GANGES WATER SHARING DISPUTE: AN ANALYSIS IN THE CONTEXT OF INTERNATIONAL WATER LAW

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Abstract

The Ganges river water sharing dispute has long been a problematic issue for Bangladesh. Bangladesh has tried to resolve the dispute through the 1996 Ganges River Water Sharing Treaty with India. However, the dispute over Ganges river water sharing remains and has become a burning issue in Bangladesh-India water relations. This study follows the content analysis method and thoroughly examines the principles of international water laws for the settlement of trans-boundary river disputes. It finds that widely accepted principles of customary international water laws have not been properly followed to resolve the Ganges River water-sharing dispute which makes the 1996 treaty weak. The study emphasises the legal obligations of both Bangladesh and India in the case of trans-boundary river water sharing and aims to add to insights on dispute resolution.

Keywords: *Ganges River, Farakka Barrage, Water Sharing Treaty, international water law*

Introduction

Water is the most fundamental necessity for survival and becomes even more precious if it comes through an international river which is not limited within the boundary of one particular state. For,

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when a trans-boundary river runs through the territorial border of any country, it cannot claim the full utilisation right over the water of the said river. This entails that a trans-boundary river does not flow exclusively through one particular country. Rather, it is governed by the customary international rules to avoid disagreement over the common river water-sharing. Activities related to the utilisation of the trans-boundary river are supposed to be consistent with the guidelines of international law. International water law enables the co-riparian countries to settle the issue of the use of water resources of a trans-boundary river peacefully. Customary international law identifies the rights of the co-riparian countries over the water of a trans-boundary river and locates the co-riparian countries in terms of mutuality regarding the usage of the trans-boundary river water. A commonly acknowledged view is that no state has an unrestricted right over the utilisation of the water of an international river.[1]

However, because of the growing demand for water, all the basin states try to ensure the best use of their river water, take new water projects, build dams and barrages, and store water for the lean season. All of these activities somehow hinder the rightful share of other basin states deliberately and sometimes not so deliberately, eventually resulting in disputes on trans-boundary river water. In this situation, international water law can play an important role in managing and resolving water disputes and can eliminate the impending threat of water wars. So far, water conflicts among many disputant countries have been resolved through the proper application of the rules of international water laws. As the present paper focuses on the longstanding dispute over Ganges water sharing, considering all the aspects, the legal issues of the Ganges water sharing dispute are discussed in this paper in light of the international water law and state practices.

Major International Water Laws

Trans-boundary water disputes have been emphasised by the

world community mostly in recent times, though the issue has been in existence for long. Globally, there are 263 trans-boundary river basins. Thirteen river basins are shared between five and eight countries while as high as eighteen countries share the basins of the Congo, Niger, Nile, Rhine, and Zambezi rivers. Approximately, more than 40 per cent of the world's population lives in globally shared river basins.[2] More than 75 per cent of 145 countries are sharing trans-boundary rivers with other countries. Additionally, 33 countries have 95 per cent of their area inside international river basins.[3] Vast areas covered by trans-boundary rivers and the increasing dependence of people on these rivers have forced countries to have water-related interactions with other co-riparian countries. Multiple uses of international river water and interactions among the basin states have raised complications and have drawn the attention of the world community to the international dimensions and rules for resolving water disputes as well as for sustainable water resource management. Internationally, there are some principles to resolve water-sharing problems which have emanated from major international water laws. Before the emergence of the widely accepted international laws on the uses of common river waters, disputes were mainly settled first under the provisions of the Vienna Act of 1815 and later under the provisions of the 1921 Barcelona Convention. These conventions, however, dealt with the navigational uses in the earlier times as conflicts on non-navigational uses were not as apparent as navigational uses. However, growing demands for water resources pushed for the modernisation of the law which is also related to non-navigational uses such as mitigation of floods, use for hydropower, water sharing, maintaining water quality, and so on. This eventually led to the formulation of non-navigational rules important for state practices and water conventions for dispute resolution.[4] Two non-governmental organisations, i.e., the Institute of International Law (IIL) and the International Law Association (ILA) contributed immensely to the establishment of non-navigational water laws. The work of ILA was

incorporated in the Helsinki Rules 1966, Berlin Rules 2004, and also in the UN Watercourses Convention which is considered as the major international water law.[5]

The Helsinki Rules

In August 1966, in Helsinki, a set of comprehensive rules on the usage of trans-boundary river water was issued in the 52nd meeting of the ILA. The Helsinki Rules are the first legally authorised international apparatus covering widespread subjects including rules for navigational and non-navigational uses together.[6] It made the co-riparian states aware of their riparian rights and to sort out the inter-riparian issues in a peaceful manner. The Helsinki Rules have six chapters and 37 Articles covering various aspects of riparian rights to maintain peaceful inter-riparian relations. The Helsinki Rules are considered the first authorised lawful instrument in this regard. The rules were later revised by the Montreal Rules on Pollution 1982, Seoul Complimentary Rules 1986, and Berlin Rules 2004. Despite the broad recognition of the Helsinki Rules, it enjoyed little gratitude as the official codification of international water law gradually led to the UN Watercourses Convention.[7]

Major Provisions Incorporated in Helsinki Rules for Amicable and Peaceful Resolution

The Helsinki rules entitled all the basin states to receive equitable and reasonable shares which have been mentioned in Articles IV to VIII. According to its principles, all the basin states can use a rational and rightful share of transboundary river water inside its sovereign territory. The terms 'equitable' and 'reasonable' share will be determined through the relevant factors mentioned in Article V. Considering these factors together, basin states could reach an understanding. The existing principle of 'reasonable use' of trans-boundary river water will be given more importance in case of preserving water for upcoming usage of a basin state (Article VII). But basin states can continue the reasonable usage until the other justified factors emerge as more important than the reasonable use (Article VIII). According to the Helsinki Rules, if water

use by any country causes any kind of water pollution and leads to damage to the co-basin states, then the injured state must be compensated by the offender state.[8] The Helsinki Rules covered a wide range of issues related to the procedure to prevent and settle disputes arising among the riparian states. Article XXVII envisages settling the trans-boundary water disputes according to the lawful rights and other benefits of the basin states in a peaceful manner so that peace, harmony, and righteousness among the basin states are not put at risk. According to the Rules, every basin state must furnish related data about its use of such waters to other basin states of the concerned basin inside its territorial border. The Helsinki Rules also instruct that irrespective of their riparian positions, basin states should inform the co-basin states about their proposed construction activities if such activities can change the watercourse of the basin in such a way that might cause harm to other basin states and lead to disputes. Such information on the responsible basin state would help the other co-riparian states assess the likely impact of projected construction activities. Article XXIX also instructs the responsible state to intimate a period to make this assessment.[9] In addition, the Helsinki Rules give importance to negotiation for dispute settlement. It also instructs the concerned parties to form a joint body to prepare plans and proposals for the best and competent use of water to ensure the interests of all the parties. If, in case, the riparian states are unable to sort out disputes, then the states can seek help from a third party for dispute resolution. Even if the concerned states fail to resolve the dispute, then, according to the Rules, the basin states can go for an inquiry commission or an ad hoc conciliation commission to find a satisfactory way for dispute resolution.[10]

The UN Watercourses Convention

The UN Convention was approved on 21 May 1997 in the General Assembly of the United Nations (UN) to define the non-navigational uses of trans-boundary watercourses. After working for

almost twenty years, the International Law Commission drafted a written document incorporating several articles which formed the basis of the 1997 UN Watercourses Convention. This Convention has seven parts, thirty-seven articles, and an annexure on dispute settlement.[11] The Convention got 103 votes in its favour and 3 votes against it with 27 abstentions. It remained open for signature in favour of its acceptance till 20 May 2000.[12] The 1997 Convention covered an extensive range of water issues. The major objective of the convention was to ensure a rational and rightful share of trans-boundary river water and participation of the basin states to attain optimum and sustainable development and benefit. According to the UNGA rightful and rational use by the basin states should be determined by several factors relating to nature, socio-economic needs of the co-riparian countries, population reliant on trans-boundary river water in each basin state, the impact of the present and probable use of water resources of one basin state to other, and so on.[13] The basin states must be mindful of all these factors during the utilisation of trans-boundary river water as the other basin states are also reliant on the watercourse.

Significant Clauses for Avoiding Disagreement or Dispute Resolution

The UN Convention emphasizes the 'no significant harm' principle to avoid disputes over transboundary river water. Article 7 illustrates that during the use of trans-boundary river water, the principle of 'no significant harm' has to be pursued by the co-riparian countries. If any state's such use causes any harm, it must consult with the concerned state to mitigate the harmful effects and, if necessary, compensate the affected state. All the basin states must share all the available information (Article 9) about the watercourse, particularly related to hydrological, atmospheric, hydrogeological, and environmental aspects to ensure the best utilisation of the watercourse for all the basin states of the concerned drainage basin. If the data is not readily available, they must take utmost efforts to collect data and make

it available.[14] The UN Convention entitled the basin states to report and discuss with each other regarding their planned actions. If there is a chance for substantial adverse impact upon other basin states, they must make all the technical data, information, and environmental assessment available on time to the states so that they can assess the likely adverse effects on them. The informed state(s) should be given at least six months to assess the planned measures and reply. During this process, if they need any further information, the notifying state should provide them with the said additional information and after their assessment, if the notified state does not consent or disagrees with the planned measures, the notifying state cannot implement it. Article 14 (b) mentions that the notifying state shall not implement the intended project(s) in the absence of the approval of the notified state. However, if the notified state does not respond to the notification, the notifying state may continue with the execution based on the announcement and the data and information delivered so far to the informed state.[15]

The 1997 UN Convention also incorporated miscellaneous provisions for dispute settlement. Article 33 refers to the procedure to settle a dispute between two or more parties through peaceful means. Any state can go for a third-party arbitration if they are unable to reach any agreement. There is a provision for the states to mutually form a watercourse institution. They can also escalate the issue to the International Court of Justice (ICJ) for settlement. If the abovementioned procedures fail, the issue could be submitted to a neutral fact-finding commission which is entitled to decide its procedures and look for finding out a just resolution to the dispute.[16]

The Berlin Rules

After the adoption of the 1966 Helsinki Rules, the International Law Association delivered articles on the mitigation of floods in 1972 and rules on the management of international waterways in 1976. Later on, several other rules were also adopted to deal with the international waterway like the rules of 1980 at the Belgrade Conference on the flow

of international watercourses as well as on the connection of international water resources to other natural resources. An article on the contamination of world-wide drainage basins was also adopted in 1982 at the Montreal Conference. Complementary rules relating to global water resources were approved in the Seoul Conference in 1986.[17] The ILA wanted to consolidate all the Rules adopted until then into one instrument. This attempt came to its completion in the year 2000. When the UN Convention was approved in 1997, the Water Resource Committee of the ILA decided to revise the Helsinki Rules at the ILA Conference in London. Following that, in 2002, at the New Delhi Conference, it was decided that the revised project would be completed by 2004. In August 2004, the revised rules were approved as the Berlin Rules on Water Resources in the seventy-first conference of the ILA held in Berlin. It carried fourteen chapters incorporating 73 articles covering a wide range of issues on water resources. As all the issues related to the watercourse are discussed extensively, it is argued that the Berlin Rules go beyond the Helsinki Rules and the UN Watercourses Convention.[18]

Major Articles and Clauses for Dispute and Disagreement Resolution under Berlin Rules

The Berlin Rules covered the management of transboundary river basins as well as all waters. It also discussed the implementation procedure of the rules related to water management in the course of judicial context. The key concepts of the Berlin Rules are largely delineated in Chapter III representing the provisions which apply to the internationally shared waters. Article 10 explains the right to participation of all the watercourse states in the management of the water of a trans-boundary river basin in a rational, reasonable, and justifiable manner. In this case, the basin states are also instructed to cooperate to ensure mutual benefit under Article II. Articles 12 through 15 explain the provision of equitable utilisation and other related issues with it. The basin states should manage the water of the trans-boundary river basin inside their national territory rationally and reasonably

without triggering noticeable damage to other basin states. To ensure equitable, rational and rightful use, states must consider the determining terms mentioned in Article 13. States are also instructed to avoid acts inside their area which can have harmful impacts on other watercourse states under Article 16 and disregard their riparian rights.[19]

The Berlin Rules covered a broad spectrum of issues to ensure environmental balance, strengthening collaboration among co-riparian countries and also for dispute resolution. Article 29 mainly directed the states to assess the environmental impacts caused by undertaken projects or activities on water in accordance with the assessment procedure described in Article 31. It also covers the provisions and rules for international cooperation among the basin states pointing to the exchange of important data and information under Article 15, notification of programmes, plans, and development activities (Article 57), consultation (Article 58), failure to consult (Article 59), request for impact assessment or other information (Article 60). All these aspects have been discussed elaborately for meaningful cooperation among the basin states. There are certain other chapters in the Berlin Rules addressing the importance of state responsibilities (Chapter XII), legal remedies (Chapter XIII), and the dispute settlement procedures (Chapter XIV) that contain several provisions to ensure state accountability for other basin states as well as for dispute settlement. In the concluding section, this convention gives the basin states the right to resolve the dispute through peaceful means. This convention has some provisions for peaceful settlement of contentious water issues. According to Article 72, states can go for consultation with one another as well as competent international organisations appointing an investigative body. According to Article 73, states are allowed to submit water issues to an ad hoc or permanent arbitral tribunal or the international court.[20]

What's New in the Berlin Rules?

Upon closer observation of the Helsinki Rules, the UN Watercourses Convention, and the Berlin Rules, some differences can be

noticed. While the Helsinki Rules and UN Convention recognise and highlight the provisions of rational and rightful share for each basin state, the Berlin Rules urge all the basin states to 'manage' the water of the transboundary river basin equitably and reasonably. The term 'manage' in the Berlin Rules indicates the expansion, usage, sharing, regulation, protection, safeguard, and control of the waters. So, while the Helsinki Rules and the UN Convention established the right to use and develop trans-boundary river water in a rational, equitable, and reasonable way for all the basin states, the Berlin Rules referred to 'manage' it.[21] Another major difference could also be noticed in the Berlin Rules. It gave the main basin states the authority to 'manage' the waters of the international drainage basin in a rational, equitable, and reasonable way so that it may not bring any significant harm to other basin states. It has incorporated this provision in a separate Article while the Helsinki Rules incorporated it along with the other related factors mentioned in Article V to define the just and rightful share for the basin states. Although the UN Convention incorporated the 'not to cause significant harm' principle in a single article, it was made subordinate to the principle of equitable and reasonable utilisation. Considering these facts, it seems that the Berlin Rules dealt with the provision of 'not to cause significant harm' to other basin states more cautiously than the earlier international water laws as after mentioning this provision in Article 12 under the provision of equitable utilisation, it again explained this provision in an independent article.[22]

Though most of the principles of the Berlin Rules were drawn from the Helsinki Rules and the UN Convention, a significant difference made in the Berlin rules is that while the former water laws applied only to the common international waters, the Berlin Rules are relevant to both national and international watercourses. Moreover, the Berlin Rules have outstripped the earlier water laws as they incorporated both the established customary international laws and the emerging principles.[23]

Comparative Discussion on Ganges Water Sharing Dispute and International Water Law

In South Asia, water disputes on the trans-boundary rivers are generally stuck to definite principles of international laws. However, only a few bilateral treaties exist in this region and these treaties draw a little from the globally authorised instruments and judicial precedents. The larger co-riparian countries insist on following the principles of international water law mainly to resolve their disputed issues inside their own country rather than trans-boundary water disputes with other co-riparian countries. Lack of a balance of power, distrust, and worldwide lack of common compulsory legal management have complicated trans-boundary water-sharing issues. Resultantly, conflict on trans-boundary water-sharing issues could be a matter of concern as they pose a threat to the international discourse.[24] Like other South Asian countries, the water-sharing dispute between Bangladesh and India has been the most irritating issue in their overall bilateral relationship which involves not only legal matters but also technical, social, environmental, and strategic factors. Therefore, international legal aspects are also related to these factors.[25] So, analysis of the legal aspects requires comparative discussion on both legal and other relevant factors.

Legal Obligations of Bangladesh and India during the Ongoing Construction of Farakka Barrage

Legal aspects of the Ganges issue came to the fore with India's claim that it was completely free to take out any amount of water from the Ganges while flowing inside its territory and no basin state has any right to interfere. Mists thickened when, in response to this, Pakistan, and later Bangladesh, claimed the rightful share of transboundary rivers as lower riparian countries.[26] Theoretically, this claim of India is supported by the absolute territorial sovereignty doctrine. However, because of its narrow and partial point of view about the sharing of water with lower riparian countries, it is not acceptable worldwide. The widely accepted laws on international water sharing such as the Helsinki

Rules 1966 and the UN-Watercourses Convention 1997 completely contradict this point of view. It is also against the draft provision of the 1923 Geneva Conference regarding the use of hydropower which affects more than one state.[27]

Countries that share transboundary river water with other basin states must follow some procedural principles of international law. These procedural principles bind the basin states to certain legal obligations. If a country intends to undertake any project in the transboundary river basin which is likely to adversely affect the other basin states, before implementing such schemes, it must fulfil the legal obligations, inform the other basin states about its planned project, share all necessary information about the project, and consult with the co-basin states in good faith and, thus, has to abide by the rule of notification, consultation, and negotiation. Generally, the upper riparian countries habitually oppose this principle as it makes them legally liable towards the lower riparian states.[28] This principle of prior notice and information was mentioned in the 1923 Geneva Convention, Helsinki Rules 1966, and UN Watercourses Convention 1997 which are widely accepted laws to resolve transboundary water-sharing disputes. Besides the 1957 Buenos Aires Resolution of the Inter-American Bar Association, the 1926 Convention between the French and Swiss governments, the 1938 Convention between Lithuania and Poland, the Montevideo Declaration of Chile and Bolivia in 1933 and many other declarations, UN the Convention recognised this principle, given its capability to avoid controversies over water issues through the principle of prior notice and information. This principle was also recognised even by India several times as a way to resolve water issues with neighbouring countries, such as the Indus water issue with Pakistan, the conflict with Nepal on the Kosi Barrage issue in 1954, and the Gandak Irrigation Project in 1959. Like the other disputed issues, India was also bound by this principle in the case of the Farakka issue. When Pakistan first came to know about it, it claimed that the barrage would bring an adverse impact on the lower

riparian East Pakistan. However, in response, India claimed that it was purely hypothetical. Moreover, defining serious injury or adverse effects is a complicated issue as there is no definitive way to determine the criteria for both. Besides, questions also arose about whether East Pakistan got enough time to assess the project after coming to know about it. Islam gave importance to the observation of Kulz to describe how the absence of the principle of prior notice turned the Ganges issue into a matter of concern for East Pakistan. According to the observation of Kulz, India not only failed to provide Pakistan with prior information about the project, it provided information only upon the request of East Pakistan, and not by its willingness. In addition, East Pakistan was not given reasonable time to assess the project and to reply to the prior notice as the second expert-level meeting was held in October 1960 and India started the construction of the barrage on 30 January 1961, meaning that East Pakistan got just about three months to respond. Whereas according to the rules of Article 13 of the UN convention, East Pakistan should have gotten six months to assess the possible harmful effects of the barrage.[29]

However, India eventually went ahead with the construction of the Farakka Barrage and after completion, based on a mutual understanding, began the trial run of the barrage for 41 days in 1975. But even after the 41-day test run, India continued the unilateral withdrawal of water without the consent of Bangladesh. Thus, India violated the jointly agreed upon press release of 18 July 1973, the joint communiqué of 15 February 1974, and the joint Indo-Bangladesh declaration of the Prime Ministers of 16 May 1974, where they decided that before India commissions the Farakka Barrage, both sides would reach a mutually satisfactory resolution. Violations of the joint press release were not thoroughly noticed by the international legal authorities. But, taking into account the international judicial decision taken on the legal status of the Eastern Greenland case between Denmark and Norway in 1933 and the Nuclear Test case between

Australia and France in 1973, it may be argued that Bangladesh and India are bound to act as per the undertakings of the joint statements, declarations, and announcement.[30] However, it was completely overlooked and Farakka Barrage was commissioned in 1975. India's unilateral withdrawal brought about disastrous consequences for Bangladesh and due to the unsuccessful bilateral negotiation, Bangladesh raised the Farakka issue in the General Assembly of the United Nations. In general, the disputant countries should settle their disputes bilaterally in a peaceful manner. However, Bangladesh had to raise the issue at the international forum for arbitration by the world community. The purpose was to pressurise India, necessitating an immediate solution. Following Article 33 (2) of the UN Convention, the disputant states can raise the issue to any third party based on mutual understanding. Bangladesh's unilateral decision to internationalise the Farakka issue does not seem to go fully well with this provision. However, according to international practice, if bilateral negotiation fails to produce any solution, a neutral third party can assist the disputant states to reach a settlement. So, it seems that the quarter-century-long bilateral negotiation and deadlock on the Farakka issue compelled Bangladesh to raise the issue in the UN General Assembly.[31] Consequently, after the UN consensus statement, Bangladesh and India signed the 1977 agreement which was followed by the MOUs of 1982, 1985, and then, after a long absence of mutual agreement on the allocation of Ganges water, in 1996, both parties signed the 30 years Ganges water sharing treaty.

The 1996 Ganges Water-Sharing Treaty and its Legal Aspects

According to Islam,[32] after a close comprehensive scrutiny of the 1996 Ganges Water Sharing Treaty and the 1997 UN Watercourses Convention, the following differences could be noticed:

The 1997 Convention held the basin states responsible for ensuring the safety of the international watercourse in the procedure of

exploitation of water, bearing in mind the provision of a just and reasonable manner in Article 6 (1). But, Article 5 (1) of the 1996 Ganges Water Sharing Treaty contains nothing to ensure sufficient protection of the international waterway.

Article II of the 1996 treaty applied the 'equity' and 'no harm' principles only when the flow of the Ganges falls under 50,000 cusec but Article 7 of the UN Convention talks about making concrete efforts to avert and lessen the harmful effects as well as to compensate (Article 5 and 6) the injured state. In this way, the UN convention established the no-harm rule dynamically, enthusiastically, and positively.

The 1996 Ganges Treaty envisaged that basin states will exchange information related to the planned projects with other co-basin states as per Articles I, II, and IV while Articles 9 and 11 of the 1997 Convention envisaged the basin states to exchange all related facts and figures on the watercourse condition, planned measures, and consultation.

To settle the dispute, the 1997 UN Convention urged the disputant states to go through bilateral negotiation first. In case of failure to settle the issue through bilateral negotiation, it envisaged a third-party settlement by including a fact-finding commission. The 1996 treaty did not incorporate any provision for third-party arbitration.

Part IV of the UN Convention has dealt with the environmental issues and made it obligatory upon the basin states to protect biodiversity, halt climate change, and not initiate any action that may cause environmental degradation. However, the 1996 treaty entirely overlooked the environmental issue.

Again, when the Indian government came out with its new plan for interlinking rivers, it raised new concerns in Bangladesh. Though India supports this scheme contending that it will augment the dry season flow of the Ganges by diverting water from the Brahmaputra, Bangladesh assumes that it will harm Bangladesh in many ways. According to the Centre for Development and Environment Policy, this

plan would have terrible consequences for the fisheries in South Asia which is highly rich compared to the other areas of the world and cause devastation to the Sundarbans.[33] This is against the 'no harm rule' and the 'precautionary principle' of the UN Watercourses Convention. Moreover, Bangladesh, which is a developing country and vulnerable to natural disasters, should be given a special priority. It is also supported by Principle 6 of the Rio Declaration on Environment and Development (1992). Bangladesh also believes that the project has the potential to violate the provisions of the 1996 treaty between Bangladesh and India as it has envisaged that both countries would work together for the optimum utilisation of common river water for flood management, generation of hydropower, and river basin development for common benefit. The 1996 treaty also accepted the necessity of augmenting the Ganges flow as a long-standing solution for the mutual benefit of both countries. Thus, the Interlinking River Project of India violates the principles of the 1996 Ganges treaty.[34] From India's point of view, the Environmental Appraisal Committee of the Ministry of Environment and Forests and Climate Change of India, after considering all the impacts, has approved the implementation of this project. India also held the uneven flow and dramatic seasonal variation as the real reason for the water-related tension between Bangladesh and India. It also justified her position by stating: "Now keeping the Vienna Convention in mind, particularly the principle 61 which says that if the performance of a treaty becomes impossible as in the case of the Ganges water sharing treaty, 1996 during the lean period the treaty will be void without putting any of the parties liable or responsible".[35]

Conclusion

After observing the principles of international water law and the perception of Bangladesh and India as watercourse (co-riparian) states in the Ganges water sharing dispute, it looks like no principle can satisfy all the trans-boundary countries at the same time and at the same rate on trans-boundary river water rights as well as trans-boundary water

conflicts. Different countries have different perceptions according to their national interest and each will judge its activities according to its objectives. Each country will try to ensure its maximum benefit at any cost. This is the fact which has turned water into a frightening source of contention in the twenty-first century. So far, the principle of rational and reasonable use is the most common method through which attempts have been made to resolve trans-boundary river water-sharing conflicts. Despite this, sometimes one basin state may cause damage to other basin states as sometimes implementing this principle in its entirety is very difficult and unavoidable circumstances may arise. But it is also true that if the basin states of transboundary rivers bound themselves by the terms and conditions of international river water sharing laws such as the 1997 UN Watercourses Convention or other international legal provisions and take necessary steps to avoid the extent of damage, the intensity and extent of harm might be minimised. Water conflicts not only create political, economic, and environmental problems but also raise humanitarian concerns. According to the United Nations Committee on Economic, Social, and Cultural Rights, "the human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses."[36] Universal access to water is essential but it has been debated from different perspectives and this issue has turned out as a bone of contention among nations. So, to overcome this unavoidable situation, the basin states of trans-boundary rivers should have a broader perspective where countries have to cater to their national interest keeping the humanitarian concern and the rights of other basin states in view.

Notes and References

1 B. M. Abbas, *The Ganges Dispute* (Dhaka: The University Press Limited, 1984), 147.

2 "International Rivers and Lakes," Natural Resource and Infrastructure Division, United Nations Economic Commission for Latin America and Caribbean (ECLAC), Santiago, Chile, June 2009, 2.

3 "International Rivers and Lakes," 2.

4 Mohammad Mizanur Rahman, "Principles of International Water law: Creating Effective Trans-boundary Water Resource Management," *International Journal of Sustainable Society* 1, no. 3 (August 2009): 213.

5 M. A. Salman, "The Helsinki Rules, the UN Watercourse Convention and the Berlin Rules: Perspectives on International Water Law," *Water Resource Development* 23, no. 4 (2007): 625.

6 Salman, "The Helsinki Rules, the UN Watercourse Convention and the Berlin Rules," 629.

7 Rahman, "Principles of International Water law," 215.

8 "The Helsinki Rules on the Uses of the Waters of International Rivers," International Law Association, Report of the Fifty-Second Conference, Helsinki, August 14-20, 1966, 484-532, www. international waterlaw.org/…/ILA-HelsinkiRules1966-as-amended.pdf

9 "The Helsinki Rules."

10 "The Helsinki Rules."

11 Stephen McCaffrey, "International Water Law for the 21st Century: The Contribution of the UN Convention," *Journal of Contemporary Water Research and Education* 118, issue. 1 (2001): 11-19.

12 Md. Nazrul Islam, "Environmental Impacts of the Ganges Water Diversion and Its International Legal Aspects" In *The Ganges Water Dispersion: Environmental Effects and Implication*s, ed. M. Monirul Qader Mirza, (Khuwer Academic Publishers, 2004), 207.

13 "*Convention on the Law of the Non-Navigational Uses of International Water Courses*," Adopted by the General Assembly of United Nations on 21 May 1997, See General Assembly Resolution

51/229, annex, Official Records of the General Assembly, Fifty-First Session, Supplement No.49 (A/51/49), accessed February 1, 2019. Legal.un.org/ilc/texts/instruments/English/conventions/8_3_1997.pdf

14 "*Convention on the Law of the Non-Navigational Uses*."

15 "*Convention on the Law of the Non-Navigational Uses*."

16 "*Convention on the Law of the Non-Navigational Uses*."

17 Salman, "The Helsinki Rules, the UN Watercourse Convention and the Berlin Rules," 631.

18 Salman, "The Helsinki Rules, the UN Watercourse Convention and the Berlin Rules," 631.

19 "*Berlin Rules on Water Resource*," Berlin Conference 2004, International Law Association, accessed 18 December 2018, https:www.unece.org/…/water/…groundwater…/Annex_IV_Berlin_Rules_On_Water_...

20 "*Berlin Rules on Water Resource*."

21 Salman, "The Helsinki Rules, the UN Watercourse Convention and the Berlin Rules," 631.

22 Salman, "The Helsinki Rules, the UN Watercourse Convention and the Berlin Rules," 636.

23 Salman, "The Helsinki Rules, the UN Watercourse Convention and the Berlin Rules," 636.

24 Gopal Siwakoti, "Trans-boundary River Basins in South Asia: Options for Conflict Resolution," *International Rivers*, 2011. http://www. internationalrivers.org/…/trans-boundary-river-bbasins-in-south-asia-optio…

25 M. Rafiqul Islam, *Ganges Water Dispute: Its International Legal Aspects* (Dhaka: The University Press Limited, 1987), 8.

26 Islam, *Ganges Water Dispute,* 8.

27 Islam, *Ganges Water Dispute,* 22.

28 Rahman, "Principles of International Water law," 212.

29 Islam, *Ganges Water Dispute,* 67-75.

30 Islam, *Ganges Water Dispute,* 106-110.

31 Islam, *Ganges Water Dispute,* 122-124.

32 Islam, "Environmental Impacts," 213-215.

[33] Nidhi Upadhay and Ashish Bhardwaj "Is Interlinking of Rivers a Violation of International Environmental Law?" 26 July 2017, https:www.livelaw.in/interlinking-of-rivers-violation-international-environmental.

[34] Upadhay and Bhardwaj, "Violation of International Environmental Law."

[35] Upadhay and Bhardwaj, "Violation of International Environmental Law."

[36] Dr ASM Saifullah, "Fresh Water Disputes and People's Right to Water," *The Business Standard*, 22 March 2022.