger and Chad: 'A fragile island of stability in a region of conflict', says OCHA Operations Director," *OCHA*, May 6, 2015, https://www.unocha.org/story/niger-and-chad-%E2%80%9C-fragile-island-stability-region-conflict%E2%80%9D-says-ocha-operations-director (March 23, 2019).
[138] Institute for Economics and Peace, "Global Terrorism Index 2015," *Institute for Economics and Peace* (2015): 2.
[139] Institute for Economics and Peace, "Global Terrorism Index 2018," *Institute for Economics and Peace* (2018): 10.

The Diplomatic and Hydropolitical Context

Since 2000, the LCBC has started to consolidate its structure, secure more consistent funding, and develop a long-term water management strategy, including the development of a Water Charter, which emphasizes long-term water cooperation and food security.[140] Traditionally, the primary functions of the LCBC have been advising and coordination, with a focus on data gathering and coordination of stakeholders to improve knowledge sharing and resource management.[141] However, the rise of Boko Haram in the LCB led to member states designating the LCBC as the primary coordination body for the MNJTF. This has led to the LCBC's remit expanding dramatically into the "traditional" security realm. This has important implications not only for its work on security issues relating to violent extremism, but also its work on climate-related water issues.

Technical Water Management

The ability of the LCBC to provide technical management and support to its member states has largely been determined by its funding, which has historically been sporadic. However, since 2005, the member states have adopted a streamlined funding model, leading to the development of an integrated approach to water management.[142]

Evidence of this can be seen in official documents, in which LCBC countries adopted a long-term vision and strategic action plan in 2008 and a Water Charter in April

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[140] Lake Chad Basin Commission, Water Charter 2012
https://openknowledge.worldbank.org/bitstream/handle/10986/23793/Main0report.pdf?sequence=1&isAllowed=y 19
[141] LCBC, Report on the State of the Lake Chad Basin Ecosystem (N'Djamena: Lake Chad Basin Commission, 2016),
[142] Greta Galeazzi, *Understanding the Lake Chad Basin Commission (LCBC)*, 7.

2012. The Water Charter's development and initial implementation was heavily

supported by Nigeria, the regional hegemon, and aims to help the LCBC pursue an

Integrated Water Resource Management Plan. The Water Charter emphasizes

crosscutting issues such as water sharing, common investments, and environmental

management.[143] This emphasis on shared interests mirrors arguments made by Sadoff and

Grey who emphasize how initial agreement on water management outcomes leads to

further cooperation in other areas.[144]

Military Coordination

The other, newer face of the LCBC is its role in the operations against the

extremist organization Boko Haram. While the LCBC was created as a technical

management body, the founding treaty also has a peace and security component. This

was explicitly spelled out in the Water Charter, which detailed its role in building peace

and security.[145]

While the role of the LCBC in military cooperation predates the rise of Boko

Haram, the reactivation of the Multinational Joint Task Force (MNJTF) in 2015 with an

expanded mandate to encompass counter terrorism operations, represents a more explicit

security action on the part of the LCBC with regards to national security concerns of its

member states.[146] Unlike its previous iteration, the task force now included Cameroon

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[143] LCBC, "Water Charter of the Lake Chad Basin," *Lake Chad Basin Commission* (2011).
[144] Claudia Sadoff and David Grey, *Beyond the River*, 393.
[145] Article 4 of the Water Charter states that an objective of the LCBC is "preventing conflict with guarantees of efficient prevention and inter-state shared water resource related dispute resolution". LCBC, *Water Charter of the Lake Chad Basin*, 13.
[146] In 1994 at the 8th summit of the LCBC, due to smuggling and criminal activities taking place in the area, the member states decided to establish a joint security force based in Baga-Kawa in Nigeria. However, only Nigeria committed troops. In addition, while the LCBC acted as a political forum, its direct involvement in these early experiences was limited.

among its troop-contributing countries, and it is financially supported by regional and
international actors such as the AU, United States, United Kingdom, France, and
European Union (EU), who all have a vested interest in security cooperation and reducing
the threat of extremist organizations such as Boko Haram.[147] The regional mandate of the
MDTF, along with the LCBC's need for sustained funding, provides two additional
reasons why the LCBC was chosen to manage the deployment.[148]

Securitization Dynamics: Duel Engagement

When analyzing the behavior of basin stakeholders, it is important to note that the
LCB has historically been neglected as a development priority by all LCBC member
states. For Nigeria, Niger, and Cameroon, the LCB is at the national periphery.[149] The
LCBC has consequently struggled to maintain buy-in from its member states, which is
reflected in its historical lack of consistent funding. For example, the Water Charter,
despite being a cornerstone document of the LCBC's expanded remit, has not actually
been ratified by all member states. Despite this, member states have sought to securitize
various aspects of the LCBC's work. In addition, the securitization dynamics of member
states reflect traditional security arrangements and power dynamics in the region, which
in turn influence which security sectors – as outlined by Buzan – the stakeholders seek to
securitize.[150]

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[147] https://odihpn.org/magazine/the-evolution-and-impact-of-boko-haram-in-the-lake-chad-basin/
[148] Isaac Olawale Albert, "Rethinking the Functionality of the Multinational Joint Task Force in Managing
the Boko Haram Crisis in the Lake Chad Basin," *Africa Development / Afrique et Developpement* Vol. 24,
No. 3, Special Issue on Security Regimes in Africa (2017): 119-135 (124).
[149]
https://openknowledge.worldbank.org/bitstream/handle/10986/23793/Main0report.pdf?sequence=1&isAllo
wed=y
[150] Barry Buzan et al, *A New Framework for Analysis,* 1999.

The country of Chad is by far the most dependent on Lake Chad, with its capital and demographic centre located 120km from the basin. Given this, it has primarily focused on the water management aspect of the LCBC's work, through the lens of economic security. This is primarily through the lens of ensuring long-term management of pastoralist migratory patterns, upon which 50% of its population relies on for their livelihood.[151] In addition, Chad has sought to invoke both the state and human securitization pathways by simultaneously contributing to the MNJTF and framing the movement of people and the risk of Boko Haram in terms of human insecurity.[152]

Nigeria, in turn, houses a key portion of the southern part of the basin, even if the basin is only of secondary concern for the country.[153] Despite this, Nigeria has taken a lead role in the MNJTF since Boko Haram's emergence in the late 2000, leading to an increased focus on the role of the LCBC and its water management role. This is in part because of the recognition that successful water management is critical to developing the region and reducing the threat posed by extremist organizations. However, this renewed interest in water management in the LCB is purely through the lens of its engagement with Boko Haram, with an emphasis on internal state security, food security for local populations, and the strategic use of water resources to impair Boko Haram.[154] For instance, both the Nigerian military and Boko Haram have sought to divert water

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[151] International Crisis Group, "The Security Challenges of Pastoralism in Central Africa," *Africa Report No.215* (April 1, 2014): https://www.justice.gov/eoir/page/file/1073841/download
[152] UN, "Better Governance of Underfunded, Poorly Managed Lake Chad Basin Key to Resolving Conflict, Suffering across Region, Speakers Tell Security Council," Security Council Meeting 8212, March 22, 2018. https://www.un.org/press/en/2018/sc13259.doc.htm (December 10, 2018).
[153] Ricarhd Skretteberg, "Sahel: The world's most neglected and conflict-ridden region," *Norwegian Refugee Council*, https://www.nrc.no/shorthand/fr/sahel---the-worlds-most-neglected-and-conflict-ridden-region/index.html (June 23, 2019).
[154] https://www.vanguardngr.com/2015/10/boko-haram-poisons-water-sources-in-borno/

resources to gain a tactical advantage. In addition, Nigeria has also sought to securitize its development agenda in northeast Nigeria, framing development objectives in terms of reducing recruitment to Boko Haram.[155] However, Nigeria's use of Local Government Areas to coordinate aid after an area has been liberated from Boko Haram has been criticized for failing to address the root causes of economic inequality in the region, and provide a short-term militaristic development solution to long-term political grievances.[156]

Other member states, such as Cameroon and Niger, have not displayed consistent engagement in the LCBC, apart from their troop contributions to the MNJTF. Similarly, The Central African Republic and Libya do not have direct access to the LBC and are do not consistently engage with regards to long-term water management.[157]

Non-State Actors

Civil society engagement with the LCBC has tended to come from Western NGOs, with a vast increase from 2010 onwards in response to the Boko Haram insurgency. While there are no specific provisions for stakeholder participation in LCBC procedures, "user groups" – the function of which range from advisory to dispute settlement – provide the only formal entry point for regional and international NGOs.[158]

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[155] Saskia Brechenmacher, "Stabilizing Northeast Nigeria After Boko Haram," *Carnegie Endowment for International Peace*, May 3 2019. https://carnegieendowment.org/2019/05/03/stabilizing-northeast-nigeria-after-boko-haram-pub-79042 (June 23, 2019).

[156] Nigeria INGO Forum, "North-East Nigeria: An overlooked Protection Crisis," *Nigeria INGO Forum*, March 2019, https://reliefweb.int/sites/reliefweb.int/files/resources/GVA%20briefing%20Note%202019%20-%20online%20version.pdf (May 29, 2019).

[157] https://ecdpm.org/wp-content/uploads/LCBC-Background-Paper-PEDRO-Political-Economy-Dynamics-Regional-Organisations-Africa-ECDPM-2017.pdf

[158] ANBO, "Source Book On Africa's River Basin Organization, "African Network of Basin Organizations (2007): 35.

However, this engagement is relatively unstructured.[159] Official documents such as the Water Charter highlight the goal of supporting the participation of civil society in water and natural resources management and the need to improve service delivery.[160] Similarly, the LCBC's Climate Resilience Action Plan, adopted in 2015, offers numerous suggestions for broadening stakeholder engagement in its development remit, such as mini-networks to supply drinking water, promoting economic empowerment by providing rural electrification schemes.[161] However, such statements have not been put into action, in part due to the focus on the MNJTF. Several scholars have argued that the LCBC is not logistically equipped to adequately fulfil both security and water management mandates.[162]

Due to the relatively closed nature of the LCBC when compared to other RBOs, civil society engagement has largely come from outside the organization, and through other channels such as the United Nations. Given its growing remit, funding the LCBC has become a key issue, and NGOs have been successful in using human and ecological securitization pathways to secure additional funding for projects coordinated by the LCBC at international conferences, most notably The High-Level Conference on the Lake Chad Region in Berlin, Germany in September 2018. At the conference, human insecurity of individual communities was used to frame economic, environmental, and political issues in the LCB. In addition, high-level ministers from LCB and donor

[159] Ibid.
[160] Greta Galeazzi, Understanding the Lake Chad Basin Commission, 7.
[161] LCBC, Lake Chad Development and Climate Resilience Action Plan (2015).
[162] Beth Ellen et al., "Breaking Boko Haram and Ramping up Recovery: US Engagement in the Lake Chad Basin," *United States Institute of Peace* (2017):14.

governments used terrorism, crime, and human trafficking as key reasons why investment in the LCB was needed.[163]

Such engagement emphasized securitized approach through framing water stress in the LCB as a human security threat. In particular, the discourse focused on livelihood and food insecurity. This discourse was also connected to funding for the MNJTF as a method for securing sustained funding for the LCB.[164] While there is a growing recognition that such engagement needs to focus on long-term solutions, the unstructured engagement of NGOs incentivizes a security discourse and short-term funding as a method ensure as much funding as possible.

Overall, civil society engagement within the LCBC has been limited when compared to the other case studies in this thesis. While international NGOs have used human and ecological securitization pathways to advocate for increased funding to the region, the closed nature of the LCBC has decreased the space availability for local NGOs to impact decision making at the basin level. While this has been improved through initiatives such as the Water Charter, the rise of the LCBC as a coordination mechanism for the MNJTF has acted to incentivize securitization practices from NGO projects in the basin. While this has driven funding towards the LCBC in the short-term, the long-term implications of this narrow securitized framing is arguably to the detriment

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[163] Achim Steiner, "High-Level Conference on the Lake Chad Region," *United Nations Development Programme*, September 3 2019, https://www.undp.org/content/undp/en/home/news-centre/speeches/2018/high-level-conference--on-the-lake-chad-region.html (June 24, 2019).

[164] LCBC, "Concept Note on the Civil Society Segment," High-Level Conference on the Lake Chad Region, 3-4 September, 2018. https://lakechadberlin.de/wp-eb6f4-content/uploads/2018/08/Concept-Note-for-Civil-Society-Segment_EN_31-08-18.pdf (February 20, 2019).

of a holistic solution to address the pollical, economic, social, and ecological issues affecting the Basin.

Regional and International Context

Interactions between the LCBC and other regional organizations have also dominated by the MNJTF. This is reflected by the fact that the AU mandated that the LCBC act as the coordination body for security operations countering Boko Haram.[165] This was in part by necessity, as the MNJTF members are effectively split between two RECs, ECOWAS (Nigeria, Niger, and Benin) and ECCAS (Cameroon and Chad), making it difficult for the AU to recognize either to lead the military deployment. Since the majority of the countries concerned belong to the LCBC, it was seen as a suitable institutional framework for this joint military effort, providing a pragmatic solution for this cross-regional arrangement. However, and in contrast to more integrated RBOs such as the LVBC, the LCBC is notable for its lack of engagement with other actors in the APSA.

The Impact of Securitization on the LCBC

The past five years has seen the LCBC move from exclusively a water-management with a human security agenda body to an organization coordinating a military mission to combat violent extremism. This shift has impacted stakeholder

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[165] African Union, Multinational Joint Task Force against Boko Haram, The Africa-EU Partnership, July 1, 2016 https://www.africa-eu-partnership.org/en/projects/multinational-joint-task-force-mnjtf-against-boko-haram (December 1, 2018).

engagement within the LCBC, with concerns that short-term strategic goals are harming long-term water management objectives.[166]

Tensions regarding the deployment and management of the MNJTF continue to hamper cooperation on long-term water management frameworks.[167] While it could be argued that advances in regional cooperation in security-related areas through the MNJTF could lead to increased cooperation on water management issues, the empirical evidence suggests that the LCBC has sought to pursue each mandate separately.[168] Furthermore, the LCBC continues to face serious difficulties in fulfilling its core water management mandate to coordinate and promote the safeguarding and development of Lake Chad, leading the 2015 joint audit to conclude that, despite existing policies and legislation, the future of Lake Chad has not been sufficiently prioritized by member states, noting an absence of institutional coordination on water resource management in the basin.[169]

While it is not surprising that the MNJTF has contributed to increased securitization in the discourse of the LCBC through a national security lens, this framing has also led to increasing securitization actions with regards to its water management portfolio, with member states and international NGOs using human and ecological securitization pathways to move water management issues, at least in the short term, to the same prominence as the fight against Boko Haram. This is arguably much needed, as military advances without development have been shown to be ineffective. However, this

[166] William Assanvo et al., "Assessing the Multinational Joint Task Force," *Institute for Security Studies*, Issues 19 (2016): 4.
[167] Daniel Agbiboa, "Border that Continue to Bother Us: The Politics of Cross-Border Security Cooperation in Africa's Lake Chad Basin," *Commonwealth and Comparative Politics* 44, No. 4 (2017): 403-425.
[168] Ibid.
[169] Greta Galeazzi, Understanding the Lake Chad Basin Commission, 10.

framing as short-term, in part contributed to the unstructured nature of NGO engagement, has incentived securitization as a method to hold the audience of the securitizing act – the LCBC – and receive relevant funding from international organizations which use the LCBC as their primary stakeholder in the LCB.[170] Ultimately, despite some successes, the increased securitization of the LCBC through its role in the MNJTF has harmed its ability to effectively develop and implement a long-term water management strategy for the LBC. However, it should also be noted that this is indicative of its lack of consistent funding, and member state preferences continue to drive the discourse in the LCB.

Although Boko Haram is undoubtably a significant threat to the region, responses to the insurgency have come to dominate the LCBC and its stakeholder engagement. This at the expense of long-term water management solutions to long-term vulnerability in the region– changing demographics, environmental degradation, and unstable livelihoods – contributed to the rise of Boko Haram in the first place.

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[170] UNDP, "High-Level Conference in Berlin commits to comprehensive crisis response in the Lake Chad Region," *United Nations Development Program*, September 4, 2018 http://www.africa.undp.org/content/rba/en/home/presscenter/events/high-level-conference-on-the-lake-chad-region.html (November 23, 2018).

Chapter 5: The Nile Basin Initiative

The Nile Basin Initiative (NBI) was launched in 1999 as a transitional and temporary institutional mechanism to be replaced by a RBO at a later date. Due to the delay in the development of a fully-fledged commission, the NBI still operates as a decentralized umbrella organization, presiding over transboundary water governance in the Nile River Basin.[171] Crucially, it is the first arrangement in the Nile River Basin to include all riparian states, as opposed to the vast majority of former treaties.

The NBI consists of Burundi, the Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Sudan, Tanzania, Rwanda, and Uganda and seeks to "achieve sustainable socio-economic development through equitable utilization of, and benefit from, the common Nile Water Basin resources."[172] As such, the NBI coordinates on a diverse range of topics including environmental action, hydropower, efficient water uses in agriculture, and water resources planning and management. Structurally, the NBI is made up of the Council of Ministers of Water Affairs of the Nile Basin States (Nile-COM), which serves as the highest decision-making body, the chair of which rotates annually. Nile-COM is subsequently divided into the Eastern Nile Council of Ministers (EU-COM), focusing on the Blue Nile, and the Nile Equatorial Lakes Council of Ministers (NEL-COM).[173]

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[171] ANBO, *Source Book*, 41.

[172] T Waako, "The Nile Basin Initiative: The Roles Functions, and Governance Structure," *Symposium on Science and Policy and Policy Linkages,* 24-26 September 2008, Entebbe, Uganda: United Nations University: 3.

[173] The EN-COM is supported by the Eastern Nile Subsidiary Action Programme Technical Team (ENSAPT), NEL-COM is supported by the Nile Equatorial Lakes Technical Advisory Committee (NELTAC).

The current strategic plan of the NBI (2017-2027) emphasizes varied and consistent stakeholder engagement in the management and development of the Nile basin.[174] However, the role of the NBI within the hydropolitics of the Nile Basin has long been dominated by tension between upstream member states, such as Ethiopia, and downstream states, such as Egypt. This dynamic – as identified by Homer Dixon – is further exacerbated by changing power dynamics in the region, with the longtime hegemon Egypt being increasingly challenged by Ethiopia. In recent years, the discourse of member states has tended to focus on national security, with the construction of the Grand Ethiopian Renaissance Dam (GERD) emerging as a critical faultline, paralyzing other water governance issues in the NBI. While the NBI has had some success in broadening its engagement with non-state actors as well as mediating between member states, it struggles to fulfil its mandate as a long-term water governance mechanism. Overall, the power of member states, historic treaty interpretations, and a lack of meaningful non-state actor engagement has impacted the ability of the NBI to effectively mediate between basin stakeholders. This is further hampered by a lack of multilateral coordination between other institutions such as Intergovernmental Authority on Development (IGAD).

The River Nile Basin: Regional Hegemony and Water Scarcity

At 6,825km long, the Nile River is the longest river in the world, with its basin covering one tenth of Africa and a catchment area of 3.1 million km^2. In terms of national contributions to streamflow, all the Nile water used in Burundi and Rwanda and more

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[174] NBI, *10 Year Strategy 2017-2027* (Entebbe: Nile Basin Initiative, 2017): 1-32.

than half the water in Uganda originates from within each of their national boundaries. However, for the downstream riparians of Sudan and Egypt, 77% and 97% of respective Nile water usage originates outside their borders.[175] In contrast, Ethiopia is by far the great contributor to streamflow, supplying 86% of the Nile's water and 95% during flood periods.[176] Importantly, the river does not form a continuous border between any riparian states, but instead flows through them, which has made it possible for any one state to act unilaterally in developing infrastructure projects on its portion of the river.[177]

Physical Characteristics of the Nile River Basin	
Total basin area	3.1 million km^2
Area rainfall (mm/y)	Average: 600-650mm per month
No. of countries that share the basin	10 (Burundi, the Democratic Republic of Congo, Egypt, Ethiopia, Eritrea, Kenya, Sudan, Tanzania, Rwanda, and Uganda)
Water demand	Irrigation, power generation, and navigation
Population	160,000,000

Table 4: Physical Characteristics of the Nile River Basin

The Nile River Basin is facing increased water stress as ecological changes including sea level rise and changing precipitation patterns combine with dramatic economic expansion. Population growth is exacerbating these risk dynamics, with the region's population predicted to reach 591 million in 2025, growing at a rate of 3% per year.[178] Increased usage is further exacerbated by the effects of climate change and highly

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[175] M El-Fadel, K El-Sayegh, and D Khorbotly, "The Nile River Basin: A Case Study in Surface Water Conflict Resolution," *Journal of Natural Resources and Life Science Education* 32 (2003): 107-117.
[176] D Tadesse, "The Nile: Is it a Curse or Blessing?," *ISS Paper 174,* Institute for Security Studies (2008): 3.
[177] D Malzbender and A Earle, "The Impact and Implications of the Adoption of the 1997 UN Watercourse Convention for Countries in Southern Africa," Africa Center for Water Research (2008).
[178] NBI, "State of the River Nile Basin," *Nile Basin Initiative* (2012): 206.

variable water conditions.[179] Practically all of the river's water is generated from an area covering 20% of the basin, with the reminding 80% classed as arid or semi-arid with minimal water supply and very large evaporation losses.[180] These factors, combined with inefficient agricultural practices, crop subsidies, and dam building have led to increasing tension within the region over water resources.[181] Furthermore, there is a high degree of external water dependency, which has been linked to increasing the risk of socio-environmental violent conflict.[182]

Within this context, the construction of the GERD has emerged as a potential flashpoint for increasing tensions and securitizing actions between basin stakeholders.[183] Egypt, Ethiopia, and Sudan view sustained access to water resources as integral to their national survival and security, and have steadily increased their use of securitizing rhetoric.[184] As such, securitization of the regional water discourse outside the structure of the NBI has important implications for the behavior of stakeholders in its structure and procedures.

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[179] Ibid.
[180] Ibid.
[181] ANBO, *Source Book*, 42.
[182] Homer Dixon, *Environmental Scarcities and Violent Conflict*, 1994.
[183] The total estimated cost of the project is US$ 4.8 Billion and when completed it will be the largest dam in Africa.
[184] Seyfi Kılıç, "Water Security Concept and its Perception in the Egypt," *International Journal of Arts and Commerce* 3, no. 8 (2014).

Nile River Basin: Drivers of Water Stress				
Geophysical	**Ecological**	**Effect on human systems**	**Human responses**	**Feedback**
Sea level rise Decreased precipitation Increase in temperature	Salt-water intrusion Irregular water flows	Increased agricultural stress Increasing fears of state insecurity	Dam building Increased use of water efficient agriculture practices Subsidies to protect domestic industries	Dam building exacerbates interstate tensions Increasing sediment flows, reducing water quality and increasing irrigation

Table 5: Nile River Basin: Drivers of Water Stress

The Diplomatic and Hydropolitical Context

The Nile River Basin has the most complicated institutional governance of the case studies in this thesis. First, despite the efforts of the NBI, there is no multilateral agreement that governs all 11 Nile riparians states. Second, many treaty agreements and resulting claims were formed under British colonial rule, rather than in the context of post-independence sovereign states. As such, the validity of the treaties is continually questioned.[185] Third, even more recent treaties fail to address the changing socio-economic and ecological conditions including climate change, human intervention which alters the streamflow, changing demographics, and the growing problem of pollution.

While, the legacy of colonialism is a factor in the institutional makeup of virtually all water agreements in Africa, the Nile Basin has the highest number of pre-

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[185] K Abraham, "Nile Opportunities: Avenues Towards a Win-Win Deal," The Ethiopian International Institution for Peace and Development and the Horn of Africa Democracy and Development International Lobby (2003).

independence agreements still enacted today.[186] Successive agreements emphasized the hegemony of British control Egypt at the expense of other riparian stakeholders. One such examples is the 1902 treaty signed between Britain (acting for Egypt and Sudan) and Italy-Ethiopia, which explicitly prohibited Ethiopia from engaging in any construction activities of the Nile's headwater that would alter the flow to Egypt.[187] In addition, Egypt's present rights and control over the Nile Basin were taken from the above treaty along with the 1929 Nile Waters Agreement, signed between British-Sudan and Egypt, with gave Egypt its dominant share of the waters with a ratio of 12:1 (to Sudan).

As riparian states gained their independence, issues of historic versus sovereign rights was further complicated regarding questions of water management. In this regard, the 1959 Nile Waters Agreement altered the share between Sudan and Egypt to 1:3. Under this agreement, Sudan was allowed to undertake a series of development projects, such as the Roseries Dam, while Egypt was allowed to build the Aswan Dam which was designed to create assurance of supply, especially during droughts, and also to increase hydroelectric power generation.[188] Once again, Ethiopia rejected this agreement, while Egypt continued to assert the no harm doctrine and its historic claim to the Nile.[189] This

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[186] Aaron Wolf, Atlas of International Freshwater Agreements, 31.
[187] C Okidi, "A Review of Treaties on Conceptive Utilization of Waters of Lake Victoria and Nile Drainage Basins," In J Howell and J Allan eds, *The Nile: Resource Evaluation, Resource Management, Hydropolitics, and Legal Issues* (London: School of Oriental and African Studies, 1990).
[188] Tadesse, The Nile: Is it a Curse or Blessing.
[189] C Spiegel, "International Water Law: The Contributions of Western United States Water Law to the United Nations Convention on the Law of the Non-Navigable Uses of International Watercourses," *Duke Journal of Comparative and International Law* 15 (2005): 331-361.

history of disagreement, along with changing power dynamics, and rising water stress provides the setting for increased securitizing actions of stakeholders with the NBI.

Securitization Dynamics: Changing Hydro-Hegemony

Given the centrality of nation states in its processes, the high degree of water dependency, and a history of ecological marginalization within the region, member states have consistently viewed water stress in terms of national security. Homer Dixon predicted that upstream-downstream dynamics increase the likelihood of conflict, particularly in cases in regional hegemonic transition.[190] Others note that this dynamic is balanced when the strongest or leading country of a region is downstream, as it is more likely that cooperation and shared benefits are seen as more convenient for all riparian states.[191] While Egypt has displayed some cooperative tendencies in the NBI, such as the development of joint climate action plan,[192] this cooperative behavior is prefaced on its interpretation of historic treaties, which explicitly favor downstream states. The economic rise of upstream basin stakeholders such as Ethiopia and their growing calls for "water equality" has led to increasing tensions in the NBI.[193] This ultimately led to Egypt freezing its membership of the NBI in 2010, after Ethiopia successfully lobbied other member states to sign the Cooperative Framework Agreement, which sought to divide the waters of the Nile River equally between NBI states.[194] These tensions were further

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[190] Thomas Homer-Dixon, *Environmental Scarcities and Violent Conflict*, 1994.
[191] Gaia Sinnona, "Two-Tier Water Governance in the Nile River Basin (2018).
[192] Ibid.
[193] Ashok Swain, "Challenges for Water Sharing in the Nile Basin: Changing Geopolitics and Changing Climate," *Hydrological Sciences Journal* 56, no. 4 (2011): 687-702.
[194] Reuters, "Who controls the world's longest river?," *Reuters*, April 23 2018, https://www.reuters.com/article/us-egypt-rice-factbox/who-controls-the-worlds-longest-river-idUSKBN1HU1OE (June 24, 2019).

exacerbated by the strong presence of member state ministers in the NBI's executive committees, which led to the NBI being dominated by member state preferences, negatively impacting its ability to effectively resolve disputes between its members.

In the context of disagreements over the interpretation of treaties and water sharing agreements, the construction of dams such as the GERD have increased tensions. Egypt views sustained access to water resources as integral to their national survival and security. As such, Egypt's engagement with the NBI is governed by its legacy of preferential water agreements, both under colonialism and as an independent state. It has long viewed environmental security within a national security framework and these preferences have actively sought to upload these preferences to the NBI.[195] This was seen during its fraught negotiations in the NBI in the run-up to the signing of the CPA, where several Egyptian ministers threatened military action if Ethiopia continued to construct GERD.[196] While Egypt has since adopted a cooperative stance and sought to desecuritize its language, as evidenced by its reentry into the NBI and the signing of the Declaration of Principles in 2015, it remains fundamentally focused on viewing transboundary water management through a national security lens.[197]

In contrast, Ethiopia views GERD as essential to its long-term development and key to its long-term economic prospects. By successfully aligning upstream member

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[195] T Othieno and S Zondi, "Co-operative Management of Africa's Water Resources: A Basis for Resolving Conflicts on the Nile River Basin," *Institute for Global Dialogue* May 1-4, 2016).
[196] Michael Kelly and Robert Johnson, "STRATFOR: Egypt Is Prepared To Bomb All Of Ethiopia's Nile Dams," *Business Insider*, October 13, 2012, https://www.businessinsider.com/hacked-stratfor-emails-egypt-could-take-military-action-to-protect-its-stake-in-the-nile-2012-10 (June 24, 2019).
[197] Reuters, "Who controls the world's longest river?," *Reuters*, April 23 2018, https://www.reuters.com/article/us-egypt-rice-factbox/who-controls-the-worlds-longest-river-idUSKBN1HU1OE (June 24, 2019).

states against Egypt, which has been heavily criticized by upstream riparian states for its reluctance to compromise on the 1959 agreement, Ethiopia has placed itself as a key player in the NBI.[198] This is in marked contrast to Egypt's historic domination of the NRB water discourse. In terms of securitization dynamics, Ethiopia has simultaneously sought to cooperate within the NBI structure, while using both national and human security rhetoric to justify the construction of the GERD. In addition, the construction of GERD is the cornerstone of Ethiopia's National Growth and Transformation Plan, and furthermore, it fits into its discourse concerning the Sustainable Development Goals and the AU 's long-term development initiative, Agenda 2063.[199]

After initially siding with Egypt, Sudan has declared neutrality in the conflict between Ethiopia and Egypt. While Sudan has historically benefited from treaties signed between it and Egypt, it also stands to benefit from the construction of GERD which will divert water from the primary Nile tributary, towards farmland sporadically irrigated by the Roseries Dam.[200] As the GERD will deliver a continuous flow to the Roseires Dam, Sudan could increase the amount of water it takes from the Nile River. As a result, Sudan has begun selling new agricultural leases for water usage, further signally its diplomatic shift towards Ethiopia. Moreover, Sudan has accused Egypt of mishandling the dispute, clearly indicating a change in diplomatic stance as the benefits of GERD to Sudan have become clearer.[201]

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[198] Inga Jacobs, *The Politics of Water In Africa* (New York: Bloomsbury, 2015): 113.

[199] S Dibaba, "Ethiopia: GERD - Iconic Project for the Realization of AU Aspirations," *All Africa, December 1, 2017,* http://allafrica.com/stories/201703080393.html (June 1, 2019).

[200] Y Yihedgo, A Khalil, and H Salem, "Nile River's Basin Dispute: Perspectives of the Grand Ethiopian Renaissance Dam (GERD)," *Global Journal of HUMAN-SOCIAL SCIENCE: B Geography, Geo-Sciences, Environmental Science & Disaster Management* (2017): 1-21.

[201] Ibid.

Regional and International Context

The NBI is notable as the only case study in this thesis with no systematic coordination with other regional structures. Despite the World Bank playing a critical role in the creation of the NBI, and the presence of long-term funding from the EU and Germany, the NBI has not sought to align itself with either Intergovernmental Authority on Development (IGAD) or the East African Community (EAC).[202]

Despite this, basin stakeholders have sought to use securitization of water within other regional bodies, as a strategy for pressuring desired actions in the NBI. For example, Egypt's President Sisi used his AU chairmanship in 2019 to advocate for the treaty interpretations within the 2015 Declaration of Principles, which acknowledged the need to shield downstream states from "significant harm", while simultaneously warning upstream states that Egypt would defend its water rights if needed.[203] This action, while taking place outside the NBI, negatively impacted the initiative's ability to effectively mediate between its member states. In response, Ethiopia announced it would increase the fill up rate of the GERD, reducing the amount of water that downstream states, such as Egypt, would receive. Within this increasingly securitized rhetoric the NBI has proved incapable of providing a common platform for conflict resolution between Egypt and Ethiopia.[204]

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[202] International Crisis Group, "Bridging the Gap in the Nile Water Dispute," *International Crisis Group*, March 20, 2019 https://www.crisisgroup.org/africa/horn-africa/ethiopia/271-bridging-gap-nile-waters-dispute (March 2, 2019).
[203] Ibid.
[204] Mwangi S. Kimenyi and John Mukum Mbaku, "The limits of the new "Nile Agreement," *Brookings, April 28 2018,* https://www.brookings.edu/blog/africa-in-focus/2015/04/28/the-limits-of-the-new-nile-agreement/ (June 24, 2019).

Non-State Actors

Non-state actor engagement in the NBI is framed through a project lens, which encourages short-term funding for specific water related management activities.[205] While there is no one mechanism for non-state actor engagement, the 'Confidence Building and Stakeholder Involvement' (CBSI) project, which ran from 2004 to 2009, provided entry for these actors to influence the broader water management decisions of the NBI. This was then developed into the 'Communication and Stakeholder Engagement Strategy' in 2013, which became part of the NBI's Strategic Plan in 2017.[206] Despite this, funding is limited and continues to focus on short-term projects, which incentivizes short-term securitizing actions by non-state actors, as a method of securing limited funds for a limited time period. In addition, complex enforcement criteria further limited civil society participation.[207]

As a response to these first ad hoc mechanisms, in 2003 NGOs established the Nile Basin Discourse (NBD), a network of civil society organization which sought to strengthen civil society participation in the NBI's processes, projects, programs, and policies.[208] The objective of this collaboration was to enable horizontal communication across NGOs as well as vertical communication with the NBI.[209] While the NBD has had some success in providing a structured platform to facilitate discussions on long-term water management, projects continue to heavily focus on short-term funding, with an

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[205] ANBI, *Sourcebook,* 39.
[206] NBI, "CBSI project completion report," *Nile Basin Initiative* (2009): 22.
[207] Ibid, 8.
[208] Nile Basin Discourse, "Civil Society Engagement in Nile Cooperation and Development," *Nile Basin Discourse* (2013).
[209] World Bank, "Citizen Voices Shape Nile Basin Resilience Investments," *World Bank,* May 12, 2017 https://www.worldbank.org/en/news/feature/2017/05/12/citizen-voices-shape-nile-basin-resilience-investments (December 3, 2019).

emphasis on human securitization pathways. Economic and energy security is also mentioned in reference to water security, further indicating that the project focus of the NBI's non-state actor engagement, while leading to cooperative measures such as the establishment of the NBD, has securitized non-state actor engagement with the NBI.[210]

The Impact of Securitization on the NBI

Despite the extensive securitization actions documented above, the NBI has had some success in providing guidance and implementing strategies relating to the management of environmental flows and the building climate adaptation into large infrastructure projects.[211] However, the fact that the NBI has not advanced to a fully-fledged commission is evidence that differences remain between stakeholder regarding the long-term management of the Nile Basin.

With regards to the GERD, one area of potential collaboration is NBI leadership on the dam fill up rate. Despite the initial diplomatic push coming from outside the NBI, in a series of tri-lateral talks between Egypt, Ethiopia, and Sudan, the NBI has been positioned by basin stakeholders as a potential coordinating body for monitoring and data sharing.[212] This demonstrates the potential effectiveness of the NBI to effectively mediate between member states preferences. However, it is also clear that the NBI is unable to advocate for such positions independently, and can only assume such roles when key member states allow it to.

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[210] NBI, *10 Year Strategy 2017-2027* (Entebbe: Nile Basin Initiative, 2017): 1-32.
[211] NBI, Strategy for Management of Environmental Flows in the Nile Basin, Nile Basin Initiative (2016).
[212] International Crisis Group, *Bridging the Gap.*

Chapter 6: Lake Victoria Basin Commission

Established in 2001 as an organization of the East African Community (EAC)
under the Sustainable Development Protocol, the Lake Victoria Basin Commission
(LVBC) operates within broader regional governance structures, to a greater degree than
other RBOs in this thesis. Its members include every member of the EAC – Burundi,
Kenya, Rwanda, South Sudan, Tanzania, and Uganda – and it acts as a center for
investment and information sharing among basin stakeholders.[213] The founding Protocol
of the LVBC also stresses the importance of "public participation in policy and projects
formulation."[214] In addition, the LVBC focuses on harmonizing policies and laws on the
management of the environment, eradicating alien species which can harm the ecology of
the basin, managing conservation of aquatic resources including fisheries, and overseeing
economic activities (industry, agriculture, and tourism).[215] Additionally, it also focuses on
developing hydraulic infrastructure such as irrigated agriculture and hydropower.[216]

The goals of the organizations are firmly centered on human security, with
eradicating poverty and sustainable development being its core objectives. These
objectives are supported through the harmonization of laws, regulations, and standards,
and the promotion of stakeholder participation. This second area has been a source of
increased member state competition as securing institutional funding and support from

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[213] EAC, "Lake Victoria Basin Commission," *East African Community* (2011).
[214] EAC, "Protocol for Sustainable Development of Lake Victoria Basin," *East African Community* (2003): 7.
[215] Ibid.
[216] Ibid.

the LVBC and the EAC is a crucial step for a member state in developing their own water resources.[217]

The structure of the LVBC is different from the LCBC and the NBI for two reasons. First, it is the only RBO analyzed here that is intentionally integrated into its relevant regional economic community, the EAC. Second, it is also notable for systematically including non-state actors into its governing structure. Third, while dispute resolution between basin stakeholders is an element of all RBOs, the previous two case studies have shown that such mechanisms are often unstructured and lack enforcement capacity. In contrast, the LVBC has an explicit dispute resolution mechanism that is integrated into the judicial structure of the EAC. These three differences impact both the degree of securitization and the pathways used. While securitization by basin stakeholders is still evident, dispute settlement mechanisms in the LVBC deter long-term securitization actions.

Lake Victoria Basin: Competing Interests

The Lake Victoria Basin (LVB) is the largest freshwater body in Africa and the largest inland fishery in the world, accounting for $500 million per annum. The Lake is rich in different resources that provide the core livelihoods for those who live around it, including transport, trade, and fishing. Additionally, these resources are used in other economic sectors such as tourism and mining. However, Lake Victoria's vulnerability is increasing, with climate change, pollution, deforestation, and overfishing combining to

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[217] R Abeer and Y Abazeed, "Bridging the Gap Between Civil Society and the Nile Basin Organizations," *United Nations University* (2018): 7.

negatively impact poverty alleviation efforts and economic development. In addition, increasing water stress has increased tension between basin stakeholders at all levels.[218]

Physical Characteristics of the Lake Victoria Basin	
Total basin area	59,947 km^2
Area rainfall (mm/y)	18.5 mm per month
No. of countries that share the basin	6 (Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda)
Water demand	Agriculture, hydropower, fisheries, industrial activity
Population	40 million

Table 6: Physical Characteristics of the Lake Victoria Basin

Lake Victoria is crucial to the economic livelihoods of the basin's inhabitants, as well as the economic interests of its riparian states, to varying degrees. Forty million people rely on it for their livelihood, with nearly 50% of them living on less than $1.25 a day.[219] Food security among local inhabitants and the long-term water security for basin states are the most pertinent connections between the LVB and human systems.

In addition, there are significant economic interests in the lake's resources, as it provides crucial inputs for the economies of Kenya, Tanzania, and Uganda. Uganda relies on the Lake Victoria Basin for 90% of its hydropower. This energy dependence, and the accompanying construction of a dam, has led to increased tensions with other member states, who have accused Uganda of not sufficiently consulting with other basin stakeholders. NGOs have also accused the Ugandan government of not correctly assessing the impact of the second dam on Owen's Falls, which has been running at half

[218] UNDP, "International Waters: Review of Legal and Institutional Frameworks," *United Nations Development Programme: International Waters Project* (2011): 172.
[219] World Bank, "Reviving Lake Victoria by Restoring Livelihoods," *Wold Bank*, February 29, 2016 http://www.worldbank.org/en/news/feature/2016/02/29/reviving-lake-victoria-by-restoring-livelihoods (November 28, 2018).

capacity due to a recent drop in the water level of Lake Victoria.[220] In addition, Kenya relies on Lake Victoria for over half of the country's freshwater supply.[221]

While violent conflict and increased tension is less pronounced in the LVB when compared to the River Nile and Chad Basin, low level violence over resources, such as land and access to fish stocks, has become increasingly prevalent. This has been aided by poor governance and corruption.[222] For example, increases in farming around Lake Victoria tributaries such as the Naro Moru River has increased water stress for downstream communities. These communities, who are primarily pastoralists, have responded by undertaking upstream water raids and blocking water intakes for farm irrigation systems, leading to retaliatory actions from farming communities, despite the increased presence of Kenyan security forces.[223]

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[220] Jason Beaubien, "Uganda's Thirst for Electricity Drains Lake Victoria," *National Public Radio*, March 7 2006, https://www.npr.org/templates/story/story.php?storyId=5250126 (June 28, 2019).
[221] Tadesse, The Nile: Is it a Curse or Blessing.
[222] C.T. Kirema Mukasa, J. P. Owino, and K. West, "Conflict over Transboundary Fishery on Lake Victoria and its Management," *Lake Victoria Fisheries Organization* (2001): 149.
[223] C Mumma-Martoinon, "Role Of Sub Regional Organizations In Preventing Water-Related Conflicts In The Eastern African Region," *International Peace Support Training Centre* (2010): 20.

Lake Victoria Basin: Drivers of Water Stress				
Geophysical	**Ecological**	**Effect on human systems**	**Human responses**	**Feedback**
Reduced rainfall Reduction in ground water Declining fish stocks	Increased flooding and drought	Increased economic stress Negative impact of human livelihoods	Increased irrigation for cash crops Increased competition for fisheries	Increased economic use further reduced groundwater Low-level violence over national resource rights incentivizes overfishing, further reducing fish stocks

Table 7: Lake Victoria Basin: Drivers of Water Stress

The Diplomatic and Hydropolitical Context

Lake Victoria is connected to the Nile and its water has been a central element in the evolution of regional integration in East Africa. However, the development of water governance in the Lake Victoria basin has been markedly different than that of the River Nile, due to the differences in water flow (lake vs. river) and the legacy of colonialism. As early as the 1920s, Lake Victoria has been a central pillar of governance in the region, as seen when the British colonial territories of Kenya, Uganda, and Tanganyika (now Tanzania) united to form a customs union.[224] The development of modern governance of the basin's resources is inextricably linked to the rise and fall of regional integration efforts in East Africa.

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[224] Peter Kagwanji, "Calming the Waters: The East African Community and Conflict over the Nile Resources," *Journal of East African Studies* 1, no. 3 (2007): 323-325.

The Nile River and Lake Victoria also played a central role in the development of debates in the original EAC, which was created in 1967. However, disagreements between member states' ideologies and the costs of regional integration led to the community collapsing in 1977, removing transboundary water management mechanisms from Lake Victoria.[225] The revival of the EAC in 1999 marked the re-emergence of regionalism in a post-Cold War East Africa. Peter Kagqanja argues that this re-emergence was made possible by the removal of competing ideologies, the emergence of a common bond of democratization and the rule of law, and the fear of being left behind in the midst of Africa's integration wave.[226] Related to these factors was the desire to develop the Basin's natural resources, which decreased the relative importance of other factors.

The new EAC's stated purpose is the "policies and programmes aimed at widening and deepening co-operation among the partner states in political, economic, social and cultural fields, research and technology, defence, security and legal and judicial affairs, for their mutual benefit."[227] This broad and vague mandate has enabled the EAC to dominate the discourse on regional issues, including the management of water resources in Lake Victoria through its role in the LVBC.[228]

Facing the economic, environmental, and human needs identified in the previous section, Nyanjom rightly stated that the EAC is measured against its ability to ensure the

[225] Peter Kagwanji, *Calming the Waters,* 326.
[226] Ibid.
[227] EAC Secretariat, Treaty for the Establishment of the EAC, Article 5(1).
[228] Ibid.

use of resources in a peaceful and secure environment.[229] However, the question of who these resources are secured for continues to dominate the LVBC.[230]

Securitization Dynamics: Structured Engagement and Dispute Settlement

Historic rivalry between Kenya and Uganda over the region's water resources has important implications for their relationship within the LVBC. Both claim Migingo Island, in what has become known as "Africa's smallest war," in their attempts to expand their respective fishing waters.[231] This territorial dispute is but one example of increasing tension of the future use and management of Lake Victoria. This should be viewed in the context of declining fish stocks, increasing sargassum blooms harming navigation, and riparian states seeking to expand hydropower.[232] It is unusual when compared to other African river basins, as Lake Victoria has historically operated on an Open Access Agreement, which allows basin stakeholders to use the lake's previously abundant resources.[233] However, in the midst of rising water stress, this state of affairs has also led to increasing state-based securitizing actions, as stakeholders seek to secure scarce resources using the language of security.

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[229] V Sridharan, E P Ramos, C Taliotis, M Howells, P Basuddem, and I V Kinhonhi, "Vulnerability of Uganda's Electricity Sector to Climate Change: An Integrated Systems Analysis," in W Leal Filho eds, *Handbook of Climate Change Resilience* (New York: Springer, 2018).

[230] O Nyanjom, ''Can the EAC Help to Deliver the Millennium Development Goals?,'' in Rok Ajulu *The Making of a Region: The Revival of the East African Community* (Johannesburg: Institute for Global Dialogue, South Africa, 2005).

[231] Andrea Dijkstra and Jeroen Van Loon, "Migingo Island: Africa's 'smallest war'," *Al Jazeera*, February 18, 2019 https://www.aljazeera.com/indepth/inpictures/migingo-island-africas-smallest-war-190217150742518.html (January 2, 2019).

[232] S M Glaser, C S Hendrix, B Franck, K Wedig, and L Kaufman, "Armed conflict and fisheries in the Lake Victoria Basin," *Ecology and Society* 24, no. 1 (2019): 25.

[233] Ibid.

Given its energy dependency on the LVB, Uganda has used economic security framing in its relations with other basin stakeholders and the LVBC. For example, the speech by President Yoweri Museveni at the stone-laying of the Bujagali hydropower dam, which was at its time the largest hydropower plant in Africa, emphasized state securitization pathways through the promotion of energy independence for Uganda.[234] In addition, the use of hydropower is a key part of Uganda's Sustainable Development Goals commitments, as it transitions to greener forms of energy generation.[235] However, this growing dependence on a resource which is ultimately shared with other states, changing demographic and climate pressures, and a historic fear of Kenya monopolizing its water rights, has led to the Government of Uganda using a security discourse in the LVBC relating to questions of economic and energy policy.[236]

However, Uganda has also displayed cooperative behavior, albeit within the securitized framework. An interesting aspect of this strategy has been the growing calls by Uganda for collective regional energy security through improved management of Lake Victoria and its drainage basin. By design, this would require increased cooperation between LVBC member states. Thus, as noted by Sadoff and Grey, securitization does not automatically led to increased tension and closing political space, and these efforts by Uganda do demonstrate that collective security can be achieved within a securitized framework.[237]

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[234] AKDN, "Foundation stone-laying ceremony of Bujagali hydropower project," *AKDN*, August 21 2019, https://www.akdn.org/speech/he-yoweri-kaguta-museveni/foundation-stone-laying-ceremony-bujagali-hydropower-project (June 24, 2019).
[235] UBOS, "Uganda Bureau of Statistics 2016 statistical abstract," Uganda Bureau Office of Statistics (2016).
[236] Peter Kagwanji, *Calming the Waters,* 326.
[237] Claudia Sadoff and David Grey, *Beyond the River*, 393.

Tanzania invoked both state-based and human-based securitization pathways in the construction of the Shinyanga pipeline project. Launched in 2005 in response to increasing water scarcity, the government of Tanzania, including Edward Lowassa, the then Minister for Water and Livestock Development, emphasized the water insecurity of communities in Tanzania's semi-arid regions of Mwanza and Shinyanga, as well as the future water security of Tanzania. The language was adopted after significant pressures from local politicians and non-state actors from these areas.[238]

Finally, while Kenya is notable for framing its use of water resources in terms of national development, it has increasingly used a state security discourse with regards to fishery disputes, particularly with Uganda. As fish stocks decrease, border disputes between basin states have increased, especially as fishing boats move further afield. In response, Kenya has demonstrated increasing state security based rhetoric, framing the issue as a border dispute that threatens the territorial integrity.[239]

Regional and International Context

As previously stated, the LVBC sits within the broader institutional structure of the EAC.[240] The organization promotes the establishment of a range of regional development, economic cooperation, trade, and political cooperation initiatives, including the management of the LVB. Despite reservations being expressed by its smaller members, most notably Uganda and Tanzania, that Kenya's economic hegemony would

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[238] C Mumma-Martoinon, *Role Of Sub Regional Organizations In Preventing Water-Related Conflicts In The Eastern African Region,* 20.
[239] Ibid, 19.
[240] A Cascao, "Changing Power Relation in the Nile River Basin: Unilateralism vs. Cooperation?" *Water Alternatives*, 2, no. 2 (2009): 245-68.

lead it to dominate the EAC and LVBC, all member states have broadly benefited from membership, as indicated by continued funding and engagement with the EAC.[241]

This supranational structure within the LVBC is also critical in its dispute mechanism. Article 46 of the LVBC Protocol provides the dispute resolution procedures to be used when disputes arise between the member states concerning the interpretation or application of the LVBC decisions. This presents a structured approach to conflict resolution which is markedly different to the LCBC and the NBI. First, the member states must seek to resolve the dispute by negotiation. If negotiations fail, either member state involved in the dispute or the Secretary General of the EAC may refer the dispute to the East African Court of Justice. The decision of the East African Court of Justice regarding the dispute shall be final.[242] While this apparatus has to date not yet been used, it can be argued that it effectively acts as a deterrent and incentivizes cooperative behavior between member states. [243] This represents a positive aspect of the high degree of institutionalization with the EAC, as legitimate dispute mechanisms exists for the settling of stakeholder disputes.

Non-State Actors

The LVBC Protocol defines stakeholders as "all persons, legal or natural and all other entities being governmental or non-governmental, residing, having interest or

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[241] Inga Jacobs, Politics of Water in Africa, 124.
[242] International Water Governance, "Lake Victoria Basin Commission and the Lake Victoria Fisheries Organization," *International Water Governance, 2019* http://www.internationalwatersgovernance.com/lake-victoria-basin-commission-and-the-lake-victoria-fisheries-organization.html (June 3, 2019).
[243] C Mumma-Martoinon, *Role Of Sub Regional Organizations In Preventing Water-Related Conflicts In The Eastern African Region,* 20.

conducting business in the Basin."[244] This along with its broad focus on human security is reflected in the LVBC's stakeholder engagement. Stakeholders, including civil society and the business community, are represented in sectoral committees, a key difference when compared to other RBOs in this study. Within this institutionalized structure, representatives from civil society organizations, the private sector, and research institutes are all invited to discuss the sectoral policy agenda before it is sent to the Minister's Council.[245]

Examples of this process include the Water Safety Plan and the Drought and Flood Management Tool project, both of which were developed with the private sector and key community groups. This participation has been key in reducing the risk of low-level violence through conflict resolution practices such as community dialogues on contested natural resource issues.[246]

The Impact of Securitization on the LVBC

While the LVBC is structured to emphasize long-term environmental management, in certain instances the commission has sought to securitize climate-related water issues. Within the EAC, the LVBC shares water management responsibilities with many other organizations including the Lake Victoria Fisheries Organization. While this allows the LVBC to coordinate with other actors in the EAC, disagreements between EAC stakeholders on other issues can impact the effectiveness of the LVBC through

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[244] EAC, *Lake Victoria Basin Commission*, 2011.
[245] ANBO, *Source Book*, 36.
[246] S M Glaser, C S Hendrix, B Franck, K Wedig, and L Kaufman, "Armed conflict and fisheries in the Lake Victoria Basin," *Ecology and Society* 24, no. 1 (2019): 25.

issue linkage.[247] This represents a disadvantage of the strong association between the

LVBC and the EAC. Despite this, the LVBC's use of structured non-state actor

engagement and dispute settlement procedures has disincentivized the use of short-term

securitization actions. This has arguably led to increased buy-in and reduced the risk of

intra-state conflict in member states. One area where this approach appears to be less

successful is attempts to develop a regional hydropower management plan. In this area,

as evidenced by continued unilateral infrastructure projects, member state security

preferences remain in ascendance.

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[247] Annie Barbara Chikwanha, "The Anatomy of Conflicts in the East African Community (EAC): Linking Security With Development," *Keynote Speech to Development Policy Review Network-African Studies Institute, Leiden University* (2007).

Chapter 7: Accounting for the Divergence: Implications for Water Governance

The empirical evidence presented in this thesis shows a diversity of securitization dynamics in Africa's RBOs, in terms of stakeholders, securitization pathways, and multilateral responses. It is clear that RBOs take a variety of different actions in the name of water security under different paradigms, from international fundraising, direct mediation between states, stakeholder engagement, and data sharing being the most pertinent examples. Secondly, despite the fact that the academic literature has not come to any definitive conclusion regarding the link between water stress, environmental degradation, fragility, and violent conflict, transboundary water organizations are responding to growing water stress in Africa through a security discourse. Several conclusions can be drawn both from this analysis of securitization dynamics.

First, the altered securitization framework outlined in this thesis allows the methodology to assess a wider range of securitizing actions. In particular, relaxing the assumptions regarding countervailing measures and viewing securitization as an incremental process, are vindicated by the empirical case studies. In many instances, while security framing in the case studies did not reach the level of language of existential threat, this framing nevertheless had a profound impact on policy, both in basin stakeholder interactions and in the procedures of the relevant RBO. In addition, the type of security pathway – state, human, or ecological – also influenced securitization dynamics. In other words, how basin stakeholders act and interact within these biophysical and socio-economic systems, and how relevant actors perceive and act

towards these systems actively shape the divergence in mandates, interpretations of water security, and policy effectiveness of RBOs.

Accounting for the Divergence

The different securitization pathways in the case studies show a diversity of policy outcomes related to the security discourse. In the Nile Basin Initiative, securitization has arguably brought the organization to a standstill, preventing it from coordinating on a wider range of other water topics such as increasing stakeholder engagement, livelihood diversification, and salination. In contrast, despite disagreement between member states on topics such as fisheries and hydropower, the Lake Victoria Basin Commission has been more successful in providing a platform for discussion and decisions on nutrition, climate change, and the continued development of Lake Victoria. The Lake Chad Basin Commission falls in the middle. While security cooperation between its member states in the Multinational Joint Task Force has arguably been successful in combating violent extremism in the Lake Chad Basin, this dynamic has had two implications. First this change in focus has diverted attention from the traditional water management activities in the LCBC, and second, funding for the LCBC has become increasingly securitized, as reflected in recent international conferences dominated by the language of security. Within this analysis, three factors can be discerned which influence securitization dynamics in RBOs.

The Contested Nature of Water Security

The contested nature of security and its consequent potential for abuse is often overlooked by proponents of water security.[248] Water security means different things to different people and not every interpretation of water security is conducive to sustainable water management and mitigating the risk of inter and intra state conflict. It is also important to note that transboundary water governance is a dynamic process, with member state preferences changing over time. These imbedded processes can obscure underlying drivers of tension and violent conflict. It also reiterates the point that water stress and its links to socio-environmental conflict is inherently a social process, and while stakeholders may respond to changing ecological and geophysical processes, how they interpret this change in terms of security can look very different depending on internal states dynamics, and the structure of the transboundary water management system.

The securitization pathways methodology presents in this thesis provide framework for analyzing these dynamics. As the case studies demonstrate different interpretations of water security through the sectoral approach, builds on the securitization framework proposed by Buzan and connects it to the critical security studies literature which seeks to problematize the concept of security. This approach illuminates different aspects of securitization practices in RBOs.

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[248] Rita Floyd, "Whither Environmental Security Studies" in Rita Floyd and Richard A. Matthew eds, *Environmental Security Approaches and Issues* (London, Routledge: 2013), 284.

RBO Structure and Procedures

The institutional structure of the RBO clearly influences the degree to which basin stakeholders undertake securitization actions. In part due a historic lack of funding, RBOs often heavily rely on member state environmental ministries, both for leadership and technical capacity. Evidence of this can be seen in all the RBOs analyzed in this thesis, where leadership of the organization rotates member states. In addition, they all rely to varying extents on member state environmental ministries to provide technical management. The disadvantage of this model is that member states are incentivized to securitize objectives which are important to them in the short-term. This is arguably not conducive for long-term water management.

Similarly, evidence across the case studies show that non-state actors often use the language of security to elevate issue areas into RBO secretariats. This behavior is to a certain extent incentivized, by the unstructured engagement procedures of RBOs. RBOs that centralize member state preferences, such as the LCBC and the NBI, also tended to exclude non-state stakeholders from their processes. Conversely, the structured engagement model formalized within the LVBC provides a greater incentive for non-state actors to engage in long-term water management projects.

Integration with Other Multilateral Frameworks

The final key area of divergence is the degree to which RBOs are integrated into other regional organizations. The LVBC is by far the most integrated, and this has allowed it to maintain flexibility, ensure sustainable funding, and mitigate the risk of socio-environmental conflict through extended conflict resolution mechanisms. This is contrasted by the NBI, which lacks a defined conflict resolution mechanism, leaving it

incapable to resolve conflicting member state preferences. While this structure can

incentivize free-riding and competition over resources and institutional influence, its

open structure allows for improved coordination and financing of local projects which are

providing sustainable development and environmentally sensitive peacebuilding.[249]

Problematizing Securitization Outcomes

Ultimately, this thesis problematizes the common assumption that securitization is

inherently a negative outcome. The securitization-desecuritization prism is not sufficient

for analyzing the varied outcomes of the security discourse relating to the wide range of

topics in transboundary water management.[250]

First, in several cases identified, securitization along human and ecological

security pathways was crucial in driving funding towards water management issues. This

was seen, both by international NGOs in the Lake Chad Basin, which sought to securitize

through a human security pathway. In addition, a subset of NGOs in the Lake Victoria

Basin used ecological security framing to advocate for increased funding for long-term

water management.

Second, desecuritization and its potential positive impact is not uniform. The

traditional securitization literature views desecuritization as desirable, as it brings an

issue back into the realm of "normal politics" where the issue can be discussed without

closing down political space. However, desecuritization towards a technical outcome can

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[249] Examples of this include the Lake Victoria Environmental Management Plan (LVEMP), implemented by the EAC with support of the LVBC. To date it has funded over 600 'community driven development' projects. World Bank, "Reviving Lake Victoria by Restoring Livelihoods," The Wold Bank, February 29, 2016 (November 28, 2018).
[250] Rita Floyd, "Whither Environmental Security Studies" in Rita Floyd and Richard A. Matthew eds, *Environmental Security Approaches and Issues* (London, Routledge: 2013), 284.

also remove the issue from normal politics, thereby entrenching the current state of affairs. Seeking purely technical solutions can alienate stakeholders and entrench inequality, as seen in Lake Chad where non-state actors viewed the technical solutions as continued marginalizing several communities. In contrast, while the securitization of water issues can lead to more effective decision making, as seen in with the MNJTF, securitization dynamics can also be abused by the strongest actors in society, which can subsequently increase structural and ecological inequalities and conversely increase the risk of violent conflict.[251] This is evidenced in the River Nile Basin, where powerful state actors have used securitization language to claim water resource rights, often to the detriment of long-term water management.

Third, when analyzing how RBOs construct water related threats, it is vital to consider how the prevailing regional security discourse impact the positions of basin stakeholders. These discourses implicitly reflect core security concerns that shape official and nonofficial output of regional arrangements such as RBOs. Such discourses can increase securitization actions within RBOs. This dynamic is seen in the historic rivalries between Uganda and Ethiopia, and Egypt and Ethiopia negatively impact the work RBOs by reducing the collective ability of basin stakeholders to address growing long-term water management.

As water stress continues to rise, it should be expected that securitizing actions by basin stakeholders will also increase. This, along with population growth, economic expansion, and climate change will continue to drive water insecurity across the

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[251] Ibid, 283.

continent. Despite this RBOs do not proactively address the impact of such actions on their policy planning and procedures.[252] Empirical evidence from this thesis suggests that consistent funding, structured procedures for non-state actor engagement, and dispute settlement mechanisms are all crucial in improving stakeholder engagement in RBOs and reducing the incentives to undertake short-term securitizing actions.

This thesis only provides a broad assessment of these dynamics and future research would benefit from studies which analyze the micro actions of basin stakeholders across a wider range of RBOs. Understanding these securitization dynamics, the diverse pathways in which this can take place, and how the transboundary governance structures help or hinder this process is vital for designing effective multilateral water governance institutions. In a future where RBOs will only to grow in importance, understanding these dynamics is critical to ensuring Africa's RBOs are adequately equipped to respond to these changing security dynamics.

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[252] C Mumma Martinon, *Role of Sub-Regional Organizations in Preventing Water-Related Conflicts in the Eastern African Region*, 38.

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Appendices

List of River Basin Organizations in Africa.[253]

	River Basin Commission	River Basin	Founded	Total Area	Length of River	Population	Member States
1	International Commission of Congo-Oubangui-Sangha	Congo River Basin	1999	3,699,100 km2	5,100 km	50 million	Angola, Burundi, Cameroon Central Africa Republic, DRC, Congo, Gabon, Malawi, Rwanda, Tanzania, Zambia
2	Organization for the Management of Gambia River (OMVG)	Gambia River Basin	1989	69,999 km2	1,000 km	1.4 million	Gambia, Guinea, Senegal
3	Incomaputo Watercourse Commission	Incomaputo River Basin	1993	77,400 km2	810 km	3.25 million	South Africa, Swaziland
4	Komati Basin Water Authority	Komati River Basin	1992	44,800 km2	480 km	Not available	South Africa, Swaziland, Mozambique
5	Lake Chad Basin Commission	Lake Chad Basin	1964	2,388,700 km2	NA	47 million	Cameroon, Chad, Niger,

[253] Information obtained from RBO websites; AMBO, *sourcebook,* 2007; and the World Bank.

						Nigeria, Algeria, Central Africa Republic, Libya, and Sudan
6	Lake Victoria Basin Commission	Lake Victoria Basin	2003	181,000 km2	NA	26 million	Burundi, Kenya, Rwanda, Tanzania, Uganda
7	Limpopo Water Course Commission (LIMC)	Limpopo River Basin	2003	414,800 km2	1750 km	14 million	Botswana, Mozambique, South Africa, Zimbabwe
8	Niger Basin Authority	Niger River Basin	1980	2,113,200 km2	4,200 km	109 million inhabitants	Algeria, Benin, Burkina Faso, Cameroon, Chad, Ivory Coast, Guinea, Mali, Niger, Nigeria, Sierra Leone
9	Nile Basin Initiative	Nile Basin	1999	3.04 million km2	81,500 km	280 million	Burundi, DRC, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Uganda

10	Permanent Okavango River Basin Water Commission	Okavango River Basin	1994	725,000 km2	1,100 km	800,000	Angola, Botswana, Namibia, Zimbabwe
11	Orange-Senque River Commission	Orange River Basin	Not available	850,000 km2	2,300 km	14.1 million	Botswana, Lesotho, Namibia, South Africa
12	Organization for the Development of Senegal River	Senegal River Basin	1972	490,000 km2	1,800 km	3.5 million	Guinea, Mali, Mauritania, Senegal
13	Volta Basin Initiative	Volta River Basin	Not available	414,000 km2	1,610 km	14 million	Benin, Burkina Faso, Ghana, Ivory Coast, Mali, Togo
14	Zambezi Watercourse Commission	Zambezi River Basin	2004	1,570,000 km2	2,650 km	38 million	Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia, Zimbabwe