The Blue Nile and its Watercourse Through Ethiopia into Sudan and Egypt: A Paradigmatic Shift in Water Rights, An Analytical Overview

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The February 2020 round of Washington-brokered talks among Egypt, Ethiopia, and Sudan, on filling the Grand Ethiopian Renaissance Dam (GERD) failed to reach an agreement after Ethiopia walked away from the talks. The objective of this research is to examine critically the paradigmatic interfaces between the three water rights regimes of Ethiopia, Sudan, and Egypt. The research question is: what are the legal consequences of these two legal paradigm transitions for Ethiopia's building the GERD? Argument seeks to sustain the proposition that the lowland riparian states of Sudan and Egypt have developed their water rights legal regimes, and in the case of Egypt, a multi-thousand year prestigious state apparatus, while Ethiopia's course of development had truncated its inherent right to enjoy its own natural Nile watercourse resources. Since the research examines critically some of the civil law issues of water rights, some constitutional issues, some issues of international law, and some policy issues, the research paradigm must be in the nature of meta-law. Thus, the research methodology is to be library research, constructing a meta-legal critical narrative analysis. Ethiopia has carefully constructed a considerable state domain system, generated by a public trust over its river resources, with its people as priority beneficiaries. Egypt has maintained its ancient prescriptive claim of res communis over Nile waters, based on its ancient, subsisting, and considerable prestige. Whether this dispute remains intractable, or not, likely depends on mediating the reach in the various jurisdictions of the rights prescribed in international law, and already deployed by Ethiopia as the bases for their new public state domain.

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I. INTRODUCTION

The February 2020 round of Washington-brokered talks among Egypt, Ethiopia, and Sudan on filling the Grand Ethiopian Renaissance Dam failed to reach an agreement after Ethiopia walked away from the talks. Addis Ababa instead moved towards the Nile Basin countries, to counter Egypt's international moves to block Ethiopia's filling of the dam, which was scheduled to commence at the start of the seasonal rains in June 2020. Ethiopian President Sahle-Work Zewde visited Kenya, Uganda, and Rwanda, each of which are members of the regional Nile Basin Initiative.¹ The President called for the "just and equitable"² use of

^{1.} The Nile Basin Initiative (NBI) is an intergovernmental partnership of the 10 Nile Basin countries of Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania and Uganda. Eritrea participates as an observer. NILE BASIN INITIATIVE, https://www.nilebasin.org (last visited Apr. 4, 2023).

^{2.} Five principles of peaceful coexistence, defining "just and equitable" international agreements are: (a) mutual respect for each other's territorial integrity and sovereignty; (b) mutual nonaggression; (c) mutual noninterference in each other's internal affairs; (d) equality and mutual benefit; and (e) peaceful coexistence. Declaration of the Russian Federation and the People's Republic of China on the Promotion of International Law, China-Russ., Jun. 25, 2016, MINISTRY OF FOREIGN AFFS. OF THE PEOPLE'S REPUBLIC OF CHINA, https://www.fmprc.gov.cn/mfa_eng/wjd t_665385/2649_665393/201608/t20160801_679466.html (last visited Apr. 20, 2023); *but see* Gary Lilienthal & Nehaluddin Ahmad, *The South China Sea Islands Arbitration: Making China*'s

water and a rejection of all likely unequal international agreements, a reference to historical water agreements of the region's former British colonial era.³ Therefore, in the light of apparently intractable disagreements in the international instruments, the objective of this research is instead to examine critically the paradigmatic interfaces between the three water rights regimes of Ethiopia, Sudan, and Egypt, with the aim of discovering the underlying controlling issues.

In Ethiopia, water rights were incorporated for the first time into the Ethiopian Civil Code of 1960,⁴ entrenching the principle of state domain.⁵ Waterways, lakes, and underground accumulations of water were to form part of the public (state) domain.⁶ Thus, Ethiopia recognizes two types of ownership: private and state domains.⁷ In a public domain, the community has priority in the usage of all running and still water.⁸ Water shall, however, be private property, in the private domain, wherever in a man-made reservoir, basin or in cisterns, from which it is not flowing naturally.⁹

In the international environment, in 2015, Egypt, Sudan, and Ethiopia signed a set of principles¹⁰ that state in part that the purpose of the dam is for "power generation, to contribute to economic development, promotion of transboundary cooperation and regional integration through generation of sustainable and reliable clean energy supply."¹¹

In Sudan, there had been rivalry among European colonial powers in the upper valley of the Nile. In the 1890s, the British employed land

Position Visible in Hostile Waters, 18 ASIAN–PAC. L. & POL'Y J. 83, 105–07 (2017) (critically discussing these principles).

^{3.} Ayah Aman, *Ethiopia Turns to Upstream Countries Amid Nile Dam Dispute with Egypt*, AL–MONITOR (Apr. 15, 2020), https://www.al-monitor.com/originals/2020/04/egypt-ethiopia-nile-dam-dispute-upstream-countries-support.html.

^{4.} CIVIL CODE OF THE EMPIRE OF ETHIOPIA, art. 1447 (1960).

^{5.} REVISED CONSTITUTION OF THE EMPIRE OF ETHIOPIA, Nov. 4, 1955, art. 130(a) (promulgated by Emperor Haile Selassie I).

^{6.} CIVIL CODE OF THE EMPIRE OF ETHIOPIA, art. 1447 (1960).

^{7.} *Id.* art. 1445 (identifying the principle of public domain).

^{8.} Id. art. 1228.

^{9.} *Id.* art. 1229.

^{10.} Agreement on Declaration of Principles between the Arab Republic of Egypt, the Federal Democratic Republic of Ethiopia and the Republic of the Sudan on the Grand Ethiopian Renaissance Dam Project (GERDP), Mar. 23, 2015, ECOLEX, https://www.ecolex.org/details/ treaty/agreement-on-declaration-of-principles-between-the-arab-republic-of-egypt-the-federaldemocratic-republic-of-ethiopia-and-the-republic-of-the-sudan-on-the-grand-ethiopian-renaissance -dam-project-gerdp-tre-160043/ (last visited Apr. 20, 2023) [hereinafter GERDP Agreement].

^{11.} Id. art. 2.

acquisition tactics against the locals.¹² British colonialists had developed strategies for creating a river empire on the entire Nile,¹³ suggesting a similar planned takeover of Ethiopia.¹⁴

In the light of these colonial activities in Sudan, water rights had subsisted based on a principle of usufruct, as the right to use land that belonged to another.¹⁵ This usufructuary right could be acquired through inheritance, deed, will, or actual possession or improvement of the lands.¹⁶ Central and regional governments of Sudan now have authority for grants of usufruct over publicly held land.¹⁷ Usufructuary rights continue while lawfully exploited,¹⁸ terminating for breach,¹⁹ at the grant's expiry,²⁰ or if the property is expropriated or destroyed.²¹

In Egypt, where an ancient civilization had been built on Nile waters, as well as on the fertilizing properties of river silt originating in Ethiopia's Blue Nile, the current laws of water rights are mostly constitutional. They are contained in a long historic memory, encoded in ancient texts, such as in the ancient Hymn of Kheti.²² There are also Egyptian views that water rights subsist due to ethical components of ancient tacit agreements with upstream countries. Thus, in Kheti's Hymn, the river creates the grain, as well as all good things, arguably stated in a context of ethical deliberation, with the land's young men and its children rendering royal homage to the Nile. Kheti preserved the view that the Nile literally made mankind and caused all the state's servants to exist, suggesting the genesis of the great Pharaonic state and its civilization and its modern descendants. This view is similar to ancient subsisting indigenous views expressed elsewhere in the world, in particular with those even more ancient views expressed by Aboriginal peoples of the Australian continent.²³

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^{12.} MWANGI KIMENYI & JOHN MBAKU, GOVERNING THE NILE RIVER BASIN: THE SEARCH FOR A NEW LEGAL REGIME 28 (2015).

^{13.} ANGUS KONSTAM, NILE RIVER GUNBOATS 1882–1918 12–34 (2016).

^{14.} Terje Tvedt, *Hydrology and Empire: The Nile, Water Imperialism and the Partition of Africa*, 39 J. IMPERIAL & COMMONWEALTH HIST. 173, 175–76 (2011).

^{15.} Civil Transactions Act 1984, § 560(6) (Sudan).

^{16.} Id. §§ 573(1), 695.

^{17.} Id. § 566(1)–(2).

^{18.} Id. § 572(1).

^{19.} Id. § 573(6).

^{20.} Id. § 696(a).

^{21.} Id. §§ 572(3), 696(b); but see id. § 707(2).

^{22.} Written circa 2100 BCE by Khety. *See* NICOLAS GRIMAL, A HISTORY OF ANCIENT EGYPT (1992).

^{23.} E.g., Anne Poelina & Donna Bagnall, *Recognizing the Martuwarra's First Law: Right to Life as a Living Ancestral Being*, 9 TRANSNAT'L ENV'T L. 541 (2020) (discussing Martuwarra, River of Life).

From this, it appears there are two international legal paradigmatic transitions along the Nile from Ethiopia: the first from Ethiopia to Sudan as a transition from domain principles to usufruct principles, and the second transition from Sudan to Egypt as a transition from usufruct principles to water rights by prescription from time immemorial. Thus, the question arises as to what the legal consequences of these two legal paradigm transitions are for Ethiopia's building the Grand Ethiopian Renaissance Dam. Our argument sets out to sustain the proposition that the lowland riparian states of Sudan and Egypt have developed their water rights legal regimes, and in the case of Egypt, a multi-thousand-year prestigious state apparatus, while Ethiopia's course of development has truncated its inherent right to enjoy its own natural Nile watercourse resources.

Since the research examines critically civil law issues of water rights, constitutional issues, issues of international law, and policy issues, the research paradigm must be meta-law. Thus, the research methodology is to be library research, constructing a meta-legal critical narrative analysis. The Article is structured into four substantive sections of the research. The first is entitled Water Rights in Ethiopia. The second is entitled The Dispute over the New Ethiopian Dam on the Blue Nile, with subsections on The Grand Ethiopian Renaissance Dam, and International Views Relating to the Blue Nile. The third is entitled Land and Water in Sudan, with subsections on Sudan Colonial Background, Sudan Legal System, The Right to Use Land in Sudan, Usufruct in Sudan, and Water Rights in Sudan. The fourth is entitled Egyptian Water Rights, beginning with a substantial subsection on the background of the Egyptian state and its laws, The Law of Water Rights in Egypt, followed by Egyptian Constitutional Provisions, and finally, Egyptian Civil Law of Water Rights. The research is furnished with a detailed conclusion containing the authors' syntheses and final argumentative conclusions.

The research outcomes reason that Ethiopia has carefully constructed a considerable state domain system, generated by a public trust over its river resources, with its people as priority beneficiaries. Egypt has maintained its ancient prescriptive claim of *res communis* over Nile waters, based on its ancient, subsisting, and considerable prestige. Thus, the conflict is between an Egyptian domain, based on powerful ancient legislation, and a newer Ethiopian public state domain founded on the general internationally formed rights to life and biodiversity of the Ethiopian peoples. Whether this dispute remains intractable likely depends on mediating the reach in the various jurisdictions of the rights prescribed in international law, and already deployed by Ethiopia as the bases for their new public state domain.

II. WATER RIGHTS IN ETHIOPIA

Under old customary rules and practices, Ethiopian waters and rivers always were communal property, suggesting a long-term local character for the likely governing customs. In addition, in many parts of the country, it is widely observable to all, to this day, that riverbank trees have been kept intact, as are trees in religious shrines. This tradition can be taken as a form of indigenous knowledge for water preservation and protection.²⁴

It was only as recently as the 1950s and 1960s, when Ethiopia started to modernize the country by codification of its laws, that water rights were incorporated into the Ethiopian Civil Code of 1960.²⁵ This followed the constitutional provision: "The natural resources of, and the sub-soil of the Empire including those beneath its waters, are state domain,"²⁶ implying a prior exercise of eminent domain.²⁷ The justification was that "The natural resources in the waters, forests, land, air, lakes, rivers and ports of the Empire are a sacred trust for the benefit of the present and succeeding generations of the Ethiopian people."²⁸ Article 1447 provides that "Waterways, lakes and underground accumulations of water shall be deemed to form part of the public domain,"²⁹ implying that the Blue Nile in Ethiopia is a public domain.

The Ethiopia Civil Code recognizes two types of ownership, private and state. If a property, owned by the State, or other administrative body, is directly placed or left at the disposal of the public, or is destined to be a public service and is, by its nature or by reason of adjustments, principally or exclusively adapted to the particular purpose of the public service concerned, it is considered as a public domain.³⁰ As a public domain, the community has priority in the usage of all running and still water.³¹

^{24.} Id. at 549.

^{25.} CIVIL CODE OF THE EMPIRE OF ETHIOPIA (1960).

^{26.} REVISED CONSTITUTION OF THE EMPIRE OF ETHIOPIA, Nov. 4, 1955, art. 130(a) (promulgated by Emperor Haile Selassie I).

^{27.} Eminent domain is the authority of a government entity or agent to seize property for a public purpose in exchange for appropriate compensation. Michele M. Hoyman & Jamie R. McCall, "*Not Imminent in My Domain!*" *County Leaders' Attitudes toward Eminent Domain Decisions*, 70 PUB. ADMIN. REV. 885 (2010).

^{28.} REVISED CONSTITUTION OF THE EMPIRE OF ETHIOPIA, Nov. 4, 1995, art. 130(b) (promulgated by Emperor Haile Selassie I).

^{29.} CIVIL CODE OF THE EMPIRE OF ETHIOPIA, art. 1447 (1960).

^{30.} Id. art. 1445.

^{31.} Id. art. 1228.

However, water shall be private property, wherever it is collected in a man-made reservoir, basin, or in cisterns, from which it does not flow naturally,³² meaning that damming the Blue Nile could theoretically create a form of privately-owned water mass, owned by the State.

A landowner can use surface or ground water in his land, or bordering his land, for personal consumption of his family or cattle.³³ A landowner is any person who has ownership of land, which extends below and above the surface of the land to the extent necessary for the use of the land.³⁴ Though there is no legal limit stipulated as to the number of cattle, Ethiopia's Civil Code seems to envisage traditional cattle rearing, where their number is neither large nor commercial. But, the landowner is under an affirmative duty to share the excess water with his neighbors, where they cannot get water elsewhere, except at exaggerated costs.³⁵ He can use the water for irrigation purposes, as long as he does not affect the rights of others on the land or downstream, either for domestic use or for their cattle, because domestic use is given priority.³⁶ However, if the landowner's land use deteriorates, due to such adverse use by others, he is entitled to compensation, as fixed by a competent court.³⁷ Regarding industrial and commercial uses, the landlord whose land is crossed or bordered by a river has a right to use the water, provided he does not pollute the water.³⁸ For hydraulic power generation and distribution, a concession³⁹ is required from the government.⁴⁰

Both underground water and rivers form part of the public domain, and to construct a drill-hole deeper than 100 meters on the landholder's land, permission is required.⁴¹ For fishing and navigation, special laws were required to be made.⁴² However, these laws were promulgated only in recent times.

40. Id. art. 1244.

^{32.} Id. art. 1229.

^{33.} *Id.* art. 1232.

^{34.} *Id.* art. 1209.

^{35.} *Id.* art. 1233.

^{36.} *Id.* art. 1236–37.
37. *Id.* art. 1239–40.

^{37.} *Id.* art. 1239–4 38. *Id.* art. 1242.

^{6.} *1a*. art. 1242.

^{39.} *Id.* art. 3207(2) ("The concession of a public service is the contract whereby a person, the grantee, binds himself in favor of an administrative authority to run a public service getting a remuneration therefor by means of fees received on the use thereof."). Electric power production and distribution is one of such public services.

^{41.} Id. art. 1255.

^{42.} Id. art. 1256.

A dramatic change took place with the adoption of the current Ethiopian Constitution in 1995,⁴³ which provided that all land and other natural resources, such as minerals, rivers, lakes, came under state ownership. As a matter of history, when its monarch was deposed in 1974, Ethiopia embarked upon socialism, and land was redistributed to the landless by seizing it from the nobles and from the rich, under the revolutionary banner of "land to the tiller." This was given effect by law, which had brought all rural lands under public ownership.⁴⁴ It was also a time of massive nationalization of private property, including urban land and unoccupied houses.⁴⁵

Under the 1987 Ethiopian Constitution, a socialist instrument of governance, land became state property, by the removal of effect of the Civil Code's provisions for private ownership of land.⁴⁶ As per the Constitution, "Natural resources, in particular land, minerals, water and forest, are state property."⁴⁷ One of the reasons for opposition⁴⁸ against the present constitution, the Ethiopian Federal Democratic Republic Constitution,⁴⁹ is its maintenance of land as state property, just as it was during the socialist era, commonly known as the Derg regime.⁵⁰ Ethiopian citizens do not now have rights of ownership over the country's natural resources. Previously, individuals could own land and man-made water reservoirs.

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^{43.} CONSTITUTION OF FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA, Aug. 21, 1995 [hereinafter FDRE CONSTITUTION].

^{44.} A Proclamation to Provide for Public Ownership of Rural Land, Proclamation No. 31/1975, Negarit Gazeta (Ethiopia).

^{45.} A Proclamation to Provide for Government Ownership of Urban Land and Extra Urban Houses, Proclamation No. 47/1975, Negarit Gazeta (Ethiopia).

^{46.} CONSTITUTION OF THE PEOPLE'S DEMOCRATIC REPUBLIC OF ETHIOPIA, Feb. 22, 1987, art. 118 (stating that the Constitution is the supreme law and any law or decision contrary to the Constitution shall have no effect).

^{47.} *Id.* art. 13(2).

^{48.} There are some liberal political parties whose one of the priorities in their agenda is private ownership of land if they come to power. Actually, land has ever been ceased from being sold in fraudulent ways. A landholder concludes a sale of a house to a buyer while the contract is indeed that of sale of land. This kind of practice tells us the society in general does not support state ownership of land exclusively. It is a commonplace that courts in Ethiopia from lowest to the highest levels are stuffed with litigations related to land issues. Beza Zerga, *Land Resource, Uses and Ownership in Ethiopia: Past, Present and Future*, 2 INT'L J. OF RSCH. & ENG'G TRENDS 17 (2016) (examining in brief the existing debates on land ownership issues and the merits of private ownership over state ownership of land).

^{49.} FDRE CONSTITUTION, *supra* note 43.

^{50.} CONSTITUTION OF THE PEOPLE'S DEMOCRATIC REPUBLIC OF ETHIOPIA, Feb. 22, 1987, art. 13(2).

Until 1974, the land holding and tenure system in Ethiopia was different in the northern and southern parts of the country. In the North, while the hereditary system known as "rist" had enabled the private ownership of land, if the individual could trace his lineage, the holding system referred to as "gult" was land granted by emperors to the military generals, governors, and officers for their service to the emperors or to the country. When the Southern peoples came into Ethiopia around the end of the nineteenth century, the gult was introduced into the South, granting land to the military generals and governors who conquered native peoples, the church, and few local nobilities, with the common native peoples becoming mere tenants. Thus, ownership of land in the Southern part was restricted to the gult holders, while in the North, those tracts of rist holders and gult holders could enjoy ownership rights. Apart from the distinction that rist was dominant in the North, and gult in the South, the land in the rist system could only be devolved within the lineage line. But in the gult system, land was easily alienated or exchanged.⁵¹ Now, the change is so significant that land and its natural resources have all come within the public domain, as provided thus:

The right to rural and urban land, as well as all natural resources, is exclusively vested in the State and in the peoples of Ethiopia. Land is a common property of the Nations, Nationalities and Peoples of Ethiopia and shall not be subject to sale or other means of exchange.⁵²

However, Ethiopians, as peasants and pastoralists, have the right to obtain land without payment and to secure a guarantee against eviction by the state.⁵³ This guarantee is not absolute, as farmers and pastoralists can be displaced, due to the implementation of state programs, with commensurate monetary or alternative means of compensation.⁵⁴ They have possessory rights on land and of other natural resources, which are found beneath their plot of land, but they can only own natural resources to a limited extent through restrictions to traditional mining.⁵⁵

The Federal Government is given the power to "determine and administer the utilization of waters or rivers and lakes linking two or more

^{51.} JOHN MARKAKIS & NEGA AYELE, CLASS AND REVOLUTION IN ETHIOPIA 30-43, 71 (1986).

^{52.} FDRE CONSTITUTION, *supra* note 43, art. 40(3).

^{53.} FDRE CONSTITUTION, supra note 43, art. 40(4)(5).

^{54.} FDRE CONSTITUTION, *supra* note 43, art. 44(2). The details are provided for in the special laws dealing with expropriation, rural land, and urban land promulgated by the federal government and each nine regional states from time to time.

^{55.} Ethiopian Water Resources Management Proclamation No. 197/2000, art. 12, Federal Negarit Gazeta.

[regional] States or crossing the boundaries of the national territorial jurisdiction."⁵⁶ If such waters or rivers or lakes are found only within one regional state, and do not cross the national border, the concerned state owns and administers them.⁵⁷ This conforms to the Ethiopian Water Resources Management Policy,⁵⁸ which considers water as a natural endowment, commonly owned by all the peoples of Ethiopia,⁵⁹ but presumably, not in *res communis*,⁶⁰ due to Ethiopia's domain system. Although these policies in Ethiopia do not have the force of law, they do function as guidelines, by which any organ of government, including the court, should consult in the implementation of the constitution, other laws and public policies.

However, it does not mean that the individual peasants, pastoralists, or investors do not have usage rights over those waters and rivers. They do have rights to use the water for their personal consumption, as well as for cultivation and for their animals. Indeed, as far as conditions permit, every Ethiopian citizen shall have access to sufficient water of acceptable quality, to satisfy their basic needs.⁶¹ Though it is not justiciable⁶² as an act of state, "The State has the obligation to allocate ever increasing resources to provide to the public health, education and other social services."⁶³ Water is one of such social services, which the State is duty

^{56.} FDRE CONSTITUTION, *supra* note 43, art. 51(11).

^{57.} FDRE CONSTITUTION, *supra* note 43, art. 52.

^{58.} FDRE CONSTITUTION, *supra* note 43, art. 85-92 (National Policy Principles and Objectives).

^{59.} Ethiopian Water Resources Management Proclamation No. 197/2000, art. 5, Federal Negarit Gazeta.

^{60.} Things that were owned in common were called *res communis*, and they included the air, the oceans, the sunshine, etc., which could be enjoyed by anyone and from which no-one could be barred. HUGO GROTIUS, MARE LIBERUM (THE FREEDOM OF THE SEAS) 24 (R.V.D. Magoffin trans., 1916).

^{61.} Ethiopian Water Resources Management Proclamation No. 197/2000, art. 7(1), Federal Negarit Gazeta.

^{62.} Individuals are not granted a right to education, health, and other social services. They have only a right to equal access to publicly funded social services. FDRE CONSTITUTION, *supra* note 43, art. 41(3). In other words, if there is no public service, say a hospital, one cannot claim successfully his rights against the state in a court of law. If those public services are already made available, thus every Ethiopian has a right to equal access to enjoy them. If there is discrimination or denial in having access, then one who is denied or discriminated may apply to the court and get a remedy. But this is not a socio-economic right. It is basically a civil right to be equally treated and not to be discriminated. Nevertheless, there are some who claim that socio-economic rights are justiciable in Ethiopia. *See generally*, Sisay Bogale Kibret, Competence and Legitimacy of Ethiopian Courts in the Adjudication of Socio-economic rights: An Appraisal of the Challenges and Prospects (Dec. 2010) (LL.M. Thesis, Addis Ababa University School of Graduate Studies, School of Law).

^{63.} FDRE CONSTITUTION, supra note 43, art. 41(4).

bound to provide. Ethiopia, as party to the United Nations Covenant on Economic, Social and Cultural Rights,⁶⁴ has an international obligation in the provision of such services. The judiciary and other organs of the government have the duty⁶⁵ to interpret individual rights incorporated in the constitution in conformity with the principles of the Universal Declaration of Human Rights,⁶⁶ International Covenants on Human Rights⁶⁷ and other international instruments adopted by Ethiopia. That means that courts can consult these general principles in giving meaning to a right whenever the need arises. This seems to suggest that the state's priority is its people, over local international agreements.

Similarly, it is provided that "All water resources of the country are the common property of the Ethiopian people and the state."⁶⁸ In other words, both surface and underground waters are owned by the state. Among the different usages of water, domestic use has priority over any other uses.⁶⁹

When disputes arise between a permit holder and a third party, the Ministry of Water Resources,⁷⁰ or any other supervisory organ of the public domain,⁷¹ will resolve the disputes by way of adjudication of compensation.⁷² Their decision is appealable to a competent court. However, if the issues relate to disputes between a supervisory body and a permit holder, they must first be settled through mediation, and finally, by arbitration. A foreseeable conflict of interest over the utilization and management of water resources has been identified between the federal jurisdictions and regional states. Its resolution is not yet adequately legally regulated.⁷³

^{64.} G.A. Res. 2200A (XXI), International Covenant on Economic, Social and Cultural Rights (Jan. 3, 1976). Ethiopia acceded to this covenant in 1993.

^{65.} FDRE CONSTITUTION, *supra* note 43, art. 13(2).

^{66.} G.A. Res. 217 (III) A, Universal Declaration of Human Rights (Dec. 10, 1948).

^{67.} G.A. Res. 2200A (XXI), International Covenant on Civil and Political Rights (Mar. 23, 1976) *and* G.A. Res. 2200A (XXI), International Covenant on Economic, Social and Cultural Rights (Jan. 3, 1976).

^{68.} Ethiopian Water Resources Management Proclamation No. 197/2000, art. 5, Federal Negarit Gazeta.

^{69.} *Id.* art. 7(1).

^{70.} Now named the Ministry of Water, Irrigation, and Energy. Definition of Powers and Duties of the Executive Organs of the Federal Democratic Republic of Ethiopia Proclamation No. 1097/2018, art. 23, Federal Negarit Gazette.

^{71.} There are different organs at federal and regional governmental levels, such as the River Basin Councils and Authorities.

^{72.} Ethiopian Water Resources Management Proclamation No. 197/2000, art. 9, Federal Negarit Gazeta.

^{73.} See Abiy Chelkeba, Competing Water Resource Demands in Ethiopia's Federal System: Infancy of the Law Toward Integrated Management, 12 MIZAN L. REV. 231, 243 (2018).

Every person is required to have permits to use waters for any purposes or construct any works.⁷⁴ Only in the following two situations is a person exonerated from having a permit: (a) to dig water wells by hand or use water from hand-dug wells, and (b) to use water for traditional irrigation, artisanal mining, and for traditional animal rearing, as well as for water mills.⁷⁵

Water permits can be renewed, amended, transferred, or canceled by the supervising government organ for various reasons.⁷⁶ Any water user is subject to payment of water charges. The price for water should be neither too high nor too low.⁷⁷ The government bears the duty of meeting the basic water demands of disadvantaged rural communities. For livestock, industrial and other water uses, the "User Pays" policy applies.⁷⁸ Under this principle, such costs should be borne by beneficiaries. In other words, the water supply is not free of cost, and water pricing reflects such costs. Hence, the State bears the duty to cover costs for water supply for the disadvantaged rural communities, who might be unable to pay, but who might be willing to cover the operation and maintenance costs.

Based on a permit system, the Water Policy envisages the involvement of the private sector⁷⁹ in the development and supply of water resources with a view to achieving the highest social and economic benefits for the Ethiopian people out of the management of any water resource.⁸⁰ Private investors have already been involved in the production and supply of bottled water in urban areas, and now this industry is booming at a remarkable rate.⁸¹ Despite the growing demand by urban middle classes for bottled water for drinking, in preference to tap water, and investors' keen interest in engaging in that business, as it is a lucrative

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^{74.} Ethiopian Water Resources Management Proclamation No. 197/2000, art. 11, Federal Negarit Gazeta.

^{75.} Id. art. 12.

^{76.} Id. art. 15-17.

^{77.} MINISTRY OF WATER RESOURCES, ETHIOPIAN WATER RESOURCES MANAGEMENT POLICY, THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA § 2.2.5(b)(4) (1999).

^{78.} Id. § 2.3.1.4.B(4), C(1).

^{79.} *Id.* § 2.1.1(16).

^{80.} Ethiopian Water Resources Management Proclamation No. 197/2000, art. 6, Federal Negarit Gazeta.

^{81.} Matiwos Ensermu, *Trends in Bottled Water Use Survey in Addis Ababa: Implication on Reverse Logistics of Bottled Manufacturing in Ethiopia*, 3 INT'L J. SCI. & RSCH. 934, 935 (2014).

business, there is still a legal gap in governance of the private sector in the supply of water for drinking and sanitation.⁸²

With respect to water for fishing, the federal legislative body promulgated a law in 2003.⁸³ The Proclamation regulates fishing for subsistence, commercial, recreation, and research purposes,⁸⁴ and the objectives are conservation of the fish biodiversity and its environments, prevention and control of over-exploitation of the fisheries resources, increasing the contribution of fisheries in ensuring food security through the supply of safe and good quality fish, and expanding aquaculture development.⁸⁵ The law is to be applied to "all water bodies found within the boundary of Ethiopia such as lakes, rivers, streams, reservoirs, ponds, and marshy areas where fish are bred and where fishing, preparing, activities and marketing takes place."⁸⁶ This appears to contribute further to maintaining a public domain. Thus, any person, be it physical or legal, can engage in fishery activities, when having secured a permit from the competent supervisory federal or regional government organ.⁸⁷

Traditionally, both at the time of the Civil Code and in the current legal systems of Ethiopia, water resources have remained the common property of the Ethiopian people. The change of constitutional laws and the progressive legislation, from time to time, and the involvement of the private sector in water management and utilization do not change the fact that water resources are in the public domain.

III. THE DISPUTE OVER THE NEW ETHIOPIAN DAM ON THE BLUE NILE

A. The Grand Ethiopian Renaissance Dam

Constructing the Grand Ethiopian Renaissance Dam on the Blue Nile, some 20km upstream from the Ethiopia-Sudan international border, offers modernizing benefits for Ethiopia and its surrounding countries, primarily in upgraded and stabilized electrification. However, questions of how the Grand Ethiopian Renaissance Dam will affect the water supplies and generation of power in the downstream countries of Sudan

^{82.} Mulugeta M. Ayalew et al., *The Regulatory Implications of the Right to Water: Small Scale and Independent Water Providers in Ethiopia and Kenya*, 1 INT'L J. OF SUSTAINABLE DEV., 43, 48 (2010).

^{83.} Fisheries Development and Utilization Proclamation No. 315/2003, Federal Negarit Gazeta (Ethiopia).

^{84.} Id. art. 5.

^{85.} *Id.* art. 3.

^{86.} *Id.* art. 4.

^{87.} Id. art. 5.

and Egypt have spurred ongoing debates.⁸⁸ Thus, the geopolitical complexities of the region have necessitated a review of existing design parameters for the filling phase of the seventy-four billion cubic meter storage reservoir behind the Grand Ethiopian Renaissance Dam.⁸⁹

A recent declaration of principles was signed by Egypt, Sudan, and Ethiopia in 2015,⁹⁰ which states in part:

2. Principle of development, regional integration and sustainability:

The purpose of the Renaissance Dam is to generate power, contribute to economic development, promote cooperation beyond borders, and regional integration through generating clean sustainable energy that can be relied on.⁹¹

Technical details of this cooperation in reservoir filling are not yet established, although computer modeling has already simulated the development of the Eastern Nile Basin,⁹² and parties have analyzed several Grand Ethiopian Renaissance Dam filling methods.⁹³ Nevertheless, these studies of Grand Ethiopian Renaissance Dam filling strategies have delimited their analyses to a small number of hydrological settings, resulting in over-determined results, a paucity of details of the

^{88.} See EDF & SCOTT WILSON, EASTERN NILE POWER TRADE PROGRAM STUDY: PRE-FEASIBILITY STUDY OF BORDER HYDROPOWER PROJECT, ETHIOPIA (2007) (report to Nile Basin Initiative).

^{89.} Kevin G. Wheeler et al., *Cooperative filling approaches for the Grand Ethiopian Renaissance Dam*, 41 WATER INT'L 611 (2016); *see* MEMBERS OF THE IPOE, INTERNATIONAL PANEL OF EXPERTS ON THE GRAND ETHIOPIAN RENAISSANCE DAM PROJECT FINAL REPORT (2013).

^{90.} GERDP Agreement, *supra* note 10.

^{91.} GERDP Agreement, *supra* note 10, art. 2.

^{92.} See Diane Arjoon et al., Hydro-Economic Risk Assessment in the Eastern Nile River Basin, 8 WATER RES. & ECON. 16 (2014); DON BLACKMORE & DALE WHITTINGTON, OPPORTUNITIES FOR COOPERATIVE WATER RESOURCES DEVELOPMENT ON THE EASTERN NILE: RISKS AND REWARDS, FINAL REPORT – AN INDEPENDENT REPORT OF THE SCOPING STUDY TEAM TO THE EASTERN NILE COUNCIL OF MINISTERS (2008); Paul Block & Kenneth Strzepek, Economic Analysis of Large-Scale Upstream River Basin development on the Blue Nile in Ethiopia Considering Transient Conditions, Climate Variability, and Climate Change, 136 J. WATER RES. PLAN. & MGMT. 156 (2010); Giorgio Guariso & Dale Whittington, Implications of Ethiopian Water Development for Egypt and Sudan, 3 INT'L J. WATER RES. DEV. 105 (1987); Matthew McCartney & Michael Girma, Evaluating the Downstream Implications of Planned Water Resource Development in the Ethiopian Portion of the Blue Nile River, 37 WATER INT'L 362 (2012); Abay Yimere & Engdawork Assefa, Beyond the Implications of Grand Ethiopian Renaissance Damfilling Policies, 7 AIMS GEOSCIENCES 313 (Aug. 2021) (citing Huaming Yao et al., The Nile Decision Support Tool, River Simulation and Management, Report No. GCP/INT/752/ITA, GA. INST. TECH., 2003).

^{93.} A. BATES ET AL., FIRST JOINT MULTIPURPOSE PROGRAM IDENTIFICATION: STRATEGIC PERSPECTIVES AND OPTIONS ASSESSMENT ON THE BLUE NILE MULTIPURPOSE DEV. – WORKING PAPER 2 (2013); Andrew King & Paul Block, *An Assessment of Reservoir Filling Policies for the Grand Ethiopian Renaissance Dam*, 5 J. WATER & CLIMATE CHANGE 233 (2014).

complexities of existing reservoirs,⁹⁴ and providing only limited testing of possible degrees of coordination among the stakeholders.⁹⁵

The Nile Basin, located in Eastern Africa, measures 3.18 million km². The river system is comprised of two major tributaries, the White Nile and Blue Nile, both merging in Sudan and forming the Main Nile that runs north through Egypt.⁹⁶ The Blue Nile is sourced in the Ethiopian Lake Tana, and forms a deep canyon, running clockwise, across the Ethiopian plateau, before passing the international border into Sudan. It contributes greatly to the Sudanese agricultural economy before joining with the White Nile in the northern parts of the Sudan capital city of Khartoum.⁹⁷ North of the confluence of the White Nile and Blue Nile in Khartoum, the Atbara River, which originates in Ethiopia and Sudan, joins the Nile and provides the last major, but intermittent, contribution of waters before traversing the Nubian Desert into Egypt.⁹⁸

Monsoonal rainfalls in the Ethiopian highlands provide the majority of the system's flow through the Blue Nile, the Tekeze-Setit-Atbara, and the Baro-Akobo-Sobat sub-basins,⁹⁹ while only about half of the flows from the Lake Victoria region emerge as the White Nile from the wetlands in South Sudan. Thus, the Blue Nile contributes about 57% of the total waters into the main Nile flowing into Egypt. The White Nile contributes some 30% and the Atbara River contributes about 13%.¹⁰⁰ Although most of the precipitation catchment is in Ethiopia and the Equatorial Lakes region, Sudan and Egypt consume the majority of the water. This apparent imbalance in equity has the potential for international conflict.

The construction of the Grand Ethiopian Renaissance Dam is the most recent event in a long history of development in the Eastern Nile Basin. The Low Aswan Dam in 1902, the Sennar Dam in 1925, and the Jebel Aulia Dam in 1937 were all constructed under British colonial governance, with an ostensible view to extending the seasonal floodwaters in Egypt and enhancing Sudan's agricultural potential, with

^{94.} King & Block, supra note 93.

^{95.} BATES ET AL., *supra* note 93; King & Block, *supra* note 93; Asegdew Mulat & Semu Moges, *Assessment of the Impact of the Grand Ethiopian Renaissance Dam on the Performance of the High Aswan Dam*, 6 J. WATER RES. & PROT. 583 (2014).

^{96.} Wheeler et al., *supra* note 89, at 612–13.

^{97.} G.M. CRAIG, THE AGRICULTURE OF THE SUDAN (1991).

^{98.} Wheeler et al., *supra* note 89 at 613.

^{99.} JOHN SUTCLIFFE & YVONNE PARKS, THE HYDROLOGY OF THE NILE 170 (1999).

^{100.} BLACKMORE & WHITTINGTON, *supra* note 92; NILE BASIN INITIATIVE, STATE OF THE RIVER NILE BASIN (2012).

its Gezira irrigation scheme.¹⁰¹ However, as a colonial agreement, it must arguably be construed as being primarily in Britain's interests. After Sudan¹⁰² and Egypt¹⁰³ achieved independence from Britain, the Khashim El Girba Dam in 1964, the Rosaries Dam in 1966, and the High Aswan Dam in 1970 were built pursuant to a 1959 treaty between Sudan and Egypt.¹⁰⁴ This agreement provided, *inter alia*, as follows:

That the amount of the Nile waters used by the United Arab Republic until this Agreement is signed shall be her acquired right before obtaining the benefits of the Nile Control Projects and the projects which will increase its yield and which projects are referred to in this Agreement; The total of this acquired right is 48 Milliards of cubic meters per year as measured at Aswan.¹⁰⁵

It is difficult to understand how this provision was possible, considering the water flow sources were outside the states' jurisdictions. As of 2016, joint international infrastructure management in the Eastern Nile basin did not exist.¹⁰⁶ Even though the High Aswan Dam had been advantageous for Egypt's economy,¹⁰⁷ the development of additional storage in the Grand Ethiopian Renaissance Dam upstream has uncertain implications for both Egypt and Sudan.¹⁰⁸

B. International Views Relating to the Blue Nile

The Blue Nile (also known as "Abbay") is one of the rivers of Ethiopia that crosses the national border. It is the largest contributory of the Nile basin waters, accounting for 85% of the Nile.¹⁰⁹ It is one of national pride. It is not uncommon to hear traditional and modern music sung for the Blue Nile. However, the River has never benefited Ethiopia. Though a significant portion of Ethiopia has adequate rainfall, large parts

^{101.} TERJE TVEDT, THE RIVER NILE IN THE AGE OF THE BRITISH: POLITICAL ECOLOGY AND THE QUEST FOR ECONOMIC POWER (2004).

^{102.} Sudan formally attained its independence from Britain and Egypt on Jan. 1, 1956.

^{103.} Egypt gained independence from the British Empire on Feb. 28, 1922.

^{104.} Agreement between the Arab Republic of Egypt and the Republic of the Sudan for the Full Utilization of the Nile Waters, Egypt-Sudan, Nov. 8, 1959, U.N.T.S. 64 [Hereinafter 1959 Nile Agreement].

^{105.} *Id.* art 1.

^{106.} Salman Salman, *The Grand Ethiopian Renaissance Dam: The Road to the Declaration of Principles and the Khartoum Document*, 41 WATER INT'L 512 (2016).

^{107.} Kenneth Strzepek et al., *The Value of the High Aswan Dam to the Egyptian Economy*, 66 ECOLOGICAL ECONOMICS 117, 125–26 (2008).

^{108.} Wheeler et al., supra note 89, at 614.

^{109.} Bishop et al., Water as a Mirror for Landscapes: How Useful a Hypothesis for Research Management?, 93 EOS 259 (2012).

of it are drought and famine driven. Internal instability and civil wars, frequent international conflicts and natural catastrophes have caused Ethiopia's low level of development and abject poverty. Its population is fast growing and is the second largest in Africa. It has not utilized its natural resources to meet its peoples' socio-economic demands. Ethiopia did not secure international funding to finance projects due to international geopolitical influences, the main force of which has been representations by Egypt.¹¹⁰ Until a few decades ago, the number of people in Ethiopia with access to clean and safe water was around 17%,¹¹¹ while 99% of Egyptians have had access to water.¹¹²

Experiencing relative stability over the last three decades, the Ethiopian government has crafted national policies to reduce or eradicate poverty and improve the living standards of the people. One of such policies is the water policy adopted to enhance the socio-economic development of the Ethiopian people.¹¹³ Regarding trans-boundary rivers such as the Abbay, the policy aims to "foster meaningful and mutually fair Regional cooperation and agreements on the joint and efficient use of trans-boundary waters with Riparian countries based on 'equitable and reasonable' use principles."¹¹⁴ Institutionally, for the promotion and supervision of the proper management and implementation of water resources in the Abbay basin, an institution known as the Abbay Basin High Council and Authority was established in 2008 to address the Grand Ethiopian Renaissance Dam.¹¹⁵ However, news of the new project was not welcomed by the lower riparian jurisdictions of Sudan and Egypt.¹¹⁶

The two countries have been using the Nile waters in a form of monopoly and have agreements solely among themselves. The first was

^{110.} Interview with Dr. Yacob Arsano, an expert on hydro-politics issues of transboundary rivers (Jan. 17, 2018). Dr. Arsano is an advisor to different organs of the government, foreign affairs, the GERD National Council, Ethiopian panel of experts on the Abbay Basin and teaches at Addis Ababa University, Political Science and International Relations.

^{111.} MINISTRY OF WATER RESOURCES, ETHIOPIAN WATER RESOURCES MANAGEMENT POLICY, THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA i (1999).

^{112.} Interview with Mr. Wondimu Asaminew, who was a high official in the Ministry of Foreign Affairs for 24 years and former Ethiopian ambassador to Somalia (Apr. 22, 2020). Currently, he teaches at Mekelle University, International Relations and Strategy Studies, Mekelle, Ethiopia.

^{113.} MINISTRY OF WATER RESOURCES, supra note 110, at iii.

^{114.} MINISTRY OF WATER RESOURCES, *supra* note 110, at § 2.2.8.

^{115.} Abbay Basin High Council and Authority Establishment Regulation No.151/2008, Federal Negarit Gazeta (Ethiopia); Ethiopian Water Resources Management Proclamation No. 197/2000, art. 6, Federal Negarit Gazeta (providing fundamental principles for water management).

^{116.} Interview with Dr. Yacob Arsano (Jan. 17, 2018).

made in 1929,¹¹⁷ and was then amended in 1959.¹¹⁸ As per these agreements, the two countries claim a monopoly over the Nile waters, ignoring the upper riparian countries of Ethiopia, Eritrea, South Sudan (a new country), Kenya, Uganda, Tanzania, Democratic Republic of Congo, Rwanda, and Burundi. In the amending agreement, Sudan and Egypt's shares were re-arranged in such a way that Sudan was to get 18.5 billion cubic meters and Egypt was allocated 55.5 billion cubic meters of the annual net of 74 billion cubic meters out of 84 billion gross water of the Nile.¹¹⁹ Ethiopia argues it was never a party to either of the above agreements and cannot be bound by an agreement made by others to its disadvantage. Ethiopia had immediately notified Sudan and Egypt of its rejection of their agreements.¹²⁰

IV. LAND AND WATER IN SUDAN

A. Sudan Colonial Background

In 1882, British troops invaded and occupied Egypt. Their reasoning for sending a fleet of British ships to Alexandria is still contentious. Some have argued that this British invasion was to quash the 'Urabi Revolt and protect British control over the Suez Canal to maintain its shipping route to the Indian Ocean.¹²¹ The 'Urabi revolt was an Egyptian nationalist uprising¹²² led by Colonel Ahmed 'Urabi to depose the Khedive Tewfik Pasha¹²³ and end British and French foreign influence. The revolt triggered a war between Britain and Egypt and resulted in the British takeover of Egypt.

Others rejected this argument, asserting no danger to the Suez Canal from the 'Urabi uprising, who maintained legal and social stability.¹²⁴ The British government appeared to have been concerned for protection of British bondholders heavily invested in Egypt. British investments in

^{117.} Patrick Lock Otieno Lumumba, *The Interpretation of the 1929 Treaty and Its Legal Relevance and Implications for the Stability of the Region*, 11 AFR. SOCIO. REV. 1, 12–13 (2007).

^{118. 1959} Nile Agreement, supra note 104.

^{119. 1959} Nile Agreement, *supra* note 104, § II(3), (4).

^{120.} Interview with Dr. Yacob Arsano (Jan. 17, 2018).

^{121.} RONALD ROBINSON ET AL., AFRICA AND THE VICTORIANS: THE OFFICIAL MIND OF IMPERIALISM (1961).

^{122.} The 'Urabi revolt took place from 1879 to 1882.

^{123.} The Khedive was effectively the Ottoman Viceroy.

^{124.} A.G. Hopkins, *The Victorians and Africa: A Reconsideration of the Occupation of Egypt, 1882, 27 J. AFR. HIST. 363, 373–74 (1986).*

Egypt had grown greatly in the 1880s, partially from the Khedive raising funds from foreign debt to finance building the Suez Canal.¹²⁵

While rivalry among European colonial powers in the upper valley of the Nile in the 1890s was suggestive of the British imperial tactics of land acquisition from the locals,¹²⁶ it was not the primary motivation for the British spreading out upstream.¹²⁷ During the 1890s, British colonialists developed military and diplomatic strategies and tactics for creating a river empire on the entire Nile.¹²⁸ London's two strategic objectives were: (a) to develop the Nile for maximal cotton production and exports to Lancaster in the United Kingdom,¹²⁹ and (b) to develop the Egyptian economy to enhance stability at the Suez Canal, which was their optimal maritime path to India.¹³⁰

The first cotton cultivated in the Nile delta was called "Jumel," named after the Frenchman Monsieur Louis Alexis Jumel, who introduced it in 1820. Jumel, after successfully growing cotton plants from seeds imported from Sudan, presented them to the Khedive who foresaw a very profitable cotton-growing empire under his control.¹³¹ The cotton was also called "Mako," after M. Jumel had remarked on plants growing in the fine Cairo gardens of an Arab nobleman Mako El Orfali, and from whose gardens Jumel had originally collected and re-grown the first seeds. This extra-long staple cotton variety of *Gossypium barbadense L.* was for many years the only cotton cultivated in Egypt.¹³²

Planners in London understood that control of the upper Nile would likely give Britain influence over Egyptian nationalists. For diplomatic reasons, the inevitable military occupation of Sudan was framed as an Anglo-Egyptian joint enterprise. Thus, it was supported by the Egyptian

^{125.} Id. at 379-80.

^{126.} MWANGI KIMENYI & JOHN MBAKU, GOVERNING THE NILE RIVER BASIN: THE SEARCH FOR A NEW LEGAL REGIME 28 (2015).

^{127.} Terje Tvedt, Water and Society: Changing Perceptions of Societal and Historical Development 63-64 (2016).

^{128.} ANGUS KONSTAM, NILE RIVER GUNBOATS 1882–1918 12–34 (2016).

^{129.} By 1934, Cotton had essentially displaced Egyptian grains production. Cotton was now some 85% of Egyptian agricultural exports. PERRY KENTON NORRIS, U.S. DEP'T OF AGRIC., TECHNICAL BULLETIN 451, COTTON PRODUCTION IN EGYPT 1–4 (1934).

^{130.} Tvedt, supra note 14, at 176.

^{131.} But see Nehaluddin Ahmad et al., Corporate Plant Breeders and Indigenous Farmers' Rights: Linnaeus Overrides the F.A.O., 13 EUROPEAN FOOD & FEED L. 427 (2018) (discussing the argument on international movements of plants to create new imperial intellectual property in agriculture).

^{132.} Cultivation of Cotton in Egypt. (Gossypium barbadense, L.), 1897 BULLETIN OF MISC. INFO. (ROYAL BOTANIC GARDENS, KEW) 103 (1897).

elites and financed by Egyptian assets.¹³³ London knew that the long-time Egyptian irrigation question, since ancient times, could give them full political control over Egypt, because an improved control of the Nile upstream, beginning in Sudan, would give Egypt the summer waters that cotton growers needed.¹³⁴

Therefore, after invading and occupying Sudan, Britain set up an Anglo-Egyptian system of governance over the country in 1899. Sudan was granted a separate political status, whose sovereignty was operated by both the Egyptian Khedive and the British Crown, which they called a "condominium." The Sudan military and its civil government became vested in a Governor-General nominated by the British but appointed by the Khedive.

B. Sudan Legal System

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Arabized Sudanese and some southern ethnic groups had considered justice administration as the primary governmental function. Before colonization, justice was in the ruler's hands. In northern parts of Sudan, an Islamic judge, trained in a Sunni Islamic legal school, tried most cases. Both the Hanafiyya and Shafiyya Schools had adherents in Sudan.¹³⁵ Crimes committed against the government were decided by the ruler, advised by the Grand Mufti,¹³⁶ who was the official expert in the sharia.¹³⁷ Although Muslim influence on Sudanese law remained in place, British

^{133.} Tvedt, *supra* note 14, at 185 (citing correspondence respecting the lawsuit brought against the Egyptian government with regard to the appropriation of money from the general reserve fund to the expenses of the Dongola military expedition into Northern Sudan, Egypt).

^{134.} Tvedt, *supra* note 14, at 187.

^{135.} George Makdisi, *The Significance of the Sunni Schools of Law in Islamic Religious History*, 10 INT'L J. MIDDLE EAST STUD. 1, 1 (1979). There are four Sunni Schools of Islam. (1) The Hanafiyya School was formed was by Imam Abu Hanifa (699-767 CE) of Kufa, generally reflecting the jurists' views of Iraq. This school also has a following in Turkey, the countries of the Fertile Crescent, Lower Egypt and India. (2) The Malikiyya School was founded by Imam Malik bin Anas (d. 795 CE) of Medinah. Imam Malik was a judge in Medinah. The followers of this school are mostly in the North African countries. (3) The Shafiyya School was founded by Imam al-Shafi, (d. 820 CE), a disciple of Imam Malik, and is strongest in Lower Egypt, Syria, India and Indonesia. (4) The Hanbaliyya School was founded by Imam Ahmad bin Hanbal (d. 855 CE) of Baghdad. His was the most conservative of the four schools.

^{136.} The Grand Mufti is the state head of regional muftis, acting as Islamic jurisconsults. The office began in the Ottoman empire being adopted in many modern countries. James Broucek, *Mufti/Grand Mufti, in* THE PRINCETON ENCYCLOPEDIA OF ISLAMIC POLITICAL THOUGHT 365–66 (Gerhard Böwering et al. eds., 2013).

^{137.} LIBRARY OF CONGRESS, FEDERAL RESEARCH DIVISION, SUDAN: A COUNTRY STUDY (Helen Metz ed., 4th ed., 1992).

colonial rule left Sudan with a legal system patched together from several sources, ¹³⁸ with British-trained Sudan Superior Court judges.

C. The Right to Use Land in Sudan

In Sudan, there is a large amount of land owned by the government. The 1984 Civil Transactions Act provides that landowners have exclusive rights to its fruits, crops, and other natural products.¹³⁹ It provides that the landowner owns the airspace above the land and the soil below.¹⁴⁰ The landowner may not use the property so that it causes damage to his neighbor(s).¹⁴¹

D. Usufruct in Sudan

Usufruct is the right to use land that belongs to another.¹⁴² The usufructuary right can be acquired through inheritance, deed, will, or actual possession.¹⁴³ A person using rural wastelands, after improving them by cultivation, irrigation, or building, has usufruct over that land.¹⁴⁴ Central and regional governments of Sudan have authority for promoting land use. Thus, they may survey, divide, and operate land registries.¹⁴⁵ Committees of 3-5 members handle grants of usufruct over publicly held land.¹⁴⁶ When deliberating on usufruct grants, authorities must consider these issues:

- a. preservation of villages, natural resources, animal health and natural pasture areas;
- b. preservation of small agricultural enterprises;

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^{138.} In the 1890s, British forces invaded the Mahdi's Sudan, bringing it under their control, imposing their policies, and filling the top administrative posts with British officials. After World War I, the Sudanese nationalism movement gained steam. Conscious that the British could not suppress Sudanese desire for independence, the British colonizers signed an agreement in 1953 that granted the Sudanese self-governance. While free from British rule, however, the undeveloped, mainly Christian and animist South would still be ruled by an administration based in the remote capital of the Muslim-dominated North, Khartoum. Ariel Zirulnick, *South Sudan: A Timeline to Independence*, CHRISTIAN SCI. MONITOR (July 8, 2011), https://www.csmonitor.com/World/Africa/2011/0708/South-Sudan-a-timeline-to-independence/Independent-Sudan-and-the-growing-North-South-divide-1953-1970s.

^{139.} Civil Transactions Act of 1984, § 516(3) (Sudan).

^{140.} *Id.* § 516(4). But see, *Id.* § 556; Mines and Quarries Act of 1972 (Sudan); Petroleum Resources Act of 1972 (Sudan) (vesting the ownership of oil and minerals in the government).

^{141.} Civil Transactions Act of 1984, § 516 (Sudan).

^{142.} Id. § 560(6).

^{143.} Id. §§ 573(1), 695.

^{144.} Id. § 573.

^{145.} Id. § 560(6).

^{146.} Id. § 566(1)-(2).

- c. large tracts of land should not be granted without a determination that the grantee will exploit the whole of such area in the most favorable way;
- d. protection of drainage and other servitudes;
- e. particular land may be granted to more than one person, family, or company for the purpose of agricultural production by modern technique.¹⁴⁷

Authorities may set a precondition, when granting usufruct, for prior government consent before the grantee transfers his usufructuary interest to a non-Sudanese person.¹⁴⁸ If the usufruct grantee fails to use the rights for three years, the government may reclaim the grantee's usufructuary rights.¹⁴⁹ Unused usufructuary rights cannot be transferred to another person, an attempted transfer being void.¹⁵⁰ The government shall not expropriate usufruct unless in the public interest and for sufficient and just compensation.¹⁵¹ Rights and obligations from usufruct are sourced in the conditions in the grant instrument.¹⁵² A grantee is entitled to the products from the use,¹⁵³ including buildings, crops, and construction on the property, unless it violates the grant instrument,¹⁵⁴ and is entitled to court protection from encroachment.¹⁵⁵

The holder of usufructuary rights has the following correlative obligations:

- a. to use and exploit the property in the best manner which does not cause permanent damage to the land in question;¹⁵⁶
- b. to pay any rent agreed upon;¹⁵⁷
- c. to notify the owner of the land of any damage to the property;¹⁵⁸

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^{147.} Id. § 561.

^{148.} Id. § 569(4).

^{149.} Id. § 570(1)-(3).

^{150.} Id. § 570(5).

^{151.} Id. § 560(3); Carey Gordon, Recent Developments in the Land Law of the Sudan: A Legislative Analysis, 30 J. AFR. L. 143, 155 (1986).

^{152.} Civil Transactions Act of 1984, §§ 573(1), 695 (Sudan).

^{153.} *Id.* § 659(a).

^{154.} Id. § 569(1).

^{155.} Id. § 568.

^{156.} Id. § 573(4).

^{157.} Id. § 573(2).

^{158.} Id. §§ 573(3), 695(h)(2).

- d. to exercise due care in preserving the property; however, in the event of damage through no fault of the holder of the usufruct, he shall not be liable;¹⁵⁹
- e. to bear the ordinary expenses of preserving and maintaining the property during the period of use.¹⁶⁰

Usufructuary rights continue as long as they are exploited lawfully,¹⁶¹ terminating if the grantee's obligations are breached,¹⁶² at the expiration of the grant period,¹⁶³ or if the property is totally destroyed or expropriated.¹⁶⁴ Usufruct rights may vest in legal heirs.¹⁶⁵ Property improvements through agriculture or construction become the property of the deceased's heirs.¹⁶⁶ The usufruct owner has the right to transfer them rights to another, except when otherwise agreed,¹⁶⁷ or when failing to use the property.¹⁶⁸ Transfers must be in writing.¹⁶⁹

E. Water Rights in Sudan

The Civil Transactions Act defines a water right to be a right to irrigate land or plants.¹⁷⁰ Water rights can be inherited and devised by will, but cannot be sold separately from land or usufruct to which it is appended. Also, water rights may not be gifted or leased.¹⁷¹ Every person has an entitlement to use public water sources in accordance with the law and custom.¹⁷² The Nile Water Use Control Board controls mechanical pumping of water from the Nile for agricultural purposes, including the White Nile, Blue Nile, Atbara, and tributaries, through mandatory licensing.¹⁷³ The Board also fixes conditions of land tenure as

165. Id. § 570(6).

- 167. Id. § 692(2).
- 168. Id. § 570(5).
- 169. *Id.* § 615(1); Gordon, *supra* note 150, at 156.
- 170. Civil Transactions Act of 1984, § 592(1) (Sudan).
- 171. Id. § 593.
- 172. Id. § 592(2).

173. Nile Pumps Control Act of 1939, § 2 (Sudan); BRIAN JOHNSON & WAAFAS OFOSU-AMAAH, FORESTRY, ENV'T & NAT. RES. AGENCY FOR INT'L DEV., LEGAL, REGULATORY, AND INSTITUTIONAL ASPECTS OF ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT IN DEVELOPING COUNTRIES: A COUNTRY STUDY OF SUDAN 38 (1981); *see also* AGRICULTURE IN THE SUDAN: A HANDBOOK OF AGRICULTURE AS PRACTISED IN THE ANGLO-EGYPTIAN SUDAN 611-618 (J.D. Tothill ed., 1948) (discussing pump schemes operating in the Sudan).

^{159.} Id. § 695(f).

^{160.} *Id.* § 695(d).

^{161.} *Id.* § 572(1).

^{162.} *Id.* § 573(6). 163. *Id.* § 696(a).

^{164.} Id. §§ 572(3), 696(b); but see § 707(2).

^{166.} Id. §§ 569(1), 697(1).

preconditions to a license to pump water from the Nile for irrigation and to enforce rotation of crops on any land irrigated from the Nile.¹⁷⁴ If a landowner builds a channel or watercourse for irrigating his land, nobody else can use its water without his permission.¹⁷⁵ If water in a private watercourse exceeds the owner's requirements, adjoining landowners may share the water if they contribute, pro rata, to the cost of constructing and maintaining the watercourse.¹⁷⁶ Anyone who digs a well on wasteland,¹⁷⁷ or on other kinds of land,¹⁷⁸ has the exclusive use of the water from it. Where water drains naturally from one landowner's land to a neighbor's land, neither party may obstruct this water flow.¹⁷⁹ If a landowner is entitled to use water, for irrigation, that first flowed across another's land of another, the landowner over whose land the water has flowed has no right to that water.¹⁸⁰

The relatively recent 1995 Water Resources Act provides as follows:

This Act consisting of 23 articles divided in 6 Chapters aims at reforming the organization of the Nile and Non-Nilotic surface waters as well as the groundwater, hence superseding the Law of 1939 that was limited to the Nile waters only. The Law establishes the National Council for Water Resources (NCWR) with the following main tasks (i) design and rationalize the management and use of water resources to mitigate the effects of natural disasters resulting from drought and floods, to protect these resources from pollution and degradation and to develop them in an integrated and balanced manner with the other natural resources; (ii) develop a long-term national program for the optimal and balanced use of water resources; (iii) propose and review the legislation related to water resources; (iv) supervise the withdrawal of water from the Nile, non-Nile waters and other rivers and groundwater for the purposes of irrigation, drinking, industry, hydro-power generation and sanitation; (v) issue permits to withdraw water from the Nile, or other non-Nile waters, or groundwater; (vi) The allocate specific quantities of surface or underground water; (vii) distribute the available quantity water for fair use; and (viii) organize the drilling of deep surface wells. As regards for the right to use water, the Law establishes that (i) the State has the right to control the flow and use of water, and all that relates to water resources; (ii) the public has the right to use water for various

^{174.} Nile Pumps Control Act of 1939, § 9 (Sudan); *See also* Civil Transactions Act of 1984, §§ 602-605 (Sudan) (discussing riparian land rights).

^{175.} Civil Transactions Act of 1984, § 592(3) (Sudan).

^{176.} Id. § 524.

^{177.} Id. § 560(1).

^{178.} Id. § 524.

^{179.} Id. §§ 597, 525.

^{180.} Id. § 594; Gordon, supra note 150, at 157.

purposes in accordance with the provisions of this Law. It is permitted pump or other means of withdrawing water from the Nile or non-Nile rivers, or other streams or groundwater for irrigation, drinking, sanitation or industrial only after obtaining a permit from the Ministry of Irrigation and Water Resources. The Law prohibits (i) the establishment of dams on the Nile, non-Nile rivers, other streams or groundwater unless approved by the Minister; (ii) cultivation of state-owned land except for the established conditions; (iii) the establishment of any facilities between the banks without the permission of the Ministry; and (iv) logging trees or palm trees planted on private land adjacent to the banks.¹⁸¹

From this exegesis of the legislation, it appears that the GERD may render nugatory much of the Sudan Minister's power of administration and supervision. The Act prohibits any dams on the Nile in Sudan, places conditions on some usufructuary activities, and protects riverbank trees.

V. EGYPTIAN WATER RIGHTS

A. The Background

Ancient texts, such as the narrative sections of the Iliad, or the Oresteia, are used routinely to reconstruct ancient law and its attendant legal procedures.¹⁸² Legal practices, constructed from such ancient narratives, can represent the actual procedures that were followed when those narratives were either set or written.¹⁸³ Thus, the Hymn to the Nile may similarly be treated as an encoded legal narrative, explaining the Nile and its relationship to the Egyptian people and the genesis of the Egyptian state.¹⁸⁴ The hymn is reproduced in full below, so that it can be characterized.

Hail to thee, O Nile! Who manifests thyself over this land, and comes to give life to Egypt! Mysterious is thy issuing forth from the darkness, on this day whereon it is celebrated! Watering the orchards created by Re, to cause all the cattle to live, you give the earth to drink, inexhaustible one! Path that descends from the sky, loving the bread of Seb and the first-fruits of Nepera, You cause the workshops of Ptah to prosper!

Lord of the fish, during the inundation, no bird alights on the crops. You create the grain, you bring forth the barley, assuring perpetuity to the

^{181.} Water Resources Act of 1995 (Sudan).

^{182.} Pamela Barmash, *The Narrative Quandary: Cases of Law in Literature*, 54 VETUS TESTAMENTUM 1 (2004).

^{183.} *Id.* at 2.

^{184.} Written circa 2100 BCE by Khety. See GRIMAL, supra note 22.

temples. If you cease your toil and your work, then all that exists is in anguish. If the gods suffer in heaven, then the faces of men waste away.

Then He torments the flocks of Egypt, and great and small are in agony. But all is changed for mankind when He comes; He is endowed with the qualities of Nun. If He shines, the earth is joyous, every stomach is full of rejoicing, every spine is happy, every jaw-bone crushes (its food).

He brings the offerings, as chief of provisioning; He is the creator of all good things, as master of energy, full of sweetness in his choice. If offerings are made it is thanks to Him. He brings forth the herbage for the flocks, and sees that each god receives his sacrifices. All that depends on Him is a precious incense. He spreads himself over Egypt, filling the granaries, renewing the marts, watching over the goods of the unhappy.

He is prosperous to the height of all desires, without fatiguing Himself therefor. He brings again his lordly bark; He is not sculptured in stone, in the statutes crowned with the uraeus serpent, He cannot be contemplated. No servitors has He, no bearers of offerings! He is not enticed by incantations! None knows the place where He dwells, none discovers his retreat by the power of a written spell.

No dwelling (is there) which may contain you! None penetrates within your heart! Your young men, your children applaud you and render unto you royal homage. Stable are your decrees for Egypt before your servants of the North! He stanches the water from all eyes and watches over the increase of his good things.

Where misery existed, joy manifests itself; all beasts rejoice. The children of Sobek, the sons of Neith, the cycle of the gods which dwells in him, are prosperous. No more reservoirs for watering the fields! He makes mankind valiant, enriching some, bestowing his love on others. None commands at the same time as himself. He creates the offerings without the aid of Neith, making mankind for himself with multiform care.

He shines when He issues forth from the darkness, to cause his flocks to prosper. It is his force that gives existence to all things; nothing remains hidden for him. Let men clothe themselves to fill his gardens. He watches over his works, producing the inundation during the night. The associate of Ptah . . . He causes all his servants to exist, all writings and divine words, and that which He needs in the North.

It is with the words that He penetrates into his dwelling; He issues forth at his pleasure through the magic spells. Your unkindness brings destruction to the fish; it is then that prayer is made for the (annual) water of the season; Southern Egypt is seen in the same state as the North. Each one is with his instruments of labor. None remains behind his companions. None clothes himself with garments, The children of the noble put aside their ornaments. He night remains silent, but all is changed by the inundation; it is a healingbalm for all mankind. Establisher of justice! Mankind desires you, supplicating you to answer their prayers; you answer them by the inundation! Men offer the first-fruits of corn; all the gods adore you! The birds descend not on the soil. It is believed that with your hand of gold you make bricks of silver! But we are not nourished on lapis-lazuli; wheat alone gives vigor.

A festal song is raised for you on the harp, with the accompaniment of the hand. Your young men and your children acclaim you and prepare their (long) exercises. You are the august ornament of the earth, letting your bark advance before men, lifting up the heart of women in labor, and loving the multitude of the flocks.

When you shine in the royal city, the rich man is sated with good things, the poor man even disdains the lotus; all that is produced is of the choicest; all the plants exist for your children. If you have refused (to grant) nourishment, the dwelling is silent, devoid of all that is good, the country falls exhausted.

O inundation of the Nile, offerings are made unto you, men are immolated to you, great festivals are instituted for you. Birds are sacrificed to you, gazelles are taken for you in the mountain, pure flames are prepared for you. Sacrifice is metle to every god as it is made to the Nile. The Nile has made its retreats in Southern Egypt, its name is not known beyond the Tuau. The god manifests not his forms, He baffles all conception.

Men exalt him like the cycle of the gods, they dread him who creates the heat, even him who has made his son the universal master in order to give prosperity to Egypt. Come (and) prosper! Come (and) prosper! O Nile, come (and) prosper! O you who make men to live through his flocks and his flocks through his orchards! Come (and) prosper, come, O Nile, come (and) prosper!¹⁸⁵

Extracting the most significant symbolic phrases from the hymnal text, the hymn legislates the Nile to be the giver of life to the state of Egypt. The river creates the grain, as well as all good things, arguably stated in a context of ethical deliberation, with nobody to attend the river as servants. However, the land's young men and its children applaud the Nile and render royal homage, thus generating the state's monarchy. The Nile literally makes mankind and causes all the state's servants to exist. Southern Egypt is seen in the same state as the North, suggesting that the Nile itself unifies the state. It is healing balm for all mankind, suggesting the creation of peace rather than war among the people. As an august

^{185.} Khety, *Hymn to the Nile, in OLIVER J. THATCHER, THE LIBRARY OF ORIGINAL SOURCES* 79–83 (1907).

ornament of the earth, it shines in the royal city, a rhetorical formula to regal-ness, and instituted great festivals in the name of the Nile, suggesting the great Pharaonic state and its civilization. And finally, men exalt the Nile in the same way they exalt the natural cycle of gods, suggesting human symbiosis with the River Nile. Similarly, the Australian Aboriginal narrative to the Martuwarra River in Western Australia posits that the river itself has a right to life, with the people deriving their lives as an integral part of the river.¹⁸⁶ Therefore, those key propositions legislated in the Hymn of Kheti are far from unusual in riparian ancient constitutional lore.

As of 2020, the only agreement for the sharing of water in the Nile basin is the 1959 treaty between Egypt and the Sudan, which provides for the "full utilization of the Nile waters" by those two countries.¹⁸⁷ The Nile River is still the main water source for Egypt, providing 97% of its water supplies. The Nile Management Plan allocates 55 billion cubic meters of water to Egypt annually.¹⁸⁸

According to the international law, *res communis* means territory such as the high seas and outer space, not susceptible to state sovereignty.¹⁸⁹ This kind of territory is governed by the common heritage of mankind and sounds like the character of the legislation in Kheti's hymn.¹⁹⁰ As for the Nile River, Egypt and the Sudan have always sought to claim territorial jurisdiction and sovereignty over its watercourse,¹⁹¹ raising the issue of whether such claims can be validated.

The Egyptian and Sudanese claims of sovereignty by *res communis* over the River Nile are grounded in the concept of accretion, where the river itself was added to the physical boundaries of the two countries through the natural causes of silting.¹⁹² In this case, there are abrupt transfers of soil becoming embedded within the territories of both states,

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^{186.} Poelina & Bagnall, *supra* note 23, at 7–9.

^{187. 1959} Nile Agreement supra note 104.

^{188.} THE MINISTRY OF WATER RESOURCES AND IRRIGATION, ARAB REPUBLIC OF EGYPT INTEGRATED WATER RESOURCES MANAGEMENT PLAN 11 (2005).

^{189.} Things that were owned in common were called *res communis*, and they included the air, the oceans, and the sunshine, etc., which could be enjoyed by anyone and from which no-one could be barred. GROTIUS, *supra* note 60, at 24.

^{190.} THATCHER, supra note 186.

^{191.} Lumumba, supra note 116, at 11.

^{192.} Naturally occurring additions of soil to waterside land become the property of the riparian owner of the land which is thereby increased, and soil removed by erosion ceases to belong to the riparian owner whose land is diminished. W. Howarth, *The Doctrine of Accretion: Qualifications, Ancient and Modern*, 50 CONVEYANCER & PROP. LAW. 247, 247 (1986).

although the Nile waters originated chiefly in the territory of Ethiopia.¹⁹³ The likely diminution of silting after Ethiopia's dam is built implies a problem for Egyptian jurisdiction over the river's watercourse.

Egyptian and Sudanese acquisition of title to the Nile waters has also been argued through the principle of prescription.¹⁹⁴ There are no judicial determinations supporting conclusively any doctrine of acquisition by prescription under international law,¹⁹⁵ although the ancient legislation of Kheti is a forceful proposition inferring long-time acquiescence by neighboring states. Thus, Egyptian and Sudanese claims of jurisdiction over the River Nile waters may have some substantive force under the principle of *res communis*.¹⁹⁶

The most contentious issue is the lack of any binding agreement between all of the Nile Basin countries on a just and equitable distribution of the Nile River's waters.¹⁹⁷ The international community has tried to resolve this problem with the Convention on the Law of the Non-Navigational Uses of International Watercourses of 1997, which took more than twenty years to prepare.¹⁹⁸ The Convention includes two important provisions. It holds that states should use river waters in an equitable and responsible way, and it outlines a procedure for resolution when watercourse schemes may adversely impact other states. However, as of the writing of this Article, not one of the Nile Basin sovereign states had ratified this Convention. Thus, Egypt has insisted that only the treaty of 1929 and its amended version of 1959 ought to be respected in any Nile water disputes with other riparian states.¹⁹⁹

Part of the 1959 Convention, *Obligation Not to Cause Significant Harm*, requires all member states "in utilizing an international watercourse in their territories... take all appropriate measures to prevent the causing of significant harm to other watercourse states," and compensate the other sharing states for any such harm that might take place.²⁰⁰ This is despite the fact that Ethiopia is not a party to the

^{193.} Lumumba, supra note 16, at 11.

^{194.} People, by virtue of long enjoyment rather than labor, have property in, and so are entitled not to see disturbed, legal arrangements which protect rights that they hold dear. JAMES TYRRELL, BIBLIOTHECA POLITICA: OR, AN ENQUIRY INTO THE ANCIENT CONSTITUTION OF THE ENGLISH GOVERNMENT 25-26 (2nd ed. 1727).

^{195.} Lumumba, supra note 116, at 11.

^{196.} Lumumba, *supra* note 116, at 12.

^{197.} Lumumba, supra note 116, at 13.

^{198.} G.A. Res. A/Res/51/229, Convention on the Law of the Non-Navigational Uses of International Watercourses (May 21, 1997).

^{199.} Lumumba, *supra* note 116, at 14.

^{200. 1959} Nile Agreement, supra note 104.

Convention, and is therefore not bound by it as a third party state. The Vienna Convention on the Law of Treaties²⁰¹ concerns the relationship between treaties and third parties. These articles reproduce the maxim *pacta tertiis nec nocent prosunt*, which states that third states are strangers to the treaty contract, and thus, cannot be beneficiaries of any rights under the treaty. Nor can third-party states be burdened by any obligations imposed by such a treaty.²⁰²

B. The Law of Water Rights in Egypt

The Egyptian constitution issued some provisions regarding the right to water in Egypt. However, there is no single comprehensive positive law for water resources in Egypt, considering the subsisting force of the historical background in the former Pharaonic regimes. The main laws related to water resources management include irrigation and drainage laws on the one hand, and environmental protection laws on the other.²⁰³

1. Egyptian Constitutional Provisions

Each citizen has the right to healthy and sufficient food and water. The State shall also ensure sustainable food sovereignty and maintain agricultural biological diversity and local plants to save the rights of future generations.²⁰⁴ "Every citizen is guaranteed the right to enjoy the River Nile. It is prohibited to trespass on the riverbank reserve, or harm the riverine environment. The State shall guarantee the eliminating of any trespass against the River Nile as regulated by Law."²⁰⁵

Article 32 sets forth provisions regarding natural resources. The State's natural resources belong to the people. Granting the right of exploitation of natural resources or public utility concessions shall be by virtue of a law for a period not exceeding thirty years. The Law defines provisions for disposing of the State's private properties as well as the regulating rules and procedures.²⁰⁶

The Constitution of Egypt sets out specific provisions regarding the Suez Canal and the River Nile. The State shall preserve and develop the

^{201.} The Vienna Convention on the Law of Treaties, May 5, 1969, 115 U.N.T.S. 331, art. 34-38.

^{202.} Lumumba, *supra* note 116, at 18.

^{203.} THE MINISTRY OF WATER RESOURCES AND IRRIGATION, ARAB REPUBLIC OF EGYPT INTEGRATED WATER RESOURCES MANAGEMENT PLAN 9-18 (2005).

^{204.} CONSTITUTION OF THE ARAB REPUBLIC OF EGYPT, Jan. 18, 2014, art. 79.

^{205.} Id. art. 44.

^{206.} Id. art. 32.

Suez Canal as an international waterway owned by the State and as a distinguished economic center.²⁰⁷ The State preserves Egypt's historical rights, rationalizes and maximizes their use. The State shall support scientific research in that regard.²⁰⁸ Article 45 sets forth the protection of seas, shores, lakes and waterways, and preserves all life resources.²⁰⁹

2. Egyptian Civil Law of Water Rights

Resolution No. 1383 of 2005 concerning the protection of Nile River and coasts is composed of 13 articles.²¹⁰ Article 1 describes the importance of the Nile River for Egypt with its two streams, its dams, banks, coasts, sides, plots, and islands, from Sudan to the Mediterranean Sea.²¹¹ Articles 2 and 3 entrust the Ministry of Irrigation and Water Resources (MIWR) with the control of the Nile River and all works and activities related to the development of it.²¹² Article 4 establishes the High Committee for Nile Licenses at the MIWR.²¹³ All Ministries, General Authorities and Apparatuses shall not be allowed to undergo new works or constructions in any of the zones mentioned in Article 1 unless in possession of an authorization from the MIWR.²¹⁴ An authorization from MIWR for access is necessary to authorize Ministries, General Authorities and Apparatuses to sell, rent, and to license works, or constructions in the zones specified in Article 1.²¹⁵ Article 11 contains offences and penalty provisions.²¹⁶

Law No. 48 of 1982 concerning the protection of the Nile River and the water channels against pollution is divided into 20 articles to be applied in what is considered water channels: (a) fresh water areas include the Nile River, (b) non fresh water areas include water channels with its different degrees, lakes, pools and water in closed system, and (c) underground water reservoirs.²¹⁷ It is forbidden to discharge solid, liquid or gaseous waters from real estates, shops, commercial, industrial,

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^{207.} Id. art. 43.

^{208.} Id. art. 44.

^{209.} Id. art. 45.

^{210.} Resolution No. 1383 of 2005 (Concerning the Protection of Nile River and Coasts), *al-Jarīdah al-Rasmīyah*, 25 Aug. 2005 (Egypt).

^{211.} Id. art. 1.

^{212.} Id. art. 2, 3.

^{213.} Id. art. 4.

^{214.} Id. art. 6-8.

^{215.} Id. art. 10.

^{216.} Id. art. 11.

^{217.} Law No. 48 of 1982 (Concerning the Protection of the Nile River and the Water Channels Against Pollution), *al-Jarīdah al-Rasmīyah*, 21 June 1982, art. 1 (Egypt).

or tourist establishments or from sanitary drainage into water channels without a license from the Ministry of Irrigation in line with rules set by the Ministry of Public Health.²¹⁸ The owners of house-boats and tourist house-boats standing on the Nile or its two branches are requested to seek out a system to treat or gather the wastes and fuel, to discharge them only in sewage or sanitary drains.²¹⁹ The Ministry of Irrigation is responsible to issue licenses for the new houseboats on the Nile and the renewal of existing licenses.²²⁰ It is forbidden for ferryboat units, used for transportation, to cause any discharge or fuel leakage in the channels' waters.²²¹ The Ministry of Agriculture is to take caution when choosing pesticides to abate agricultural pests.²²² The Ministry of Irrigation shall take caution when choosing herbicides to abate water herbs.²²³

The water related responsibilities of MRWI are spelled out in Law 12 of 1984 on Irrigation and Drainage.²²⁴ In 1994, an amendment was made to Law 12 to legalize the establishment of water users.²²⁵ To render these laws more effective, they are to be reviewed considering on-going changes in water management policies in Egypt.²²⁶

Law 93 for the year 1962 for the discharge to open streams and its modifications for the years 1962, 1982, and 1989 consists of 22 articles, and aims at controlling wastewater discharges and drainage to public sewers.²²⁷ It mainly concerns the development of sewers and sewage treatment facilities. It specifies the procedures to be followed for establishing sewerage networks, house connections. Article 11 establishes that liquid waste from assets, shops, commercial and industrial establishments, and public sewerage operations are also disposed of within the streams after obtaining the approval of the local authorities representing the Ministries of Health, Construction, and Industry.²²⁸

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^{218.} Id. art. 2.

^{219.} Id. art. 5.

^{220.} Id. art. 6.

^{221.} Id. art. 7.

^{222.} Id. art. 10.

^{223.} Id. art. 11.

^{224.} Law No. 12 of 1984 (Promulgating the Law of Irrigation and Drainage), *al-Jarīdah al-Rasmīyah*, 22 Mar. 1984 (Egypt).

^{225.} Law No. 213 of 1994 (Amending Some Provisions of the Irrigation and Drainage Law No. 12 of 1984), *al-Jarīdah al-Rasmīyah*, 17 June 1994 (Egypt).

^{226.} Id.

^{227.} Law 93 of 1962 (Discharge of Waste Waters), *al-Jarīdah al-Rasmīyah*, 21 May 1962 (Egypt).

^{228.} Id. art. 11.

Article 13 states that a non-public sewerage system may only be established with a license from the sewerage.²²⁹

Presidential decree No. 178 of 2012 concerning the organization of the Ministry of Drink and Sanitation sets forth the organization of the Ministry of Beverage and Sanitation, and it is composed of seven articles.²³⁰ The aim of this Ministry is to supply water in sufficient quantities to satisfy this growing demand following the specifications of Egyptian standards. Other duties of the Ministry include encouraging national industries of services that concern potable water and sanitation, continuous improvement to keep pace with technological advances. Article 2 addresses the measures taken by the ministry to attain its goals.²³¹

As illustrated by this discussion, the Egyptian provisions tend to be mainly regulatory, with the founding principles still arising from Pharaonic times as exemplified in the Hymn of Kheti.

VI. CONCLUSION

This Article's research question asked what are the legal consequences of the two legal paradigm transitions, from Ethiopia to Sudan, and then from Sudan to Egypt, for Ethiopia's building the Grand Ethiopian Renaissance Dam. The Article's argument sought to sustain the proposition that the lowland riparian states of Sudan and Egypt had developed their water rights legal regimes, and, in the case of Egypt, a multi-thousand-year prestigious Pharaonic state apparatus and its modern descendants, while Ethiopia's course of development had truncated its inherent right to enjoy its own natural Nile watercourse resources.

Under the old Ethiopian customary rules and practices, before statutes were applied to the use and distribution of water, Ethiopian waters and rivers were always communal property. This implies that the old governing customs were of a very a long-term local character, undisturbed by positive law. Constitutional changes came in the Ethiopian Civil Code of 1960, in which the natural resources and sub-soil of the Empire, including those beneath its waters, were designated for the first time as state domain. This was a change from communal ownership to state, or public, domain. The Constitution further elaborated this change by specifying that all natural resources in the waters, forests, land, air, lakes,

^{229.} Id. art. 13.

^{230.} Presidential Decree No. 178 of 2012 (Concerning the Organization of the Ministry of Drinking Water and Sanitation), *al-Jarīdah al-Rasmīyah*, 27 Sept. 2012 (Egypt).

^{231.} Id. art. 2.

rivers and ports of the Empire were sacred trust for the benefit of the present and succeeding generations of the Ethiopian people, elevating the Emperor to the status of public trustee over the public domain. Waterways, lakes, and underground accumulations of water were expressly included as part of this public domain, implying directly that the Blue Nile in Ethiopia was now a public domain, held in trust for the people and their descendants.

As a public domain, members of the community were beneficiaries with priority over non-members of the community for use of all water. However, water could still become private property, if in any kind of manmade reservoir from which its exit flow is not a natural flow. This implies that damming the Blue Nile would form of privately-owned water reservoir, owned privately by the State. This view was confirmed with the 1995 inception of the current Ethiopian Constitution, with all land and other natural resources such as minerals, rivers, lakes, coming under state ownership. Thus, the right to all natural resources became vested in the State in common with the peoples of Ethiopia, no longer subject to sale or any other kind of exchange. This meant that the GERD reservoir was and is inalienable, thus preventing forms of privatization, or unequal colonial international agreements or treaties giving over de facto control to other nations.

Under these new arrangements, the Ethiopian judiciary and other administrative entities within the government are obliged to interpret individual rights to water consumption by principles stated in the Universal Declaration of Human Rights, International Covenants on Human Rights and any other international instruments adopted by Ethiopia. This allows the courts to consult these general principles without any further reduction of the international instruments into Ethiopian municipal law. This suggests that the state's priority is its people, over local international agreements, further inferring that a correction had taken place where previously other international entities had benefitted from Ethiopian water resources to the perceived detriment of the Ethiopian state in common with its people. The 2003 Ethiopian Proclamation regulating fishing for subsistence, commercial, recreation and research purposes to conserve fish biodiversity and its environments and control over-exploitation of the fisheries appears to sustain this view and further entrench the relatively new public domain.

In Sudan, there is a large amount of land that the government owns. This is clearly not a national state domain. The 1984 Civil Transactions Act of Sudan provides that landowners have exclusive rights to their land's fruits, crops, and other natural products, which might not be construed to include water, as water is not a product. Although the landowner owns the airspace above the land and the soil below it, he or she may not use the property to causes damage on the neighbor's property, suggesting an obligation to preserve water flow among the properties.

The Sudan has a usufructuary land rights regime, where usufruct is the right to use land that belongs to another. This right can be acquired by inheritance, deed, will, or actual possession. For example, a farmer occupying rural wastelands may improve them by cultivation, irrigation, or building, a subsequent grant thus conferring a right of usufruct over that land. Authorities deliberating on usufruct grants must a range of ethical issues, such as priority for small enterprises and villages, regulation of proper drainage, and encouragement of more modern farming techniques. The deed of grant may contain controlling conditions, rights, and obligations. If the grantee violates the terms of the grant, the usufruct ceases.

A grantee of usufructuary rights is obliged not to cause permanent damage to the land, to pay rent, to notify the landowner of property damage, pay for maintaining the property and take measures to avoid negligence. Usufructuary rights continue while lawfully exploited. Thus, the Sudanese grantee of usufruct is in a relatively precarious position, supervised by both a deed of grant, and a landowner. Further tightening regulation of usufruct grantees, the 1995 Sudanese Water Resources Act prohibits any dams on the Nile in Sudan, places prohibitory conditions on some usufructuary activities and protects riverbank trees. These farmers appear to be in a state of subsistence serfdom.

In Egypt, the Hymn to the Nile may be regarded as an encoded constitutional legal narrative, explaining the Nile and its relationship to the Egyptian people and the genesis of the Egyptian state, legislating the Nile to be the very giver of life to the state of Egypt.

Egyptian and Sudanese acquisition of title to the Nile waters has also been argued as *res communis* descending from the principle of prescription. Although there are no relevant judicial determinations supporting conclusively any doctrine of *res communis* acquisition by prescription under international law, the ancient hymnal legislation of Kheti is a forceful proposition inferring a widely disseminated constitutional declaration attended by long-time acquiescence in it by neighboring states. Thus, Egyptian and Sudanese claims of an interest in jurisdiction over the River Nile waters may have some substantive force under the principle of *res communis*. The Egyptian constitution discusses the right to water in Egypt. However, Egypt has no single comprehensive positive law for water resources. This leaves open the view that there is a subsisting force of the historical regulatory remnant from the former Pharaonic regimes. Thus, Egypt's main laws related to water resources management include irrigation, drainage, and environmental protection. It appears that the Egyptian provisions are mainly regulatory, with its founding principles of a *res communis* arising from Pharaonic times, as exemplified in the Hymn of Kheti.

The transitional interface from Ethiopia to Sudan is one that is from Ethiopian state domain with the Ethiopian state as trustee for the benefit and priority of the people, to a system of Sudanese serfdom based on tenants in usufruct, where usufructuary farmers have mere subinfeudated priority. The transitional interface from Sudan to Egypt is, again, from a hierarchical system of what looks like serfdom to the Egyptian prescription of extensive Pharaonic prestige that is so great both in the Egyptian population and around the world that Egyptians regard their position on the Nile as conferring a prescriptive *res communis* over relevant and necessary parts of the upper reaches of the River Nile.

Ethiopia has carefully constructed a state domain system, generated by a public trust over its river resources, with its people as priority beneficiaries. Egypt has maintained its ancient prescriptive claim of *res communis* over Nile waters, and specifically, over the GERD, based on its ancient and subsisting prestige. Thus, the conflict is between an Egyptian domain, based on subsisting ancient legislation, and a newer Ethiopian public state domain founded on the general internationally formed rights to life and biodiversity of the Ethiopian peoples. Whether this dispute is intractable likely depends on mediating the reach in the various jurisdictions of the international rights deployed by Ethiopia as the bases for their public state domain.