



Grand Ethiopian Renaissance Dam vis-à-vis Hydropolitical Justice: Why Egypt and Ethiopia Engage in Hydropolitical Tension over the Dam?

Getasew Endalew

*Department of Political Science and Governance Studies, University of Gondar
Gondar, Ethiopia*

Abstract

The study was aimed to examine the Grand Ethiopian Renaissance Dam (GERD) from the viewpoint of hydropolitical justice and reveal the reason of Ethio-Egyptian hydropolitical tension over the dam. Conceptually, hydropolitical justice can be defined as procedurally inclusive, environmentally valid, politically sound, and economically reasonable plus distributionally benefit sharing utilization of transboundary water resources in the way of maximizing benefits and minimizing harms of all riparians. Through relying on this concept, the study has employed qualitative research method and utilized secondary sources of data. Accordingly, the analysis of this paper proved that the GERD is a project of water use management and development which fulfill imperative requirements for the birth and growth of hydropolitical justice over the utilization of the Blue Nile. Hence, GERD is a development project of water utilization which could enable both Egypt and Ethiopia to equitably share benefits of the Blue Nile without the worth of another. The analysis of this study assures, with evidence, that the dam has a potential to equitably maximize benefits and minimize harms of both Ethiopia and other lower riparians of the river. Thus, the hydropolitical tension of Egypt and Ethiopia is emanated not from the dam's feature of strengthening a reasonable, equitable and non- significant harm principle of international water law. Rather from an equitably non-beneficial, legally baseless, scientifically unsupported and greedily motivated political insistency of Egypt so as not to recognize the necessity of GERD from the perspective of hydropolitical justice.

Keywords: Dam, Justice, Hydropolitics, Nile, Water Utilization.

*Corresponding author email: getshendale8@gmail.com

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Introduction

It is true that either the peaceful or conflictual relationship of Ethiopia and Egypt is extremely linked with the water politics of Blue Nile. This bears in mind, since recently, their hydropolitical relation becomes full of tension. What creates the recent and ongoing political tension

between Ethiopia and Egypt in their hydropolitical relation is the construction of GERD, a development project, on the Blue Nile. The justification behind this argument is that, Egyptians perceive the hydropolitical position of Ethiopia in general and this recently commenced dam project as a dangerous project of their

water security. Accordingly, Egyptians consider the dam as “*a serious threat to their national interest as they believe that it will reduce the amount of water flow*” (Endalcachew, 2015: 160). Besides, as it is revealed on 2022, around 84 % of the construction of GERD and third round filling of its reservoir is accomplished (Amanuel and Belmonte 2022).¹ The central researchable question is that; what is the hydropolitical implication of GERD from the perspective of justice? For this matter, overlooking the positive effects and negative impacts of the dam becomes the first stage of describing the data on the outlook of hydropolitical justice.

At this point, before proceeding to the scientific business of analysis, it is essential to clarify the meaning of hydropolitical justice. Conceptually, apart from specific legal frameworks, straightforward definition is not clearly given for hydropolitical justice. Thus, to understand the concept of this term, making a theoretical linkage between hydropolitics and justice is imperative. What is justice? As we can learn from the view of different scholars, the scope of justice is encircled with the concepts of fairness, reasonableness, lawfulness,

validity, equity and consideration of both right and duty of whatever parties have on a certain actions and decisions (Begun and Awan, 2013, Lie, *et al*, 2007 and Rawls, 1971, Williamson and Fadil, 2009). Even if the concept of hydropolitical justice is not clearly defined, the author of this paper have found one highly related definition. Concerning with this, scholars pointed out that “*hydropolitics is evolved in a constant and worsening global scenario of lack of equitable access to water for human sustenance and sanitation*” (Davidson-Harden *et al*, 2007:8). For these coequal authors, water justice refers the concept of responding the issues of lack of access to safe fresh water which is essential for basic sustenance, sanitation and economic projects that require the essentiality of utilizing water as a commodity (*Ibid*). Accordingly, hydropolitical justice can be defined as the concept and practice of transboundary water resource utilization that is aimed for sustaining its equitable and inclusive service without favoring the most benefited riparian at the expenses of the less utilized riparian by recognizing the water claim of the neighborhood (*Ibid*). Moreover, the convention on the law of non-navigational uses of international watercourse (1997), under article 5 and 7 has articulated those of equitable, reasonable and not-to cause significant

¹ The event of celebrating the third round filling of GERD's reservoir is elucidated by Ethiopian Broadcast Corporation (EBC) on August 12, 2020. It is also reported by Ahram Online and Aljazeera.

harm principle of water utilization. These elements of the law are grounds of justice. Thus, equitable, reasonable and not to cause significant harm principles of water consumption are foundations of hydropolitical justice that riparians of any transboundary water resource would take in to consideration.

In nutshell, the issue of justice in hydropolitics cannot be out of the theoretical and legal scope of justice that implies the prevalence of fairness, reasonableness, lawfulness, validity and consideration of both water use rights and duties of all riparians. Hence, hydropolitical justice can be defined as procedurally fair, environmentally valid, distributionally equitable, politically sound and economically reasonable utilization of transboundary water resources in the way that could maximize benefits and minimize harms of all riparians. This is attained through taking the national interest and accommodating the mutual expense of other riparians into consideration both environmentally and socio-economically. Within this theoretical framework, justifying the implication of GERD from the viewpoint of hydropolitical justice is significant for researchers, policy makers, readers and riparians of the Nile. This is due to the existence of gaps in examining

the GERD from vantage point of hydropolitical justice.

To rationalize these gaps, the researcher has selected three researches which strived to justify the tension-based hydropolitical relation of riparians over the dam. From previous researches that justified the cause of Ethio- Egyptian hydropolitical conflict over GERD, a research article of Whittington *et al* which is titled “*The Grand Renaissance Dam and prospects for cooperation on the Eastern Nile*” is mentionable. It could be concluded that “*The escalation of tensions between Ethiopia and Egypt over the construction of the Grand Renaissance is at least partly based on a misunderstanding of the nature of the risks this dam poses to Egypt*” (Whittington *et al*, 2014:14). A scholar in hydropolitics, Tawfik, has also examined GERD from hydro-hegemony theoretical framework of analyzing transboundary water conflict and cooperation. Her article is titled “*Revisiting hydro-hegemony from a benefit-sharing perspective: the case of the Grand Ethiopian Renaissance Dam*”. the scholar concluded that “*although the GERD is a ‘game changer’ that challenges Egypt’s long-standing hegemony in the Nile Basin, Ethiopia’s approach in constructing the dam has increased uncertainties*” (Tawfik, 2015,40). On the

research article entitled as “*Declaration of Principles on the Grand Ethiopian Renaissance Dam: Some Issues of Concern*”, a scholar has justified that “*the basin’s proneness to conflict has been exacerbated by the absence of an inclusive legal and institutional framework governing the utilization and management of its meager water resources*” (Dereje, 2017:255).

However, beyond misunderstandings, uncertainties and contentions on legal issues, the researcher believes that scientifically justifying the real cause of Ethio-Egyptian hydropolitical tension over the GERD needs to be examined from the perspective of hydropolitical justice that other scholars did not provide scientific assessment. The reason is that hydropolitical justice is the reconciling element of misunderstandings, uncertainties and divergences over legal issues plus institutional frameworks of water utilization that riparians of the Nile have failed to agree in common. Remember that, as it is justified earlier, the concept of hydropolitical justice is not sufficiently defined by other scholars. Accordingly, the major objective of the study was to examine GERD from the vantage point of hydropolitical justice and justify the question of why Egypt and

Ethiopia engage in hydropolitical tension over the dam. Thus, the Ethio-Egyptian relation that they have over the utilization of the Blue Nile and the water use project of GERD is examined in accordance with this conceptual frame work of hydropolitical justice.

Materials and Methods

The study has employed qualitative research approach. Scholars urge that qualitative research method, among others, is relied on the constructivist presumption of inquiry (Creswel, 2003). Accordingly, the researcher strived to construct meaning from sources of data for analysis. Having this in mind, the research has utilized content analysis research design. Conceptually, content analysis is one of the most a widely used design of qualitative research method by analysis is made through the description, interpretation and triangulation of textual or recorded data (Hsieh and Shannon, 2003). It is true that textual data is secondary source of data which could be acquired from books, journal articles, reports, and others. Thus, though exploring these sources of data, the study has applied content-based descriptive technique of qualitative data analysis.



Analysis and Discussion of the Study

The impact of Ethiopian dams in lower riparians of the Nile

Before examining GERD from the vantage point of hydropolitical justice, the researcher believes that providing an insight concerning with the perceptions and assessments on Ethiopian dams is crucial. Linked with the general fortunate contribution of dams of Ethiopia for Egypt, evidences proved that knowledge based impact assessment has been conducted on the validity of Ethiopian water use dams that can have the base of fairness were. In this regard, through citing the research confirmation done by American Professor, Richard Tiyoteler, Biruk Dereje (2011:7-8) have stated that;

The beneficiary advantage of Egypt over the Nile is maximized through controlling the water flow and holding water reservoir by the dams which are constructed in the higher areas of Ethiopia. Additionally, during the Imperial era of Menelik II of Ethiopia and when Egypt was under the colony of Great Britain, British expertise were conducted the trustworthy research on the construction of dams in Ethiopia which do not affect but benefit Egypt was perceived for implementation at the time of Emperor Haile Selassie.

This is an empirical truth on the benefit and impact of dams which could be constructed in Ethiopia, upper riparian of the Nile. This bears in mind, from the perspective of hydropolitical justice, GERD could be examined through taking environmental, socio-economic and legal affairs of riparian's claim of water utilization to justify the hydropolitical tension of Ethiopia and Egypt over the dam. For general knowledge, as it was described on August, 2022, the third fillig of the GERD has concluded, and the progress was known by all riparians of the Nile. Based on prior experiences, the fourth stage of filling the GERD's reservoir is presumed to be accomplished in Ethiopia's rainy season of 2023.

GERD vis-à-vis hydropolitical justice with evidences

While GERD is examined accordance with the conceptual framework of hydropolitical justice, it is scientifically proved that the dam doesn't endanger for the downstream riparians. This is because the purpose of the construction, primarily, is for hydropower generation which is a non-consumptive water use. Thus, after the GERD is filled, the dam itself will not appreciably reduce the total water availability of Egypt (Whittington *et al*, 2014). In addition, apart from economic

development, there is a trust on the dam to contribute for “*transboundary cooperation and regional integration*”.² If this is the myth at the back of Ethiopian dams which were perceived to be constructed over the Blue Nile in general and GERD in particular, the ultimate outcome of the dam is realizing the birth of hydropolitical justice through reconciling the national interest of the two countries that Ethiopia and Egypt have over the Blue Nile. Due to this, the fate of GERD is to facilitate the possibility of enhancing Ethiopia’s equitable benefit of water utilization without endangering the equitable (not the historical) water access of Egypt. This evidence enables the study, partly, to argue that “*the escalation of tensions between Ethiopia and Egypt over the construction of GERD is at least partly based on a misunderstanding of the nature of risks this dam poses to Egypt*” (Whittington *et al*, 2014:11-12). Hence, among others, the hydropolitical tension of the two riparians is emanated from the misperception of Egypt regarding with the mutual sustainable benefit by which the dam could provide without causing significantly harming the equitable water

share of Egypt. This feasibility confirms the fact on how the significance of dams in Ethiopia like GERD is incomparably higher than the psychological and political view of Egyptians that they have on this dam. The good reason, as it is stated in the above manner, is that the intensification of Ethio-Egyptian hydropolitical tension due the construction of GERD is the result of Egypt’s misinterpretation on the harm that the dam will cause for Egypt.

However, the cause of Ethio-Egyptian tension over the GERD is beyond misunderstandings on the nature of risks which could be emanated from the dam. What leads Ethiopia and Egypt to engage in hydropolitical relation to be full of tension is the existence of measures of Egypt that aimed to maintain hydropolitical injustice. These measures of Egypt which are intended for maintain hydropolitical injustice include measures of warmongering (Biruk and Dereje, 2011), engagement in proxy wars and operating propaganda (Ibrahim, 2011) plus blocking opportunities of external funding and exploiting the influence of superpowers (Kidane, 2015). Hence, beyond misunderstandings, Egypt’s position and measure of challenging the birth of hydropolitical justice over the utilization of the Blue Nile are contributory factors for the engagement of

² Article II of the “Agreement on the Declaration of Principles between The Arab Republic of Egypt, The Federal Democratic Republic of Ethiopia and the Republic of Sudan on the Grand Ethiopian Renaissance Dam Project”, 2015, Khartoum, Sudan

Ethiopia and Egypt in hydropolitical tension over GERD.

Moreover, scholars underlined that the principle of equitable and reasonable utilization and the obligation not to cause significant harm are “*the most fundamental principles which define the rights and obligations of riparian states*” (Dereje, 2017:261). It is in congruent with these fundamental principles of international law by which Ethiopia is presumed to utilize the Blue Nile in general and constructed the GERD in particular. That is why the research urges that GERD is a project of renovating hydropolitical justice in transboundary water resource utilization of the Blue Nile.

Beyond this, based on the report of International Panel of Experts (IPoE) on Grand Ethiopian Renaissance Dam Project (GERDP) (2013), it is proved that GERD has the potential of controlling the irregularity of water flow, reducing water evaporation, providing cheap electricity and resolving problems of siltation that largely faces Egypt. Based on such evidences, apart from its purpose of generating electricity, the above contributions of the dam which are outstandingly higher than its perceived harm can enable the GERD to serve as an instrument of managing the proper water

flow of the Blue Nile and water loss because of evaporation. Despite such type of contribution of the GERD overwhelm any negative impacts, Egypt insistently oppose Ethiopia’s claim to share benefits through constructing GERD over the Blue Nile. However, even if Egyptians perceive on the occurrence of appreciable harm due to the dam, from the very beginning, the non-existence of as such irrigable land that can consume water around GERD is the evidence on the non-appearance of significant harm against Egypt (Whittington, 2014). Moreover, the Initial Trans-boundary Environmental Assessment (ITEA) of IPoE on GERDP approves that “the GERD is economically attractive project” (IPoE on GERDP, 2013:40). It is also analytically verified that “*a cascade of dams in the Blue Nile gorge would completely control the Blue Nile flood, providing both additional hydropower capacity and over year storage*”(Whittington, et al, 2014:5). In accordance with this scientific and technical confirmation, the GERD can serves as an imperative developmental apparatus of maintaining environmental and social justice. This is attained by its role of controlling flood, generating hydropower, and ensuring water security through its’ over year storage capacity for the mutual benefit of both Ethiopia and

Egypt. Unlike the hydropolitical insistency of Egypt, the support of Sudan on the commencement and continuation of GERD is “predicated on a pragmatic consideration of the variegated benefits the Dam avails to it” (Dereje, 2017: 270). Therefore, the presence of such sustainable contribution of the GERD to maximize the mutual benefits and minimize harms which are happening on the side of both Ethiopia and Egypt make the Dam to fulfill the requirements for the birth and future development of hydropolitical justice on Ethio-Egyptian relation over water resource utilization of the Blue Nile.

However, Egypt focuses on risks and is unwilling to fully recognize such contribution of the dam for hydropolitical justice. Therefore, the cause of their tension is also emanated from the existence of Egypt’s unwillingness so as not to recognize the necessity of GERD to use the Blue Nile in accordance with equitable, reasonable and not to cause significant harm principle of international water law.

It is true that GERD, as a dam of water utilization and center of hydropolitical relation, can be taken as one element of water management and development on the Nile. Besides, the fundamental intention of the dam is to meet the basic energy needs of Ethiopia based on its

objective of electric power generation with the simultaneous function of controlling flood threat that will affect Egypt and Sudan. Through taking this holistic role of the dam, it is scientifically convincing to argue that GERD both socially and environmentally, GERD has a potential to meet the basic social needs of the people and to protect societies from the destructive impacts of water. Hence, there is no a case by which dam’s potential of protecting the destructive impact of water that the societies face due to flooding and maximizing societal needs , for instance, in energy production , agricultural production and ecological attraction cannot become the manifestation of hydropolitical justice in distributing benefits .

As it is justified in the final report, IPoE on GERDP has conducted the required Environment and Socio Economic Impact Assessment (ESEIA). Accordingly, the report has founded a “comprehensive information on the existing water quality of the Abbay/Blue Nile River and its main tributaries feeding the proposed GERD reservoir, and provides a water quality forecast in terms of eutrophication risk, based on classical empirical models” (IPoE on GERDP, 2013: 39). The phrase of “eutrophication risk” based on its

dictionary meaning shows the happening of water risks that will affect agricultural production and aquatic plants that will serve for nutrition due to the absence of water quality. Thus, the evidence of IPoE on GERD through conducting ESEIA affirms that the dam could not pose significant harm on the downstream Egypt. Despite the non-appreciable harm and the equitability benefit of GERD is confirmed procedurally and conducted openly; Egypt is not positioned to fully recognize the outcome of ESEIA positively.

Based on evidence based understanding, knowing the secret of fairness that could enable Egyptians so as to accept the most equitably beneficial contribution of GERD, apart from Ethiopia's reiteration and scientific confirmation of experts that prove the nonoccurrence of significant harm on the equitable water share of Egypt, is also the great riddle of this study. Furthermore, we can understand that Egypt is not willing to understand the significant harm that would occur in the national interest of Ethiopia without utilizing utilize the Blue Nile through constructing socially valuable, economically efficient, legally acceptable, environmentally sustainable and politically justifiable dams like GERD. What would be the fate of Ethiopia in the absence of

GERD in utilizing the Blue Nile? The destiny of Ethiopia, without fairly utilizing the Blue Nile, is continuous loss of fertile soil without any benefit, starvation of generation through poverty, being dependent on importation of power and loss of community wellbeing in the absence of environmental, food and energy security. The continuity of such complex and interrelated problems in the land of Ethiopia has an impact to coerce its generation for significant harm. That is why, for Ethiopians, the issue of the Blue Nile is becoming the issue of survival. Therefore, significant harm and hydropolitical injustice within the relation of the two riparians could be resulted not from commencement rather the absence of GERD.

Unlike Ethiopia and Egypt, the practical experience of other riparians over the utilization of Transboundary Rivers implies that their hydropolitical relation is sustained by cooperation and water diplomacy to ensure equitable and reasonable water utilization without causing significant harm over the right of one another. Such global practices are prevailed, among others, on international rivers of Mekong, Euphrates and Indus (Mornal *et al*, 2017). Scholars like Schmidt (2014) also have examined the existence of dams , like GERD, which are

built for fair water utilization which do not produce significant harm on the quality and quantity of water plus health of ecosystem in Canada. The typical example is Oldman Dam which is constructed over Alberta River (Aguilar and Iza, 2011). Specifically, the dam from international experience which is comparatively equivalent with the GERD is the construction of a large hydro-electric project of large magnitude in France on Lake Lanoux that flows to the downstream riparian of Spain (Susskind and Islam, 2012). Global experiences of construction of dams which aimed for hydropower generation and irrigation on transnational are vastly prevailed in different rivers shared by different states. As a sample, it is possible to mention the case of Oder River (shared by Czechoslovakia, Denmark, France, Germany, the United Kingdom and Sweden and Poland), the Helmand River (shared by Afghanistan and Iran) and the Lauca River (shared by originates in Chile and flows in south-east across the border into Bolivia), among others (*Ibid*). These states use the river that flows from upstream to downstream states through constructing dams not only for the purpose of electric power generation but also for irrigation. Thus, GERD, as a dam which is constructed on of Transboundary Rivers, highly shares global experiences

and features of fair water utilization. Apart from sharing such features, the dam is accomplished incongruent with international water law and in a way of strengthening the fairness practice of water utilization in the Nile basin. Overwhelmingly, GERD qualifies environmental, socio-economic and legal elements of hydropolitical justice. Hence, GERD is not the cause for hydropolitical tension of Ethiopia and Egypt over the utilization of the Blue Nile.

Conclusion

The GERD, as a project of water management and development, is a dam of renovating hydropolitical justice over the utilization of the Blue Nile. It is technically proved and scientifically examined that a dam has socio-economic, ecological and hydrological potential of equitably maximizing utilities and minimizing harms of Ethiopia and lower riparians of the River. Accordingly, there is no legal, technical, and scientific ground by which the GERD would become a source for the escalation of hydropolitical tension between Ethiopia and Egypt. Rather, the source of their conflict is, firstly, emanated from the position of Egypt so as to sustain its historical policy of water utilization which is contradictory with hydropolitical justice. The second

cause of their hydropolitical tension is the existence of unwillingness of Egypt so as not to recognize the necessity of GERD to use the Blue Nile in an equitable, reasonable and not to cause significant harm principle of international water law. Thus, the source of conflict in Ethio-Egyptian hydropolitical relation is originated from equitably non-beneficial, legally baseless, scientifically unsupported and greedily motivated political insistency of Egypt so as not to recognize necessity of GERD from the perspective of hydropolitical justice. Scholars in the field argue that “most difficulties in water negotiations are due to rigid assumptions about how water must be allocated” (Susskind and Islam, 2012:1). It is such rigidity of Egypt which became the challenge of negotiation and the cause of hydropolitical tension at the back of fairly utilizing the Blue Nile with Ethiopia without the worse of another. Hence, the root cause for the hydropolitical tension of Egypt and Ethiopia over GERD is not emanated from equitable water use project of the dam rather greedy political position of Egypt. This rationalization is that, as it is uncovered by the scientific analysis of this study, the dam is a project of renovating hydropolitical justice over the utilization of the Blue Nile. Accordingly, the research asserts that the significance of

analyzing GERD from the perspective of hydropolitical justice is found as relevant in justifying the tension of Ethio - Egyptian relation over the Blue Nile.

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