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## **BANGLADESH-INDIA WATER NEGOTIATIONS: CHALLENGES AND WAY FORWARD**

### **Abstract**

Sharing river water between neighbours is a complicated task as it creates upstream-downstream supply disputes. Having the highest number of common rivers with its biggest neighbour – India, Bangladesh has to face common water sharing disputes with that country. To resolve disputes over water sharing, Bangladesh started negotiations with India after its independence, but the country has been facing challenges in reaching a consensus on a formula and mechanism to share the common water. Given this backdrop, the present paper argues that the water negotiations between Bangladesh and India are being affected due to significant negotiation challenges which make the water negotiations a zero-sum game. With this argument, the paper endeavours to examine the challenges of Bangladesh-India water negotiations. To understand these challenges, this paper evaluates historical fact, past and ongoing water negotiations between Bangladesh and India. Some possible solutions are also suggested in the paper to overcome these challenges.

### **1. Introduction**

South Asian countries are increasingly facing acute water shortfall due to growing population, industrialisation and the absence of proper water sharing management. Bangladesh is a riverine country of South Asia. It is a great delta formed by the three mighty Rivers – the Ganges, the Brahmaputra and the Meghna.<sup>1</sup> There are 405 rivers in Bangladesh. Out of 405 rivers, 57 are transboundary rivers. Of the 57 transboundary rivers, 54 are entering from India and 3 from Myanmar.<sup>2</sup> China, India, Nepal and Bhutan are the co-riparian countries of Bangladesh. Among these countries, India and Bangladesh depend largely on the waters from the common rivers. The inadequate supply of water in the dry season is the central point of dispute between these two countries. The situation is particularly critical for Bangladesh since

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<sup>1</sup> Q. K. Ahmed, Asit K. Biswas, R. Rangachari and M. M. Sainju (eds.), *Ganges-Brahmaputra-Meghna Region: A Framework for Sustainable Development*, Dhaka, Bangladesh: University Press Ltd, 2001, p. 15.

<sup>2</sup> "Bangladesh Transboundary Rivers", available at <http://jrcb.gov.bd/bangla/>, accessed on 11 February 2017.

its fresh water comes mostly (92.5 per cent) from its transboundary rivers from India.<sup>3</sup> In this respect, Bangladesh largely depends on India. This dependency causes both the scarcity and flooding situation in Bangladesh. It also creates disputes over the rights of a fair share of water between the two countries.

To resolve disputes over water sharing, Bangladesh started negotiations with India on the Ganges and the Teesta instantaneously after its independence. Though the neighbours managed to set Ganges water sharing treaty, both the nations have been facing challenges in reaching a consensus over the water sharing of other common rivers. The uncertainty over the proposed Teesta River agreement is now a burning issue. The Tipaimukh dam dispute is also on the negotiation table. Water shortage during the dry season makes the situation particularly critical. Therefore, proactive negotiations for successful water sharing agreements on the common rivers between the two countries are essential for Bangladesh. However, past water negotiations between them were mostly zero-sum game. Both the countries depend on the riverine ecosystem. To protect the ecosystem, it is important to act sensibly on the issue of common water sharing. But in asymmetrical situations, it is difficult to reach satisfactory solutions for all parties involved in the negotiation.

Power in a transboundary context refers to the riparian's geographic position, size, military might, economic strength and structural capacity. Power determines the hegemon in international river basins. The fundamental power structure in the basin is dictated by the relative power of the parties. In international river basins, power asymmetry explains how conflict occurs in relation to allocation and exploitation of a water resource and how consent may be established through agreements and institutions.<sup>4</sup> States' position in a negotiation depends on its geographical positioning *e.g.*, whether it is an upstream state or a downstream state. While upstream states hold a powerful position as they can control the water resources, downstream states have no reciprocal power.<sup>5</sup> But this situation may differ in the other cases such as the Nile basin dispute and India's water arrangement with Bhutan. In these cases, Egypt and India being the lowest riparian country had the greatest power. Still, Egypt and India are practicing power in their negotiations with Sudan and Bhutan respectively, due to their military and political prowess.<sup>6</sup> It is usually cited that India and Egypt act as benevolent hegemonies with respect to their upstream basin states (Bhutan and Sudan), offering economic incentives designed to foster cooperation.<sup>7</sup>

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<sup>3</sup> Brahma Chellaney, *Water: Asia's New Battleground*, Washington DC, USA: Georgetown University Press, 2011, p. 40.

<sup>4</sup> Anamika Barua, Sumit Vij and Mirza Zulfiqur Rahman, "Powering or Sharing Water in the Brahmaputra River Basin", *International Journal of Water Resources Development*, 2017, pp. 1-15.

<sup>5</sup> Jack Di Nanzio, "Conflict on the Nile: The Future of Transboundary Water Disputes over the World's Longest River" in *Strategic Analyses Paper*, Dalkeith, Australia: Future Directions International, 2013.

<sup>6</sup> *Ibid.*

<sup>7</sup> Shlomi Dinar, "Power Asymmetry and Negotiations in International River Basins", *International Negotiation*, Vol. 14, No. 2, 2009, pp. 329-360.

Zeitoun and Warner introduced “Hydro-hegemony” – a framework for analysing transboundary water conflicts. The framework posits that relative power differences can cause various forms of hydro-hegemony. According to their framework, power may either encourage or discourage effective transboundary water cooperation. Consequently, either ‘positive’ or ‘negative’ transboundary arrangements may take place. If the basin hegemon considers the needs of the basin riparians and uses its power to lead the way to cooperation, then such power can help to achieve effective transboundary management. However, if the basin hegemon uses its position and power in a negative way and behaves as a basin bully rather than a basin leader, it will lead to a negative transboundary outcome or arrangement. For example, South Africa as a hegemon in the Orange-Senqu River basin plays a leading and enabling role that has brought about an effective transboundary water management regime between Lesotho, Botswana and Namibia.<sup>8</sup> So, the absence of symmetry in power between riparian countries may result in asymmetric negotiations and treaties. In fact, the greater the symmetry in power, the better will be the outcome (equitable, sustainable and non-zero sum) of transboundary negotiations and vice versa.<sup>9</sup> It is therefore important to recognise and analyse this power asymmetry and how it may influence basin-level negotiation or cooperation. In Bangladesh-India water negotiations, state’s geographic position and position in power structure matter the most. India as an upstream as well as politically, militarily and economically more powerful state holds the strongest position. In contrast, Bangladesh as a downstream as well as politically, militarily and economically less powerful state holds the weakest position. Thus, an asymmetric situation is prevailing in Bangladesh-India water negotiations. This situation results a zero-sum outcome. And this zero-sum outcome of Bangladesh-India water negotiations demonstrate significant challenges in resolving the water sharing disputes.

Given this backdrop, the present paper argues that the water negotiations between Bangladesh and India are being affected due to significant negotiation challenges which has turned the water negotiations a zero-sum game. With this argument, the paper endeavours to understand the challenges. The paper, then, attempts to suggest relevant policy recommendations to address these challenges. The paper is qualitative in nature. In the literature review, publications on water negotiation, water diplomacy, Bangladesh-India water relations, etc. have been drawn upon. For data collection, in-depth interviews of experts have been conducted along with the literature review comprised of books, journal articles, newspaper articles, reports and government documents. There are five sections in the paper. After the introduction, the second section discusses the past and present progress of water negotiations between Bangladesh and India. Third section analyses the challenges that disrupt the negotiation process. In the fourth section, it suggests relevant policy recommendations to address the challenges. The final section concludes the paper.

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<sup>8</sup> Mark Zeitoun and Jeroen Warner, “Hydro-hegemony – A Framework for Analysis of Trans-boundary Water Conflicts”, *Water Policy*, Vol. 8, No. 5, 2006, pp. 435-460.

<sup>9</sup> *Ibid.*

## 2. Bangladesh-India Water Negotiations: Past and Present Progress

Although Bangladesh shares transboundary rivers with two of its neighbouring countries, its water negotiation effort only focuses on India. The water negotiations with India have been limited to the Ganges, the Teesta and the Feni. The main bone of contention between the two countries is to share water in the common rivers during the dry season. Since, most of the common rivers originate from India, Bangladesh faces severe problems of unilateral water withdrawal in the upper stream.

On the other hand, India has water deals with almost all of the South Asian countries. Of all the South Asian neighbours, India has a very well functioning water relation with Bhutan. In contrast, Bangladesh finds itself at the weakest negotiating position with India. Being a lower riparian country, Bangladesh has to suffer the disastrous consequences of upstream river diversions and mismanagement of transboundary water flows.<sup>10</sup> India is mostly blamed for doing such mismanagement of water bodies, which results in a perilous situation for Bangladesh. To understand the water relations between India and Bangladesh, the background and the latest development of the water negotiations between them have been discussed in this section. A map is also given in the annex to exhibit the geographical setting of the international rivers between Bangladesh, India and Myanmar.

### 2.1 *Negotiations on the Establishment of the Joint Rivers Commission*

Early on, both India and Bangladesh recognised the importance of water relations and started bilateral negotiations immediately after the independence of Bangladesh. The establishment of the Joint Rivers Commission (JRC) in 1972 was the instant outcome of the very first phase of the negotiations. The statute of JRC was initiated on 24 November 1972.

According to the statute, the JRC is supposed to meet at least four times a year.<sup>11</sup> Its main objective is to discuss the common water issues and identify applicable solutions. The functions of the JRC as mentioned in its statute are summarised below:

- Ensuring most effective joint efforts in maximising the benefits from common rivers.
- Formulating flood control works and recommend implementations of joint projects.

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<sup>10</sup> Bhim Subba and Kishor Pradhan (eds.), *Disputes Over the Ganga*, Patan, Nepal: Jagadamba Press, 2004, pp. 104-105.

<sup>11</sup> Ainun Nishat and Faisal Islam, "An Assessment of the Institutional Mechanisms for Water Negotiations in the Ganges-Brahmaputra-Meghna System", *International Negotiation*, Vol. 30, No. 4, 2000, pp. 292-295.

- Formulating detailed proposals on flood and cyclone warning and flood forecasting.
- Studying flood control and irrigation projects to ascertain equitable sharing of water resources for mutual benefit of the peoples of the two countries.
- Formulating proposals for carrying joint research on the problem of flood control affecting both the countries.<sup>12</sup>

Although JRC has a very small list of successes, but it has been dealing with common water related disputes for the last 45 years as an important platform. The contributions of JRC in terms of Bangladesh-India water negotiations include efforts of both nations to resolve the dispute over the Ganges water sharing and facilitating bilateral agreements in 1975, 1978 and 1996.<sup>13</sup>

## 2.2 *Ganges Water Sharing Negotiations*

The Ganges (or Ganga) is a major river in South Asia, flowing eastwards through the plains of northern India into Bangladesh and discharging into the Bay of Bengal. It originates from the Gangotri glacier in the Indian state of Uttarakhand in the central Himalayas and travels south and southeastwards in India for about 1,400 miles (about 2253 km).<sup>14</sup> The river forms a common boundary between Bangladesh and India around 11 miles (about 18 km) downstream from the Farakka Barrage in India, and continues about 63 miles (about 101 km) before finally entering Bangladesh near Rajshahi.<sup>15</sup>

Ganges water sharing negotiations started with India when Bangladesh was known as the East Pakistan. The then Pakistan started that negotiations with India from the 1950s and failed to reach to any settlement till the independence of Bangladesh. After the independence, Bangladesh officially started the water negotiations with the issue of the sharing of Ganges water. The central point of the Ganges water sharing negotiations stands on the allocation of water and augmentation of flows in the dry season. In 1972, both the countries signed a Treaty of Friendship, Cooperation and Peace for the promotion of goodwill between the countries.<sup>16</sup>

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<sup>12</sup> *Ibid.*

<sup>13</sup> Embassy of the Federal Republic of Germany, *Rethinking Water-Climate Cooperation in South Asia*, New Delhi, India: Observer Research Foundation, 2016.

<sup>14</sup> M. Rafiqul Islam, *The Ganges Water Dispute: International Legal Aspects*, Dhaka, Bangladesh: University Press Limited, 1987, p. 50.

<sup>15</sup> Ashild Kola, Katherine Edelen, Farzana Jahan and Line Barkved, "Water Scarcity in Bangladesh: Transboundary Rivers, Conflict and Cooperation", available at <https://www.files.ethz.ch/isn/172868/PRIO%20Report%20-%20Water%20Scarcity%20in%20Bangladesh.pdf>, accessed on 09 January 2017.

<sup>16</sup> Graham P. Chapman and Michael Thompson (eds.), *Water and the Quest for Sustainable Development in the*

**Map 1: Location of Farakka Barrage on the Ganges River**



Source: Available at <https://www.thethirdpole.net/en/2017/01/17/even-states-in-the-same-country-fight-over-a-river/>, accessed on 09 January 2017.

Article VI of the treaty provides, “both the nations agree to take joint action in the field of flood control, river basin development and development of hydroelectric power and irrigation”.<sup>17</sup> In 1974, the Prime Ministers of the two countries met and made a joint declaration on the augmentation of the Ganges river. But the situation was not in favour of a peaceful settlement as India unilaterally built the Farakka Bridge. India, from the very beginning of this negotiation with the then Pakistan, wanted to build a bridge at Farakka. However, Pakistan opposed the construction of the Farakka Barrage in 1951. Between 1960 and 1970, several meetings were held where two countries shared substantial amount of data. In 1970, India for the first time acknowledged Ganges as an international river.<sup>18</sup>

Despite the resistance of Pakistan, India completed building the Farakka Barrage in 1971. The Farakka Barrage became operational in 1975. Early in 1975, an interim agreement was signed to operate a test withdrawal of water, allowing India to operate the feeder canals of the Barrage experimentally for 41 days from April 21 to May 31.<sup>19</sup> However, Indian unilateral withdrawal of water started to cause severe water crisis in the southwest region of Bangladesh. Bangladesh tried to settle this

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*Ganges Valley*, New York, USA : Mensell, 1995, p. 95.

<sup>17</sup> Mazharul Islam, “Revisiting the 1996 Ganges Treaty”, *The Daily Star*, 26 July 2016.

<sup>18</sup> Mohammad Abul Kawser and Md. Abdus Samad, “Political History of Farakka Barrage and Its Effects on Environment in Bangladesh”, *Bandung: Journal of the Global South*, Vol. 3, No. 16, 2016, p. 455.

<sup>19</sup> “Ganges Water Sharing”, *Banglapedia*, available at [http://en.banglapedia.org/index.php?title=Ganges\\_Water\\_Sharing](http://en.banglapedia.org/index.php?title=Ganges_Water_Sharing), accessed on 09 January 2017.

contention through bilateral negotiations, but the efforts broke down in September 1976. After that, Bangladesh decided to internationalise the issue. It was first raised at the Islamic Foreign Ministers' Conference in Istanbul in May 1976, and then at the summit of Non-Aligned Movement (NAM) in Colombo in August of the same year. Bangladesh's decision to raise the issue at the 31<sup>st</sup> session of the United Nations General Assembly (UNGA) in 1976, led to a flurry of diplomatic activities. At the request of Senegal, Australia and Sri Lanka, the Political Committee of UNGA urged upon India and Bangladesh to settle the issue amicably. At the initiative of Syria, Egypt, Sri Lanka, Algeria and Guyana, both Bangladesh and India agreed to sit at Dhaka for talks.<sup>20</sup>

Afterward, a bilateral discussion between Bangladesh and India resulted in the formation of the first water sharing agreement on 05 November 1977. The agreement was valid for five years. A significant feature of the treaty was the Article 2 that provided a 'guarantee clause' for Bangladesh by assuring a minimum of 80 per cent of its share during the lean period, and it was further reinforced in the Article 12. Bangladesh's share of water cannot be reduced under any circumstances till the duration of the treaty. This treaty expired in 1982. After that, the two countries signed a Memorandum of Understanding (MoU) on 04 October 1982 for two years. The second MoU was signed in November 1985 for a 3-year period. However, the 'guarantee clause' was not included in the two MoUs. After the expiry of these MoUs, a vacuum remained till the water sharing treaty in 1996 was signed.<sup>21</sup>

Finally, the two countries signed the Ganges Water Sharing Treaty in 1996, which will remain valid for 30 years. This treaty has resolved the sharing of Ganges water between the two countries. However, there are still concerns regarding the guarantee of minimum water flow for Bangladesh. According to the 1996 Water Sharing Treaty, Bangladesh and India are each to receive Ganges water as per the following distribution policy:

- If water availability is less than or equal to 70,000 cusecs at Farakka, then Bangladesh and India will share the water equally (50 per cent).<sup>22</sup>
- If the water availability is above 70,000 but less than 75,000 cusecs at Farakka, then Bangladesh will get 35,000 cusecs and India may withdraw the rest.
- If water availability is more than 75,000 cusecs, then India may withdraw 40,000 cusecs and Bangladesh will get the rest.<sup>23</sup>

<sup>20</sup> Punam Pandey, *India Bangladesh Domestic Politics: The River Ganges Water Issues*, Singapore: Springer, 2016.

<sup>21</sup> *Ibid.*

<sup>22</sup> 1 Cusec = 28.32 litres per second.

<sup>23</sup> Ainun Nishat and Faisal Islam, *op. cit.*

The Ganges treaty has been criticised due to less effectiveness during the lean period. It performs poorly in the most critical periods of March and April.<sup>24</sup> The lack of the arbitration clause and the lack of any guarantee clause made the treaty less effective.<sup>25</sup> The dispute resolution mechanism of the Ganges treaty has been widely condemned. Quite the opposite, the “Mahakali Treaty 1996” signed between India and Nepal, and the “Indus Water Treaty 1960” signed between India and Pakistan have the arbitration mechanism for dispute settlement.<sup>26</sup> In the case of Indus Water Treaty, Pakistan remained able to include arbitration clause because of the involvement of third party *e.g.*, World Bank during the negotiations of the treaty. Additionally, India was increasingly eager to resolve the dispute, as many of its development projects were being delayed because of lack of a resolution.<sup>27</sup> Prior to Mahakali Treaty, Nepal and India signed Kosi Agreement (1954) and Gandaki Treaty (1959) which created mutual trust and confidence between them. Consequently, this mutual trust and confidence pushed India to keep arbitration clause in Mahakali Treaty.

With regard to Ganges Treaty, no third party was involved and there was no urgent development project that needed to be undertaken immediately by India. Additionally, certain activities like India’s unilateral withdrawal of water from Farakka Barrage and Bangladesh’s decision to raise the issue at the UNGA created trust deficit and diffidence. As a result, Ganges Treaty lacks arbitration and guarantee clause. But the Article 9 of the Ganges Treaty specifies that the “principle of equality, fairness and no harm to either party” shall guide the future action of both nations. This is the reflection of “equitable utilisation theory”, based on the Roman maxim “sic utere tuo ut alienum non laedas”, which means “you use your own so as not to injure another”. Articles 5-7 of UN Watercourses Convention 1997 and Articles 4-8 of Helsinki Rules, 1966 are also based on the “equitable utilisation theory”. But India and Bangladesh are not the signatories of the UN Watercourse Convention 1997. As such, they cannot claim any legally binding effects for dispute settlement.<sup>28</sup> The Ganges Treaty is supposed to be reviewed every five years, but it has never happened though it is renewable without any condition. Experts are of the opinion that whatever existing loopholes are there, these can be addressed.<sup>29</sup>

### 2.3 Teesta Water Sharing Negotiations

The Teesta River originates from the Pahunri glacier above 7,068 metres (23,189 ft), and flows southward through valleys and falls in the Sikkim Himalaya. It runs through Sikkim, West Bengal and Bangladesh, where after streaming through

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<sup>24</sup> *Ibid.*

<sup>25</sup> *Ibid.*

<sup>26</sup> Mazharul Islam, *op. cit.*

<sup>27</sup> “Water Scarcity in Bangladesh Transboundary Rivers, Conflict and Cooperation”, available at [https://www.files.ethz.ch/isn/172868/PRIO Report - Water Scarcity in Bangladesh](https://www.files.ethz.ch/isn/172868/PRIO_Report_-_Water_Scarcity_in_Bangladesh), accessed on 01 March 2017.

<sup>28</sup> *Ibid.*

<sup>29</sup> Authors’ interview with Professor Dr. Ainun Nishat on 03 March 2017.



about 45 km of irrigable land, joins with the Brahmaputra River.<sup>30</sup> It is the fourth largest transboundary river between Bangladesh and India.

**Map 2: Teesta in Bangladesh**

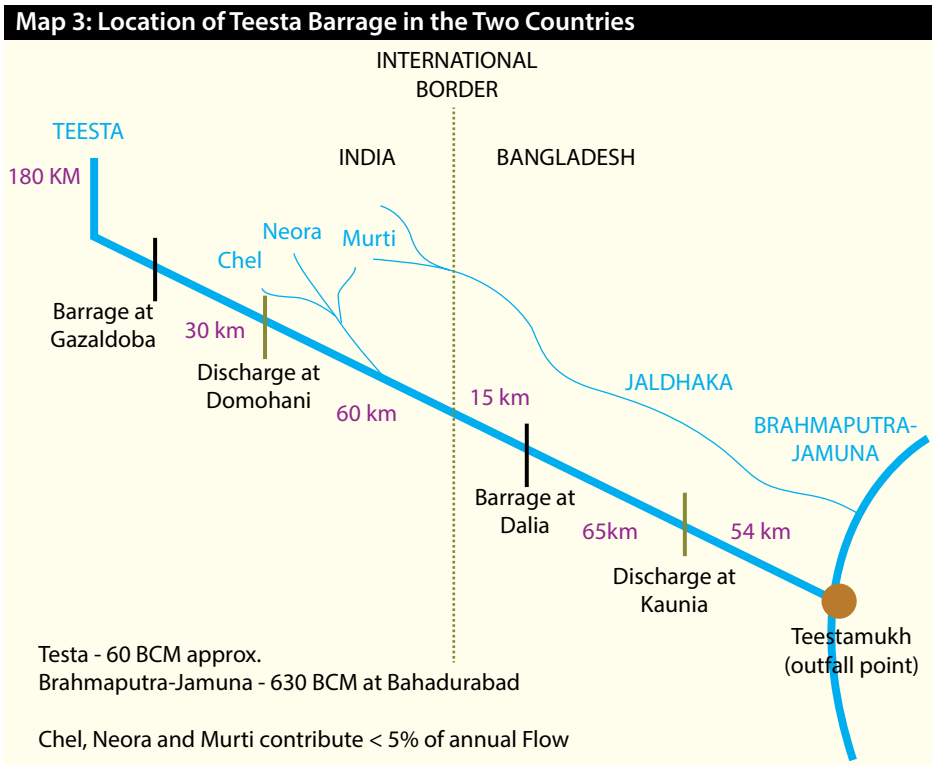


Source: Strategic Foresight Group, *Rivers of Peace – Restructuring India Bangladesh Relations*, Mumbai, India: Strategic Foresight Group, 2013.

The Teesta water negotiation was started in 1951. At that time, Bangladesh was part of Pakistan. After the independence of Bangladesh, the negotiation with India on Teesta water sharing officially began with the ad hoc agreement in July 1983. According to the ad hoc agreement, Bangladesh was supposed to receive 36 per cent whereas India was supposed to get 39 per cent of water. But the agreement was not implemented. After a long period of disagreement, an interim water sharing agreement has been drafted in 2010 during the 37<sup>th</sup> meeting of the JRC. The draft specifies that Bangladesh and India would each get 40 per cent of the actual flow available at Gazaldoba Barrage in West Bengal, while 20 per cent of the actual flow available at Gazaldoba would be reserved as environmental flow.<sup>31</sup>

<sup>30</sup> Kumar Harshvardhan, "Teesta River Conflict", available at <https://www.quora.com/What-are-the-disputes-over-India-Bangladesh-Teesta-deal>, accessed on 11 January 2017.

<sup>31</sup> Strategic Foresight Group, *Rivers of Peace – Restructuring India Bangladesh Relations*, Mumbai, India: Strategic Foresight Group, 2013.



Source: Strategic Foresight Group, *Rivers of Peace – Restructuring India Bangladesh Relations*, Mumbai, India: Strategic Foresight Group, 2013.

During former Indian Prime Minister Manmohan Singh’s visit to Bangladesh in September 2011, the signing of the agreement on Teesta waters was one of the main objectives. But the Chief Minister of West Bengal opposed the agreement. She stated that water was a state subject under the Indian Constitution, and the state needed to give its consent to the central government prior to any agreement with Bangladesh. Thus, the draft Teesta treaty remained unsigned during that time.<sup>32</sup> Prime Minister Sheikh Hasina’s latest visit to India in April 2017 renewed the hope of signing the agreed Teesta agreement. But this time, again, India refused to sign it. The Chief Minister Mamata Banerjee proposed that Bangladesh should look for alternative sources of water other than the Teesta. However, Dhaka rejected such inappropriate proposal of Mamata Banerjee.<sup>33</sup>

Teesta’s dry period starts in October and monsoon starts in April-May. The crucial period in the Teesta is September-October when supplementary irrigation is

<sup>32</sup> Strategic Foresight Group, *op. cit.* p. 10.

<sup>33</sup> Humayun Kabir Bhuiya, “Dhaka Wants Signing of Agreed Draft”, *The Independent*, 19 April 2017.

needed in some areas of the river basin for agriculture. During the dry season, the Teesta gets around 6,000 cusecs of water. But Bangladesh needs 8,000 cusecs and India needs 16,000 cusecs. So it is a difficult task to meet these demands. On the other hand, the Teesta overflows during monsoon. Its water flow typically exceeds 300,000 cusecs to 450,000 cusecs. If governments come forward to develop an effective water management mechanism like building a reservoir in the upstream, then the excess monsoon water can be shared during the dry period. So, according to the experts, Teesta treaty should have two mechanisms: ensuring water flow during the dry period and managing water for the rest of the year in the entire river basin. In addition, it should ensure prevention of flood and river erosion during the monsoon period.<sup>34</sup>

## **2.4 Feni Water Sharing Negotiations**

Feni River originates from the hill ranges of the Indian state of Tripura. It flows southwest marking the boundary with the Chattogram Hill Tracts, then flows west, separating Tripura from Chattogram up to Aliganj and then emerges out of the hills and passes through the plains dividing Chattogram from Noakhali, flows down the frontier town of Sabroom before falling into the Bay of Bengal.<sup>35</sup> The river flows through the highlands and passes down Feni district where it acquires its name on the Bangladesh side. Feni river is a transboundary river between Bangladesh and India.

The question of sharing of the waters of the Feni river between India and Pakistan was first discussed in 1958. After the independence of Bangladesh, a negotiation with India was going on Feni river. The issue of water sharing in the Feni river has been added to the mandate in the 36<sup>th</sup> JRC meeting held in September 2005. At that meeting, a decision was taken to inspect the site. The Ministers of Water Resources of both countries would visit the sites where developmental works had been held up. This joint inspection took place in September 2006.<sup>36</sup>

During the dry season, the Feni river is hardly navigable up to Ramgarh, about 80 km upstream. Members of the JRC of Bangladesh and India have prepared a draft agreement to equally share the Feni river waters. However, the agreement was not signed yet.<sup>37</sup>

## **2.5 Negotiations on India's River Linking Project**

The river linking project of India is designed to reduce water scarcity in the east and south parts and protect the north and west parts from flooding. This proposed linking project has three parts: Northern Himalayan component, Southern peninsular

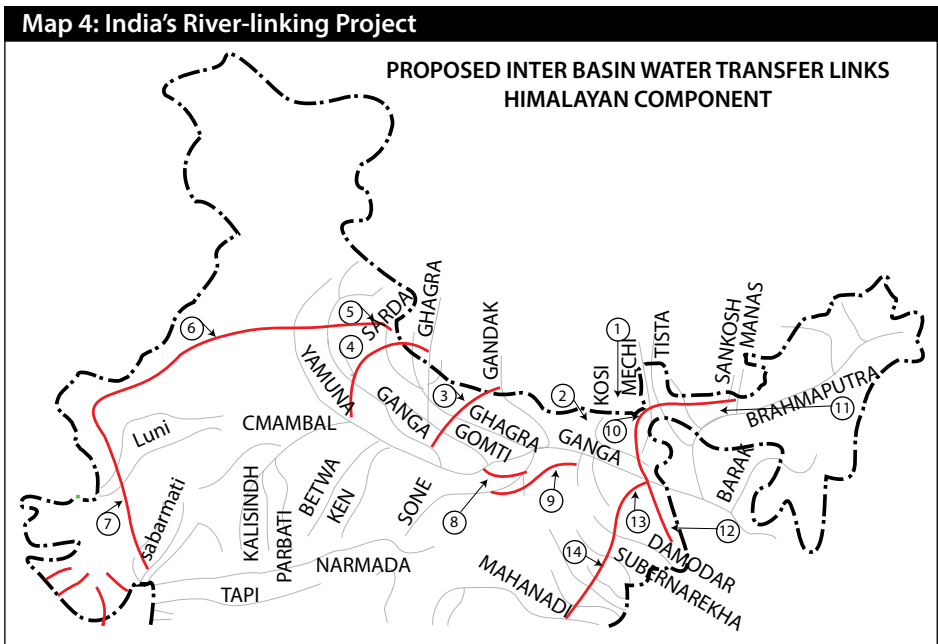
<sup>34</sup> Authors' interview with Professor Dr. Ainun Nishat, *op. cit.*

<sup>35</sup> Available at [http://en.banglapedia.org/index.php?title=Feni\\_River](http://en.banglapedia.org/index.php?title=Feni_River), accessed on 19 February 2017.

<sup>36</sup> Authors' interview with an official from Joint Rivers Commission, Bangladesh on 22 February 2017.

<sup>37</sup> "Vast Tracts of Land to Go Barren", *Dhaka Mirror*, 14 September 2011.

component and an Intra-state rivers linking component.<sup>38</sup> Under the Himalayan river linking component, the Ganges and the Brahmaputra rivers are included for diverting water from these two rivers to create a canal. This canal will link the Ken and Betwa rivers in central India and Damanganga-Pinjal in the west.<sup>39</sup> This situation raises concern in Bangladesh as Himalayan component is linked with Bangladesh. However, India did not take any such initiative till now, which affects Bangladesh. There are also internal contentions related to river-linking project in India. Of the many proposed projects under India's river-linking project, Ken Betwa linking project got the final permission.<sup>40</sup> But according to JRC Bangladesh and other Bangladeshi experts, this river linking project of Ken Betwa will not affect Bangladesh.<sup>41</sup>



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|------------------------|--|
| 1. Kosi- Mechi         | 8. Chunar-Sone Barrage                       |
| 2. Kosi Ghagra         | 9. Sone Dam - Southern Tributaries of Ganga  |
| 3. Gandak Ganga        | 11. Manas - Sankosh -Tista - Ganga           |
| 4. Ghagra - Yamuna*    | 12. Farakka - Sunderbans                     |
| 5. Sarda - Yamuna*     | 13. Ganga (Farakka) - Damodar - Subernarekha |
| 6. Yamuna - Rajasthan  | 14. Subernarekha -Mahanadi                   |
| 7. Rajasthan Sabarmati | * FR Completed                               |

Source: National Water Development Agency (NWDA), India.

<sup>38</sup> Available at [www.nwda.gov.in/](http://www.nwda.gov.in/), accessed on 10 April 2017.  
<sup>39</sup> "India Set to Start Massive Project to Divert Ganges and Brahmaputra Rivers", *The Guardian*, 18 May 2016.  
<sup>40</sup> *Ibid.*  
<sup>41</sup> Authors' interview with an official from Joint Rivers Commission, Bangladesh, *op. cit.*

## 2.6 Negotiations on Tipaimukh Dam

Tipaimukh Dam is a proposed hydroelectric project, which is to be built on the Barak river in Manipur, India. The 164 metre high and 390 metre long dam has a capacity to generate around 1,500 megawatts of power for the Indian national grid. The dam is within 100 km of the Bangladeshi border town of Sylhet.<sup>42</sup> The Tipaimukh dam entered on the agenda of the JRC in 1978. It was then decided that superintending engineers of the two countries should jointly examine the scope of the Indian scheme of the storage dam on Barak river at Tipaimukh. The examination did not take place as the issue of Tipaimukh has been protested both in India and Bangladesh because of its adverse environmental impact. In spite of enormous demonstration, on 22 October 2011 Indian government unilaterally signed an agreement with the Indian national hydroelectric companies NHPC (National Hydroelectric Power Corporation Limited), and SJVNL (Satlujjal Vidyut Nigam Limited) and the Manipur state government for the construction of the project.<sup>43</sup>

As a result, in 2012, a sub-group was formed under the JRC for joint surveys to assess the impacts of proposed 1500 MW Tipaimukh dam over Barak river. The first meeting of the sub-group took place in 2012 where the terms of references for the surveys were finalised. Under the terms of references, both countries can undertake surveys in their own sides to assess the environmental impacts.<sup>44</sup> But there was no such joint study that took place.<sup>45</sup> In sub-group's second meeting in 2013, Dhaka asked Delhi to provide more information and data on the water flow of the Barak river to assess the possible negative impacts of the planned dam on the common river in Bangladesh. Later on, the governments of India and Bangladesh announced further delays.<sup>46</sup> Till now, this proposed dam has not been built yet. According to the experts, the proposed Tipaimukh dam is likely to affect two major rivers of Bangladesh, namely the Surma and the Kushiara and another 60,000 Manipuri people of India who depend on the river for livelihood and other activities.<sup>47</sup>

## 3. Challenges

South Asia provides two excellent, but contrasting examples on water relations between the co-riparian countries. Bhutan and India have shown a successful example of water relations that are based on goodwill and trust.<sup>48</sup> In contrast, water

<sup>42</sup> Rashid Askar, "Tipaimukh Dam and Indian Hydropolitics", *The Daily Star*, 01 January 2012.

<sup>43</sup> Harunur Rashid, "Tipaimukh Dam: What is the Current Position?", *Dhaka Courier*, 01 February 2015.

<sup>44</sup> "High Tipaimukh Dam Negotiations Sans Peoples", *The Sangai Express*, 06 September 2012.

<sup>45</sup> Authors' interview with an official from Joint Rivers Commission, Bangladesh, *op. cit.*

<sup>46</sup> Harunur Rashid, *op. cit.*

<sup>47</sup> M. Asaduzzaman and Md. Moshir Rahman, "Impacts of Tipaimukh Dam on the Down-stream Region in Bangladesh: A Study on Probable EIA", *Journal of Science Foundation*, Vol. 13, No.1, 2015, p. 6.

<sup>48</sup> Asit K. Biswas, "Cooperation or Conflict in Transboundary Water Management: Case Study of South Asia", *Hydrological Sciences Journal*, Vol. 56, No. 4, 2011, pp. 662-670.

relations between Bangladesh and India have proved a missed opportunity. Regarding Bangladesh-India water negotiations, it is understood that the water negotiations between them have faced major challenges. In this section, these challenges are discussed to understand why most of the negotiations have failed to produce good results. These challenges are discussed subsequently.

***Lack of Accurate and Up-to-Date Data.*** One of the basic problems that states face during water-related negotiations is the lack of adequate and reliable data on the flow of the shared rivers.<sup>49</sup> On the one hand, it prevents those at the negotiating table from arriving at a common ground. On the other hand, it fosters power and information asymmetries between countries, which restricts a plurality of views and participation.<sup>50</sup> Bangladesh Foreign Office lacks proper logistical and technical mechanisms to update on relevant data on the common rivers.<sup>51</sup> Transboundary rivers' data and information are not properly being collected, maintained and published by governments in a systematic manner.<sup>52</sup> Unlike India, Bangladesh does not have sophisticated telemetry and remote-sensing technologies and satellite-based water resources information system. Bangladesh uses survey vessels, telemetering and wireless system, calibrating tank and field installations in order to collect data for flood forecasting purpose.<sup>53</sup> Even the data collection is only limited to irrigation, water quantity and diversion.<sup>54</sup> This data gap holds up the progress of the water sharing negotiation.<sup>55</sup>

Sharing of hydrological data is widely considered a fundamental component of transboundary cooperative history as it is extremely important to support decision making and planning among riparians.<sup>56</sup> Data are usually collected within the limits of the territory of a country. This makes it an instrument of power interplay in terms of sharing information, fully or partially, or keeping it under wraps entirely.<sup>57</sup> Data sharing is seen as closely related to national security, foreign policy, strategic relations and territorial sovereignty which makes it a prime marker of power interplay. It is a ready instrument in the hands of riparian countries to extract concessions or stall negotiations over transboundary rivers. Therefore, sharing of data may be considered to imply a loss of

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<sup>49</sup> Ainun Nishat and Faisal Islam, *op. cit.*

<sup>50</sup> Sagar Prasai and Mandakini Surie, *Strengthening Transparency and Access to Information on Transboundary Rivers in South Asia*, New Delhi, India: Asia Foundation, 2015, pp. 25-30.

<sup>51</sup> Ainun Nishat and Faisal Islam, *op. cit.*

<sup>52</sup> *Ibid.*

<sup>53</sup> Bangladesh Water Development Board, available at [http://www.hydrology.bwdb.gov.bd/index.php?pagetitle=pffc,\\_hydrology&sub2=161&\\_subid=79&id=159](http://www.hydrology.bwdb.gov.bd/index.php?pagetitle=pffc,_hydrology&sub2=161&_subid=79&id=159), accessed on 28 February 2017.

<sup>54</sup> Authors' interview with an official from Joint River Commission, Bangladesh, *op. cit.*

<sup>55</sup> Ainun Nishat and Faisal Islam, *op. cit.*

<sup>56</sup> Jonathon Lautze and Mark Giordarno, "Water Resources Data and Information Exchange in Transboundary Water Treaties", *International Environmental Agreements: Politics, Law and Economics*, Vol. 11, No. 10, 2011, pp. 179-199.

<sup>57</sup> Hang NgoThu and Uta Wehn, "Data Sharing in International Transboundary Contexts: The Vietnamese Perspective on Data Sharing in the Lower Mekong Basin", *Journal of Hydrology*, Vol. 536, No. 10, 2016, pp. 351-364.

control over data, information or ideas.<sup>58</sup> Data sharing on common water has long been a controversial issue between Bangladesh and India. India does not provide all the data that Bangladesh needs, particularly data on dry season flow. It is not technically difficult to gain flood season data from satellite information. The difficulty lies in obtaining dry season data, as this needs to be measured on the ground and is not available from satellite data. For this reason, obtaining dry season data from upstream countries is critical for Bangladesh. Negotiations, however, for water sharing in this region, are mostly based on anecdotal rather than scientific evidences. Both Bangladesh and India classify river flow data as secret and use the lack of mutually acceptable data as a tactic to promote their own national interests. Thus, lack of accurate data and sharing of data by creating power and information asymmetry significantly hamper the negotiation process.

**Lack of Consistency in Negotiation Process.** According to the statute of the JRC, the ministerial level meetings are supposed to hold four times in a year. But there are only 37 meetings since the inception of the JRC in 1972. The 37<sup>th</sup> meeting was held in 2010. After that, there was no ministerial level meeting that took place to settle issues relating to common rivers.<sup>59</sup> It demonstrates the lack of consistency in negotiations. Selective foreign policy or regime based shifts in the foreign policy are found in the Bangladesh-India water negotiations. In Bangladesh's context, there are political quarters that bear an anti-India posture. It is seen that when Awami League comes in power, it follows the policy of engaging with India, whereas the Bangladesh Nationalist Party follows a policy of sidestepping India.<sup>60</sup> This policy difference hampers the regular talks on water sharing issue.

Similarly, it is seen that Indian foreign policy with Bangladesh seems more engaging when Awami League government stays in power. Additionally, one more issue that hampers the negotiation process is once there is a change in the panel of diplomatic negotiators to discuss the issue.<sup>61</sup> If the "right" people are not involved in negotiations, the process is not likely to succeed. This situation happens in both sides of the two countries.<sup>62</sup>

**Indolence in Negotiation Process.** Bangladesh and India are not fully successful in regularising talks on water sharing. Both countries' diplomats get involved with the water talks when the issue appears intermittently. Due to this indolence, despite sharing the highest number of transboundary rivers with India, Bangladesh has only one water sharing treaty with it, on the River Ganges,

<sup>58</sup> Anamika Barua, Sumit Vij and Mirza Zulfiqur Rahman, *op. cit.*

<sup>59</sup> *Ibid.*

<sup>60</sup> Shaukat Hassan "The India Factor in the Foreign Policy of Bangladesh", in M. G. Kabir and Shaukat Hassan, (eds.), *Issues and Challenges Facing Bangladesh Foreign Policy*, Dhaka, Bangladesh: Bangladesh Society of International Studies, 1989, pp. 44-61.

<sup>61</sup> Smruti S. Pattanaik, "India's Neighbourhood Policy: Perceptions from Bangladesh", *Strategic Analysis*, Vol. 35, No. 1, 2011, pp. 71-87.

<sup>62</sup> Authors' interview with Ambassador Humayun Kabir, on 05 March, 2012.

which was signed in 1996. The Ganges Water Treaty was a product of 25 years of negotiations that finally recognised Bangladesh's rights as a lower riparian state. But Bangladesh remains unable to include guarantee and arbitration clauses in the treaty. The Teesta water sharing agreement has been waiting to be signed since 2011. The Teesta water negotiations have been started since 1983. Even after long 28 years, the Teesta water sharing agreement remained unsigned. Apart from Bangladesh, India shares a number of transboundary rivers with countries like Pakistan, China, Nepal and Bhutan. There are mainly three rivers flowing from China to India<sup>63</sup>, six rivers from India to Pakistan<sup>64</sup>, five rivers from Nepal to India<sup>65</sup> and four rivers from Bhutan to India<sup>66</sup>. Excluding the Ganges Water Treaty with Bangladesh, India has the Indus Treaty with Pakistan, Mahakali Water Treaty with Nepal and an MoU with China on the water sharing of Brahmaputra. This reflects the indolence of India to negotiate water sharing issue with its neighbouring countries also.

Lack of political vision plays a role in creating indolence in the negotiation process. The political vision determines whether the negotiation will be a success or a failure. In 1996, two governments were cooperative in making the Ganges Treaty into reality. That time, "Gujral Doctrine" became popular. The doctrine spelt out by I.K. Gujral, first as India's foreign minister and later as the prime minister.<sup>67</sup> The five-point roadmap of doctrine set the then Indian government's political will to build trust between India and its neighbours for solving bilateral issues through bilateral talks. The Ganges Treaty with Bangladesh was the result of this Gujral Doctrine-led Indian foreign policy. On the other side, during the Ganges Water Treaty, Awami League government was also willing to settle the Ganges water sharing dispute with India. This both-way political willingness helped to settle the dispute. But after that, negotiations on the rest of the common rivers became deadlocked. So this negotiation inertia due to the changed regime with the different foreign policy and lack of political determination is have been major challenges of the water negotiations.

***Lack of Coordination with the JRC.*** The Bangladesh part of the JRC is working alone with some engineers and members from the Ministry of Water Resources. There is also a lack of coordination between the JRC and the Foreign Office to carry out regular ministerial level meeting on water sharing. Moreover, by the statute, the organisation should be one body with members from both the countries. But in reality, there are two separate bodies that are working in the two countries. And

<sup>63</sup> Available at <https://www.quora.com/How-many-rivers-flow-from-China-to-India>, accessed on 17 January 2017.

<sup>64</sup> Available at <https://www.quora.com/How-many-rivers-flow-from-India-to-Pakistan>, accessed on 17 January 2017.

<sup>65</sup> "Flood Threat from Rivers Flowing through Nepal to India", available at <http://pib.nic.in/newsite/mbErel.aspx?relid=169814>, accessed on 17 January 2017.

<sup>66</sup> "River Systems", available at <http://countrystudies.us/bhutan/16.htm>, accessed on 17 January 2017.

<sup>67</sup> Padmaja Murthy, "The Gujral Doctrine and Beyond," available at <https://www.idsa-india.org/an-jul9-8.html>, accessed on 10 January 2017.



there is a lack in research and workshop by the JRC and the MoFA (Ministry of Foreign Affairs) on water sharing issues.<sup>68</sup>

Although Bangladesh has a structure and an Organogram of Bangladesh's JRC but India does not have any established body called JRC. The Ministry of Water Resources, River Development and Ganges Rejuvenation of India basically runs Indian part of JRC.<sup>69</sup> So, the JRC actually does not work jointly. On top of that, Bangladesh remains unable to compel India to work jointly under the JRC.

**Lack of Research and Monitoring in the Negotiation Process.** Research has always played a key role in transboundary water-related cooperation, and in particular in bringing forward the negotiation processes. At the beginning, research and measurements are needed to know and to understand what is happening with a water basin. Very often it is the scientists who ring the alarm bells first and thus force the policy makers to sit around the negotiating table.<sup>70</sup> But Bangladesh government's preference of other sectors over water suggests, compared to other countries, that the water sector receives small funding for conducting quality research. There are a good number of government organisations such as River Research Institute, Water Resources Planning Organisation, Bangladesh Water Development Board, Bangladesh Haor and Wetland Development Board, Flood Forecasting and Warning Centre, and JRC. These organisations only deal with technical aspects. Even there is no research team in the Bangladesh part of JRC.<sup>71</sup> On the other hand, water related departments and research institutes in public and private universities do not get enough funding for conducting research on transboundary water negotiations. Hence, compared to India, Bangladeshi researchers have a lack of contribution in shaping Bangladesh's water diplomacy.

On the other hand, India needs to build its own understanding of water. In contrast with Bangladesh, India is in an advantageous position in terms of research over water negotiations. But the scientific knowledge on water management in India is not adequate in comparison with China. The Central Water Commission is not in a state to perform any kind of extensive research and development as there is no investment in this area.<sup>72</sup>

<sup>68</sup> Authors' interview with an official from Joint Rivers Commission, Bangladesh, *op. cit.*

<sup>69</sup> "Indo-Bangladesh Cooperation", available at <http://wrmin.nic.in/forms/list.aspx?lid=348>, accessed on 17 June 2017.

<sup>70</sup> Branko Bosnjakovic, *op. cit.*

<sup>71</sup> Author's interview with an official from Joint Rivers Commission, Bangladesh *op. cit.*

<sup>72</sup> Uttam Kumar Sinha, "India-China Riparian Relations: Towards Rationality", paper presented at the Fellow's Seminar on *India-China Riparian Relations: Towards Rationality*, organised by Institute of Defense Studies and Analyses, India on 16 January 2015.

**Distributive Approach to Negotiation.** Both the countries are following distributive approach<sup>73</sup> to water negotiation, which results in zero sum achievement. This approach is also known as positional bargaining. Distributive approach or positional bargaining in water negotiation emerges when parties to the negotiation conceive water as a fixed resource – one provided by nature in a given quantity that is either static or diminishing.<sup>74</sup> Based on this assumption, diplomats of both parties try to divide the assets or resources under dispute that means diplomats often focus on what share of the existing water will be given to each entity often in the face of ever-increasing demand and uncertain variability.<sup>75</sup> The Ganges treaty and even the ad hoc agreement and draft agreement regarding Teesta river gave greater focus on the distributive policy. According to the ad hoc agreement, Bangladesh was supposed to get 36 per cent whereas India was supposed to get 39 per cent of water. The draft specifies that Bangladesh and India would each get 40 per cent of the actual flow available at Gazaldoba Barrage.<sup>76</sup> According to the report of Brahmaputra dialogue initiated by the South Asia Consortium for Interdisciplinary Water Resources Studies, Bangladesh undertakes positional bargaining approach. Thus, it is seen that both the countries are more inclined to positional bargaining or distributive approach of negotiation.

**Technical Knowledge Gap.** Having a pool of water experts is important to give support to the diplomats at the negotiation table. But in reality, Bangladesh lacks in water expertise. The issue of water negotiation requires technical data, which can be dealt only by the water experts.<sup>77</sup> The inadequate academic contribution is also evident. Even lack of cooperation is seen between the scientists and the policy makers in Bangladesh. In contrast, Indian government fosters a close relationship with academic institutions and has sound scientific information on water.

**Absence of Water Expert Negotiator.** In Bangladesh, water experts remain frequently absent at the negotiation table. This is also a barrier because carrier diplomats are mostly unknown about the technical part of the water sharing process. Indian diplomats have more updated data, but still their water experts cannot take part in government-to-government negotiations on water sharing issues.

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<sup>73</sup> Distributive approach to negotiation is a competitive negotiation strategy in which one party gains only if the other party loses something. It is used as a negotiation strategy to distribute fixed resources such as money, resources, assets, etc. between both the parties. It is also referred to as 'Win-Lose', or 'Fixed-Pie' negotiation because one party generally gains at the expense of another party. See Definitions, available at <https://www.negotiations.com/definition/>, accessed on 16 January 2017.

<sup>74</sup> Lawrence Susskind and Shafiqul Islam, "Water Diplomacy: Creating Value and Building Trust in Transboundary Water Negotiations", *Journal Science and Diplomacy*, Vol. 1, No. 3, 2012, pp. 1-7.

<sup>75</sup> *Ibid.*

<sup>76</sup> Strategic Foresight Group, *op. cit.*

<sup>77</sup> Authors' interview with Ambassador Humayun Kabir, *op. cit.*

The challenges discussed above are substantial and important. These require effective policy intervention. Bangladesh and India need to address the challenges appropriately to achieve a fair share of transboundary rivers.

#### 4. Way Forward

Bitterness between states over water can lead to souring relations and tension. If not managed well, this bitterness can worsen relations and even lead to a large-scale conflict. As discussed above, water negotiations between Bangladesh and India are facing major challenges such as lack of accurate data, exchange of data, inconsistency and indolence in negotiation, technical knowledge gap, lack of research for negotiation, lack of coordination with the JRC, applying the distributive approach in negotiation, etc. To address these challenges, the present paper makes an effort to suggest some policy recommendations. These are discussed subsequently.

In light of the observations, Bangladesh needs to apply track II diplomacy in negotiating water sharing issue. Currently, Bangladesh water negotiation is based on applying track I diplomacy<sup>78</sup>. Besides applying track I diplomacy, the application of track II diplomacy might be a good option for a proactive water negotiation. Track II diplomacy is the practice of non-governmental, informal and unofficial contacts and activities between private citizens or groups of individuals, sometimes called 'non-state actors'. Intellectuals, water experts, academics from both the countries can be involved in informal meetings to seek sustainable and amicable solution. Therefore, it is prudent to undertake joint informal meetings in order to create a conducive environment in favour of track I level negotiation.

Track one and half diplomacy might be useful in promoting proactive negotiations. Track one and half diplomacy refers to the application of both track I and track II diplomacy within a strategic framework. A conglomeration of experts, professionals, officials and analysts from Bangladesh and India might play significant role in identifying sustainable solutions. This type of conglomeration can turn into a proper institution which can be used as a knowledge hub. Regular monitoring might also be possible under this type of institution.

Application of paradiplomacy might be a good option for resolving water dispute between Bangladesh and India. In India, power equilibrium is evident in the state-centre relations. Since the independence of India, it has been following the federal state system. Thus, Delhi-centred negotiation process of Bangladesh may not be able to produce the desired result. In 2011, both the countries were agreed with

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<sup>78</sup> Track I diplomacy is the practice of governmental, formal and official contacts between or among the states. See Jeffrey Mapendere, "Track One and a Half Diplomacy and Complementarity of Tracks", *Culture of Peace Online Journal*, Vol. 2, No. 1, 2005, pp. 66-81.

52:48 water sharing ratio of Teesta river. But Mamata Banerjee remained unconvinced regarding the ratio of the water sharing. She believed that agreeing on 48 per cent water share to Bangladesh would affect the agriculture of West Bengal. Thus, while formulating water diplomacy strategy with India, Bangladesh needs long term strategy to be engaged with West Bengal and other important states of India that are involved with Bangladesh-India water sharing issue. To do this, the government of Bangladesh may promote closer relations with the relevant states of India using social and cultural ties for working on the water related disagreements.<sup>79</sup>

Instead of distributive approach, Bangladesh may focus on integrative approach<sup>80</sup> to water negotiation. The Israel-Jordan Treaty of Peace<sup>81</sup> serves as an excellent example of integrative approach to water negotiation which Bangladesh may follow. Integrative approach in water negotiation emerges when parties recognising that water are not a fixed resource. Based on this assumption, policy makers and diplomats think about improving the overall efficiency of water use which, in effect, can "create" more water.<sup>82</sup> This approach embeds the concept of sharing benefits of water rather than water itself. This allows riparian to focus firstly on generating basin-wide benefits and secondly on sharing those benefits in a manner that is agreed as fair. In fact, focusing on the benefits derived from the use of water in a transboundary river system rather than the physical water itself provides many opportunities to undertake mutually beneficial cooperative actions for water resources development and management that are acceptable to all parties.<sup>83</sup> Such an approach to water negotiation not only encourages either side to look for creative ways of increasing or reusing available supplies but also helps either party to deal with flood, drought, or decreasing environmental quality.<sup>84</sup> Examples of the 'sharing of benefit' embedded in the integrative approach date back to the transboundary waters agreement, Columbia River Treaty, between United States and Canada. Besides, this approach is at the root of the some of the world's most successful water agreements.

The Indus Treaty of 1961 was possible because both India and Pakistan could perceive the huge advantage of the development of the waters of Indus system.

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<sup>79</sup> *Ibid.*

<sup>80</sup> Integrative approach to negotiation is often referred to as 'win-win' and typically entails two or more issues to be negotiated. It often involves an agreement process that better integrates the aims and goals of all the involved negotiating parties through creative and collaborative problem solving. Relationship is usually more important, with more complex issues being negotiated than with the distributive approach. See Definitions, available at <https://www.negotiations.com/definition/>, accessed on 16 January 2017.

<sup>81</sup> Lawrence Susskind and Shafiqul Islam, *op. cit.*

<sup>82</sup> *Ibid.*

<sup>83</sup> Aaron T. Wolf (ed.), *Sharing Water, Sharing Benefits: Working Towards Effective Transboundary Water Resources Development*, Paris, France: UNESCO, 2010, pp. 52-54.

<sup>84</sup> *Ibid.*

The Mekong River Agreement 1995 was possible because of the four countries saw a common interest in jointly managing their shared water resources. The Nile basin initiative of 1999 is another example of sustainable development of water resources through equitable 'sharing of benefit' which focus not on water but on a win-win situation of regional development.<sup>85</sup> The Nile Basin Initiatives, Mekong River Commission and Indus River Treaty serve as excellent examples of an integrative approach to successful water negotiation which Bangladesh and India may follow. In integrative approach, parties in the negotiation also consider multiple issues simultaneously as they can try to create value and maximise benefits by tradeoffs between them.<sup>86</sup> In this respect, both countries can consider multiple issues like transit issue, trafficking, terrorism simultaneously with water negotiation.

There is a new kind of approach which is gaining attention to deal with water sharing problems. This approach is known as multi-track water diplomacy. Multi-track water diplomacy refers to effective water cooperation as a collaboration in which two or more parties identify a negotiated compromise on maximising mutual gains and achieving joint wins for all parties involved, resulting in the availability of an acceptable quantity and quality of water for health, livelihoods, ecosystems and production, coupled with an acceptable level of water-related risks to people, environments and economies. Multi-track water diplomacy framework consists of five analytical components: the assessment of a river basin and the contextual factors related to an action situation; the institutions structuring action; the actors and their agency; the action situation – the interface between structure-agency; and finally the different outputs, outcomes and impacts as a result of the interaction. By analysing each component and their relationships, involved in a transboundary river, it helps to diagnose water problems across sectors and administrative boundaries, and at different levels of governance. Consequently, it identifies intervention points, and proposes sustainable solutions or a ZOPEC (Zone of Possible Effective Cooperation) which is sensitive to diverse views and values. Additionally, it can also accommodate ambiguity and uncertainty as well as changing and competing needs. This framework has great potential to build a sound bridge from actual or potential conflict to effective cooperation and practical solutions.<sup>87</sup> Thus, both Bangladesh and India may consider this approach to solve the water sharing problem.

<sup>85</sup> M. A. Abedin, Umma Habiba, Rajib Shaw (eds.), *Water Insecurity: A Social Dilemma*, Bingley, UK: Emerald Group Publishing, 2013, pp.134-136.

<sup>86</sup> Yona Shamir, "Alternative Dispute Resolution Approaches and their Application in Water Management: A Focus on Negotiation, Mediation and Consensus Building", UNESCO-HP, available at [http://www.un.org/waterforlifedecade/water\\_cooperation\\_2013/pdf/adr\\_background\\_paper.pdf](http://www.un.org/waterforlifedecade/water_cooperation_2013/pdf/adr_background_paper.pdf), accessed on 10 December 2017.

<sup>87</sup> "The Multi-track Water Diplomacy Framework: A Legal and Political Economy Analysis for Advancing Cooperation over Shared Waters", Hague Institute for Global Justice, available at [http://internationalwatercooperation.org/wp-content/uploads/2017/08/THIGJ\\_The-Multi-track-Water-Diplomacy-Framework\\_Webversion-1.pdf](http://internationalwatercooperation.org/wp-content/uploads/2017/08/THIGJ_The-Multi-track-Water-Diplomacy-Framework_Webversion-1.pdf), accessed on 28 February 2017.

It is important to strengthen the JRC. It was established with a view to maintaining liaison to ensure effective joint efforts in maximising benefits from the common river system. But unfortunately, it is not so active. Since JRC's establishment, it did not contribute much to resolve the transboundary water dispute between India and Bangladesh. So, there is a need to strengthen JRC as it provides a very good platform to discuss water sharing. In order to strengthen JRC, several initiatives need to be undertaken. Firstly, JRC should concentrate on developing a robust mechanism to collect hydrological data as hydrological data is important to manage the transboundary river. The JRC should engage in regular collection and sharing of data on the quantity and quality of common rivers. The satellite based real time telemetry system installation might be useful to remove the existing mistrust on data exchange. Secondly, according to the charter of JRC, it is supposed to meet four times in a year. Sometimes it fails to meet even once in a year. So, JRC needs to meet from time to time for following up the progress in water negotiations. Thirdly, JRC needs to develop itself as an autonomous body so that regime change does not affect its activity. Fourthly, there is a need to shift from JRC's focus from supply side cooperation to demand side cooperation. Rather than simply focusing on volumes of water (demand side cooperation) and cross border discussion, JRC needs to focus on uses of water (supply side cooperation). Fifth, JRC needs to strengthen its organisational structures to create a set of strict norms and guideline to regulate the use of not just the Teesta, Feni and Ganges but all transboundary rivers shared with Bangladesh and to promote sustainable conservation, develop better ways to combat pollution and manage existing water supply and resources in order to avoid future dispute.

In comparison with India, Bangladesh has a little expertise regarding water negotiations. As a result, Bangladesh is lagging behind in negotiation with India. In India, there are enough funds for water research. There is a specialised training institute for water research. Currently private sectors are also involved in water research in India. Even scholarships are available for water research. In Bangladesh, there is no such institutional arrangement to support this type of research. It creates a lack of capability over water issues. So, there is a need to establish a pool of experts by creating different forums, research and training institutes. In this regard, Bangladesh government should allocate enough funds for public and private research bodies.

Both countries may develop a shared platform for water experts to take part in the negotiation process. In this regard, water experts from both countries can be trained so that they can contribute in the negotiation process. In this regard, the Clingendael Netherlands Institute of International Relations sets an example. They started a training course with the collaboration of UNESCO-IHE where they train water experts in negotiations. So these trained water experts can take part in any water negotiation and aid the career diplomats in dealing with

technical problems. Even if they are not present at the negotiation table, they can influence the process of negotiations.<sup>88</sup>

Collection of accurate data and sharing those data of transboundary rivers are important to resolve the transboundary water dispute. In this regard, Bangladesh can think about four possible solutions. Firstly, Bangladesh can discuss with India to determine sharing of minimum level of data under the JRC. Secondly, Bangladesh can also discuss with India to delegate the task of data-gathering to a third party which may speed the pace of negotiations. Thirdly, Bangladesh can upgrade its own instruments to collect common rivers, water related data e.g. sophisticated telemetry and remote-sensing technologies and satellite-based water resources information system. Fourthly, Bangladesh and India can generate scientific or technical information collaboratively.

By maintaining reciprocity in bilateral relations with India, Bangladesh can mitigate the challenges of water negotiations. In two ways, Bangladesh can maintain reciprocity with India. On the one hand, currently bilateral relations between Bangladesh and India are getting warmer. Cooperation in several spheres like political, economic, social, cultural and security is evident. Bangladesh needs to maintain reciprocity in bilateral relations with India in these spheres. Because, by maintaining the existing warm relations Bangladesh can create a compulsion over India to negotiate water dispute. On the other hand, through dialogue and engagement both countries can share best practices and ease overall water demand. As a result, they can easily come to an agreement over transboundary rivers. Reciprocal sharing of best practices over the uses of water is much effective in a range of fields. They include: irrigation; hydro-power generation and distribution; navigation; fisheries management; water quality and pollution; industrial water usage; erosion control on shared rivers; urban water management; eco-system; watershed and forest management.

Multilateral diplomacy might be another suitable option for resolving water sharing tribulations. As the middle riparian in the basin, India faces threats from upper riparian China and poses challenges to lower riparian Bangladesh. Among the world's major international rivers, the Brahmaputra ranks low in terms of institutionalised management. Countries along the Nile, for instance, have formed the Nile Basin Initiative to encourage peace and security. The states, in the lower Mekong region, have formed the Mekong River Commission. On the contrary, there is no institution capable of promoting cooperation between the Brahmaputra's three major riparian states – China, India and Bangladesh. The three riparians have taken modest steps at the bilateral level to cooperate in the Brahmaputra basin, such as limited water data-sharing and government dialogues between technical experts. Although Bangladesh

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<sup>88</sup> Mariska Heijs, "Water Negotiations: Sharing A Resource Without Borders", available at <https://www.clingendael.org/publication/water-negotiations-sharing-resource-without-borders>, accessed on 12 January 2017.

is most favourably disposed to multilateral cooperation, China and India are cautious and selective. They have shown marginal interest in addressing water resource management at the multilateral level. They are supporting bilateralism to address water sharing problems. Bangladesh, on the other hand, is the strongest advocate for basin-wide management of the Brahmaputra. Thus, there is still precedents and space for New Delhi and Beijing to experiment with pursuing innovative approaches with its neighbours by applying multilateral diplomacy. Opportunities at the multilateral level include 1) technical exchanges on the development of hydrological tools, disaster management, and pollution control and 2) confidence-building activities through official and unofficial dialogues, especially by international organisations and extra-regional governments. Additionally, through multilateral diplomacy, countries can develop collaborative water management projects by taking financial aid from multinational institutions such as the World Bank, the Asian Development Bank, the Asian Infrastructure Investment Bank and so forth .

One would not be wrong in saying that the most critical part of the water negotiation is to define and balance the rights of upstream and downstream states. All the above discussed recommendations are doable if both the countries agree upon the same policy of negotiation. In Bangladesh-India case, India is following its latest National Water Policy (2012). According to this policy, India is inclined to bilateral cooperation to address the transboundary water issues. In contrast, National Water Policy of Bangladesh (1999) is disposed to multilateral cooperation and basin-wide management to address the transboundary water issues. In summary, a successful negotiation requires an agreed platform. Once this situation developed, both parties can settle down all the existing water sharing disputes.

## 5. Conclusion

River basins in South Asia are not only the greatest sources of drinking water, irrigation and hydropower but also important for social, economic and environmental development. This condition is a burning issue for Bangladesh and India. These two countries mostly depend on the waters from the common rivers. The inadequate supply of water in the dry season is the central point of dispute between these two countries. Although from the very beginning of the bilateral relationship, both the countries have started water negotiations over the issue of sharing transboundary rivers. But there is no significant achievement except the Ganges water treaty. Even the Ganges water treaty has been criticised due to less effectiveness during the dry period. Except the Ganges treaty, the negotiations over sharing water in Teesta and Feni are going on but could not produce any good result yet.

In the present paper, it is seen that the water negotiations between Bangladesh and India are being affected due to some significant negotiation challenges such as lack of accurate data, exchange of data, inconsistency and



indolence in negotiation, technical knowledge gap, lack of research, lack of coordination with the JRC, distributive approach in negotiation, etc. In light of these observations, some policy suggestions have been addressed in the present paper. For a functioning proactive negotiation, several diplomatic tracks, namely paradiplomacy, track II diplomacy and track one and half and integrative approach to negotiation might be useful. Another important thing is to activate and strengthen JRC as it provides a very good platform to discuss water sharing. In both countries, there is also a need to establish a pool of water experts who can properly support the negotiation process by providing analytical assessment and relevant policy suggestions.

Additionally, in Bangladesh, there is a need to allocate enough funds for water research. Data collection over common rivers is another important thing. Finally, Bangladesh needs to maintain reciprocity with India, which can help in creating compulsion over India to negotiate water disputes. Bilateral agreements can at best be short-term palliative. Therefore, the solution lies in wider regional and multilateral collaboration involving India, Nepal, Bhutan and China. The support of the United Nations and our development partners such as the United States, the European Union and Japan might be useful. Several multilateral financial institutions including the World Bank, the Asian Development Bank, the Asian Infrastructure Investment Bank and so forth might aid collaborative projects under the multilateral diplomacy.



Source: Joint Rivers Commission