## WATER DISPUTES AND INTERNATIONAL ENVIRONMENTAL LAW: A CASE STUDY OF THE INDUS WATERS TREATY AND OTHER TRANSBOUNDARY WATER AGREEMENTS

Swapnil Shankhwar & Rishabh Kumar Dubey, Dr. Ram Manohar Lohiya National Law University & Central University of South Bihar<sup>\*</sup>.

#### Abstract

Water scarcity is a growing global concern that has catalysed conflicts primarily at regional and local levels, but it also possesses the potential to escalate international tensions. This paper examines key principles of international water law, including equitable utilisation, the no-harm principle, and doctrines of cooperation among states sharing watercourses. Analysing major international water treaties and conventions reveals foundational approaches to transboundary water governance.

Although limited by its dependence on state compliance, international water law seeks to mediate disputes through frameworks balancing equitable use and conservation. However, no single organisation wields definitive power to enforce international water law, making self-commitment essential for implementation. Examining India's water disputes with neighbouring countries highlights the challenges and significance of cooperative water management. Case studies include India's treaties and ongoing negotiations with Pakistan (Indus Water Treaty), China (Brahmaputra River), Bangladesh (Ganga and Teesta Rivers), Nepal (Kosi and Gandaki Rivers), and Bhutan (hydropower agreements). This paper advocates for enhanced collaboration, timely information exchange, and effective legal mechanisms to address water security and sustain regional stability.

Keywords: International Water Law; Transboundary Water Disputes; Water Security; Cooperative Water Management

<sup>\*</sup> Author I is a Ph.D. Scholar at Dr. Ram Manohar Lohiya National Law University, Lucknow (Uttar Pradesh), and Author II is pursuing LL.M. from Central University of South Bihar (Gaya).

### 1. INTRODUCTION

The majority of conflicts related to water scarcity have transpired at a regional or local level. Water is essential for survival, and its amount and quality directly influence everyday activities. Water is a limited resource. Issues with water management institutions, inadequate or absent water resource management, disagreements over water allocation, and elevated demand for potable water are all probable factors for water disputes.<sup>2</sup> A water crisis could escalate international tensions or perhaps incite outright conflict if it compels affected states to vie for a scarce water resource.

A "water war" is a colloquial term denoting a conflict over water, often involving states competing for control of water resources. Despite several historical water disputes, few have manifested as traditional conflicts over water resources. Conversely, water has always been a controversial matter and a provocation for violence. The shared use of transboundary water resources, such as rivers, seas, or groundwater basins, may result in disputes among states. Prevalent policy concerns, such as water use and distribution, are often overlooked, conflated with more urgent security or border issues, or handled just in the wake of disastrous incidents. The influence of water politics on country prosperity and security is significant. The pressures on global water supply are immense and increasing. Globally, governments are confronting significant challenges due to the increment in the world's population in the last few years. Urbanization, industrialization, hydrological variability, and environmental degradation have exacerbated the situation. Developing countries confront these challenges directly owing to their limited per capita water resources, fast urbanization, and elevated population growth rates. The number of conflicts at regional, state, federal, and international levels is seeing exponential rise due to varying requirements and expectations. The link between domestic use and needs and difficulties related to international waterways is more evident. In this paper, we will deal with the internation law in respect of such disputes and few major international water disputes.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Tamar Meshel, "Swimming Against the Current: Revisiting the Principles of International Water Law in the Resolution of Fresh Water Disputes", *Harvard International Law Journal*, Volume 61, Number 1, Winter (2020).

<sup>&</sup>lt;sup>3</sup> McCaffrey, *The Law of International Watercourses – Non Navigational Uses* (Oxford, UK: Oxford University Press, 2001)

#### 2. PRINCIPLES OF INTERNATIONAL WATER LAW

- i. "Equitable and reasonable utilization and no significant harm principle" according to which the global governance of freshwater resources has evolved over time due to treaties, national practices, traditions, and judicial decisions. The concept of an international watercourse as a "shared natural resource" served as an initial foundation for collaborative management, advocating for governments to cooperate in ensuring equitable use and mitigating any adverse environmental effects stemming from its usage. "The International Law Commission (ILC) saw the waters of an international watercourse system as a quintessential shared natural resource and applied this perspective to the non-navigational uses of transboundary waters."<sup>4</sup>
- ii. "Harmon Doctrine", according to which a state possesses the prerogative to manage the waters within its jurisdiction as it deems fit, irrespective of the concerns of other states sharing those waters.<sup>5</sup>
- iii. "sic utere tuo ut alienum non laeda" which means that State should be barred from using their territory in a way that might possibly harm another state.
- iv. "Community interest theory" which means that river must be shared between the state in such a manner that it will benefit the community as a whole.
- "Principles of notification, consultation and negotiation" under this principle any riparian state situated along an international watercourse possesses the right to receive prior notification, consult with fellow riparian states, and negotiate when the proposed use of a shared watercourse by another riparian state who may jeopardize its rights or interests.
- vi. "Principles of cooperation and information exchange" under this principle it is the collective obligation to cooperate and share information on the condition of an international watercourse to ascertain its current and prospective utilizations.

#### 3. INTERNATIONAL LAW RELATED TO INTERNATIONAL WATER DISPUTES

International law on water disputes comprises customary law, universally applicable framework treaties, regional framework treaties, and regional or bilateral water law agreements pertaining to specific water resources.

<sup>&</sup>lt;sup>4</sup> International Regulation regarding the Use of International Watercourses for Purposes Other Than Navigation – Declaration of Madrid (Apr. 20, 1911)

<sup>&</sup>lt;sup>5</sup> M.A Salman (ed.), "Groundwater: Legal and Policy Perspectives : Proceedings of a World Bank Seminar", World Bank Publications, ISBN 0-8213-4613-X (1999)

The weaknesses inherent in all international law are therefore evident in international water law, irrespective of its origin. No organization have unequivocal power to enforce its rules.

#### 3.1. Helsinki Rules on the uses of the waters of international rivers, 1966.

In 1966, the International Law Association (ILA) convened in Helsinki, Finland, and resolved to formulate the Helsinki Rules on the Utilization of International River Waters. These regulations serve as an international framework governing the use of transboundary rivers and their associated groundwater. The Helsinki Rules assert the right to a fair allocation of water resources, considering customary usage and balancing the diverse needs of neighboring nations, applicable to all transboundary drainage basins. All transboundary drainage basins are governed by the Helsinki Rules.<sup>6</sup>

# **3.2.** The UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention), 1992.

This is a unique international legal instrument and intergovernmental platform established to facilitate cooperation for the sustainable management of transboundary water resources. The agreement was first negotiated as a regional treaty; but, in 2016, it was made available for accession by all United Nations Member States.<sup>7</sup>

### **3.3.United Nations Convention on the Law of the Non-Navigational Uses of International** Watercourses (UNWC, 1997).

In 1997, over 100 nations convened to create the UNWC.<sup>8</sup> This international legal framework is both flexible and thorough, establishing the fundamental principles for cooperation among governments sharing a watercourse in the management and protection of these waterways. The UNWC regulates, administers, and protects international watercourses. The principal river, together with its tributaries, distributaries, associated lakes, wetlands, and aquifers, is collectively regarded as a single watercourse as per the agreement. Under the UNWC, states are required to exploit international watercourses equitably and judiciously, while considering the need of their protection. Prioritizing fundamental human needs and the interests of adjacent countries along the watercourse will facilitate the optimal and sustainable use of these resources.

<sup>&</sup>lt;sup>6</sup> International Law Association, *The Helsinki Rules on the Uses of the Waters of International Rivers*, , REPORT OF THE FIFTY-SECOND CONFERENCE, Helsinki, 1966, p. 477.

<sup>&</sup>lt;sup>7</sup> UNECE ,Convention on the Protection and Use of Transboundary Watercourses and International Lakes, [online] 17 Mar. 1992, 31 I.L.M. 1312 (in force 6 Oct. 1996), available at: <u>http://www.unece.org/env/water/text/text.html</u> <sup>8</sup> UNECE, *Convention on the Law of the Non-navigational Uses of International Watercourses*,

<sup>(</sup>New York, 1997) UN Doc. A/51/869, reprinted in 36 I.L.M. 700.

China cast a vote against the Convention in 1997, while India and Pakistan chose to abstain from voting on it. Nepal and Bangladesh, on the other hand, cast votes in favor of the Convention; however, none of them has ratified it.<sup>9</sup>

# 3.4.United Nations Secretary-Generals Advisory Board on Water & Sanitation (UNSGAB), 2010.

In early 2004, Kofi Annan, the then-Secretary-General of the United Nations, urged former Prime Minister Ryutaro Hashimoto of Japan to devise and execute a strategy to offer counsel on addressing the world's critical water and sanitation issues, propose a limited number of feasible recommendations and a succinct action plan, and subsequently deliver the necessary high-level leadership to mobilize the international community towards achieving the sustainable targets for drinking water and sanitation.<sup>10</sup>

#### 3.5. The Berlin rules on water resources (2004).

The Berlin Rules on water resources were adopted during the 71st session of the International Law Association in Berlin on August 21, 2004. The Berlin Rules refer to human rights law and humanitarian laws related to warfare and armed conflict, in addition to international human rights law. The Berlin Rules mandate that all nations within an international drainage basin must adopt reasonable and fair water management policies.<sup>11</sup>

#### 4. WATER DISPUTE OF INDIA WITH OTHER NEIGHBOURING COUNTRIES.

#### **4.1.Indus Water Treaty**

India and Pakistan are governed by this Treaty (IWT), which has been operational for around 60 years, to allocate the water resources of the Indus Rivers. "The agreement was signed in 1960 by President Ayub Khan of Pakistan and president of India, Jawaharlal Nehru, with the World Bank acting as a third-party guarantor."<sup>12</sup>

<sup>&</sup>lt;sup>9</sup> Shawahiq Siddiqui, "UN Watercourses Convention is good for South Asia", *Dialogue Earth*, August 18, 2014, *available at <u>https://dialogue.earth/en/water/un-watercourses-south-asia/</u> (Last visited on 31<sup>st</sup> October, 2024)* 

<sup>&</sup>lt;sup>10</sup> UN Security Council, United Nations Secretary General's Advisory Board on Water and Sanitation (UNSGAB), Hashimoto Action Plan II, [online] (Jan. 2010), available at: <u>http://www.unsgab.org/HAP-II/HAP-II\_en.pdf</u>

<sup>&</sup>lt;sup>11</sup> Salman, M.A.S. (2007a) 'The helsinki rules, the UN watercourses convention and the berlin rules: perspectives on international water law', *Water Resources Development*, Vol. 23, pp.625–640.

<sup>&</sup>lt;sup>12</sup> Aayushi Singh, Karan Anand, "Revisiting the Indus Waters Treaty: PCA Reasserts Competence", *Kluwer Arbitration Blog*, November 30, 2023, *available at https://arbitrationblog.kluwerarbitration.com/2023/11/30/revisiting-the-indus-*

The IWT has received commendation for its five decades of operation as a paradigm of efficient third-party mediation and conflict avoidance. The allocation of Indus waters has endured conflicts between Pakistan and India and has lately attracted heightened scrutiny owing to escalating water scarcity challenges in both nations.

The Indus Basin, one of the most physio graphically uniform regions on Earth, originates in southern Tibet, traverses Kashmir, passes through Punjab, and ultimately discharges into the Arabian Sea. "The treaty awarded unrestricted use of the three eastern rivers—the Ravi, the Beas, and the Sutlej to India, while the three western rivers—the Indus, the Chenab, and the Jhelum—were designated for Pakistan. Pakistan derives 90% of its agricultural output from little over half of the basin's total irrigated area situated inside its borders."<sup>13</sup> Pakistan secured around 80% of the Indus waters based on its historical claims. The British extensively irrigated the region of West Punjab in Pakistan. The allocation designated for India was around 20%. India also obtained specific 'non-consumptive' rights to the Western rivers for purposes like as agriculture, water storage, and hydropower, among others.<sup>14</sup> The IWT created the Permanent Indus Commission (PIC) to facilitate communication between the nations and address issues with the treaty's implementation. According to the treaty, India and Pakistan are required to have yearly meetings, with each nation hosting the other in alternating years. Multiple reasons, notably the COVID-19 pandemic and the significant deterioration of relations after the Pulwama terrorist attack, hindered the parties from convening in 2020 and 2019, respectively. On May 30-31, 2022, in New Delhi, they had their last official meeting. More than two years had elapsed.<sup>15</sup>

The PIC was temporarily halted while a high-level task force was formed to review the agreement after Indian Prime Minister Narendra Modi's assertion that "blood and water cannot coexist" in the wake of the 2016 Uri terrorist attack.

<sup>&</sup>lt;u>waters-treaty-pca-reasserts-competence/</u> (last visited on 31<sup>st</sup> October, 2024)

<sup>&</sup>lt;sup>13</sup> Ministry of External Affairs, Government of India, "Indus Waters Treaty", Media Centre, 19 September 1960, <u>https://mea.gov.in/bilateeral-documents.htm?dtl/6439/Indus</u>.

<sup>&</sup>lt;sup>14</sup> Mustafa Khalid, 'India out to Damage Pakistan's Water Interests on Kabul River', *the Print*, Jun 05, 2016, *available on* <u>http://www.thenews.com.pk/print/125490-India-out-to-damge-Pakistans-water-interets-on-Kabul-river,3/11</u>, (last visited on 31<sup>st</sup> October, 2024)

<sup>&</sup>lt;sup>15</sup> John Joseph Vater, "The Indus Waters Treaty: Prospects for India-Pakistan Peace", *ISAS*, 23 June 2021, *available on* <u>https://www.isas.nus.edu.sg/papers/the-indus-waters-treaty-prospects-for-india-pakistan-peace/</u> (last visited on 31<sup>st</sup> October, 2024)

In order to prevent floods in Pakistan, India accelerated many hydroelectric initiatives, including the Shahpurkandi dam, the Ujh Multipurpose project, and the Ravi-Beas Link. Nitin Gadkari, India's Minister of Water Resources, issued a similar warning in February 2019 after the Pulwama incident; concurrently, Modi boasted to an audience at a general election rally that the rivers will be rerouted to advantage farmers in Haryana. Islamabad said that any attempt to alter the flow of rivers in the West would be seen as a "act of aggression," despite the fact that India's actions concerning the eastern tributaries do not significantly affect Pakistan.<sup>16</sup>

India purportedly used a "zigzag" approach driven by political expediency prior to abrogating Kashmir's special status and shown less urgency over Indus Basin projects. Since 2019, 33 projects along the Chenab, Jhelum, and Ravi rivers have been accelerated. The Atmanirbhar Bharat Abhiyan provided  $\gtrless11,024.47$  crore (about S\$2 billion) in 2020 to assist Jammu and Kashmir in settling their outstanding power purchase obligations. The government intends to use hydropower to generate employment and enhance skills in the region, ultimately aiming to establish it as a net energy exporter. Initiatives like as these are seen as a vital "thrust area" for linking Kashmir to the broader country.<sup>17</sup>

#### 4.2. India-China Water Relations

China and India, the two most populous nations globally, are among the four states that share the river. Both nations' economies are rapidly developing, and they rank among the most water-stressed in the world. The fluctuating monsoon season, retreating glaciers, strained diplomatic relations, absence of formal water-sharing agreements, insufficient history of exchanging fundamental hydrological data, and lack of cooperative water-sharing arrangements complicate the joint management of the Brahmaputra. Moreover, China's participation in collaborative transboundary water management, whether concerning the Brahmaputra or any other river, has been limited. China, as the upstream state, is enhancing infrastructure and exerts control over a significant portion of the Brahmaputra basin. China and India may not be fighting for a substantial volume of water from the Brahmaputra, however a different kind of competition is emerging in their water infrastructure.

<sup>&</sup>lt;sup>16</sup> Suhasini Haidar,Jacob Koshy, "India and Pakistan at odds over renegotiating the 64-year-old Indus Water Treaty, risking the future of the Permanent Indus Commission", *The Hindu*, September 18, 2024, *available on* <u>https://www.thehindu.com/news/national/india-serves-notice-to-pakistan-seeking-review-of-indus-water-treaty/article68655577.ece</u> (last visited on 31<sup>st</sup> October, 2024)

<sup>&</sup>lt;sup>17</sup> Supra Note 14 at 7.

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The hydropower plant, China's first project in the river, was finished in 1998.<sup>18</sup> Subsequently, China has constructed or is now contemplating the construction of many dams along the Brahmaputra mainstem. Planet Labs and the Stimson Center's Energy, Water, and Sustainability Program have used satellite imagery to detect an additional 18 dams on tributaries of the main stem. Among the planned dams, the "Great Bend Dam" is the most audacious and contentious. This would treble the power production of China's renowned Three Gorges Dam by channeling water down a tunnel with a descent of 6,562 feet.<sup>19</sup> The Brahmaputra River has been mostly managed by both countries, with China consenting to exchange hydrological data about water flow within its jurisdiction as stipulated in a memorandum of understanding (MoU) signed in 2002. In 2017, Beijing suspended the 2002 agreement due to the ongoing confrontation on the Doklam Plateau stemming from a dispute.<sup>20</sup> The timing of flows may be influenced by Chinese infrastructure, thereby increasing the risk of floods, even if it is not designed to divert water from the river. Nonetheless, mitigating flood dangers may also be accomplished by concerted efforts with India. Although China's contribution to the flow is around 7%, the Indian government has consistently downplayed the threats associated with Chinese infrastructure. China has invested in the 30 megawatt Chameliya hydroelectric Project, one of the most costly hydroelectric initiatives ever constructed; nevertheless, India would not get electricity from such projects.<sup>21</sup>

#### **4.3.India And Bangladesh Water Disputes**

The Teesta River, originating in India and discharging into the Bay of Bengal, spans 414 kilometers and traverses Bangladesh. This river is essential for almost six districts in West Bengal. Research conducted by the Asia Foundation in 2013 indicates that the Teesta River is essential for the sustenance of 73% of the population of Bangladesh. Numerous farmers, fishermen, and boatmen continue to depend on the Teesta River, despite its significant desiccation resulting from excessive groundwater extraction. This river can provide 84GW of hydroelectric electricity when completely developed.

<sup>&</sup>lt;sup>18</sup> Mark Giordano; Anya Wahal, "The Water Wars Myth: India, China and the Brahmaputra", *United States Institute of Peace*, December 8, 2022, *available at* <u>https://www.usip.org/publications/2022/12/water-wars-myth-india-china-and-brahmaputra</u> (last visited on 31<sup>st</sup> October, 2024)

<sup>&</sup>lt;sup>19</sup> Itay Fischhendler, "The Securitization of Water Discourse: Theoretical Foundations, Research Gaps and Objectives of the Special Issue," *International Environment Agreements* 15, no. 3 (2015), 249–50

<sup>&</sup>lt;sup>20</sup> Selina Ho, Neng Qian, and Yifei Yan, "The Role of Ideas in the China-India Water Dispute," *Chinese Journal of International Politics* 12, no. 2 (2019): 263–94.

<sup>&</sup>lt;sup>21</sup> Itay Fischhendler, "The Securitization of Water Discourse: Theoretical Foundations, Research Gaps and Objectives of the Special Issue," *International Environment Agreements* 15, no. 3 (2015), 249–50.

The Teesta River basin in the Sikkim-Darjeeling catchment area has several hydropower facilities.<sup>22</sup> This will likely generate over 6,000 MW of power in the near future. In 2007, the Teesta-V dam was constructed across the river to mitigate flood danger. Currently, 55% of the water in the Teesta River is under Indian jurisdiction.<sup>23</sup>

In 2011, India and Bangladesh established a new agreement, a provisional arrangement for 15 years, allocating 37.5% of Teesta's water to Bangladesh and 42.5% to India. Discussions about Teesta have persisted for decades with little result. The agreement also mandated the creation of a collaborative hydrological observation station to collect precise data in the future.<sup>24</sup>

The agreement was not executed later that year due to significant resistance from the Trinamool Congress (T.M.C.) in West Bengal. Numerous individuals anticipated that Prime Minister Narendra Modi's 2015 visit to Dhaka would address the unresolved issues regarding a fair and equitable water-sharing agreement. The Teesta project, meanwhile, remains incomplete.<sup>25</sup>

#### 4.4.Ganga Water Treaty, 1996

The Farakka Barrage, a dam on the Bhagirathi River, is situated around 10 kilometers (6.2 miles) from the Bangladeshi border in the Indian state of West Bengal. India utilizes the Ganges River to control its flow. "To mitigate the silt accumulation that afflicted Kolkata Port on the Hooghly River during the 1950s and 1960s, a dam was erected to divert water from the Ganges River into the Hooghly River in the dry season (January to June). Bangladesh asserts that its rivers are depleting owing to India's excessive extraction of water."<sup>26</sup>

<sup>&</sup>lt;sup>22</sup> Supra note 8 at 5.

<sup>&</sup>lt;sup>23</sup> Sasidhar, Nallapaneni, "Multipurpose Freshwater Coastal Reservoirs and Their Role in Mitigating Climate Change" (PDF), *Indian Journal of Environment Engineering*. 3 (1): 31–46. doi:10.54105/ijee.A1842.053123. ISSN 2582-9289. S2CID 258753397

<sup>&</sup>lt;sup>24</sup> Wolf, Aaron T., "Water and Human Security". *Journal of Contemporary Water Research and Education*, **118**: 31 (2001).

<sup>&</sup>lt;sup>25</sup> Praveen Swami, "Manmohan says Mamata assented to Teesta deal", *The Hindu*, November 17, 2021, *available at* <u>https://www.thehindu.com/news/national/manmohan-says-mamata-assented-to-teesta-deal/article2433343.ece</u> (last visited on 31<sup>st</sup> October, 2024)

<sup>&</sup>lt;sup>26</sup> Bhaswar Kumar, "What is the 1996 Ganga Water Treaty that has sparked Mamata-Centre row?" *Business Standard*, Jun 26 2024, *available at <u>https://www.business-standard.com/external-affairs-defence-security/news/what-is-the-1996-ganga-water-treaty-that-has-sparked-mamata-centre-row-124062500681 1.html* (last visited on 31st October, 2024)</u>

The 1996 pact concerning the allocation of Ganges waters at Farakka was established to address the conflicts between Bangladesh and India over water distribution from the river. "The conflicts started with the commissioning of the Farakka barrage in 1975, which aimed to divert water from the Ganges to the River Hooghly to maintain the navigability of the Calcutta port."<sup>27</sup> The principal objective of the agreement was to impose a limit on India's water outflow. The treaty mandated that Bangladesh, the lower riparian state, and India, the higher riparian state, would allocate the water from the Ganges at Farakka, a dam situated around 10 kilometers from the Bangladeshi border on the Bhagirathi River. "The pact delineates a flow schedule from the Farakka barrage during the dry season months of January to May, expiring on December 12, 2026. If the flow at Farakka exceeds 75,000 cusecs, India is authorized under the treaty to extract up to 40,000 cusecs."<sup>28</sup>

#### 4.5.India–Nepal water Dispute

Nepal and India have established water cooperation agreements for significant hydropower and irrigation projects, including the building of dams or barrages on rivers such as the Kosi, Gandaki, Karnali, and Mahakali. Aside from the Kosi barrage, no projects have been finalized to far. Minor rivers have also been overlooked. No progress has been made in addressing the water rights conflict between Nepal and India since the Kosi Agreement was signed in 1954.<sup>29</sup> The floods in the Kosi region have intensified the many disputes surrounding this arrangement. The compensation dispute about the Kosi dam has generated tensions between Nepal and India. Moreover, Nepal saw India's construction as an encroachment onto its sovereign territory. Embankments have failed to mitigate the elevated sedimentation rate in the Kosi River, which is a significant issue. Storage tanks provide the only feasible alternative; nevertheless, their construction need assistance from Nepal.<sup>30</sup> "A persistent dispute between the two nations concerns the delineation of the boundary along the Maha Kali River in Nepal as established by the 1816 Sugauli Treaty, signed by Nepal and the British East India Company. The determination of which stream is the river's source is a contentious issue between India and Nepal.

<sup>&</sup>lt;sup>27</sup> Mirza, M.Q., 'The Ganges water-sharing treaty: risk analysis of the negotiated discharge', *International Journal of Water*, Vol.2, No.1, pp.57-74 (2002).

<sup>&</sup>lt;sup>28</sup> Paula Hanasz, "Sharing waters vs. sharing rivers: The 1996 Ganges Treaty", *Global Water Forum*, July 28th, 2014, *available at* <u>https://www.globalwaterforum.org/2014/07/28/sharing-waters-vs-sharing-rivers-the-1996-ganges-treaty/</u>(last visited on 31<sup>st</sup> October, 2024)

<sup>&</sup>lt;sup>29</sup> Medha Bisht, "Revisiting the Kosi Agreement: Lessons for Indo-Nepal Water Diplomacy", *IDSA*, September 22, 2008, *available at <u>https://idsa.in/idsastrategiccomments/RevisitingtheKosiAgreement\_Medha%20Bisht\_220908</u> (last visited on 31<sup>st</sup> October, 2024)* 

<sup>&</sup>lt;sup>30</sup> Amit Ranjan, "Contours Of India- Nepal Relationship And Transboundary Rivers Water Disputes", *Journal of International Affairs* Vol. 1, No. 1, 2016.

The territorial dispute between Nepal and India, albeit seemingly trivial, has strategic importance owing to its closeness to the Sino-Indian border.<sup>31</sup>

#### 4.6.India–Bhutan water Dispute

Collaboration between India and Bhutan in hydroelectric power generating started over fifty years ago. Tala, Chukha, and Kurichu were initial small-scale hydroelectric projects that established the foundation of the collaboration. Bhutan has the potential to achieve a hydroelectric capacity of thirty thousand megawatts. In 2006, a 35-year Power Purchase Agreement was signed, allowing India to purchase and generate hydropower from Bhutan at a capacity of 5,000 MW; this capacity was increased to 10,000 MW in 2008. Nonetheless, apprehensions over the projects' prospective long-term effects on Bhutan have prompted its residents to voice their opposition. Water accessibility is a domestic issue for Bhutan.<sup>32</sup>

#### 5. CONCLUSION

International water law, in addition to its fundamental principles, provides specific laws derived from treaty and customary international law. If water is to be used for sustainable development, peacebuilding, and preventive diplomacy, it must be managed properly. The capacity of water to unite diverse populations and facilitate agreement across countries and cultures is substantial.

With the increase in global population and the growing scarcity of water, complex claims are likely to emerge. International collaboration on watercourses is regrettably hindered by the absence of a worldwide treaty to regulate their sharing and use. Collaboration is unequivocally the most effective method for dispute resolution and achieving mutually beneficial solutions for all parties involved. When individuals collaborate, they must not only allocate water or river basins but also apportion the benefits derived from using such resources. Effective management of water resources necessitates the establishment of current laws and regulations. Consequently, legislators must consider the cultural background, economic necessities, political environment, and the natural rules governing the water supply. The collection and monitoring of data is essential. Fundamental elements include preparation, instruments, and methodologies for adaption.

<sup>&</sup>lt;sup>31</sup> Dr. Priyanka Kumari and Dr. Ramanek Kushwaha, "Sugauli Treaty 1816", *International Journal of History* 2019; 1(1): 42-47, DOI: <u>https://doi.org/10.22271/27069109.2019.v1.i1a.42</u>

<sup>&</sup>lt;sup>32</sup> Mihir Bhonsale, "Bhutan's 20-year economic development and transition to democracy: An assessment of India's role", *Observer Research Foundation*, May 24, 2023, *Available at* <u>https://www.orfonline.org/english/research/bhutans-</u> 20-year-economic-development-and-transition-to-democracy-an-assessment-of-indias-role-64630 (last visited on 31<sup>st</sup> October, 2024)