

Indo-Bangladesh water sharing issues

Dr. Aruna R Mital

Associate Professor & Head, Department of Political Science, S.G.R.R. (P.G.) College, Dehradun, Uttarakhand, India

Abstract

Indo-Bangladesh relationship carries not only strong historical and cultural overtones but both sides also realize the immense benefits of a strong relationship. However, there have been a number of setbacks too. The two countries have a long history of water disputes notably over the sharing of Ganga river waters. India's diversion of the Ganges from Farakka Barrage to the Bhagirathi Hooghly river system remained for a decade a major sources of discord between the two. To solve the problem, several attempts have been made. In 1977, a five year agreement was signed and two more short term agreements were also concluded in May 1982 and in 1985. Finally, in December 1996, a 30 years treaty on sharing of Ganges waters was concluded which was intended to bring to an end long running differences between the two. It has signaled a shift in bilateral relations between the two countries.

Another dispute on water sharing is linked with Teesta River started in 1979 with the beginning of construction of a barrage on the river by Government of West Bengal in India, though efforts were made to settle the dispute in 1983 by an ad-hoc agreement. A Joint River Water Commission in 1984 and a joint committee of experts in 1997 were formed to examine and solve the issue of sharing of river water. A series of meetings were held between 1997-2004 but a little progress was made. Subsequently, a Joint Technical Group (JTG) was formed in 2004 but unfortunately failed to finalise any positive result due to the opposition of Chief Minister of West Bengal. Again in 2011, Prime Minister of India Dr. Man Mohan Singh have dropped the Teesta Accord under the pressure of Ms. Mamta Banerjee, the head of the Trinmool Congress party which was then a single largest coalition partner of UPA Government in India.

After the change of Government in India, Prime Minister, Narendra Modi with Ms. Mamta Banerjee, Chief Minister of West Bengal during their visit to Bangladesh in 2015 expressed hope for an early and fair solution to the long pending Teesta Water issue. It is now upto both countries to restore confidence and rebuild bilateral relationship. It would be better to adopt a more feasible approach that would be constituted by an integrated collaborative and sustainable management of all shared rivers.

Keywords: Ganges water, Farakka, Teesta River, bilateral relations, West Bengal

1. Introduction

Bangladesh emerged on the world map as sovereign independent country in December 1971 with the whole hearted material and moral help of India. It was a major historical incident in the Indian sub-continent after the Second World War and it affected the power balance in the sub-continent. It has altered the state structure of South Asia and also helped in boosting India's image in the world as a supporter of genuine liberation struggles.

The People's Republic of Bangladesh is surrounded by Indian Territory except for a short eastern frontier with Myanmar. Bangladesh shares 4094 Kilometers of land border with India on three sides and the fourth side being open to the Bay of Bengal. It shares 54 rivers with India. The Ganges, the Brahmaputra and the Meghna river systems drain through Bangladesh into the Bay of Bengal.

Indo-Bangladesh relations during Sheikh Mujib era were quite friendly. India not only actively helped Bangladesh in the liberation struggle but after the emergence of independent Bangladesh, Indian government stood firmly with the government of Bangladesh in the task of building already destroyed economy, trade and social set up by providing liberal loans and grants and signing various trade agreements. In such a friendly atmosphere it was hoped that the problem of Farakka Barrage will be solved amicably by mutual discussions. India and Bangladesh signed a 25 years Treaty of Friendship,

Cooperation and Peace on 19 March 1972 which was considered a unique step taken by the important Asian countries for the stabilization of peace in this sub-continent. An Indo-Bangladesh Joint Rivers Commission was established also in 1972 to study the river flow and develop the river water on a cooperative basis.

Inspite of this, some sections of people of Bangladesh were not happy with India and these elements launched anti-India propaganda by leveling serious charges against India. Mujib government not only refuted the charges but tried its best to curb the anti-Indian elements. Internal political dynamics in both India and Bangladesh have led to estrangement despite the fact that the two countries have ample opportunities for cooperation, especially over water issues. The water sharing disputes between India and Bangladesh have time and again strained the relations between the two. These disputes are mainly related to the Ganges and Teesta Rivers.

2. Ganges Water Sharing Issue

The Ganga runs through the Indian states of Uttarakhand, Uttar Pradesh, Bihar and West Bengal. At the end of its downstream one of its tributaries called Padma, enters Bangladesh. The origin of the dispute can be traced back in the Treaty of Friendship in 1972. According to the treaty, the two nations established a Joint River Commission to work towards the common interests and sharing of water resources, irrigation,

floods and cyclone control. Accordingly, the barrage was built in 1974 about 10 Kms. from the border of Bangladesh, controlling the flow of the Ganges, possessing strong economic and religious importance, diverting some of the water into a feeder canal linking the Hooghly River, keeping it silt free. The objective behind the construction of Farakka barrage was to increase the lean period flow of the Bhagirathi – Hooghly River, branch of the Ganges to increase the water depth at the Kolkata port which was threatened by siltation to facilitate the navigators. The barrage diverts a large quantum of water during the winter season through a 40 Km. long feeder canal to flush the silting sediments out of the port. Besides, it is also designed to improve communication, drainage, sanitation and water supply facilities in Calcutta as well as to provide inland transport throughout West Bengal with a rail and road bridge over the Farakka. The rationale of barrage is also linked with the benefit of the people of the city. The operation of Calcutta port directly affects the well-being of over 100 million people in hinterland which is much more than the total population of Bangladesh.

Indeed, the rationale of saving Calcutta city and port impinges upon the economy of as many as 13 states of India. The utilization of Ganga waters by India for various industries affect the lives of a large segment of Indian society. Considering all the above reasons Indian government decided to build a barrage across the Ganga at Farakka, a few miles away where the Ganga branches into Bhagirathi. It would make the flow of water strong enough to flush out the silt and keep the port clear. It would also reduce the frequency and intensity of great tidal waves which move up the Hooghly, affecting ships going up and down from Calcutta port, reduce the content of silt in the water at Calcutta and thus improve navigation in the Ganga and reduce flood hazards in the catchment areas of river. Legally too, India's position was strong and she was not under any obligation to sacrifice her interests in the utilization of the Ganga waters in favour of Bangladesh.

The construction of the Farakka Barrage was started in 1961 and completed in 1974 and operations began on 21 April 1975. The barrage has to divert 1100 cubic meters per second (40,000 cu ft/s) of water from the Ganges to the Hooghly River for the flushing out the sediment deposition from the Kolkata harbour without the need of regular mechanical dredging.

After commissioning the project, it was found that the diverted water flow from the Farakka Barrage was not adequate to flush the sediment from the river satisfactorily. In addition, there are land and bank collapses in the Ganga River due to the high level back waters of the Farakka Barrage. Substantial high land is already converted to low level river bed causing displacement of huge population. The water diverted from the Farakka Barrage is less than 10% of Ganga River water available at Farakka.

After the completion of the barrage in 1975, it was agreed to run it with specified discharges for period of 41 days from 21 April to 31 May during the remaining period of the dry season of 1975 under an accord announced in a joint press release on 18 April 1975. A short term agreement was subsequently signed by India and Bangladesh to conduct a 40 day trial test of the barrage during the dry season. But after the assassination of Sheikh Mujibur Rahman on 15 August 1975, relations between the two became greatly strained and India continued to

withdraw water even after the agreed period. This led to a crisis situation in Bangladesh in the dry season of 1976. In the next dry season, India began to divert water at Farakka unilaterally and continued until 1977 when a treaty of sharing of the Ganges waters at Farakka and on augmenting its flows was signed by the two countries and guaranteed a minimum flow level for Bangladesh for a 5 year period. After the expiry of the treaty in 1982, two more short term agreements were concluded on water sharing until 1988.

In October, 1982 a Memorandum of Understanding (MOU) was signed between the two countries for sharing dry season flow of Ganges at Farakka in 1983 and 1984. This MOU is followed by the understanding reached between the Prime Minister of India, Indira Gandhi and the President of Bangladesh, H. M. Ershad in the Delhi Summit in November 1982. There was no agreement for 1985 dry season. Hence, the President of Bangladesh and Prime Minister of India discussed the issue during the Common Wealth Summit at Nassau, Bahamas in October 1985. Consequently in November 1985, another MOU was signed for three years by the two countries which expired on 31st May 1988.

After the expiry of MOU of 1985, no agreement was signed till 1996 in spite of the efforts by the two countries. In October 1993, Bangladesh raised the issue at Common Wealth Summit held at Cyprus and again in October 1995 at 50th UN General Assembly about the miseries of Bangladeshi people due to unilateral water diversion at Farakka Barrage. It also raised the issue at SAARC Summit meeting but failed to achieve any positive result.

In 1996, with the change of governments in the two countries an atmosphere of regional cooperation was created resulting in the conclusion of Ganges Water Sharing Treaty on 12 December 1996 for 30 years. The treaty was intended to bring to an end long running differences between India and Bangladesh over the entitlement of water flow after the construction of barrage by India on the Ganga River.

The treaty stipulates that below a certain flow rate, India and Bangladesh will share half of the water. Above a certain limit, Bangladesh will be guaranteed a certain minimum level and if the water flow exceeds a given limit, India will withdraw a given amount and the balance will be received by Bangladesh. It did not contain any guarantee clause for unconditional minimum amount of water to be supplied to Bangladesh, nor could the future hydrological parameters were taken into account. As a result, the agreement is sometimes perceived to be failed by some sections in Bangladesh to provide the expected result. Lower levels of soil moisture alongwith the increased salinity also led to desertification.

The treaty envisaged that the water of the Ganges river would be distributed from Farakka between the two countries from 1 January to 31 May of each year and that India was required to maintain the flow of Farakka at the average level of the previous 40 years including any critical period when Bangladesh would continue to receive 35,000 cusecs of flow. The Annexure-I of Article-II, of the 1996 treaty establishes the formula for water sharing of the Ganges waters at Farakka during the dry season whereas Annexure II provides an indicative schedule of the sharing arrangement based on 10 days period average availability of water at Farakka for 40 years between 1949-1988.

Table 1: Water sharing formula of the 1996 Treaty (Article II, Annexure I)

Availability at Farakka (m ³ /Sec.)	Share of India	Share of Bangladesh
1982 or less	50%	50%
1982 to 2124	Balance of flow	991 m ³ /sec
2124 or more	40,000 cusecs	balance of flow

Table 2: Indicative schedule for water sharing at Farakka of 1996 Treaty (Article II, Annexure II)

Period	Average of total flow 1949-88 (m ³ /sec)	India's share (m ³ /sec)	Bangladesh's share (m ³ /sec)	Ratio India: Bangladesh	
Jan.	1-10	3045	1133	1912	37:63
	11-20	2766	1133	1633	41:59
	21-31	2553	1133	1420	44:56
Feb.	1-10	2445	1133	1312	46:54
	11-20	2347	1133	1214	48:52
	21-28	2240	1133	1107	51:49
Mar.	1-10	2107	1116	991	53:47
	11-20	1952	961	991*	49:51
	21-31	1832	991*	841	54:46
Apr.	1-10	1789	798	991*	45:55
	11-20	1774	991*	783	56:44
	21-30	1727	736	991*	43:57
May	1-10	1907	991*	916	52:48
	11-20	2084	1093	991	52:48
	21-31	2318	1133	1185	49:51

* Three ten-day periods during which 991 m³/sec. shall be provided.

India and Bangladesh expressed their views that the treaty has the provision of being reviewed at the end of the five years or even at the end of two years if so wished. However, the 1996 treaty established a long term solution and considerably eased the tension or strains in Indo-Bangladesh relations. Though some political parties in Bangladesh alleged that India is drawing excessive water and the amount allocated to Bangladesh is unjust and insufficient. Their opinion was that India being large and more powerful country disregarded the needs and interests of a small and weaker neighbour resulting in reduction in flows which will have adverse effects on Bangladesh. They also emphasized environmental hazards such as raised salinity levels, contaminated fisheries, hindered navigation and a threat to water quality and public health. Alarming increase in deforestation and erosion at the upper levels of the Ganges river increases the deposition of silt at the lower level which is already measured at two million tons annually along with increased salinity have also led to desertification.

The treaty was also criticized on some other points in Bangladesh such as: (a) no minimum guaranteed flow for Bangladesh and thus makes Bangladesh dependent on the will of upstream users of Farakka; (b) no water sharing arrangement for the period if the flow at Farakka falls below 1145 m³/sec. (c) no provision for clear dispute resolution mechanism; (d) not having any arrangement for long term solution of the dry season water scarcity.

On the other side, India complains that the water allocated to Bangladesh leaves it with less water than necessary for the functioning of Kolkata port and the National Thermal Power Corporation at Farakka.

However, the 1996 treaty approves the theory of equitable allocation and obligation not to cause significant harm of international law through the inclusion of principles of equity, fairness and no harm to either party. This is certainly the major breakthrough of the treaty that would in turn reduce conflict and promote cooperation between the two nations.

3. Teesta Water Sharing Issue

The Teesta River originates from Teesta Kangse glacier about 7,068 metres (23,189 ft.) height and flow southward through gorges and rapids in the Sikkim Himalaya. It flows through Sikkim, West Bengal and Bangladesh where after coursing through about 45 Km of irrigable land merges with the Brahmaputra River or Jamuna when it enters Bangladesh and ends in the Bay of Bengal. It is an important irrigation source for paddy farmers in both countries. The river is flanked by white sand which is used by the construction industry in the region.

The dispute was started regarding the sharing of the river waters when West Bengal government began constructing barrages on the river in 1979 mainly for irrigation purposes. Bangladesh Government opposed it and argued that the major rice producing areas of Bangladesh specially 'rice bowl' Rangpur region lie in the Teesta and Brahmaputra river basin. If the barrages will be constructed, it would lead to scarcity of water for irrigation and low rice production. To pacify Bangladesh, India began negotiations on the issue. In 1983, an adhoc agreement on water sharing was concluded between India and Bangladesh. As the upper riparian country, India controls the flow of water into Bangladesh from the Teesta Barrage at Gazaldoba, constructed to provide water to the northern part of West Bengal. Bangladesh has also constructed a barrage downstream at Dalia in Lalmonirhat District, which supplies water for agriculture and irrigation to drought prone areas of the northern Bangladesh. It was argued by Bangladesh that the construction of Gazaldoba barrage and the diversion of waters have drastically reduced water availability at Dalia barrage particularly in the dry season.

According to the agreement both India and Bangladesh were allocated 39% and 36% of the water flow respectively. Unallocated 25% adhoc sharing of waters was demanded by Bangladesh on equitable distribution basis. The West Bengal pointed out that it will dry out the Northern West Bengal if less water is allocated to India. It was also predicted by India

to go 'water scarcity' by 2025. Since the lives of countless people of both West Bengal and Bangladesh were at stake as these depend upon the river for survival, the Joint River Water Commission have to collect hydrological data and suggest rational method for water sharing. The commission recommended to increase Bangladesh's share on logic that West Bengal's barrage is very close to Bangladesh border (nearly 90 Kms.). Some water will penetrate underground and benefit both countries.

In 1997, the joint committee of experts also examined the sharing of river water in a series of meetings between 1997 to 2004 though little progress was made. Subsequently, a Joint Technical Group (JTG) was formed in 2004 to develop draft terms of reference of joint scientific assessment of the Teesta and an interim agreement on sharing of lean season flows between the two countries. In 2005, in its fourth meeting, the JTG recorded its inability to find a solution. In the same year, the Joint River Water Commission in its 36th meeting recognized that the lean season flows in the Teesta will not meet the needs of both the countries and hence, any sharing formula for the lean season flows should be based on shared sacrifices. It has proposed new formula for water sharing from Teesta as India 42.5%, Bangladesh 37.5% and unallocated 20% for the river, otherwise nothing will reach to Bay of Bengal. However, the deal could not be finalized due to the opposition by Chief Minister of West Bengal. As water is a state issue in India therefore, water agreement cannot be signed without the consent of state government.

In 2010, the Prime Ministers of India and Bangladesh issued a joint communiqué calling for the Teesta issue to be resolved expeditiously. The two countries prepared a draft agreement on the Teesta and the statement of principles for sharing river waters in the lean season. These documents were to form the basis of an interim agreement on the Teesta between India and Bangladesh.

As per the proposal of the agreement of 2011, the two sides have agreed to share the river's water 50:50. While a large section of Bangladeshi population as well as Indian media vilified West Bengal's Chief Minister Mamta Banerjee's rigid stand though her opposition to the terms and conditions of the treaty was much valid. She expressed fear that the loss of higher volume of water to the lower riparian would cause problems in the northern region of state especially during drier months. She has pointed out that the treaty will dry out northern region of West Bengal and hurt Indian farmers. She also stated that in 1998, Bangladesh's largest irrigation project 'Teesta Barrage' have begun. With the help of this water, Bangladeshi farmers have already three cropping season per year. Therefore, they do not deserve more water. At that time, Trinmool congress with Mamata Banerjee as head of the party, was the single largest coalition partner of UPA Government in India. Therefore, Mammohan Singh, the then Prime Minister of India have to drop the Teesta accord. It was very much criticized in Bangladesh. Large scale protests and political mobilization began against Bangladesh Prime Minister Sheikh Hasina for her failure to carryout Teesta accord, hurting peddy farmers and 'selling' their country to India.

In May 2012, the Bangladesh Foreign Minister Ms Dipu Moni warned that if India fails to conclude Teesta water sharing agreement, bilateral relations would be complicated. Despite this pressure tactics, the progress of the treaty remained very

slow and India continued its efforts of domestic political consensus building. However, the Indian Minister for external affairs S. M. Krishna tried to diffuse tensions and assured Bangladesh that India remains committed to an early solution on the issue of sharing Teesta Waters. Bangladesh was also interested in early solution of the problem and even was ready to soften their stand because of increasing pressure at home.

In June 2015 Prime Minister of India Modi visited Bangladesh with Mamta Banerjee, Chief Minister of West Bengal and expressed confidence of finding a fair solution to the long pending Teesta water issue, crucial for Bangladesh, especially in the leanest period from December to March when the water flow often temporarily comes down to less than 1000 cusecs from 5000 cusecs. He said confidently that a fair solution of Teesta river water would be reached soon. Ms. Mamta Banerjee also reassured Bangladesh that an unfair deal would not be concluded on water sharing.

4. Conclusions

India and Bangladesh, the two sub-continent have always shared strong cultural, linguistic and geographical ties. Now-a-days, there is growing realization of improvements in relations as well as increased cooperation which can bring substantial socio-economic benefits that can no longer be overlooked. It has been argued by many security experts that water shall become a major source of conflict in the 21st century. The scenario in Indo-Bangladesh relations since last few years reflects to some extent this dismal truth. This is witnessed by long term 30 years Ganges water sharing treaty in 1996 and its implementation from Farrakka Barrage. It is now upto both countries to restore confidence and rebuild upon what has already been achieved and advance in bilateral relationship. Much of the positive sentiments generated in Indo-Bangladesh ties during UPA Government in India is undermined by the ability of Indian polity to come through on the proposed Teesta water sharing pact. Both the countries need to act fast in order to conclude this pact. The challenge for India to build on the achievements vis-à-vis neighbouring Bangladesh is to have political will and create consensus to finalise the big deal on Teesta water sharing issue.

There are some factors that make Bangladesh vital for India and necessity for the conclusion of long pending water accord. The first and foremost is that India's Northeast, a strategic corridor makes Bangladesh vital for India. The security of north-eastern Indian states is widely affected by Bangladesh's policies and actions. If any type of hinderance occur in the way of cooperation between the two, economic access will become difficult in terms of integrating the states with the Indian mainland. Secondly, the Joint Rivers Commission in Dhaka exhibited concerns over receiving only 6.5% of water which was the 'lowest ever'. This stark decline in the basin has resulted in large scale protests both in Dhaka and West Bengal with their own arguments. In the absence of official agreement, technical issues regarding the quantity, division and share of the waters are bound to take centre stage. In spite of insubstantial progress, both the Awami league and the UPA Government in Bangladesh and India have maintained peaceful cooperative relations in the past. Presently, with the change the government in New Delhi, Teesta water accord is on the Central priority considering the significant reduction of water levels in the basin and the subsequent exacerbated demand for water in the northern regions of both West Bengal

and Bangladesh. A hegemonic stance by India would have significant impact on the Indo-Bangladesh relations. Therefore, India should rely on an institutional doctrine with greater involvement with smaller and weaker neighbouring states with the aim to develop friendly relations with them. It would be better to adopt a more feasible approach that would be constituted by an integrated, collaborative and sustainable management of all shared rivers including Teesta River.

5. References

1. Bhuyan MP. Bangladesh looks to resolve Teesta dispute with India. 2015. www.livemint.com
2. Dutta, Piyali. Indo-Bangladesh relations: Issues, Problems and Recent Developments IPCS special reports. 2010.
3. Hakil Roomana. India-Bangladesh relations significance of the Teesta Water sharing agreement IPCS, New Delhi.
4. Jayaram, Dhanshree. India Bangladesh River water sharing: Politics over cooperation, International Policy Digest, World News. 2013.
5. Kumars. India and South Asia, Anmol Publications, New Delhi 2006.
6. Mishra PK, Pande KK. New Perspectives in India's Foreign Policy, Sundeep Prakashan, New Delhi.
7. Munshi, Sunil. Rivers in Delhi-Dhacca ties, Patriot, 1982.
8. Nayar Kuldip. How to have peace on waters Indian Nation, 1982.
9. Pattanaik, Smruti ed. - Four Decades of Indo-Bangladesh relations: Historical imperatives and future directions, IDSA New Delhi.
10. Pandey Punam. Water sharing between India and Bangladesh: Old Confusion and new realistic IDSA, New Delhi.
11. Farakka Barrage, Wikipedia, the free encyclopedia.
12. Teesta River - Wikipedia, the free encyclopedia.