

Impact case study (REF3)

Institution: University of Aberdeen		
Unit of Assessment: 18 (Law)		
Title of case study: Promoting fair, peaceful and sustainable use of the Blue Nile waters through the lens of the Grand Ethiopian Renaissance Dam (GERD)		
Period when the underpinning research was undertaken: 2013-2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Zeray Yihdego	Professor	2013-current
Period when the claimed impact occurred: 2013-2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact (indicative maximum 100 words)		
<p>The issue of water management in the Nile basin is a source of regional contestation between the neighbouring states. Research led by Professor Yihdego at the University of Aberdeen has been instrumental in articulating how the legal principle of fairness can play a role in ensuring practical implementation of equitable and cooperative utilisation of the Nile Waters and the operation and management of the Grand Ethiopian Renaissance Dam (GERD). As a consequence of his work, increasing attention is being paid to the principles of procedural fairness and distributive justice and their role in creating a new trilateral communication framework. Yihdego's collaborative and individual research has been drawn on by government officials and policy makers in Ethiopia, Sudan and Egypt, providing strategies to arrive at a peaceful and equitable resolution of the tension. It thereby fosters cooperation and supports regional peace and security.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>Public International Law encompasses sub-fields such as treaty law and international human rights law. As a framework however, it lacks effective enforcement and therefore by itself cannot create sharing regimes that abide by its instruments. Efforts to strengthen and reform international law seek to increase incentives to develop more effective and open management regimes by applying frameworks to analyse commitment and compliance.</p> <p>Yihdego has sought to address this issue, in collaboration with experts in a range of fields including Economics and Hydrology. Through his research [1], Yihdego has previously shown that a careful balance must be struck between the use of natural resources for economic growth, the implementation of international and legal obligations, and the pursuit of sustainable development. This balance requires an effective and workable legal framework. His research has explored [1, 4-6] the application of Public International Law to areas such as integration, governance, peace and security, as well as shared natural resource management. It has produced normative and theoretical analysis designed to support regional institutions and promote the integration agenda required to ensure a good fit between norms or policies and reality, helping to maximise trust and support from all actors, including governments, citizens, businesses, civil society actors and donors.</p> <p>In doing so, he has centralised the legal concept of fairness to develop a framework for analysing both commitment and compliance in International Law. The principle of fairness for the purposes of this field comprises two elements: a substantive right to share and preserve water resources accounting for, inter alia, population, socio-economic and human needs, hydrological and environmental considerations; and a right process through which all concerned states equally participate in determining and applying their substantive rights and duties.</p>		

The Decision Analytic Framework Nexus to explore the water-energy-food Nexus in complex transboundary water resources of fast developing countries (DAFNE)

Since 2016, Yihdego has been a member of the EU-funded DAFNE project [P1], working with a consortium of 14 partners from Europe and Africa to facilitate collaboration for sustainable and effective solutions to WEF management. Consideration of water, energy and food (WEF) in the context of their interdependencies is necessary to ensure sustainable and equitable management of shared water resources. International watercourses and river basins in Africa cut through multiple countries (riparian states) that often have conflicting interests. Effective cooperation and economic integration are preconditions for regional stability and the fulfilment of development and are essential for the peaceful co-existence of states.

DAFNE has provided a Decision Analytic Framework to explore the WEF nexus in complex transboundary water resource systems of fast developing countries, providing a better understanding of the challenges posed by these independencies. The project generates and explores alternative planning and management solutions based on the cooperation of public and private stakeholders. It fosters the profitable but equitable use of resources without transgressing environmental limits or creating societal and/or stakeholder conflicts [2].

Analysing commitment and compliance in the context of fairness: The Blue Nile

Yihdego has increasingly explored the concept of fairness, using it as a framework for analysing both commitment and compliance in international law, using it to explore specific contexts, such as legal developments related to the Blue Nile [4]. Yihdego argues that whilst the principle of fairness often faces criticism for being too vague to shed meaningful light on the practical interpretation and implementation of international law within specific fields, its application helps give it further meaning. Fairness, whilst a well-established concept in law, is closely associated with the principles of equity and justice.

One of the most significant facets of fairness is its correlation to compliance. By using the linkages between principle of fairness and international watercourses law to provide a 'fairness lens' [5], Yihdego has explored the extent to which considerations of fairness can be evidenced in the evolution of the legal regime relating to the Nile. As a result, he has been able to tease out examples where considerations of fairness may have relevance to the creation, interpretation and application of international law relating to the Nile River Basin. Yihdego thereby argues that the law relating to international watercourses is a means to understand what fairness means in practice either in relation to the design of cooperative arrangements, and process or interests that might be reconciled in the determination of equity. Similarly, his research has shown that procedural fairness and distributive justice, as normative standards, constitute two sides of the same coin, which in turn demands that both are considered together when analysing the merits of trans-boundary treaty frameworks [5].

Applying the fairness lens to the Grand Ethiopian Renaissance Dam (GERD)

The GERD, currently under construction by Ethiopia, will be the biggest hydropower dam in Africa. Energy security and economic benefits are at the heart of this estimated USD4,800,000,000 mega dam. Entirely funded by Ethiopia, it is the country's first major hydropower project on the Nile and is expected to generate enough electricity to meet the country's energy needs and for exports to neighbouring Sudan and Egypt, providing much needed affordable and clean energy for the region's socio-economic development. However, the commencement of the GERD in 2011 has heightened tensions between Egypt and Ethiopia, with Egypt insisting on its historical rights to the Nile waters as contained in colonial era treaties leading to considerable unrest in the region.

In 2019, the United States intervened in GERD negotiations through sponsored negotiations, attempting to enforce a framework of GERD reservoir filling, operation and management, which led to major disruption of the talks. Yihdego prepared a policy brief, drawing on the principles of fairness [6], recommending that for the parties to achieve a fair and equitable settlement of the issues on the GERD in accordance with international water law, they would need to:

- explore the option of an African forum for resolution of the disagreements should the tripartite negotiations fail;
- recognise the equitable right of all riparian states to utilise and share water resources as a vital asset to lift millions of people out of extreme poverty;

- identify and respect the downstream effects of upstream water use to millions of people who heavily depend on the Nile;
- ensure free will and equal participation of the three riparian states in the process.

3. References to the research (indicative maximum of six references)

References:

[1] **Yihdego, Z.**, 2013, July. The Blue Nile dam controversy in the eyes of international law. In *Global Water Forum: Discussion Paper* (pp. 1-14). Global Water Forum. doi: <https://globalwaterforum.org/2013/06/18/the-blue-nile-dam-controversy-in-the-eyes-of-international-law/>

[2] **Yihdego, Z.**, & Gibson, J. (2020). Implementing International Watercourses Law through the WEF Nexus and SDGs: an Integrated Approach Illustrated in the Zambezi River Basin, *Brill Research Perspectives in International Water Law*, 5(3), 3-90. doi: <https://doi.org/10.1163/23529369-12340019>

[3] **Yihdego, Z.** (2011), The African Union: Founding Principles, Frameworks and Prospects. *European Law Journal*, 17: 568-594, doi: <https://doi.org/10.1111/j.1468-0386.2011.00567.x>

[4] **Yihdego, Z.** and Rieu-Clarke, A., 2016. An exploration of fairness in international law through the Blue Nile and GERD. *Water International*, 41(4), pp.528-549. doi: [10.1080/02508060.2016.1196321](https://doi.org/10.1080/02508060.2016.1196321)

[5] **Yihdego, Z.** and Rieu-Clarke, A., (2017). International law developments on the sharing of Blue Nile waters: A fairness perspective. *The Grand Ethiopian Renaissance dam and the Nile Basin*. Global Water Forum. doi: <https://globalwaterforum.org/2020/04/16/international-law-connnotations-of-us-mediated-blue-nile-dam-negotiations-and-outcomes-background/>

[6] **Yihdego, Z.**, Rieu-Clarke, A., & Cascão, A.E. (Eds.). (2017). *The Grand Ethiopian Renaissance Dam and the Nile Basin: Implications for Transboundary Water Cooperation* (1st ed.). Routledge, doi: <https://doi.org/10.4324/9781315160122> Peer reviewed. Note: this was initially submitted to the three parties, the USA and the World Bank as a policy/amicus Brief and was well received.

Grants:

[P1] **Yihdego, Z.** Use of a decision-analytic framework to explore the water energy food nexus in complex and trans-boundary water resources systems of fast-growing developing countries (DAFNE). European Commission; 09/16-08/20; (GBP186,715)

4. Details of the impact (indicative maximum 750 words)

Yihdego's research has successfully established an evidence base and information framework for policy makers and negotiators looking to fashion the sustainable and equitable management of water resources. Through his research and as lead of an international multi-disciplinary consortium comprised of experts in hydrology, economics, law, hydro-politics and environmental science from the region, Europe and North America, Yihdego has developed recommendations for policy makers on the GERD. In doing so, Yihdego has informed and facilitated international discussions concerning water management in the region. This has occurred at the level of NGO, intergovernmental negotiations, and at the United Nations; throughout he has also sought to raise public awareness and deepen public knowledge of the issues involved.

In 2015, on the basis of his recommendations for GERD management, Yihdego was approached by the International Water Resources Association (IWRA), a non-profit organisation connecting professionals and corporations to provide joined up solutions to sustainable use of the world's water resources. The IWRA asked Yihdego to co-host a special session during the XVth World Water Congress in Edinburgh. This session was attended by more than 50 government, practitioner and academic experts; Yihdego presented a paper on the fairness principle and its application to the Blue Nile. The papers from the Congress were later published as the first special issue of *Water International* in 2016 on the topic [S1i]. The issue, guest edited by Yihdego and his team, titled '*The Grand Ethiopian Renaissance Dam: Legal, Political and Scientific Challenges*'

was formally launched at the 2016 World Water Week in Stockholm which was attended by 40 delegates made up of civil society organisations, experts and government officials from Egypt, Sudan and Ethiopia [S1ii]. He later co-hosted a special session with Dr Ana Cascio, currently a Nile advisor for the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and Professor Alistair Rieu-Clarke of Dundee University (now at Northumbria), focusing on law, science and policy at the XVI World Water Congress, held in Cancun in the summer of 2017.

Attendees to the 2017 session included officials from the Nile Basin. [text removed for publication] [S8].

Given the significant interest in his and his consortium's research, Yihdego published a policy brief and webinar in collaboration with IWRA in 2017, focusing on the GERD as a catalyst for cooperation on the Nile. The webinar was described as 'IWRA's strongest yet', attended by more than 90 participants from the Nile region and elsewhere and represented a key opportunity to bring together experts, policymakers, government officials and journalists to discuss the technical, legal, economic, and political problems and solutions for the GERD [S2]. Given the success of the webinar and policy brief, the President of IWRA has confirmed: '*Yihdego's efforts have articulated a new trilateral communication framework within the Nile region that focuses on the need for reconciling poverty and the lack of access to energy in Ethiopia and Sudan with that of preventing negative socio-economic impacts on Egypt*' [S3].

As his ideas have gained traction, Yihdego has been invited to and participated in several roundtable discussions with policymakers, security experts and academics to discuss matters relating to the GERD. These include an event organised by WeAspire, a non-profit public policy organization focusing on Africa issues with a special focus on Ethiopia, titled 'Learning from the past, looking into the future' (05/09/20) and an event organised by Glasgow Centre for International Law and Security (25/11/20), titled 'The "Renaissance Dam" dispute: the state of transboundary water law in the face of climate insecurity' [S4i]. The WeAspire event was attended by the Former Minister for the Ministry of Water Resources of Sudan, Executive Director of the Eastern Nile Technical Regional Office (ENTRO) and by Senior Water Policy Analysts. [text removed for publication] [S7].

By encouraging and supporting evidence-based dialogue throughout the development of the GERD, Yihdego's research has provided a valuable resource to inform debate in a much-contested area. [text removed for publication] [S7].

As demonstrated, Yihdego's research has reached a wide range of beneficiaries through effective engagement with policymakers, civil society, the media and the public, which has been crucial in articulating the role of public international law in the negotiations and demonstrating the practicalities of such a framework. In 2019, he was invited to give a keynote lecture in Khartoum at a Water Diplomacy Training event organised by Khartoum University, Sudan and European funders including IHE-Delft (the largest international graduate water education facility globally), which was attended by 38 diplomats, civil society organisations and scholars. As a result, IHE-Delft released a statement confirming that discussions throughout the event had clarified a need for a long-term capacity building program to fill the (knowledge) gap in the region [S4ii].

The need to clarify law and policy options open to the three states was brought into sharp focus when the USA and World Bank intervened in 2019 to help the parties – particularly Ethiopia and Egypt – resolve their differences. With this intensification of negotiation and, critically, the stalling of the US-sponsored mediation process, Yihdego took the opportunity to prepare a policy brief examining the outstanding issues relating to negotiations. The brief analysed the failure of the mediation process and encouraged the parties to recognise both the equitable right of all riparian states to utilise and share water resources as a vital asset, and the downstream effects of upstream water use to millions of people who heavily depend on the Nile. This policy brief, *International Law Connotations of US-Mediated Nile Dam Negotiations and Outcomes: Why and how the parties should regain control*, was founded on his framework of the fairness principle and critically assessed the merits and failings of the US-proposed text and its process; this then led to Yihdego making important proposals that are necessary to resolve the tension [S6].

The policy brief was circulated to negotiators from the three states, civil societies, the World Bank and the USA, and has received a favourable response from policymakers, [text removed for publication] [S5].

The matter was brought before the UN Security Council in May and June 2020. Yihdego strongly advised and advocated through his policy brief and bilateral conversations with the parties, for parties to consider the African Union's good offices should they fail to resolve their differences. Sudan and Ethiopia accepted the need for resorting to the African Union. The UN Security Council has subsequently referred the matter to the African Union, under the Chairmanship of the South African President, H.E Matamela Cyril Ramaphosa, to help the parties to come to an agreement.

Yihdego's Policy Brief has been published by Global Water Forum in a 4-series publication (<https://globalwaterforum.org/2020/04/16/international-law-connnotations-of-us-mediated-blue-nile-dam-negotiations-and-outcomes-background/>), with key recommendations published separately in *Ethiopia Insight*, a popular newspaper edited in the UK [S9i]. The Brief has also been translated into Amharic (Ethiopian language) and published in a well-known newspaper called *The Ethiopian Reporter*, to create public awareness and has been translated into Arabic and published by a Middle East Arabic newspaper, creating awareness in the Arab world and in Egypt and Sudan in particular [S9ii].

5. Sources to corroborate the impact (indicative maximum of 10 references)

- [S1 (group)] (i) Special Issue of Water International Volume 41, No.4 [2016], launched at the Stockholm International Water Week 2016 https://www.iwra.org/wp-content/uploads/2017/03/GERD_Presentation5.pdf; (ii) details of launch and attendance: https://www.iwra.org/wp-content/uploads/2017/03/IWRA_Update_September_2016.pdf
- [S2 (group)] IWRA in collaboration with Yihdego et al, '*The Grand Ethiopian Renaissance Dam (GERD) A Catalyst for Cooperation on the Nile*', Policy Briefing, Water International No. 5, December 2016, available at https://www.iwra.org/wp-content/uploads/2017/03/PB_N5_web.pdf; The Grand Ethiopian Renaissance Dam - A Catalyst for Cooperation on the Nile' Webinar No.7 [IWRA]), available at <https://www.iwra.org/iwra-webinar-n7/>;
- [S3] Testimonial from President of International Water Resources Association (IWRA)
- [S4 (group)] (i) Roundtable event details; [text removed for publication]
- [S5] [text removed for publication]
- [S6] Feedback from stakeholders on Policy Brief by Professor Zeray Yihdego titled: '*International Law Connotations of US-Mediated Nile Dam Negotiations and Outcomes: Why and how the parties should regain control*'.
- [S7] [text removed for publication]
- [S8] [text removed for publication]
- [S9 (group)] (i) Policy Brief (2020); (ii) Media articles: *Ethiopia Insight* Publication; *The Ethiopian Reporter* Publication, Parts 1 and 2; Middle East Arabic Newspaper