Central European Journal of International and Security Studies
Ahead of Print

DOI: 10.51870/GRRP7450
Research article

The Politics of Water Security in the Nile Basin: From Hydrohegemony to Community of Hydrosecurity?

Zelalem Tesfaye Sirna
Addis Ababa University, Ethiopia, corresponding address: zelalem.tesfaye430@gmail.com

Abstract

The politics of transboundary water security (TWS) reflect a complex interplay of power, discourse and competing national interests. Focusing on the Nile Basin and the Grand Ethiopian Renaissance Dam (GERD), this paper examines how water security has become a contested political and security concept between upstream and downstream riparian states. Drawing on primary data generated through in-depth and semi-structured interviews with senior Ethiopian officials, GERD negotiators and transboundary water experts, the study offers an empirically grounded and theoretically informed analysis of TWS, an area that remains underexplored within both security studies and transboundary water governance scholarship. The paper conceptualises TWS as an intersubjective field of struggle in which competing hydro-concepts: hydrosovereignty, hydrosecurity, hydrohegemony, hydropolitics and hydrosolidarity/hydroharmony are mobilised to advance divergent political claims. These hydro-concepts correspond to distinct security paradigms, including competitive, cooperative, collective, common and community security, revealing how water governance debates are embedded within broader security imaginaries. The analysis shows that the GERD has intensified these contestations while simultaneously exposing the limits of unilateral and securitised approaches to Nile governance. The paper argues that hydrosolidarity, grounded in cooperative sovereignty, where sovereignty is reimagined as hydrological interdependence rather than absolute

territorial control, offers a viable pathway toward the emergence of a transboundary water security community in the Nile Basin.

Keywords: *Grand Ethiopian Renaissance Dam (GERD), hydrosolidarity, Nile Basin, security paradigms, transboundary water security*

First published online on 1 June 2026

Introduction

Transboundary water governance increasingly demonstrates that co-riparian practices can shape the evolution of international water law, creating what has been described as 'normative security', where states engage through cooperative principles and cultivate a 'community of interests' (Cullet et al. 2021; Gobana 1985; McCaffrey 2019; Ziganshina 2014). However, this general understanding does not fully capture the diversity of transboundary water security contexts. For example, the Nile River Basin exemplifies a competitive water security environment, where historical, political and geographical factors have limited the development of a cohesive basin-wide regime. In this context, prevailing sovereignty-centric approaches (hydrosovereignty, hydrohegemony and hydropolitics) have struggled to evolve into frameworks grounded in hydrosolidarity or a broader water security community.

The limitations of international water law in addressing water security are reinforced by the influence of traditional realist perspectives hindered cross-fertilisation among relevant branches of international law that integrate water security discourses (Cullet et al. 2021: 13). Furthermore, water security cannot be adequately understood through the narrow lens of river management alone; it is inherently interdependent, operating within ecological, political and socio-economic systems. This recognition underscores the importance of an interdisciplinary approach that moves beyond state sovereignty (Wouters 2000: 202).

Building on these insights, this paper situates transboundary water security within the broader security studies literature, framing transboundary water security as a relational and collective practice. To operationalise this perspective, it employs five security paradigms – competitive, cooperative, collective, common and community security – as analytical lenses. These paradigms are complemented by five concepts – hydropolitics, hydrosovereignty, hydrosecurity, hydrohegemony and hydroharmony/hydrosolidarity – which act as interpretive tools to explain how actors define threats, prioritise resources and negotiate institutional arrangements in transboundary river basins. Where competitive water security is underpinned by hydrosovereignty, hydrosecurity and hydrohegemony (Nagheeby 2020), common water security paradigm is operationalised through

hydrosolidarity and hydroharmony; where cooperative security is facilitated by hydropolitics, collective and community water security is grounded in hydroharmony/hydrosolidarity (Magsig 2017; Meissner & Warmer 2017). Taking the Grand Ethiopian Renaissance Dam (GERD) as a case, this paper examines how these security paradigms and hydro-concepts interact to produce overlapping, conflicting and competing water security regimes.

The paper is structured in three sections. The first section provides a comprehensive review of the literature, details the methodological approach adopted and then reframes the politics of water security as a conceptual framework. The second section discusses how the water security paradigms interact with hydro-concepts and helps to illuminate the transboundary water security dynamics. The third section applies this framework empirically on the Nile Basin, especially taking the GERD. By linking security paradigms, hydro-concepts and empirical practice, this paper offers a comprehensive approach to understanding the complexities of transboundary water security, highlighting the potential for hydrosolidarity and relational security to guide more equitable and sustainable management of shared water resources.

Literature review: Transboundary water security

The concept of security has undergone significant theoretical expansion since the 1980s, reflecting evolving social, economic, geopolitical and environmental contexts (Buzan 1987; Buzan et al. 1998; Wæver 1998). Within security studies, this evolution has produced nuanced approaches that consider security not only as a function of material capabilities but also as socially constructed, relational and discursive. This paper situates transboundary water security within this broader theoretical landscape, highlighting how the governance of shared rivers embodies the complex interplay of objective, subjective and discursive dimensions of security.

This paper has benefited from the well-established transboundary water security discursive pluralism (Bakker 2012; Grey et al. 2009; Meissner 2016; Lautze 2012; Pahl-Wostl et al. 2016). Transboundary water security in liberal understanding has been framed in terms of human security (Al-Otaibi et al. 2007; Cook & Bakker 2013; Tarlock and Wouters 2010; Zeitoun, 2008) or as the web of climate–food–energy–human security matrix (Cook & Bakker 2013; Bogardi et al. 2012; Maganda 2019). Transboundary water security is also linked with a (neo-)realist understanding of state security, i.e. dams or water as a weapon (Al-Muqdadi 2023: xxiii; Fröhlich 2012: 321). Moreover, water security and hydraulic mega projects on international rivers are inextricably linked with development security (Arsano 2007; Grey & Sadoff 2007; Cook & Bakker 2012: 18).

Other literatures approach water security from the perspective of environmental security (Barbosa et al. 2012; Boyer 2019; Gunda 2017; Ghoreishi et al. 2024).

Transboundary water security in the context of ecosystem security has also been implicated in different treaties (UN Watercourse Convention 1997; UNECE Convention 1992; AU Nature Conservation 2003). Other literatures link transboundary water security with 'societal security', i.e. as a threat to or security of group identity (Ayeferam 2021; Gebresenbet & Wondemagegn 2021; Oestigaard, 2016). For example, the reduction of Nile flooding in Egypt may constitute a threat to Nile celebrations *Wafaa el-Nil* (Endaylalu & Arsano, 2024).

However, this paper reframes the transboundary water security as the politics of water security where co-riparian states exercise competitive, collective, cooperative, common and community water security paradigms (Väyrynen 2023). This paper concurs with these five water security framings and tries to cross-fertilise these concepts with concepts such as hydrosovereignty, hydrosecurity and hydrosolidarity and apply them in the context of the Nile water dispute following the GERD construction.

For the purposes of this paper, the politics of transboundary water security (TWS) refers to the ways in which upstream and downstream co-riparian states strategically appropriate the concept of water security to advance their political, economic and developmental interests. TWS is not a neutral technical concept; it is an intersubjective and socially constructed practice. Downstream states often frame TWS as an existential concern, vital to survival, whereas upstream states may frame it as a collective enterprise, emphasising equitable benefits for all riparian actors.

Methodology

The article adopts an interpretive, constructivist research design combining discourse analysis with theory-guided process tracing (Walt 2020; William 2024). Discourse analysis is used to examine how Nile Basin states construct and contest the meaning of transboundary water security across legal texts, policy documents, official statements and elite interviews. Process tracing structures the empirical analysis temporally, enabling the study to identify critical junctures – such as the negotiation of the CFA, the announcement and construction of the GERD and the post-2024 institutional developments – through which competing hydrosecurity logics have been institutionalised or resisted.

This paper utilised primary data collected through key informants' interviews with thirty research participants (annex I). In particular, 13 in-depth interviews and 17 semi-structured interviews were conducted with key officials from the Ethiopian Ministry of Water and Energy, the Ministry of Foreign Affairs, transboundary water scholars, Ethiopian GERD negotiators, GERD Project Office and the Eastern Nile Basin Technical Office (ENTRO). The in-depth interviews and semi-structured interviews were conducted in three rounds: in December 2024, in August and in October 2025. The research participants were purposively selected based on their experience and expertise in transboundary water issues in the Nile Basin.

However, attempts to interview the Egyptian and Sudanese ambassadors to Ethiopia were unsuccessful. The position and interests of Egypt and Sudan are not hidden but explicitly stated in their press briefings and official reports. To fill the gap, this paper relied on the positions and interests of Egypt and Sudan as indicated in their respective letters written to the UN Security Council (between 2020 and 2024).[1] Thus, the limitation of primary data from the Egyptian and Sudanese political elites' side does not fundamentally affect the findings of this study.

Reframing the politics of transboundary water security

Objective security in transboundary water contexts refers to tangible, material factors such as infrastructure, hydrological control and ecological stability (Ayoob 2002). For instance, the construction of a large upstream dam constitutes a brute fact with measurable impacts on downstream flows and livelihoods. However, the meaning and implications of such infrastructure are mediated through discourse (Buzan et al. 1998; Wæver 1995). Downstream states may frame an upstream dam as existentially threatening, while upstream actors may narrate it as a sovereign development project, illustrating the discursive construction of threats (Cascão & Zeitoun 2010; Tekuya 2024). This duality underscores that transboundary water security cannot be reduced to material control alone.

The security dilemma is central to understanding transboundary water dynamics. Actions by one state to enhance its water security – through dam construction, diversion or control overflows – can unintentionally threaten downstream states, generating reciprocal insecurity (Posen 1993; Schweller, 1996). In water systems, such dilemmas are compounded by asymmetries in geography, hydropower potential and economic capacity. Upstream hegemony, exemplified by Turkey's Southeastern Anatolia Project (GAP), Iran's Tropical Water Project (TWP) and China's Lancang-Mekong initiatives, often provokes downstream realist responses, as seen in Egypt's posture toward the Nile (Dinar 2002; Wolf et al. 2003; Cascão & Zeitoun 2010; Al-Muqdadi 2023). Hydraulic infrastructure thus serves both material and symbolic functions, operationalising hydrohegemony while shaping perceptions of threat and cooperation (Vörös 2023).

The foregoing discussion indicates that transboundary water security encompasses a continuum of material and non-material concerns, reflecting both realist and constructivist dimensions. Material security pertains to physical control over water and infrastructure, whereas non-material security involves perceptions, social imaginaries and discursive legitimisation of threats and rights (Brauch 2011;

1 Egypt's letters to the UN Security Council: S/2020/355, S/2020/566, S/2020/617, S/2021/354, S/2021/565, S/2021/607, S/2021/627, S/2022/134, S/2022/586, S/2022/587 and S/2023/664; Sudan's letter to the UN Security Council: S/2020/409, S/2020/623, S/2020/567, and S/2021/376.

Butler & Wolf 2019). By integrating security studies' relational and constructivist insights with hydro-concepts, this framework allows for a comprehensive understanding of transboundary water governance, highlighting both structural asymmetries and opportunities for cooperation. It posits the GERD case within a broader theoretical lens, showing that water security is neither purely material nor purely nor normative, but emerges from the interplay of power, discourse and shared ecological interdependence.

Transboundary water security (TWS) is framed here as an inherently relational, intersubjective and multi-scalar security system, rather than a purely hydrological or legal condition. TWS is understood here as embedded within a broader ecological network of governance, power relations and discursive practices. Security systems do not operate in isolation; rather, they constitute interdependent nodes within a complex security environment characterised by feedback loops, cascading effects and dialectical interactions among states, institutions and non-state actors. This dynamic gives rise to what Luís (1992: 39) conceptualises as a security complex – a meta-system within which water security is produced, contested and transformed.

Therefore, the politics of TWS is the result of the constellation of material, normative and discursive lines. It is material insofar as infrastructure, hydrology and allocation shape resource control; it is normative insofar as states invoke historic rights, sovereignty or collective responsibility; and it is discursive insofar as threats and opportunities are socially constructed, communicated and contested (Butler & Wolf 2020). Understanding TWS in this multi-dimensional and relational way is essential for situating the Nile Basin and other transboundary rivers within the broader security complex framework, linking the five security paradigms with the five hydroconcepts outlined in this paper.

Transboundary water security paradigms

Consistent with Tomé's definition of security systems as mechanisms for 'the protection and promotion of values and interests considered vital for the political survival and wellbeing of the community' (Tomé 2010: 36), this paper advances that security is neither static nor confined to national borders. Rather, it operates as an interdependent node within a broader ecological and governance network, in constant dialectical engagement with parallel systems and operational units through multidimensional proximate and cascading effects. Such relational dynamics constitute a security complex (Luís 1992: 39), where the security of one actor is inherently linked to the security of others.

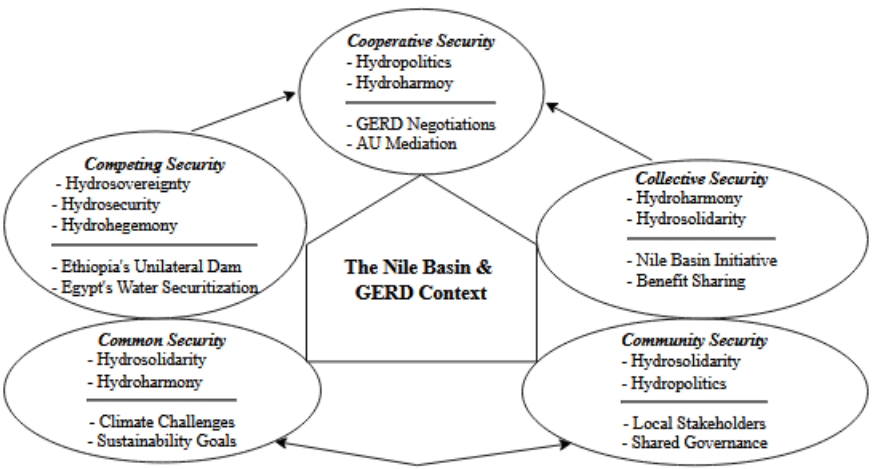
Scholarly consensus identifies five ideal-typical security paradigms emerging from such interdependence: competitive, common, cooperative, collective and community security (Luís 2010; Vayrynen 1999). These paradigms do not represent mutually exclusive categories but rather a continuum of security relations, rang-

ing from antagonistic rivalry to deep institutionalised integration. These security paradigms align with the five hydro-concepts – hydrosovereignty, hydrosecurity, hydrohegemony, hydropolitics and hydroharmony/hydrosolidarity – which collectively provide a multi-dimensional lens for analysing shared river governance (Teshome 2024).

Competitive security captures states' strategic prioritisation of national interests in an anarchic system, often producing zero-sum outcomes (Mearsheimer 2001; Tomé 2010: 37; Waltz 2001). Within transboundary water governance, this paradigm is operationalised through hydrosovereignty, hydrosecurity and hydrohegemony, in which states pursue unilateral control over river flows, infrastructure and hydropower to maximise their national advantage (Alam & Jeffrey 2009). This politicisation and securitisation of transboundary rivers produce what Magsig (2011: 329) calls 'discursive absolutes', which are conceived as non-negotiable and often reinforced by nationalistic narratives that can constrain cooperative possibilities.

The concept of hydrosovereignty illustrates the material-objective dimension of water security, whereby the state is understood as a container of security responsible for protecting its population (Hayat et al. 2022). Yet, in transboundary contexts, sovereignty-centric logics are insufficient. Threats such as climate change, environmental degradation, pandemics and transnational crime transcend borders and render unilateral strategies inadequate (Buzan 1991; Buzan & Hansen 2010). Consequently, security in shared river basins requires recognition of relational interdependence and multi-scalar vulnerabilities.

Figure 1: Water security paradigms and hydro-concepts framework



Source: Author

Common security emphasises shared survival, mutual wellbeing and interdependence, rooted in the principle that 'security must be reached with others, not against them' (Palme 1982). In transboundary water governance, hydrosolidarity and hydroharmony operationalise this paradigm through shared stewardship, equitable allocation and sustainability of water resources (Magsig 2020; Teshome 2024). Environmental crises such as climate change, floods and water pollution exemplify shared vulnerabilities that bind co-riparian states. By framing these challenges as common threats, upstream and downstream states are incentivised to cooperate, align development agendas and pursue collective environmental management strategies (Fig. 1). This paradigm demonstrates that security emerges relationally, where the wellbeing of each riparian state is contingent on the sustainability and stability of the basin.

Cooperative security extends beyond common security by incorporating institutionalised norms, procedural frameworks and negotiated arrangements, allowing rival or potentially rival states to balance power asymmetries and maximise joint benefits (Luís 1992: 38). In transboundary water contexts, cooperative security operationalises hydropolitics and hydroharmony through river commissions, joint planning and dispute resolution mechanisms. For example, in the Nile Basin, trilateral negotiations between Ethiopia, Sudan and Egypt reflect cooperative governance. Upstream hydropower generation is harmonised with downstream irrigation needs and seasonal variability. Cooperative security thus represents 'common water security plus', enabling riparian states to observe broader system-wide utilisation rather than narrow national interests.

Collective security emphasises the institutionalisation of shared responsibility and mutual protection, extending governance to include non-state actors such as NGOs, multinational corporations and community groups (Vayrynen 1999: 59). In transboundary water management, collective security is closely linked to benefit-sharing approaches, which prioritise equitable and optimised distribution of water-derived benefits rather than purely physical water allocation (Alam & Jeffrey 2009; Giordano & Wolf 2003; Sadoff & Grey 2002). In the Nile, Ethiopia's hydropower potential, Sudan's agricultural capacity and Egypt's economic leverage exemplify the tripartite interdependence often summarised as: 'Ethiopia provides power, Sudan grows food, and Egypt brings cash' (Verhoeven 2015: 245). Collective security frameworks facilitate coordination across this triad, promoting peaceful collaboration, technical sharing and mutual prosperity.

Community security represents the highest level of multilateral integration, characterised by deep institutionalism, shared identity and long-term relational commitment (Job 1994). In this paradigm, riparian states, local communities and extra-state actors perceive themselves as part of a hydrological community, prioritising systemic sustainability, adaptive governance and relational trust over short-term national gains. Operationalised through hydrosolidarity and

hydropolitics, community security emphasises ecological and systems of thinking, moving beyond anthropocentric and sovereign-centric approaches (Watson 2015).

Community security is also 'relational security' and emphasises the mutual co-constitution of interests, trust and predictability between actors (Williams 2008). In shared river systems, upstream and downstream states are entwined ecologically, economically and politically. As Williams (2008: 6) observes, true security does not arise from the ability to exercise power over others, but from cooperating to achieve security without depriving others of it. Security dilemmas are socially constructed and can be mitigated through identity transformation, trust-building and shared norms, rather than purely through material capabilities (Wendt 1992). Security cannot be reduced to either material control or normative agreement; it spans a continuum of objective, subjective and discursive dimensions (Brauch 2011; Butler & Wolf 2020).

The Nile experience: From hydrohegemony to hydrosecurity

The Nile River is shared among eleven riparian countries (Burundi, DR Congo, Egypt, Eritrea, Ethiopia, Kenya, Uganda, Rwanda, Sudan, South Sudan and Tanzania), the Blue Nile (estimated to contribute on average 49 BCM of 85% annually) is shared among Ethiopia, Egypt, Sudan and South Sudan. At the same time, close to 70% of Ethiopia's water resources are in the Blue Nile sub-basin (Arsano 2007). The Nile Basin governance presents one of the most enduring and consequential cases of transboundary water security (TWS), characterised by deep historical asymmetries, contested legal regimes and evolving security imaginaries. For much of the twentieth century, Nile governance was structured around a narrow, state-centric and exclusionary framework rooted in colonial-era agreements. This institutional architecture entrenched a hydrohegemonic order that framed water security as synonymous with the preservation of downstream control, thereby embedding competitive security, hydrosovereignty and hydrohegemony as dominant organising principles.

Prior to the GERD, Nile Basin water governance was dominated by a competitive security paradigm, rooted in an asymmetric hydrohegemonic order. The absence of inclusive legal instruments and basin-wide institutions capable of ensuring equitable and reasonable utilisation left the Nile governed by colonial-era arrangements – most notably the 1929 Anglo-Egyptian Agreement and the 1959 Egypt-Sudan Agreement – which allocated volumetric water rights exclusively to downstream states. Egypt's enduring hydrohegemony – what Rossi terms 'endogenous hegemony' – operated not only through material control of downstream infrastructure, but also through legal, discursive and normative practices that naturalised historical water allocations as immutable rights (Rossi 2022). These arrangements were institutionalised and sustained not only through material power but also through discursive practices that normalised Egypt's claim to 'historic

rights'. Moreover, it unfolded within a basin marked by 'a history of hydro-egoism, exacerbated by imperial politics, colonial treaties, and broader disruptions across the Horn of Africa' (Rossi 2022: 247).

The absence of an inclusive legal and institutional framework capable of governing equitable and reasonable utilisation of Nile waters has long undermined basin-wide cooperation. Attempts to address this deficit since the 1980s – including the Undugu framework (1983), TECONILE (1992), the Nile Basin Initiative (NBI) (1999) and ultimately the Cooperative Framework Agreement (CFA) (2010; entered into force in October 2024) – represent incremental efforts to recalibrate Nile governance away from unilateralism toward shared management (Mekonnen 2012).

It was within this context that transboundary water security emerged as a contested politico-legal concept during the early late 1990s and the early 2000s Nile Basin Initiative (NBI) negotiations, later incorporated into the CFA on the recommendation of World Bank experts (Mekonnen 2010). The insertion of TWS into the CFA proved deeply divisive. Legal scholars variously described it as a 'cunning interpolation', a 'treacherous, non-legal concept' and an 'amorphous notion incapable of generating productive legal solutions' (Mekonnen 2013), while others viewed it as primarily political rather than legal (Salman 2013; Nyaoro 2014). Still others argued that TWS constitutes a legitimate legal entitlement encompassing both rights and duties of basin states (Woldetsadik 2017; Tekuya 2019).

The notion of TWS functioned as a discursive battleground between the Nile upstream and downstream states. Downstream states – particularly Egypt – appropriated water security to preserve the 1959 allocation regime, while upstream states – especially Ethiopia – mobilised the same concept to challenge entrenched inequities. For example, Egypt has historically been described as a 'gift of the Nile', in which the river is portrayed as the lifeblood of the nation (Hamada 2017). This discursive struggle became most visible in negotiations over CFA Article 14(b), where Egypt and Sudan sought to anchor water security in 'current uses and rights', whereas upstream states insisted on the principle of 'not causing significant harm', aligned with the 1997 UN Watercourses Convention.

Underlying this dispute were divergent perceptions of scarcity, entitlement and vulnerability. Egypt's expansive understanding of transboundary waters – including precipitation over Ethiopian highlands – led it to reject the basin-wide logic embedded in contemporary international water law (Woldetsadik 2017). Such positions reflected a hydrosovereign absolutism incompatible with evolving principles of equitable utilisation, and contributed to a climate of mistrust, exacerbated by paternalistic assumptions regarding upstream states' developmental capacities (II-P-10; II-P-12).

Furthermore, Egypt's hydrohegemony is continuously reproduced through repetitive practices that code and discipline the boundaries of identity and dif-

ference, shaping how upstream and downstream states perceive each other (Neumann 2009; Garrick & Han 2014). This narrative is institutionally enshrined: Article 44 of the Egyptian Constitution commits the state to protecting the Nile, upholding its historic rights, optimising its benefits and safeguard water quality (The Constitution of the Arab Republic of Egypt, Art. 44). In this framing, 'Egypt is the Nile, and the Nile is Egypt', reflecting a civilisational and existential logic that underpins Egypt's historical hydrohegemony. Within this logic, any upstream deviation from the established order is discursively constructed as an existential threat, triggering securitising responses.

Conversely, upstream leaders articulate a cooperative and relational vision of TWS (reflected in the ratification of the CFA). For instance, Yoweri Museveni stated during his August 2025 visit to Egypt:

> Our goal should be prosperity for all, access to electricity for all, irrigation for all, and clean drinking water for all. By including these objectives in our framework, we can employ the most scientific and fair methods to achieve them (HICGI News Agency 2025).

Museveni's statement reflects a relational and collective approach to water security, consistent with the principles envisioned in the Nile Cooperative Framework Agreement, which sought to institutionalise equitable governance and benefit-sharing among Nile riparian states. However, the withdrawal of Egypt and Sudan from the agreement highlights the persistent tensions between unilateral securitising strategies and collective, relational governance.

This dynamic demonstrates water security divides and the relevance of relational water security challenge. Without mutual understanding, trust and recognition of interdependence, the appropriation of 'water security' by individual states risks exacerbating insecurity. One state's defensive or coercive actions provoke countermeasures by others, creating a self-reinforcing cycle of mistrust in which all riparian actors become increasingly insecure. Even where the idea of 'water security for all' is employed by the upstream states, it is political rhetoric and often not followed by confidence building measures (II-P-05; SI-P-21). Hence, the noble idea of TWS in a sense of shared, collective and relational enterprise, emphasising hydrosolidarity, hydroharmony and cooperative governance remains promissory.

GERD as rupture and catalyst: Reconfiguring Nile security

While early Ethiopian ambitions to develop the Blue Nile date back to Emperor Haile Selassie I (USBR 1964), the GERD represents the first material assertion of upstream infrastructural power capable of recalibrating basin dynamics (SI-P-24). Under the Ethiopian People's Revolutionary Democratic Front (EPRDF), now replaced by Prosperity Pary under Prime Minister Abiy, poverty was reframed as

Ethiopia's primary security threat, and state sponsored mega projects were believed to be a means to defeat poverty (Growth and Transformation Plan I 2010; Growth and Transformation Plan II 2016).

The GERD is 'the roller-compacted concrete gravity dam, the concrete gravity dam, the concrete faced rock fill saddle dam with gated spillway and other structures on the Blue Nile River in Ethiopia' (GERD Filling and Operation Draft Guideline 2020). The GERD is estimated to generate 5,115 MW of electricity. Domestically, the GERD became symbolically elevated as a 'Second Adwa', a project of collective resistance – this time against structural poverty rather than colonial domination (II-P-25; SI-P-21). Critics, however, questioned the project's developmental rationality, arguing that smaller irrigation-focused dams might have yielded broader livelihood benefits (II-P-13). This internal debate highlights tensions between state-centric development visions and broader human-ecological security considerations.

Moreover, the construction of the Grand Ethiopian Renaissance Dam marked a profound rupture in this long-standing hydro-political order. Following the diversion of the Nile River for the first time in history, during which the late prime minister was nicknamed '*Abayin yedefere*', ('the one who stood up to the Blue Nile'), Egypt viewed the move as a threat. It was articulated as a transformative national project aimed at electrification, industrialisation and regional integration. This shift was captured in the widely cited formulation *Abayin malmat, Abayin metekem le Ethiopia ye helewuna guday newu* – 'developing and utilising the Blue Nile is a matter of existence for Ethiopia' (II-P-01; SI-P-23). Here, water security was no longer framed exclusively in territorial or military terms, but as a developmental and human security imperative.

Undeniably, the GERD disrupted Egypt's hydro-hegemonic position and triggered a shift toward a competitive security paradigm. Egypt framed the dam as an existential threat, elevating the dispute to the UN Security Council (UNSC 2021). The GERD represents an upstream assertion of hydrosovereignty, whereas Egypt perceives existential threats to its water security. For example, Ethiopia rejected Egypt and Sudan's demand for entering into a binding agreement before filling and operating the GERD and demanded guaranteed releases during droughts. Rejecting these demands, Ethiopia completed filling the GERD without causing water shortages in the downstream, which in effect undermined the downstream securitisation of the GERD (II-P-10; II-P-12).

Thus, material concerns – volume, timing and distribution of water – intersect with discursive constructions of threat, framing development projects as counter-hegemonic or existential. This duality underscores that transboundary water security is both material and socially constructed, reflecting perceptions, narratives and hydro-power asymmetries (Brauch 2011; Butler & Wolf 2020). As long as water security is framed as a zero-sum entitlement rather than a shared

ecological condition, hydro-hegemonic competition will persist, regardless of institutional advances (Dinar 2002). The post-GERD landscape thus exposes the limits of legalism absent relational transformation.

Empirically, the filling of the GERD (from 2020 to 2025) produced no significant downstream water shortages, undermining apocalyptic securitisation narratives (II-P-10; II-P-12). As the GERD securitisation faltered, Ethiopia considered all those allegations to be inconsistent with good faith and equitable utilisation confirming their suspicion toward Egypt (II-P-04). Besides, Ethiopia's commitment to sharing water in times of hardship – grounded not in rigid legalism but in the principles of equitable and reasonable utilisation and no significant harm – is reflected in its letter to the UN Security Council (UNSC 2021). This stance aligns with community security, wherein states no longer conceive of security in zero-sum terms but recognise shared vulnerability and long-term interdependence (Sadoff and Grey 2002; Turton 2008).

CFA, GERD and DOP through the politics of water security

The negotiation, adoption and contestation of the CFA and the 2015 Declaration of Principles (DOP) illustrate how transboundary water governance in the Nile Basin is structured by overlapping security paradigms and competing hydro-concepts, rather than by a single, coherent model of water security. The CFA and DOP operate simultaneously as legal instruments, political compromises and security discourses, embedding multiple and often contradictory understandings of transboundary water security (Magsig 2020; Wouters et al. 2009).

Despite the CFA's formal grounding in the principles of equitable and reasonable utilisation and the obligation not to cause significant harm (Articles 4 and 5), the negotiation history reveals the persistent dominance of competitive security logic, particularly among downstream states. For Egypt and Sudan, 'water security' has historically been equated with the preservation of volumetric entitlements derived from colonial-era agreements – 55 BCM and 18.5 BCM respectively – reflecting a hydro-sovereign understanding of water as quasi-territorial property.

This interpretation reproduces hydrohegemony, whereby downstream states seek to maintain control not only over water flows but also over the legal meanings attached to security itself. The insistence on safeguarding 'current uses and rights' transform water security into a defensive instrument designed to protect the status quo, rather than a forward-looking framework for basin-wide adaptation. In this sense, water security becomes securitised as an existential concern, justifying resistance to institutional change and constraining the scope of cooperation (Salman 2011; Vuković 2019).

By explicitly linking water security to the principles of equitable and reasonable utilisation, both the CFA and the DOP introduce a common security logic

into Nile governance. The nine criteria enumerated in Article 4(2) of the CFA and Principle IV(a) of the DOP – ranging from hydrological and ecological factors to socio-economic needs, population dependence and climate variability – collectively frame water security as a multi-dimensional and shared condition rather than a zero-sum allocation problem.

This move reflects a shift in hydropolitics, away from narrow volumetric claims toward a broader systems-based understanding of risk and interdependence. Water security here is embedded in a web of hydrology, development trajectories, technological capacity and social vulnerability, aligning with Salman's (2013) notion that recognising interdependence can lead to inevitable cooperation. However, this reframing has also complicated negotiations by exposing fundamentally divergent assumptions about entitlement, contribution and vulnerability among riparian states.

The CFA's emphasis on cooperation, reflected in its invocation of the 'spirit of cooperation' and the proposed establishment of the Nile River Basin Commission, aligned with a cooperative security model. In this paradigm, security is pursued through agreed norms, procedures and institutions designed to manage disputes and facilitate joint decision-making (Alagappa 1998).

From a hydrosecurity perspective, the CFA represents an attempt to depoliticise and de-securitise water relations by embedding them within legal and technical frameworks. By tying water security to established principles of international water law, the CFA seeks to normalise cooperation and reduce the scope for unilateral action. Yet the cooperative promise of the CFA has been undermined by unresolved disagreements over the meaning of 'water security' itself, illustrating the fragility of cooperative security in the absence of shared interpretations and lack of confidence building measures (II-P-8).

The CFA's original vision as a 'mutually enticing opportunity' (Vukovic 2019; 2022) reflects a collective security logic grounded in shared responsibility and joint action. By recognising factors such as contribution to flows, availability of alternatives, and conservation costs, the agreement implicitly endorses principles of benefit-sharing rather than strict water allocation. This approach resonates with the concept of hydrosolidarity (Cosgrove 2003; Falkenmark 2002), which emphasises mutual dependence, ecological stewardship and shared risk management. Accordingly, the CFA strengthens the Nile Water Security Community (NWSC) for it reframes the basin not as a collection of sovereign units, but as an interconnected security system where actions in one part of the basin reverberate across others.

Finally, the CFA gestures – albeit imperfectly – toward a cooperative security model, in which Nile riparian states would internalise shared norms and perceive water security as a common good rather than a competitive asset. The envisioned Nile River Basin Commission symbolises this aspiration: a permanent institutional

forum for dialogue, adaptation and joint management. This corresponds to the concept of hydrosolidarity/hydroharmony, where long-term cooperation, ecological balance and mutual recognition replace securitised and adversarial relations.

Nile water security: Institutional transition challenges

The CFA's entry into force on 13 October 2024, ratified by Uganda, Burundi, Ethiopia, Rwanda, South Sudan and Tanzania, and signed by Kenya, formalises principles that had already gained de facto relevance in the post-GERD context: equitable and reasonable utilisation, no significant harm, and cooperation as a security imperative. Prime Minister Abiy Ahmed described the moment as 'the culmination of a long journey toward the equitable and reasonable utilization of the waters of the Nile', calling on non-signatory states to 'join the Nile family' in pursuit of development and regional integration (Ali 2024). Similarly, Ethiopia's Ministry of Water and Energy emphasised intergenerational stewardship and ecological sustainability as core rationales of the agreement (Addis Insights 2024).

Egypt and Sudan's rejection of the CFA, however, underscores the persistence of competitive security logics even as cooperative institutions expand. Egyptian officials have denounced the CFA as exclusionary and incompatible with the 1929 and 1959 agreements, reiterating that Egypt 'will not compromise even a meter of Nile water' (News Central 2024; Sewilam 2024). Joint statements issued under the Permanent Joint Technical Commission (PJTC) continue to emphasise prior notification and impact assessments while rejecting the CFA's authority (AhramOnline 2024).

The CFA's institutional core, the Nile River Basin Commission (NRBC), is referenced over sixty times in the agreement, underscoring that the CFA's viability is structurally dependent on the Commission's establishment and operationalisation. However, the withdrawal of Egypt and Sudan from the CFA severely limits the realisation of this model (Tekuya 2024). Post-GERD, Egypt and Sudan's continued non-participation in the CFA is no longer merely a legal or diplomatic issue; it functions as a strategic response to altered power asymmetries. The GERD has weakened Egypt's long-standing hydro-hegemonic position by demonstrating that upstream development can proceed despite downstream opposition. Consequently, resisting the CFA – and by extension the NRBC – allows downstream states to preserve a governance vacuum in which unilateral leverage, securitisation and ad hoc diplomacy remain viable.

For example, the postponement of the NBI summit scheduled for mid-October 2024 in Uganda illustrates the fragility of basin institutions and the political resistance to supranational governance. Without Egypt's and Sudan's accession, the NRBC, even if established, would lack jurisdiction over the basin's most influential downstream actors, severely constraining its capacity to adjudicate disputes or enforce equitable utilisation principles (Tekuya 2024). This institutional deadlock

reflects the coexistence – and collision – of multiple security paradigms. While upstream states increasingly operate within a cooperative or collective security logic emphasising benefit-sharing and interdependence, downstream states continue to securitise water through competitive and hydro-sovereign frames. The result is a fragmented security complex in which legal norms, infrastructure realities and discursive practices pull in opposing directions.

An integrated water security regime – one capable of stabilising post-GERD relations – requires aligning infrastructure realities with institutional authority and normative commitment. This entails moving beyond securitisation toward hydrosolidarity, where water is understood not as sovereign property but as a shared system whose sustainability depends on collective stewardship. In this sense, the GERD does not undermine the CFA; rather, it renders the CFA indispensable.

The post-GERD phase dynamics and the entry into force of the Cooperative Framework Agreement (CFA) together mark a structural reordering of Nile Basin hydropolitics. While analytically distinct, these developments are deeply interlinked: GERD represents a material and discursive rupture in long-standing hydro-hegemonic arrangements, whereas the CFA constitutes an attempt to translate that rupture into a legal-institutional order; they illuminate how transboundary water security (TWS) in the Nile Basin has shifted from competitive and hegemonic paradigms toward contested forms of common, cooperative and collective security – without yet consolidating into a community security regime.

Post-GERD dynamics reveal the limits of hydro-hegemonic control in an era of infrastructural sovereignty and shifting power asymmetries. Ethiopia's framing of GERD as both a developmental necessity and a sovereign right has redefined upstream agency within the basin. As articulated by Ethiopian officials and elites, GERD symbolises not merely energy production but a long-delayed correction of structural exclusion from Nile utilisation to common water security paradigm (II-P-01; II-P-04). Egypt's response, by contrast, has remained anchored in a competitive security logic, reframing GERD as an existential threat and advancing securitised claims in multilateral fora, including the UN Security Council (Egyptian State Information Service 2021; UNSC 2021).

Furthermore, drought discourse has been selectively mobilised. Ethiopian negotiators perceive downstream demands for guaranteed water releases during prolonged droughts as attempts to reframe the GERD as a de facto extension of the Aswan High Dam, thereby reinstating Egypt's hydro-hegemonic control under the guise of water security. This perception aligns with interview evidence suggesting that drought narratives are often deployed to protect historical entitlements rather than address basin-wide ecological vulnerability (II-P-02; II-P-08; II-P-12).

At the same time, Ethiopian officials emphasise that drought impacts are geographically uneven – originating primarily in upstream rainfall variability – yet require collective responses. For Ethiopia, 'Egypt's demand was simply an

attempt to subordinate GERD operations to the Aswan High Dam and perpetuate historical monopolies' (II-P-02; II-P-04; II-P-08). As one participant noted, 'if drought happens, it happens in Ethiopia, not in Egypt, for the latter is naturally rainless' (II-P-12). This framing situates drought within a common security paradigm, where climate change and hydrological uncertainty constitute shared threats demanding cooperative adaptation rather than securitised confrontation (II-P-07).

Transboundary water security community

An integrated water security regime, one capable of stabilising post-GERD relations, requires aligning infrastructure realities with institutional authority and normative commitment. This entails moving beyond securitisation toward hydrosolidarity, where water is understood not as sovereign property but as a shared system whose sustainability depends on collective stewardship.

A key outcome of transcendental and relational transboundary water security (TWS) is the potential emergence of a security community (Wæver 1998); a paradigm shift from the logic of anarchy to the logic of cooperation. In the Nile Basin, this entails moving beyond zero-sum, state-centric approaches – typified by downstream security anxieties over historical water entitlements – and embracing a constructivist framework of shared norms, practices and interdependence (Hopf 1998; Adler & Barnett 1998). The co-riparian states can, therefore, transition from securitisation discourse – where hydraulic development is framed as an existential threat – to TWS community, wherein cooperative management of the Nile fosters long-term trust, anchored in balanced reciprocity, and a collective sense of identity.

In the context of de-securitised transboundary water security understanding, the GERD, for instance, illustrates how infrastructure can simultaneously address hydrology and drainage/ecology (flow regulation, sediment management), water share (equitable allocation), development (hydropower generation and socio-economic growth), technology (advanced dam management) and socio-economic conditions (electrification) (II-P-04; Ayenalem et al. 2023; Keith et al. 2013). It also reinforces a rethinking of the GERD as an instrument that fosters energy transnationalism, enabling joint projects and reinforcing water security interdependence, co-riparian integration, and cooperation (Högselius 2018).

Simultaneously, the upstream states become empathetic towards downstream states' hydrological concerns and recognise the implication of territorial traps and evade from defining security solely in terms of national boundaries (Agnew 1994; Elhance 1998). Instead, water security interdependence positions the Nile as a shared resource, wherein droughts, climate change and demographic pressures are common vulnerabilities that demand collective actions (Aradau 2012; Paisley 2020; Tekuya 2020). As part and parcel of confidence building measures,

Ethiopia shall revisit the guideline for the GERD operation, hydrological data exchange and guarantee the safety of the dam (II-P-10; II-P-12).

In grounding transboundary water security community, not only the GERD but also the CFA plays an indispensable role. The implementation challenges of the CFA cannot be analytically separated from the post-GERD hydropolitical landscape. Rather than representing two distinct phases, the CFA and the Grand Ethiopian Renaissance Dam (GERD) constitute mutually constitutive moments in the ongoing reconfiguration of Nile water security. Together, they reveal the tension between emerging cooperative and collective security logics and the persistence of competitive, hydro-sovereign and hydro-hegemonic practices.

Nonetheless, as a negotiated agreement, the CFA embodies a pluralist TWS community in which 'the use of force is not anticipated' (Deutsche 1961), and co-riparian sovereignty has been reconceived as cooperative rather than absolute (Magsig 2020). This approach directly addresses the upstream-downstream tension by reframing water security not as a zero-sum game but as a shared developmental and ecological enterprise (Wouters et al. 2009, 2011; Magsig 2015).

In this logic, hydrosolidarity eventually replaces hydrosovereignty with interdependence, promoting joint stewardship, equitable utilisation and collective resilience (Wouters 2000). In practice, it moves the Nile co-riparian states toward a hydrosecurity community, wherein watercourses are perceived as collective security concerns, and basin-wide vulnerabilities – such as droughts and sedimentation – become matters for cooperative management rather than securitised unilateral action (Elhance 1999).

In summary, the Nile Basin's evolving TWS community regime demonstrates that water security can serve as a bridge from conflict to cooperation. By embedding the five hydro-concepts within the broader security framework (competitive historic rights tensions), common (shared existential vulnerabilities), cooperative (joint projects, energy and irrigation), collective (regional management via NRBC) and community (shared norms, trust, and interdependence) (Wæver 1998; Hopf 1998; Adler & Barnett 1998), the basin states may advance a conceptual and practical paradigm of hydrosolidarity, where sovereignty is exercised collectively, risks are shared and water is managed as a common good for the long-term benefit of all riparian states (II-P-07; II-P-12).

Conclusion

The Nile experience demonstrates that transboundary water security cannot be reduced to infrastructure, law or hydrology alone. It is a relational security system, produced through power, discourse, institutions and ecological interdependence. The GERD has destabilised a historically entrenched hydro-hegemonic order while opening space, albeit contested, for a transition toward cooperative and community-oriented water security. Whether this transition materialises

depends less on engineering outcomes than on the willingness of riparian states to reconceptualise water not as sovereign property, but as a shared foundation for collective survival and regional stability.

This paper has indicated that the CFA, GERD and DOP do not represent a linear progression toward cooperation, but rather a contested arena in which multiple security paradigms and hydro-concepts coexist and compete. The Nile Basin is best understood as a hybrid water security complex, a key analytical insight is that water security itself is the object of struggle, whether it is framed as sovereign entitlement, shared risk, institutionalised cooperation, collective responsibility or ecological community, determines not only policy outcomes but also the trajectory of Nile Basin relations.

Taken together, post-GERD and post-CFA dynamics demonstrate that the Nile Basin currently occupies an intermediate security configuration. Competitive security and hydrohegemony persist, particularly in downstream narratives. Cooperative and collective security mechanisms have expanded through GERD coordination, drought-management discussions and CFA ratification. Elements of common security are evident in shared recognition of climate change, population growth and water variability as basin-wide threats. However, the conditions for community water security, characterised by deep trust, fused identities and fully institutionalised governance, remain unmet.

Funding
This work was supported by a small fieldwork Grant of Addis Ababa University as part of my PhD Dissertation work.

Conflict of interest statement
No conflict of interest was reported.

Data availability statement
Supplementary data associated with the paper can be found here: https://zenodo.org/records/20393331.

Acknowledgements
I would like to acknowledge and thank Dr. Fana Gebresenbet, Emeritus Professor John Braithwaite, Dr. Sara de Simone, and Yayew Chekol for their feedback on the manuscript. I would also like to thank also the three anonymous peer reviewers and the journal editors for their valuable feedback, guidance and support.

Zelalem Tesfaye Sirna is assistant professor of law and PhD Candidate in Peace and Security Studies at Addis Ababa University. His research interest includes transboundary water security, restorative environmental justice, and legal pluralism. Currently, he serves as the Deputy Director of the Balzan PhD Project and Australian National University research fellow.

References

Addis Insights (2024): A Landmark Moment: The Nile River Commission Formed as CFA Takes Effect. *Addis Insights*, <accessed online: https://addisinsight.net/2024/10/a-landmark-moment-nile-river-basin-commission-formed-as-cfa-takes-effect/>.

Adler, E. & Barnett, M. (1998): A framework for the study of security communities. *Cambridge Studies in International Relations*, 62, 29–66.

Agnew, J. (1994): The territorial trap: The geographical assumptions of international relations theory. *Review of International Political Economy*, 1(1), 53–80.

AharamOnline (2024): Egypt, Sudan urge Nile Basin states to restore integrity of 19999 Nile Basin Initiative. *AharanOnline*, 12 October 2024, <accessed online: https://english.ahram.org.eg/NewsContent/1/1234/533384/Egypt/Foreign-Affairs/Egypt,-Sudan-urge-Nile-Basin-states-to-restore-int.aspx>.

Alam, U., Dione, O. & Jeffrey, P. (2009): The benefit-sharing principle: implementing sovereignty bargains on water. *Political Geography*, 28(2), 90–100.

Ali, A. A. (2024): Post on X (formerly Twitter). *X*, <accessed online: https://x.com/AbiyAhmedAli/status/1845382378547527914>.

Al-Muqdadi, S. W. (2024): Theories of International Relations and the Hydropolitical Cycle: The Hydro-Trap and the Anarchic Nature of Water Conflict. In: Szálkai, K. & Szalai, M. (Eds.): *Theorizing Transboundary Waters in International Relations.* Cham: Springer, 13–29.

Al-Otaibi, A. & Abdel-Jawad, M. (2007): Water security for Kuwait. *Desalination*, 214(1–3), 299–305.

Aradau, C. & Van Munster, R. (2012): The securitization of catastrophic events. *Alternatives*, 37(3), 227–239.

Arsano, Y. (2007): *Ethiopia and the Nile: Dilemmas of National and Regional Hydropolitics*. Zurich: ETH.

Ayenalem, A. Y., Fantini, E. & Van der Zaag, P. (2023): Popular culture and Nile hydropolitics. *International Journal of Water Governance*, 10.

Ayoob, M. (2002): Defining security: A subaltern realist perspective. In: Krause, K. & Williams, M. C. (eds.): *Critical Security Studies*. London: Routledge, 121–146.

Barbosa, L. M. & de Souza, M. (2012): *Reflections on the securitization of water resources.* Belo Horizonte: Pontifical Catholic University of Minas Gerais.

Boyer, M. A. & Oculi, N. (2019): Securitizing the environment. In: Butler, M. J. (Ed.): *Securitization Revisited*. London: Routledge, 116–142.
Braithwaite, J. (2024): *Imagining restorative diplomacy*. Cham: Springer Nature.
Butler, M. J. & Wolf, Z. (2019): Introduction: Revisiting securitization. In: Butler, M. J. (Ed.): *Securitization Revisited*. London: Routledge, 3–27.
Buzan, B. (1991): New patterns of global security. *International Affairs*, 67, 431–451.
Buzan, B. (1987): *An Introduction to Strategic Studies*. London: Macmillan.
Buzan, B. & Hansen, L. (2010): Defining–redefining security. In: Denemark, R. A. (Ed.): *The International Studies Encyclopedia, Volume II.* Malden*:* Wiley-Blackwell, 782–802.
Buzan, B., Wæver, O. & de Wilde, J. (1998): *Security: A New Framework for Analysis*. London: Lynne Rienner.
Cascao, A. E. & Zeitoun, M. (2010): Power, hegemony and critical hydropolitics. *Transboundary Water Management*, 27, 42.
Cook, C. & Bakker, K. (2013): Debating the concept of water security. *Water Security*, 49–63.
Cosgrove, W. J. (2003): Fulfilling the World Water Vision. *Water International*, 28(4), 527–531.
Cullet, P., Bhullar, L. & Koonan, S. (2021): Water security and international law. *Annual Review of Law and Social Science*, 17(1), 261–276.
Deutsch, K. W. (1961): *Security communities*. Princeton, NJ: Princeton University Press.
Dinar, S. (2002): Water, security, conflict, and cooperation. *SAIS Review*, 22(2), 229–253.
Egyptian State Information Service (2021): Egypt Facing "Existential Threat" Due to Ethiopia's GERD on Nile. *Egyptian State Information Service*, <accessed online: https://www.sis.gov.eg/Story/157165/Egypt-facing-%27existential-threat%27-due-to-Ethiopia%27s-GERD-on-Nile?lang=en-us>.
Elhance, A. P. (1999): *Hydropolitics in the Third World: Conflict and Cooperation in International River Basins.* Washington: US Institute of Peace Press.
Endaylalu, G. A. (2021): Drivers for securitization and de-securitization over GERD negotiations. *International Journal of Ethiopian Legal Studies*, 6(1).
Endaylalu, G. A. (2022): GERD: Geopolitical implications. *Ethiopian Journal of Water Science and Technology*, 5, 24–50.
Endaylalu, G. A. & Arsano, Y. (2024): GERD project controversies. *African Anthropologist*, 22(2), 215–247.
Falkenmark, M. & Folke, C. (2002): Ethics of socio-ecohydrological management. *Hydrology and Earth System Sciences*, 6(1), 1–10.
Falkenmark, M., Berntell, A., Jägerskog, A., Lundqvist, J., Matz, M. & Tropp, H. (2007): *On the verge of a new water scarcity: A call for good governance and human ingenuity.* Stockholm: Sweden International Water Institute.
Fröhlich, C. J. (2012): Security and discourse. *Conflict, Security & Development*, 12(2), 123–148.

Garrick, D., & Hall, J. W. (2014): Water security and society. *Annual Review of Environment and Resources*, 39, 611–639.
Gebresenbet, F. & Wondemagegnehu, D. Y. (2021): Ontological security in GERD negotiations. *African Security*, 14(1), 80–106.
Giordano, M. A., & Wolf, A. T. (2003): Sharing waters. *Natural Resources Forum*, 27(2), 163–171.
Grey, D. & Sadoff, C. W. (2007): Sink or swim? *Water Policy*, 9(6), 545–571.
Gray, D., Sadoff, C. & Connors, G. (2009): Effective cooperation on transboundary waters: A practical perspective. In: *Getting transboundary water right: Theory and practice for effective cooperation*. Stockholm: Stockholm International Water Institute.
Gupta, J. (2016): Watercourses convention and hydro-hegemony. *The International Spectator*, 51(3), 118–131.
Hamada, Y. M. (2017): *The Grand Ethiopian Renaissance Dam, its impact on Egyptian agriculture and the potential for alleviating water scarcity,* Vol. 55. Cham: Springer.
Hayat, S., et al. (2022): Review of hydro-hegemony. *Water Policy*, 24(11), 1723–1740.
HICGI News Agency (2025): Museveni, El-Sisi pledge stronger economic ties. *HICGI News Agency*, <accessed online: https://hicginewsagency.com/2025/08/14/museveni-el-sisi-pledge-stronger-economic-ties-at-egypt-uganda-business-forum/>.
Hopf, T. (1998): The promise of constructivism. *International Security*, 23(1), 171–200.
Högselius, P. (2018): *Energy and geopolitics*. England: Routledge.
Jansky, L., Nakayama, M., & Pachova, N. I. (2008): Introduction: From domestic to international water security. In: Pachova, N. I., Nakayama, M. & Jansky, L. (Eds.): *International water security: Domestic threats and opportunities*. Tokyo: United Nations University Press, 1–6.
Johnson, L. (2014): Adapting and combining constructivist grounded theory and discourse analysis: A practical guide for research. *International Journal of Multiple Research Approaches*, 8(1), 100–116.
Jägerskog, A., Schulz, M. & Swain, A. (2019): Perspectives on Middle East security: An introduction. In: Jägerskog, A., Schulz, M. & Swain, A. (Eds.): *Routledge handbook on Middle East security*. London, England: Routledge, 3–15.
Keith, B., Enos, J., Garlick, C. B., Simmons, G., Copeland, D. & Cortizo, M. (2013): Limits to population growth and water resource adequacy in the Nile River Basin, 1994–2100. In: *Proceedings of the 31st international conference of the system dynamics society.* Cambridge: Cambridge, 21–25.
Louts, J. (Ed.). (2014): *Key Concepts in Water Resource Management*, Vol. 1. London: Routledge.
Lautze, J. & Manthrithilake, H. (2012): Water security concepts. *Natural Resources Forum*, 36(2), 76–87.
Magsig, B. O. (2011): Overcoming state-centrism. *Goettingen J. Int'l L.*, 3, 317.

Magsig, B. O. (2017): *Water security as an evolving paradigm: Local, national, regional and global considerations.* In: *Routledge Handbook of Water Law and Policy*. London: Routledge, 382–394.
Magsig, B. O. (2020): Water security and international law. *RECIEL*, 29(1), 44–55.
Matthew, R. A. (2000): Environment as national security. *Journal of Policy History*, 12(1), 101–122.
Mathews, J. T. (2011). Redefining security. In: Williams, P. D. (Ed.): *Security studies: An introduction*, 2nd ed. London, England: Routledge, 64–70.
McCaffrey, S. C. (2019): *The law of international watercourses*. Oxford: Oxford University Press.
Mearsheimer, J. J. (2001): *The tragedy of great power politics*. New York, NY: W. W. Norton & Company
Mekonnen, D. Z. (2010): Water security paradigm. *European Journal of International Law*, 21(2), 421–440.
Mekonnen, D. Z. (2011): Nile basin CFA. *Goettingen Journal of International Law*, 3, 345.
Mekonnen, D. Z. (2013): Nile waters dispute. *International Journal of Ethiopian Studies*, 7.
Ministry of Finance and Economic Development (2010): *Federal Democratic Republic of Ethiopia: Growth and Transformation Plan*. (2010/11-2015/16). Addis Ababa, Ethiopia.
Nagheeby, M. & Rieu-Clarke, A. (2020): *Water diplomacy in the Helmand Basin*. London: Routledge.
National Planning Commission (2016): *Federal Democratic Republic of Ethiopia: Growth and Transformation Plan II* (GTP II) (2015/16-2019/20). Addis Ababa, Ethiopia.
Neumann, I. B. (2009): National security, culture and identity. In: *The Routledge handbook of security studies*. London: Routledge, 111–120.
News Central (2024): Disputed Nile River Agreement Moves Forward Despite Egypt's Objections. *News Central*, <accessed online: https://newscentral.africa/disputed-nile-river-agreement-moves-forward-despite-egypts-objections/>.
Nyaoro, J. R. (2016): *Water security of the Nile Basin States* (PhD Dissertation). Nairobi: University of Nairobi.
Oestigaard, E. T. (2016): Water and national Identities and hydropolitics in Egypt and Ethiopia. In: *Land and Hydropolitics in the Nile River Basin.* London: Routledge, 227–246.
Paisley, R. K. (2017): Why the 11 countries that rely on the Nile need to reach on a river deal soon. *The Conversation*, <accessed online: https://theconversation.com/why-the-11-countries-that-rely-on-the-nile-need-to-reach-a-river-deal-soon-75868>.
Pahl-Wostl, C., Bhaduri, A. & Gupta, J. (2016). Introduction. In: *Handbook on water security*. Cheltenham, England: Edward Elgar Publishing, 1–10.

Palme, O. (1982): Introduction. In: *Common security: A blueprint for survival*. New York, NY: United Nations, xi–xvii.
Posen, B. R. (1993): The security dilemma and ethnic conflict. *Survival,* 35(1), 27–47.
Rossi, C. R. (2022): Water security and hydro-egoism: endogenous hegemony and the Grand Ethiopian Renaissance Dam. *Indiana Int'l & Comp. L. Rev.*, 32, 247.
Sadoff, C. W. & Grey, D. (2002): Beyond the river: the benefits of cooperation on international rivers. *Water Policy*, 4(5), 389–403.
Salman, S. M. (2013): Nile basin CFA. *Water International*, 38(1), 17–29.
Salman, S. M. (2020). The Nile River Basin: On the road towards inevitable cooperation? In: *A bridge over troubled waters*. Leiden: Brill Nijhoff, 377–401.
Schweller, R. L. (1996): Neorealism's status-quo bias: What security dilemma? *Security Studies,* 5(3), 90–121.
Tekuya, M. (2019): Governing the Nile under climatic uncertainty. *Natural Resources Journal*, 59(2), 321–246.
Tekuya, M. (2020): The Egyptian hydro-hegemony in the Nile Basin: The quest for changing the status quo. *The Journal of Water Law*, 26(2), 10–20.
Tekuya, M. (2024): Entry into force of the Nile Basin CFA. *EJIL: Talk!,* <https://www.ejiltalk.org/entry-into-force-of-the-nile-basin-cooperative-framework-agreement-challenges-and-prospects/>.
Tomé, L. (2010): Security and security complex. *Janus.net*, 1(1), 29–44.
Turton, A. (2008): Southern African hydropolitical complex. In: Varis, O., Tortajada, C. & Biswas, A. K. (Eds.): *Management of transboundary rivers and lakes*. Berlin: Springer, 21–79.
UN (1997): Convention on the Law of the Non-navigational Uses of International Watercourses*. United Nations: Office of Legal Affairs,* <accessed online: https://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf>.
U.S. Bureau of Reclamation and U.S. Agency for International Development (1964): *Land and Water Resources of the Blue Nile*. Washington, DC: U.S.
Van der Walt, J. L. (2020): Interpretivism-constructivism as a research method in the humanities and social sciences–more to it than meets the eye. *International journal of philosophy and theology*, 8(1), 59–68.
Väyrynen, R. (2023): Multilateral security: Common, cooperative or collective. In: *Raimo Väyrynen: A Pioneer in International Relations, Scholarship and Policy-Making*. Cham: Springer International Publishing, 391–412.
Vörös, Z. (2024): Hydro-hegemony in East and Southeast Asia. The Case of the Lancang/Mekong River. In: Szálkai, K. & Szalai, M. (Eds.): *Theorizing Transboundary Waters in International Relations*. Cham: Springer International Publishing, 69–82.
Vuković, S. (2019): Conflict management redux: Desecuritizing intractable conflicts. In: Butler, M. J. (Ed.): *Securitization revisited: Contemporary Applications and Insights*. London: Taylor & Francis Group, 145–167.

Wæver, O. (1998): *Insecurity, security, and a security*. Cambridge: Cambridge University Press.
Waltz, K. N. (2001): *Man, the state, and war: A theoretical analysis*. New York: Columbia University Press.
Watson, J. E. (2015): *Beyond cooperation: Environmental Justice in Transboundary Water Management* (Doctoral Thesis). Oregon, Oregon State University, <accessed online: https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/9g54xm630>.
Wendt, A. (1992): Anarchy is what states make of it. *International Organization*, 46(2), 391–425.
William, F. K. A. (2024): Interpretivism or constructivism: Navigating research paradigms in social science research. *International Journal of Research Publications,* 143(1), 5.
Woldetsadik, T. K. (2017): Nile Basin Initiative and CFA. *Mizan Law Review*, 11(1), 196–228.
Wolf, A. T., Stahl, K. & Macomber, M. F. (2003). Conflict and cooperation in river basins. *Water Resources Update*, 125, 31–40.
Wouters, P. (2000): From hydrosovreignty to hydrosolidarity. *Water International*, 25(2), 202–207.
Wouters, P., Vinogradov, S. & Magsig, B. O. (2009): Water security, hydrosolidarity, and international law: A river runs through It ...*Yearbook of International Environmental Law*, 97–134.
Wouters, P. & Ziganshina, D. (2011): Tackling the global water crisis: unlocking international law as fundamental to the peaceful management of the world's shared transboundary waters-introducing the H_20 paradigm. In: Grafton, R.Q. & Hussey, K. (Eds.). *Water Resources Planning and Management*. Cambridge: Cambridge University Press, 175–229.
Ziganshina, D. (2014): *Promoting transboundary water security in the Aral Sea Basin through intervational law,* Vol. 3. Leiden: Martinus Nijhoff Publishers.

Annex I: List of Research Participants

Interviews	**Office**	**Position**	**Country**	**Code**
In-depth	Ministry of Foreign Affairs	Diplomat	Ethiopia	II-P-01
In-depth	Ministry of Foreign Affairs	Diplomat	Ethiopia	II-P-02
In-depth	Ministry of Foreign Affairs	Diplomat	Ethiopia	II-P-03
In-depth	Ministry of Foreign Affairs	Researcher	Ethiopia	II-P-04
In-depth	Ministry of Foreign Affairs	Researcher	Ethiopia	II-P-05
In-depth	Ministry of Water & Energy	Director	Ethiopia	II-P-06
In-depth	Ministry of Water & Energy	Expert	Ethiopia	II-P-07
In-depth	Ministry of Water & Energy	Expert	Ethiopia	II-P-08
In-depth	Ministry of Water & Energy	Expert	Ethiopia	II-P-09
In-depth	GERD Project Office	Director	Ethiopia	II-P-10
In-depth	ENTRO	Expert	South Sudan	II-P-11
In-depth	Addis Ababa University	Academic	Ethiopia	II-P-12
In-depth	Addis Ababa University	Academic	Ethiopia	II-P-13
Semi-structured	ENTRO	Expert	Sudan	II-P-14
Semi-structured	GERD Project Office	Expert	Ethiopia	SI-P-21
Semi-structured	GERD Project Office	Expert	Ethiopia	SI-P-22
Semi-structured	GERD Project Office	Expert	Ethiopia	SI-P-23
Semi-structured	GERD Project Office	Manager	Ethiopia	SI-P-24
Semi-structured	GERD Project Office	Expert	Ethiopia	SI-P-25
Semi-structured	Institute for Water Education	Academic	Netherlands	SI-P-26
Semi-structured	EU Special Representative	Expert	Italy	SI-P-27
Semi-structured	Addis Ababa University	Academic	Ethiopia	SI-P-28
Semi-structured	Addis Ababa University	Academic	Ethiopia	SI-P-29
Semi-structured	Addis Ababa University	Academic	Ethiopia	SI-P-30
Semi-structured	Bahirdar University	Academic	Ethiopia	SI-P-31
Semi-structured	Bahirdar University	Academic	Ethiopia	SI-P-32
Semi-structured	Australian National University	Academic	Australia	SI-P-33
Semi-structured	Ministry of Justice	Expert	Ethiopia	SI-P-34
Semi-structured	Ministry of Justice	Expert	Ethiopia	SI-P-35
Semi-structured	Ministry of Water & Energy	Expert	Ethiopia	SI-P-36
Total				30