

Transboundary River Basin Euphrates - Tigris: International Legal Regulation

Sangar Samad Asaad

Peoples' Friendship, University of Russia, Department of Legal Sciences, Contemporary International Law

Abstract: *Countries all around the globe have shown a strong desire to restrict the utilization of international water channels for non - navigational uses since they are important to human civilisation. This is to avoid issues that may occur because of the usage purposes of international water bodies such as rivers and streams. This research covers a narrow scope, which is limited to legislation addressing the use of international water channels to effectively settle international water disputes, to cover the lawful use of international watercourses. It also provides an overview of transboundary water interactions in the Euphrates - Tigris River basin, followed by a discussion of key topics. From the standpoint of international law, this study discusses the connections among Turkey, Syria, and Iraq regarding their shared water, the Euphrates and the Tigris. Finally, the paper concluded that Iraq must review its entire water policy and identify its flaws, including irrigation methods, dam maintenance, and the management of water resources by international standards. Iraq's deviation from these matters constitutes a violation of the international obligations to which it is bound by international treaties, particularly the framework agreement. This study concludes that Iraq's evaluation of its internal legislation and all of its projects built on the Tigris and Euphrates rivers adds significantly to the resolution of these issues.*

Keywords: International law, Tigris, Euphrates, International watercourses

1. Introduction

Water is in short supply. Although water covers over seventy percent of the earth's surface, just approximately 3% of this water is freshwater. Everyone benefits from this. As a result, the bulk of this water is scarce and unevenly distributed. While some locations have an abundance of water resources, others have a severe lack. Water is becoming more vital in view of rising water use and a growing global population (Kirschner and Tiroch, 2012).

The study of international watercourses and their associated agreements between nations, as well as the primary rationale for their use for non - navigational reasons, demonstrates a vital need. This may lead to talks regarding the possibilities of disputes and controversies, such as how different nations see these waterways, how they should be divided, and how they should be used. There is empirical evidence that majority of the upstream nations of these watercourses' sources, which the water that flows from their territories to neighbouring countries. Numerous approaches are used to regulate the greatest quantity of freshwater feasible. Furthermore, governments made significant attempts to divert and store adequate amounts of water or to redirect its direction using all available methods and equipment. The latter comprises the construction of dams and reservoirs to achieve their objectives. These actions will undoubtedly cause economic and social disruption in the nations on the opposite side of these watercourses. As a result of such behaviour, neighbouring countries are bound to face freshwater scarcity, and as a result, drinkable water scarcity is one of the few nightmares that populations in these countries will have to endure, not to mention the amount of water required for agricultural irrigation and all other sectors that are directly related to the use of water (Kibaroglu, 2015). This study investigates the relations among Turkey, Syria and Iraq the Tigris and Euphrates, from an international law viewpoint, regarding their shared waters.

Research questions:

This paper aims at answering the following questions:

- How have the trilateral negotiations between Iraq, Syria and Turkey have shaped water - flow?
- Have the multilateral negotiations resulted in effective communication lines between the concerned parties for future treaties?
- What can Iraq do as an independent entity to mitigate the effect of water - flow reduction?

1.1. Water Distribution is governed by international law

Water has always been a valuable resource. As a result, civilizations have begun to emerge on the outskirts of water resources in many areas of the planet (M. Everard, 2013). Dams have been built since primeval period for improving access to water and to ensure that it is available during the year. Water was so valuable that people battled over it and established agreements to protect it (World Conflict Chronology, 2020). According to the Oregon University Register of International River Basins, shared river flows have caused disagreements among governments because states have various ideas and understandings of how water should be utilized and apportioned (Transboundary Freshwater Dispute Database, 2018). There are 310 worldwide river basins included on the Register (McCracken and Wolf, 2019). This is the number of rivers used and benefited by two countries at least. States are sovereign, yet this authority is not limitless. When using a transboundary river, they must regard other states. National and international studies, most of which were non - binding, were completed on various elements of transboundary water channels, compromising the duties and rights of riparian governments. They attempted for establishing basic principles for transboundary water management and utilization based upon normal law issued in both the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the 1997 Convention on the Law of Non - navigational Uses of

International Watercourses. The agreements listed highlight commonly recognized international water law concepts like "equitable and fair usage," "duty not to cause severe damage," and "universal responsibility to cooperate." As to the customary norms of international water law, they were also stressed in various accords, courts, and arbitral judgments. Nonetheless, they are ambiguous restrictions that do not assist governments in precisely defining how water should be shared. The common law concept of "equitable and fair usage" is ambiguous since it does not establish a specific amount, creating an unexpected situation about the quantity of water that each country may use. This also poses issues with the management of water (UNESCO, 2020). This makes future water usage planning more challenging. "Equity does not imply equality," and these laws neither established clear benchmarks nor provided explicit recommendations on how water should be shared to states in between (McCaffrey, 2007). None of the present international laws provide for direct water allocation between riparian governments. More comprehensive norms were developed in order to bring the greatest number of nations together on common grounds and to establish universally recognized the principles of international water law on rivers that cross different boundaries. A minimal level of duties and rights was attempted to be agreed by the greatest number of governments so that minimum standards may be established worldwide. Because these accords were significant milestone in international water law, they do not provide any clear suggestions on how to apportion freshwater from shared rivers. Such a recommendation would not limit governments' authority over how to share water amongst them, but it would inform them while negotiating. The international treaties, on the other hand, provide no such guidelines or clear instructions. These international accords urge member countries to reach further agreements to govern various elements of transboundary waterways. As a result, several governments have reached multilateral or bilateral treaties to divide the shared water flows. These treaties aid in the concretization of the duties and rights established according to normal international law. Because governments are autonomous, they are allowed to enter into an agreement that govern many elements of water usage and management, such as how to apportion water to a shared watercourse. Furthermore, riparian governments have not reached an agreement on how to utilize and maintain the shared watercourse. As a result, bilateral or multilateral agreements do not serve as a basic starting point for water distribution. Aron Wolf demonstrated in his presentation at the Water Allocation Global Workshop, which occurred on the 16th and 17th of October 2017 in Geneva, Switzerland, that 68 of the 145 countries have concluded water allocation agreements, 15 of which have shared water equally, 39 of which had a complex but clear system, and 14 of which were made in an unclear manner (Wolf, 2017). According to these facts, no criteria for water distribution is followed by governments when signing agreements. The UN Economic Commission for Europe has been working on approaches to share international waters amongst riparian nations via a Transboundary Water Allocation book, for which the expert group has already met twice, on October 21, 2019 and March 30 - 31, 2020. (Transboundary Water Allocation Handbook, 2020). The most recent will be conducted on

October 20 - 21, 2020, when the whole text of the aforementioned Handbook is scheduled to be finished.

1.2. Water allocation benefits

One benefit of the proposed water allocation approach is that each state knows how much water it will get. Because states will know their assigned proportion, they will have a notion of the typical quantity of water they ought to get from the shared waters based on longterm statistics on river flow in various periods. This reduces the possibility of surprises in both the upstream and downstream states. This will also allow countries to freely plan how to utilise and manage their share. They would freely and readily distribute water between diverse applications based on the demands of the nation. Furthermore, it will compel governments to utilize their share as efficiently as possible. They might purchase water from other riparian nations via contracts. It will, though, come at a cost. They would also aim to prevent potential reliance. This would guarantee that water is utilized as efficiently as possible, making states more cautious about water use. This strategy is also intended to lessen inter - state conflict. Especially in desert basins, at which water organization projects pose a risk of conflict. Countries regularly monitor water infrastructure projects planned and built by other states to see if the new project will influence their share of water and whether the new project would hurt the environment. The E - T basin is an excellent illustration of this case. Turkey, Iraq and Syria are instances of governments who failed not reach a trilateral treaty to provide a specific amount of water to each. This raises tensions between governments whenever one of them plans to build a water infrastructure project. Most nations have been hesitant to reach transboundary freshwater water distribution treaties because they fear it may lead to conflicts between riparian states. As a result, they often enter into agreements that shares their benefits, likethose for the development of dams for the use of, hydropower, flood control or irrigation (Vatanfada, MesgariDoosti 2914). Furthermore, some governments do not require to share water since there is a plenty of water in the basin. These water - rich governments, such as certain countries in Europe, desire to reach contracts on other water - related issues like hydropower, flood management, and water quality. Water distribution is especially important in the basin, where water is limited, and the fact that nations do not distribute water exacerbates tensions. Climate change, according to scientists, will have distinct effects in different places of the planet. However, precipitation and climate in many regions of the globe are projected to vary, resulting in climatic unpredictability. Scientists estimate that precipitation will drop and become unstable in many regions of the planet, perhaps making the land drier; in other places, precipitation will be more abrupt and strong, potentially leading to more floods. Variations in temperature and precipitation are possible to have a detrimental influence on riparian states, since rapid and unplanned changes in the amount of water flow place a load on states with restricted ranges of mobility. According to this allocation idea, states would suffer the change based on their share. This suggestion, however, is not intended to stop current inter - state cooperation or to prohibit future ones. In most basins where riparian states collaborated, better water usage and

management outcomes were realized (UNESCO, 2013). However, nations' cooperation in particular basins is difficult. This allocation technique seeks to provide nations the ability to act alone when necessary while leaving the option of cooperation open. Riparian states will benefit from the use of such strategy.

2. Geography, Climate and Hydrological Setting

We'll take a quick look at the geography of the Tigris and Euphrates rivers in the next part. Climate, geography, and hydrology are all included in this. Before we can understand how riparian states function, we need to look at the physical properties of rivers.

2.1. Geography

The two rivers have their origins in the hilly area of southern Anatolia in eastern Turkey, and their sources are separated by less than 30 kilometres. According to Naff/ RC Matson (1984), 28% of the Euphrates drainage basin is in Turkey, 17% in Syria, 40% in Iraq, and 15 percent in Saudi Arabia (SA). The Tigris drainage basin is characterised as extending across Turkey (12 %), Syria (0.2 %), Iraq (54 %), and Iran (36 %). (34%). Despite the fact that Saudi Arabia and Iran are regularly identified as drainage basin nations, they are typically excluded from basin studies (JA Allan, 2008). It is believed that the Saudi Arabian tributary dries up during the summer, and Iran has not made extensive use of the Tigris's waters owing to the region's tough physical and climatic circumstances (Kibaroglu, 2002; H. Elver, 2002). Even though the Euphrates and the Tigris run independently for the most part, they are often studied jointly.⁵ In their last 190 kilometres, the two rivers converge to create the Shatt al - Arab before entering the Persian Gulf. Additionally, the Thartar Canal in central Iraq connects them (Moschtaghi, 2012).

a) The Euphrates

Based on available data (JF Kolars/ WA Mitchell, 1991), it seems that the Euphrates River is the longest river in southwest Asia. Following its confluence with the two rivers Kara - Su and Murat Su in eastern Turkey, the Euphrates enters northern Syria before running along the length of Iraq before ending up at the Mediterranean. Although five states share the Euphrates' drainage basin, only the states themselves provide a substantial portion of the river's water supply.⁸ About 88% of the river's flow originates in Turkey, where the Euphrates obtains most of its water. Remaining riparian Iraq contributes very little to the water flow, unlike Syria, which provides an extra 11%.

b) The Tigris

For a short distance, the Tigris forms the in the border between Turkey and Syria and then the border between Syria and Iraq. The Tigris finally joins the Euphrates near Qurna after flowing the length of Iraq. At 1, 840 kilometres, the Tigris River is one of the longest rivers in the world. Most of its yearly water volume (51%) comes from Turkey, with the rest coming from neighboring countries (Iraq, Iran, and Iraq).

2.2. Climate

There is a climatic variation area between desert climates and humid continental in the Euphrates and Tigris rivers (Lorenz, Erickson, 1999). Wet winters and dry summers are common in the region of southeastern Turkey where the two rivers originate. As the rivers travel south via Iraq and Syria, the climate changes. Arid conditions characterize large swaths of Syria and most of Iraq. Because of the high average summer temperatures and the region's dry climate, significant amounts of water are lost via evaporation (Kliot, 2005).

2.3. The Hydrological Environment

The majority of both rivers' water originates from precipitation and snowmelt in the southern Turkish mountains (Kavvas et al., 2011). In addition, seasonal and yearly fluctuations in their flow are substantial (Kibaroglu et al., 2005). Not just because of climate change, but also because of years of rapid rise in water use that has disrupted river flow patterns. Three dissimilar flow periods have been identified: March to June (high discharge), July to October (low discharge), and November to February (average discharge) (November to February). In addition to the difficulties of estimating the average annual discharge of the two rivers, the inconsistent recording of stream flow data makes it hard to arrive at a consistent number (Kliot, 2005). Nearly 32, 820 million cubic meters of water flow annually across the Euphrates, and 42, 230 million cubic meters flow annually through the Tigris (Naff/RC Matson, 1983).

3. Conclusion

This is not the first research on the rivers Tigris and Euphrates to emphasize the necessity for immediate action and the need of an inclusive trilateral solution (for example in form of obligatory international treaties). Both rivers continue to be significantly impacted by rising water demands and deteriorating water quality. Subsequent of several years of collaboration and friction, one has newly witnessed a new dynamic of cooperation in the region, as evidenced by the reactivation of the Joint tec and the signature of different memorial of understandings. Unlike earlier partnership attempts, the new projects appear to take a more comprehensive approach, focusing on numerous concerns pertaining to the economic and social growth of the area, as opposed to concentrating solely on water difficulties.

Despite the fact that the expansion of the negotiation agenda has been advantageous to break the impasse in water negotiations and improve communication, the expansion of the negotiation agenda has not been effective in breaking the impasse. It is still a patchwork method, which does not necessarily resolve the issue of discovery a sustainable trilateral or even multilateral (include other basin State) solution. Improved cooperation and close socioeconomic linkages between the riparian countries could pave the way for an inclusive and sustainable solution to the river sharing and a safe future of the water for the area in the long run.

Iraq must review its entire water policy and identify its flaws, including irrigation methods, dam maintenance, and

the management of water resources by international standards. Iraq's deviation from these matters constitutes a violation of the international obligations to which it is bound by international treaties, particularly the framework agreement. It explicitly included the principle of compatibility, and all states should review these laws, particularly as they pertain to topics and issues that lie on international rivers, such as dams, in addition to Iraq's neighbors, so long as they confront Iraq with its internal problems stemming from its water policies and the means of their application. This study concludes that Iraq's evaluation of its internal legislation and all of its projects built on the Tigris and Euphrates rivers adds significantly to the resolution of these issues.

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