

**Amit Ranjan****WATER CONFLICTS IN SOUTH ASIA: INDIA'S TRANSBOUNDARY RIVER WATER CONFLICTS WITH PAKISTAN, BANGLADESH AND NEPAL****Abstract**

Water conflict in South Asia is one of the critical challenges for the region. The unitary irrigation system constructed since Mughal period was divided in 1947, when the sub-continent was partitioned into India and Pakistan. Not enthusiastic to break the then existing hydrological, railway and port systems, Sir Cyril Radcliffe took 'other factors' also into consideration and not only religion as a sole determinant to partition the sub-continent. Despite his efforts, the water bodies were divided between the two arch enemies. Soon after the partition, the conflicts over shared water bodies started and have been graduated over the decades. The political animosities among the South Asian neighbours have inflamed the water conflicts further. As a result, arrangements, agreements and treaties seeking cooperation over shared water resources have failed to address water related grievances of each country. One common allegation the neighbouring countries have is that India exploits their resources for its own use. This allegation helps the radical elements from those countries to espouse the causes and raise the cries of water nationalism. Not only in those countries, the feeling of 'sovereign' rivers is also strong in India. The political tensions over water are duly aided by the growing supply-demand gap, phenomenon of climate change and predominant use of supply-side management system. Though the water conflicts are bilateral, it has regional implications. Realising this fact, in most of the regions, the regional organisations have taken steps to mitigate differences among the riparian states and have helped them to enter into a cooperative arrangement. In South Asia, this is difficult to attain because the South Asia Association for Regional Cooperation (SAARC) is not a very effective body.

**1. Introduction**

Rivers flow freely, but the state-centric theories (realism, neo-realism, liberalism and neo-liberalism) have trapped them within a specific territorial boundary. This trapping of water leads to competition, disputes and conflicts among the co-riparian states. To address any such conflicts and promote cooperation among the riparian states, the first step is to promote 'deterritorialised' view of water resources, which constructivists do support.<sup>1</sup> As the South Asian states, like many others,

---

**Amit Ranjan**, PhD is Research Fellow at Indian Council of World Affairs. His e-mail address is: amitrnanjan.jnu@gmail.com

© Bangladesh Institute of International and Strategic Studies (BIISS), 2015.

<sup>1</sup> Inga M. Jacobs, *The Politics of Water in Africa: Norms, Environmental Regions and Transboundary Cooperation in the Orange-Senqu and Nile Rivers*, London and New York: Continuum, 2012, p. 41.

have conceptually transformed the 'shared' river waters into 'sovereign' river waters, consistent hostility over sharing them is a natural act. Once conflicts generate over the shared water resources, cooperation between sovereign actors is difficult (though not impossible) to attain. The difficulty multiplies in South Asia because of the level of political animosity the riparian states share with their defined others.<sup>2</sup> Usually, countries having cordial bilateral relationship do make calculated adjustments and do not shy away from making compromises to seek cooperation over transboundary rivers water. This does not mean that all cooperative river water arrangements are results of mutual cooperation between or among the riparian states. They are not. Quite often, politically and militarily weaker riparian states are being compelled to enter into a cooperative arrangement by the powerful riparian or the rival co-riparian states because of mediation by powerful international actor(s). This leads to a situation where though treaties are there to cooperate, conflicts remain intact.<sup>3</sup> In this paper, an attempt is being made to address the following research questions. How did the water conflicts in South Asia begin? Why are India's neighbouring countries engaged in water conflicts with it? Why did the South Asia's regional organisation fail to address or even discuss these conflicts?

This paper is divided into five sections including introduction and conclusion. In section 2, the partition of hydrological constructions in 1947 and the political and physical reasons for the conflicts have been discussed. In section 3, India's water conflicts with Pakistan, Bangladesh and Nepal have been explained. The reasons for why the treaties to manage the bilateral conflicts with India have not succeeded and why the conflicts still exist have also been focused upon. The author has discussed interaction among the states so the rivers talked about are 'sovereign' and not free flowing 'deterritorialised' rivers. Lastly, minimal cooperation among the South Asian states have been considered, and linked as a reason for continuation of water conflicts in the region. Section 5 ends with a conclusion.

## 2. Water Conflicts in South Asia

Water conflicts among South Asian states have their genesis in religion based partition<sup>4</sup> of India in 1947. But while demarcating border between India and

<sup>2</sup> In South Asia, the idea of nationalism is based on the imagination of fear and hatred from the 'other'. India and Pakistan constructed and defined their 'other' in 1947, since then as their relationship has not substantially changed, so has their perception about each other. The partition of India was demanded because of differences between two groups of people. But, in 1947 the communal differences turned into communal hatred, due to partition related violence committed by people from both communities on the others. The feeling still exists, and is a reason for intermittent political cum military tensions between the two nuclear rivals. On the basis of this mutual hatred their idea of nationalism is being defined and constructed. In 1971, Bangladesh came into existence and defined its 'other'. Though Nepal is not a part of partition related memories, it has other reasons like size or power asymmetry etc. to remain in fear. In these countries, this fear unites the people sharing different primordial identities and engages in constant violence against each other.

<sup>3</sup> Amit Ranjan, "India-China Water Disputes", *Journal of Asian Politics and History*, No. 5, 2014, pp. 11-26.

<sup>4</sup> One of the major reasons for partition was the perception that Hindus and Muslims belong to two different nations, so they cannot live together. This perception has its beginning in writings and speeches

Pakistan (including present Bangladesh), “other factors” like water canals, railway communication lines etc. too were taken into consideration by the head of Boundary Commission (BC) Sir Cyril Radcliffe. It became an important denominator after Sikh legislators, realising the fact that strictly communal based division would go against their economic interests, urged to consider ‘other factors’ too. They pointed out their economic interests and contribution to the economy of the Lahore and Jullundur divisions, and the Montgomery and Lyallpur districts, where the Sikhs were on unassailable ground.<sup>5</sup> If Radcliffe would have taken their line, Lahore would have been included in India, but it did not happen. The BC took into consideration ‘other factors’ because Radcliffe wanted little disturbance to a well integrated hydrological system, railways and ports. In many cases, the BC discussed canals, canal head work roads, railways and ports before turning to population factors.<sup>6</sup> In some cases explicitly stated in his award, Radcliffe gave these considerations more importance than what he gave to the determinants of contiguous religious minorities.<sup>7</sup> For instance, to preserve the unity of Sutlej Valley Project, Ferozepur district was awarded to India, entirely in consideration of ‘other factors’.<sup>8</sup> Muhammad Munir, one of the judges representing Muslim League, independently recalled that “the preservation of the present (1947) irrigation system was an obsession with Sir Cyril”.<sup>9</sup> He expected India and Pakistan to come to an arrangement over canal waters themselves, after partition. “I think it is only right to express the hope”, he wrote in his final report to the Viceroy on his boundary award, “that where the drawing of a boundary line cannot avoid disrupting such unitary services as canal irrigation, railways and electric power transmission, a solution may be found by agreement between the two states for some joint control of what has hitherto been a valuable common service.”<sup>10</sup> In the final award, rivers were divided and at some places in Bengal, turned into a demarcating line between the two sovereign countries. Though in Punjab, flow of the rivers helped in partition, Radcliffe was careful to specify that the relevant administrative boundaries, not the course of Ujh, Sutlej or the Ravi, constituted the new international boundary.<sup>11</sup> He tried to make the hydrological complexity clear in Bawalpur and Montgomery districts but the

---

of Sir Syed Ahmed Khan in the twentieth century. Hindu Mahasabha leader Veer Savarkar too evoked similar sentiments through his writings. There were many reasons for the emergence of such feeling. See, B. R. Ambedkar, *Pakistan or Partition of India*, Bombay: Thacker and Company Limited Rampart Row, 1945; Mushirul Hasan (ed.), *Gender, Politics and the Partition of India*, New Delhi: Oxford University Press, 2000; Kaushik Roy (ed.), *Partition of India: Why 1947?*, New Delhi: Oxford University Press, 2012; Yasmin Khan, *The Great Partition: The Making of India and Pakistan*, New Delhi: Penguin India, 2013.

<sup>5</sup> Alloys Arthur Michel, *The Indus Rivers: A Study of the Effects of Partition*, New Haven and London: Yale University Press, 1967, p. 173.

<sup>6</sup> Lucy P. Chester, *Borders and Conflicts in South Asia: The Radcliffe Boundary Committee and Partition of Punjab*, Manchester: Manchester University Press, 2009, p. 80.

<sup>7</sup> *Ibid.*

<sup>8</sup> Alloys Arthur Michel, *op. cit.*, p. 178.

<sup>9</sup> Lucy P. Chester, *op. cit.*

<sup>10</sup> Cited in Daniel Haines, “Disputed Rivers: Sovereignty, Territory and State-Making in South Asia, 1948-1951”, *Geopolitics*, Vol. 19, No. 3, 2014, pp. 632-655.

<sup>11</sup> Lucy P. Chester, “The 1947 Partition: Drawing the Indo-Pakistani Boundary”, available at [http://www.unc.edu/depts/diplomat/archives/roll/2002\\_01-03/chester\\_partition/chester\\_partition.html](http://www.unc.edu/depts/diplomat/archives/roll/2002_01-03/chester_partition/chester_partition.html), accessed on 18 December 2014.

actual delimitation at Suleinmanke resulted from armed clashes between India and Pakistani forces, leaving part of the upstream training works on the left bank in Indian hands, rather than from the logic laid down by Radcliffe.<sup>12</sup>

In Bengal, the “other factors” made Radcliffe to recommend the transfer of almost 6000 square miles from East to West Bengal, and the districts of Murshidabad, Nadia, Jessore, Malda and Dinajpur were accordingly demarcated. The loss, thus, made was compensated by assigning the sparsely populated district of Chittagong Hill Tracts (CHT) with a Buddhist majority to East Pakistan.<sup>13</sup> This demonstrates a similar concern with maintaining “railway communications and river systems”, as well as preserving the relationship of the Nadia and Kulti river systems with the port of Calcutta (now Kolkata).<sup>14</sup>

After the two sovereign countries – India and Pakistan - came into existence, their border problems aggravated, instead of settling down, because of irredentist and anti-irredentist factors.<sup>15</sup> To settle down the border disputes in the last sixty eight years, India and Pakistan have fought three total wars, one limited war and engaged in number of political-cum-military tensions. In 1971, East Pakistan was liberated and Bangladesh came into existence. It was then thought that India-Bangladesh disputes would be resolved, but it did not happen. Over the years, many tensions have emerged between India and Bangladesh. These inter-state political animosities have implications on transboundary rivers and influence the respective state’s decisions over water sharing from common rivers. As a result, water conflicts in South Asia brew intermittently. Apart from this, the following can be counted as reasons for water conflicts in South Asia.

## 2.1 Water Stress

‘Water stress’<sup>16</sup> leads to human insecurity and underdevelopment. In South Asia, 1.3 billion people depend on a few river systems for their water needs.<sup>17</sup> Due to

<sup>12</sup> Alloys Arthur Michel, *op. cit.*, p. 177.

<sup>13</sup> Bidyut Chakrabarty, *The Partition of Bengal and Assam, 1932-1947: Contour of Freedom*, London: Routledge Curzon, 2004, p. 168.

<sup>14</sup> Lucy P. Chester, *op. cit.*

<sup>15</sup> India, Pakistan and Bangladesh are engaged in border disputes since 1947. Kashmir issue is mother of all land boundary related disputes between India and Pakistan. Kashmir is not only a territory but also considered to be an ideological symbol which the two countries claim to represent. After 1971, when Bangladesh was liberated, India and Bangladesh tried to settle down their border disputes but have not yet succeeded.

<sup>16</sup> A term used by Malin Falkenmark who developed Water Stress Index (WSI), which is calculated by dividing the volume of available freshwater resources in a country with population. By factoring in water requirements for food self-sufficiency, the index treated the countries with 1,666 cubic metres of water per capita or less were said to be chronically water stressed. Countries with less than 1,000 cubic metres of water per capita were said to be chronically water stressed, or in a state of water scarcity. Mallin Falkenmark, “Global Water Issues Confronting Humanity”, *Journal of Peace Research*, Vol. 27, No. 2, May 1990, pp.177-190.

<sup>17</sup> S. Ayub Qutub and Umesh Parajuli, *Water Conflicts in South Asia: Managing Water Resource Disputes Within and Between Countries of the Region*, Project Implemented by Global Environment and Energy in the 21<sup>st</sup> Century (GEE-21) and the School of Advanced International Studies, Johns Hopkins University (SAIS), Sponsored by the Carnegie Corporation of New York, 2004.

increasing population and phenomenon of climate change, annual water availability in South Asia has plummeted by nearly 70 per cent, since 1950. It has reached from around 21,000 cubic metres in 1960s to approximately 8000 cubic metres in 2005.<sup>18</sup> By 2025, it is being estimated that the combined population of four largest countries - India, Pakistan, China and Bangladesh - depending upon South Asian rivers is going to be about 3.470 billion.<sup>19</sup> If the present water patterns continue, the region could face 'widespread water scarcity' (that is per capita water availability under 1,000 cubic metres) by 2025.<sup>20</sup> At present, per capita water availability in India is 1,631 cubic metre, in Pakistan it is 1000 cubic metre, in Nepal it is 8,500 and Bangladesh it is 7320. By 2030, according to this report it would be 1,240 cubic metre for India, 877 cubic metre for Pakistan (by 2020), 5,500 cubic metre for Nepal and 5,700 for Bangladesh.<sup>21</sup>

## 2.2 *Floods and Droughts*

The phenomenon of climate change is also adding to water woes in South Asia. According to a 2008 International Panel on Climate Change (IPCC) report, "On an average Asian glaciers are melting at a rate that has been constant since the 1960." Retreating glaciers and changing snow-melt patterns related to climate change will impact regional water issue.<sup>22</sup> Due to climate change, floods and droughts are being experienced by the same region, at different period of time. Both create tensions among the riparian states. To secure its own interests the upper riparian state releases the non-wanted non-seasonal rain water to the lower riparian states, and during summer time it stops releasing the required amount of water to them. In South Asia, almost all countries accuse their upper riparian state about practicing such water behaviour.

## 2.3 *Political Construction of Conflicts*

Many times, at many places, for different reasons water stress or water scarcity is being 'constructed' by various stakeholders to stop any form of cooperation among the riparian states. As water issues are related with 'other' differences among the South Asian riparian states, it becomes easy to inflame conflicts over transboundary rivers. This does not mean that conflicts do not exist or the above-mentioned processes are not taking place; rather such things are happening but not as they are being narrated and projected. The rise of 'water nationalism'<sup>23</sup> makes any opportunity of cooperation

<sup>18</sup> Michael Kugelman, "Safeguarding South Asia's Water Security", *Seminar*, Issue 626, October 2011, pp. 15-22.

<sup>19</sup> Robert G. Wirsing, Daniel C. Stoll and Christopher Jasparro, *International Conflict over Water Resources in Himalayan Asia*, New York: Palgrave MacMillan, 2013, p. 16.

<sup>20</sup> As cited in Michael Kugelman, *op. cit.*

<sup>21</sup> "Himalayan Challenge: Water Security in Emerging Asia", available at [www.strategicforesight.com](http://www.strategicforesight.com), accessed on 22 January 2012; "Population Growth will Reduce Water Availability", *Xinhua*, 28 June 2010.

<sup>22</sup> Robert G. Wirsing, Daniel C. Stoll and Christopher Jasparro, *op. cit.*, p. 25.

<sup>23</sup> See Jayanta Bandhopadhyay, "Water System Management in South Asia", *Economic and Political Weekly*, Vol. 42 (10), 10-16 March 2007, pp. 863-873.

between the riparian states difficult. The rise of water nationalism in India calls for cancellation of its treaty with Pakistan, while in Pakistan the ideologically similar group calls for carrying out 'water jihad' against India. This phenomenon is present also in India-Bangladesh and India-Nepal water relations.

#### **2.4 *Predominant Supply-Side Management***

Since the colonial days, South Asian water bureaucracy has relied more on supply-side management of water resources, instead of demand-side. This predominance of technical, supply-side orientation in the centralised institutions entrusted with water management, often with an unabashed urban bias has ruinous social or economic consequences.<sup>24</sup> The structures for supply-side management of river water resources cause conflict between riparian states.

Besides these four, the reasons mentioned by the Human Development Report in its 2006 report titled *Beyond Scarcity* too apply to South Asia.<sup>25</sup>

#### **2.5 *Competing Claims and Perceived National Sovereignty Imperatives***

Many countries remain deeply divided in the way they view shared water. India sees the flow of the Brahmaputra and Ganges rivers as a national resource. Bangladesh sees the same water as a resource that it has claim to on the grounds of prior use patterns and needs. The differences are more than doctrinal. They relate directly to claims that both countries see as legitimate and necessary to their national development strategies.

#### **2.6 *Weak Political Leadership***

Political leaders are accountable to domestic constituencies, not to basin-sharing communities and the governments that represent them. In countries where water features prominently on the political agenda, domestic factors can create disincentives for water sharing and associated benefits; more equitable water sharing might be good for human development in a basin, but it might be a vote loser at home. There are also time-horizon problems. The domestic benefits of sharing are unlikely to come on stream during the term of office of any one government. Incentives for cooperation are strengthened when leaders can see some immediate political gains.

---

<sup>24</sup> Dipak Gyawali, "Water Beyond the State: Resolving Conflicts with Institutional Pluralism", in P. Sahadevan (ed.), *Conflicts and Peacemaking in South Asia*, New Delhi: Lancers Publication, 2002, pp. 396-416.

<sup>25</sup> Human Development Report, *Beyond Scarcity: Power, Poverty and the Global Water Crisis*, New York: UNDP, 2006, p. 223.

## **2.7 Asymmetries of Power**

Rivers flow through countries marked by large disparities in wealth, power and negotiating capacity. It would be unrealistic to assume that these disparities do not shape the willingness to cooperate, negotiate and share benefits. There is also stark asymmetry across many shared water sources, in some cases with one overwhelmingly dominant actor: Egypt in the Nile Basin, India in the Ganges catchment area, Israel on the Jordan River, South Africa in the Incomti Basin and Turkey in the Tigris-Euphrates watershed. Unequal power relationships can have the effect of undermining trust. The weak countries allege their powerful neighbour of bullying them to enter into water cooperation arrangement favouring the latter.

## **2.8 Non-participation in Basin Initiatives**

Perceptions of the benefits of participating in multilateral basin wide initiatives are influenced by membership. That China is not a party to the Mekong River Commission is seen by some parties as a source of potential weakness of the Commission. Downstream countries such as Cambodia and Vietnam see upstream dams constructed by China as a threat to the “flood pulse” of the river and the livelihoods it sustains. The Mekong Commission is not useful forum for negotiating on the problem because of China’s absence. The idea of basin is absent in South Asia. The countries feel that they are the sole owners of the shared rivers.

## **3. Bilateral Water Conflicts**

As India shares its border with all South Asian countries<sup>26</sup>, most of them are engaged in water conflicts with India. India is an upper riparian to Pakistan and Bangladesh while a lower riparian to Nepal. The topographical location does not determine the pitch of conflicts; the allegations remain same because of power asymmetry. Primarily, the South Asian countries are highly dependent on agriculture economy, so, often conflicts on common river waters take centre stage. In the past, treaties have been signed to manage their conflicts, discussions have taken place, yet most of the conflicts erupt or remain unaddressed. As mentioned above, their bilateral relationship may not be the only reason for it, but it acts as a catalyst to the water conflicts.

### **3.1 Water Conflicts between India and Pakistan**

The territorial division of British India lay at the heart of the Indus water dispute. The international border that the British drew down in the middle of Punjab province between India and Pakistan cut the Indus basin into two, leaving much

---

<sup>26</sup> This includes land and maritime boundary.

greater potential to control water flow in the hands of India, the upstream country.<sup>27</sup> It also destroyed the unitary canal system, whose foundation was laid during the Mughal period (1526-1857), and developed by the British since 1880.

Soon after the partition of India in 1947, the water conflicts between Indian Punjab and Pakistan side of Punjab started. Ad hoc arrangement was made to resolve the conflicts but problem of water sharing re-emerged after the end of that period. Availability of water was cited as a reason but also violence witnessed during the partition-related genocide committed by people from both sides of the border had generated hatred towards each other. This mutual hatred failed the arrangements to share river water, and was also a reason for any sort of cooperation over shared rivers.<sup>28</sup> To continue hydrological supply, the representatives of India and Pakistan met in Delhi on 04 May 1948 and signed an agreement to share water. According to it, Pakistan agreed to pay seigniorage charges to India.<sup>29</sup> This agreement came into a trouble because it could not be recognised and registered. As India and Pakistan were members of the Commonwealth, they were not a 'foreign' territory to each other. This problem was solved by the United Nations (UN) which has recognised both of them as separate countries, thus 'foreign' to each other. In May 1950, the UN duly registered not only 04 May agreement on canal water, but also several India-Pakistan agreements dating between 1948 and 1950 on monetary arrangements, banking and foreign exchange transactions.<sup>30</sup>

The arrangements made in 1948 could not resolve their water conflicts, and rift between them began to develop. In 1951, David Lilienthal, former chairman of Tennessee Valley Authority and the United States Atomic Energy Commission, visited the Indus catchment areas and wrote an article in American magazine *Colliers*. In that, one of his suggestions was that the basin be treated, developed and exploited as a single unit.<sup>31</sup> As obvious, this was rejected by both countries. But it made Eugene Black, the then President of the World Bank, to offer help of the World Bank to resolve their water conflict. India, reluctantly, but Pakistan, enthusiastically, accepted the proposal, and the process towards the signing of the Indus Water Treaty began.<sup>32</sup> After eight years of talks, Indus Water Treaty (IWT) was signed between the two countries on 20 September 1960 at Karachi.<sup>33</sup>

---

<sup>27</sup> Daniel Haines, "Disputed Rivers: Sovereignty, Territory and State-Making in South Asia, 1948-1951", *Geopolitics*, Vol. 19, No. 3, 2014, pp. 632-655.

<sup>28</sup> Chaudhary Muhammad Ali, *The Emergence of Pakistan*, New York: Columbia University Press, 1967.

<sup>29</sup> Daniel Haines, *op. cit.*

<sup>30</sup> *Ibid.*

<sup>31</sup> M. A. Salman and Kishor Uprety, *Conflicts and Cooperation on South Asia's International Rivers: A Legal Perspective*, Washington D.C.: The World Bank, 2002.

<sup>32</sup> *Ibid.*

<sup>33</sup> N. D. Gulhati, *Indus Water Treaty*, New Delhi: Allied Publishers, 1973.



The treaty allocates the three western rivers to Pakistan - Indus, Jhelum and Chenab plus Kabul - barring some limited uses for India in Jammu and Kashmir (J&K).<sup>34</sup> India got the entire waters from three rivers (Ravi, Beas and Sutlej), less some minor irrigation uses for Pakistan from four *nullahs* that joins the river Ravi.<sup>35</sup> India was also permitted to develop additional irrigation of 1.34 million acres in J&K against which only 642,477 acres have been achieved so far, leaving a balance of over half a million acres. Further, India is allowed 3.60 million acre feet (MAF) of storage (0.40 MAF on the Indus, 1.50 MAF on the Jhelum and 1.70 MAF on the Chenab). Sector wise allocation was 2.85 MAF for conservation storage (divided into 1.25 MAF for "general storage" and 1.60 for "power storage") and an additional 0.75 MAF for "flood storage".<sup>36</sup> India got 3 MAF water for additional use while Pakistan got altogether 35 MAF.<sup>37</sup>

In the final reckoning, Pakistan got 80 per cent of the Indus, and India 20 per cent. India has limited rights on the western rivers and cannot undertake projects on those rivers without providing all the details to Pakistan and dealing with Pakistan's objections. Why did India put itself in that position?<sup>38</sup> The answer is that if Pakistan got the near exclusive allocation of the three western rivers, India for its part got the eastern rivers. This was important from the point of view of the Indian negotiators, because the water needs of Punjab and Rajasthan weighed heavily with them in seeking an adequate allocation of Indus waters for India.<sup>39</sup>

Despite having such a treaty, the two countries have engaged in a number of water-related conflicts. Pakistan accuses India for diverting the rivers allocated to it by constructing multi-purpose projects in Indian side of J&K. India opposes this and cites the treaty which gives it right to construct run-of-the-river projects over those rivers. The IWT mandates broad Pakistani approval for Indian works on the western rivers in J&K, which has led to considerable delays in progressing Sallal, Uri, Dul Hasti, and Baglihar,<sup>40</sup> all run-of-the-river hydel schemes with diurnal peaking "pondage" to drive the turbines, but no "storage".<sup>41</sup> In 2007, the design objections to Baglihar, finally cleared.<sup>42</sup> Due to improved political relations, in 2010, Pakistan gave green signal to India's project - Uri-II and Chutak (run-of-the-river project on river Suru, tributary of

<sup>34</sup> B. G. Verghese, "From Indus I to Indus-II", *Journal of Peace Studies*, New Delhi, Vol. 13, Issue 1, January-March 2006, pp. 9-20.

<sup>35</sup> Ramaswamy R. Iyer, "Indus Treaty: A Different View" *Economic and Political Weekly*, 15 July, 2005, pp. 3140-3144.

<sup>36</sup> Ministry of Water Resources, Government of India, *Indus Water Treaty 1960*, New Delhi, available at [www.mowr.gov.in](http://www.mowr.gov.in), accessed on 20 July 2011; B. G. Verghese, *op. cit.*

<sup>37</sup> "Conclusion of the Treaty", *The Hindu*, 21 September 1960.

<sup>38</sup> Ramaswamy R. Iyer, *op. cit.*

<sup>39</sup> *Ibid.*

<sup>40</sup> Sallal, Dul Hasti and Baglihar are on river Chenab, Uri on Jhelum, Dul Hasti while Kishan Ganga and Baglihar are on river Jhelum. These projects are run-of-the-river dam multipurpose projects. Technically, according to the treaty India can build dams over them. Pakistan fears that these projects can tap their share of water and help it to regulate Pakistan's agriculture based economy.

<sup>41</sup> B. G. Verghese, "Do Pakistan's Claim over the Indus hold Water?", *Indian Express*, 12 March 2010.

<sup>42</sup> *Ibid.*

river Indus, in Kargil). Both governments also concurred that Baglihar dispute had been definitively resolved.<sup>43</sup> But the impasse over Kishanjanga project is still maintained. In 2010, the legality of project was challenged by Pakistan in the Court of Arbitration.

Pakistan alleges that through these projects India regulates the cross border waters. Writing in *Times of India* dated 17 May 2010, former cabinet minister, Sherry Rehman, blames both India and Pakistan for the IWT crisis. She wrote, "India can technically remain right side of the IWT, if it builds hydropower dams on the rivers Chenab and Jhelum, but it is not allowed to use storage, timing to render downstream farmers destitute, nor to divert tributaries as indicated by the Kishanjanga plan."<sup>44</sup> She even blames Pakistan for wasting 35 per cent of allocated Indus River System (IRS) water due to mismanagement. Professor John Briscoe claims that the dams India is building will give it "the ability to choke off water if it wanted to pressure its neighbour." He has suggested that India should provide water flow data to Pakistan. He has also warned Pakistan against the heated rhetoric on water issue and slipping the issue in the hands of terrorist groups.<sup>45</sup> Briscoe's claim may be correct but it cannot be generalised. In 2010, India allowed Pakistan to inspect several under-construction Indian hydropower projects on the western rivers. The two countries have also agreed to set up a telemetry system to measure river flows.<sup>46</sup>

As India and Pakistan are at constant tensions, since 1947, during times of conflict, water becomes a highly contested arena for negotiation even though it may not be a proximate cause of the conflict.<sup>47</sup> In 2014, there was a heavy flood in both sides of J&K. At the time of deluge, instead of cooperation the two were engaged in cross border firings. Though there is no specific provision in the IWT to manage floods, a few provisions in Article IV and Article VII etc. can be exploited for a common purpose.<sup>48</sup> As a norm developed due to engagements between Indus Water Commissioners from both countries, since 1989 flood related information during the monsoon season has been shared with Pakistan. But this practice too suffers due to their bilateral relationship. Continuation of such practice is possible only when the two countries have at least a working relationship. Few days before that flood, India cancelled the anxiously awaited foreign secretary level talks with Pakistan for not so convincing reasons.

Due to their bilateral relations, once again in 2015 during the annual talks between Indus Water Commissioners, a year-and-half after India started working on an 850 mw hydropower project at Drabshala village on Chenab river, Pakistan

<sup>43</sup> "Differences Resolved over Baglihar, Uri-II, Chutak", *The Daily Excelsior*, 02 June 2010.

<sup>44</sup> Sherry Rehman, "Peace Needs Working On", *The Times of India*, 17 May 2010.

<sup>45</sup> John Briscoe, "Troubled Waters: Can a Bridge be Built over River Indus", *Economic and Political Weekly*, Vol. XIV, No. 50, 11-17 December, 2010, pp. 28-32.

<sup>46</sup> Michael Kugelman, *op. cit.*

<sup>47</sup> Undala Z. Alam, "Questioning the Water War Rationale", *The Geographical Journal*, Vol. 168, No. 6, December 2002, pp. 341-353.

<sup>48</sup> Amit Ranjan, "Flood and Related Politics", *Daily Times*, 11 September 2014.

objected the “design of the dam”, and said it was not in conformity with the Indus Water Treaty of 1960. The Indian side had been asked by their Pakistan counterparts to “address” their concerns or else, they would move for “third-party arbitration”.<sup>49</sup>

### 3.2 **Water Conflicts between India and Bangladesh**

Fifty-four rivers, including the three large ones, the Ganges, Brahmaputra and Meghna (GBM), are shared between India and Bangladesh. The total catchment area of the GBM river system is 1.75 million sq.kms of which Bangladesh accounts for 7 per cent, Bhutan 3 per cent, India 63 per cent, Nepal 9 per cent and Tibet (China) 19 per cent.<sup>50</sup> Of the three large river basins that are shared, the Ganges River has been the most contentious. This is also one of the most densely populated basins in the world, with a total dependent population of about 600 million, almost one-tenth of the world population.<sup>51</sup>

The disputes over the Ganges erupted as a result of India’s decision to construct a barrage in West Bengal, known as the Farakka Barrage, about 11 miles from the borders with Bangladesh which was the then East Pakistan.<sup>52</sup> The decision for it was first mooted by the British engineers in the nineteenth century.<sup>53</sup> Before Farakka, to supply water to Calcutta (Kolkata) port, Sir Arthur Cotton suggested for construction of a barrage on the Ganges at Rajmahal in Bihar.<sup>54</sup> To facilitate the project, after independence in 1947, the Government of India constituted a Committee under the Chairmanship of Shri Man Singh to examine matters relating to the improvement of headwater supply of the river Hooghly. The report was submitted in October 1952. It fixed the discharge of the feeder canal from the Ganges at 20,000 cusecs.<sup>55</sup> In 1960, the sanctioned project was approved by the Ministry of Transport and Shipping. But it created controversy in Bihar and Uttar Pradesh because it was assumed that it would disturb the water flow in these two states.<sup>56</sup> Despite it, in 1971 this project was completed. The barrage is about 2,240 metres long. The feeder canal from the barrage, which is about 25 miles long, was completed in 1975 and the barrage came into operation on 21 April 1975.<sup>57</sup> The purpose of the barrage was to ensure that the port of Calcutta (Kolkata) situated on the lower Hooghly at a distance of 126 miles from

<sup>49</sup> “Pakistan Objects to Design of Power Project on Chenab”, *Indian Express*, 04 February 2015.

<sup>50</sup> Qazi Kholiquzzaman Ahmad, “India-Bangladesh Co-operation on Transboundary Rivers: Revisiting the Unrealized Opportunities and Unmitigated Challenges” in Salman Haider (ed.), *India-Bangladesh: Strengthening the Relationship*, Chandigarh: Centre for Research in Rural and Industrial Development, 2005.

<sup>51</sup> *Ibid.*

<sup>52</sup> Harun Ur Rashid, *Indo-Bangladesh Relations: An Insider View*, New Delhi: Har-Anand Publications, 2002.

<sup>53</sup> Ramaswamy R. Iyer, “Three Waters Treaty”, in P. Sahadevan, (ed.), *Conflicts and Peacemaking in South Asia*, New Delhi: Lancers Publication, 2002, pp. 365-395.

<sup>54</sup> Avtar Singh Bhasin, *India-Bangladesh Relations Documents-1971-2002*, Vol. II, New Delhi: Geetika Publishers, 2003, p. 625.

<sup>55</sup> *Ibid.*

<sup>56</sup> *Ibid.*

<sup>57</sup> M. A. Salman and Kishor Uprety, *op. cit.*, p. 136.

the sea would receive, however low the flow of the Ganges may be, up to 40,000 cubic feet per second (cusecs) of water diverted from the Ganges.<sup>58</sup> That was contested by Bangladesh to secure its own water interests.

This project had been contested by Pakistan in 1950s and 1960s and after 1971 by Bangladesh. Pakistan tried different diplomatic channels to stop its construction. Talks between India and Pakistan over the Farakka Barrage took place, but no serious discussion or negotiations at high level were conducted. India maintained for much of the dispute that the Ganges is not an 'international river'. This claim was based on the fact that 80 per cent of the Ganges Basin area lies in India.<sup>59</sup> After Bangladesh came into existence in 1971, India and Bangladesh took steps to amicably address their bilateral disputes. Indo-Bangladesh Joint Rivers Commission was set up under the agreement arrived at between the Prime Ministers of India and Bangladesh.<sup>60</sup> But the commission failed to manage the water conflicts between the two countries.

Bangladesh used various international platforms to raise India's water hegemony. The seventh Islamic Foreign Ministers' Conference, which was held in Istanbul, Turkey, expressed its deep concern over the problem of sharing equitably the distribution of the waters of the (international) river Ganges. A joint communiqué issued at the end of four day meeting (12 May to 15 May 1976) stated that the problem arising out of India's unilateral withdrawal of Ganges waters only resulted in the aggravation of economic hardship and the retardation of the process of national reconstruction in Bangladesh, a riverine country.<sup>61</sup>

In Bangladesh, anti-Indian sentiment built up over the operation of Farakka Barrage. On 13 May 1976, the then High Commissioner of Bangladesh, Shamsur Rahman was told of the Government of India's regret and concern at the anti-Indian sentiment in Bangladesh over Farakka.<sup>62</sup> The High Commissioner was also told that the Bangladesh government has a responsibility to control such sentiments.<sup>63</sup> The situation became grave after Maulana Mohammad Abdul Hamid Khan Bhashani threatened to lead a march on 16 May to 'demolish' Farakka. The situation was quelled after a letter was sent by Indian Prime Minister Indira Gandhi to Maulana Bhashani.<sup>64</sup>

Bangladesh decided to take up its dispute with India over Farakka Barrage to the United Nations (UN) on 21 August 1976. Both sides prepared their own White Papers to respond each other in the UN.<sup>65</sup> Before it, in his statement, Rear Admiral Mosharraf Hossain Khan, Deputy Chief Martial Law Administrator of Bangladesh said

---

<sup>58</sup> Avtar Singh Bhasin, *India-Bangladesh Relations Documents -1971-2002*, Volume II, *op. cit.*

<sup>59</sup> M. A Salman and Kishor Uprety, *op. cit.*

<sup>60</sup> Avtar Singh Bhasin, *op. cit.*

<sup>61</sup> Z. A. Khan, *Basic Documents on Farakka Conspiracy*, Dacca: Khoshroz Kitab Mahal, 1976, p. 152.

<sup>62</sup> Avtar Singh Bhasin, *op. cit.*, p. 667.

<sup>63</sup> *Ibid.*

<sup>64</sup> *Ibid.*, pp. 668-669.

<sup>65</sup> Harun Ur Rashid, *op. cit.*, p. 58.

that “the withdrawal of water continued even after the expiry of the stipulated time of 41 days” and added that “the observers from the Bangladesh side were not allowed to see what amount of water were being diverted at Farakka”<sup>66</sup> About the Bangladesh decision to raise the issue before the forthcoming session of the United Nations General Assembly Rear Admiral Khan said that the “world opinion would judge it. Bangladesh would get wide support from the fellow members of the United Nations and truth shall prevail”<sup>67</sup> However, Bangladesh was not able to muster enough support in favour of its resolution. Ergo, a Consensus Statement was adopted on 26 November 1976.<sup>68</sup>

The Consensus Statement was a sort of an embarrassment for India, and led to the signing of India-Bangladesh Water Agreement in 1977 for a period of five years. After it expired in 1982, various ad hoc arrangements were made to share the transboundary river water. In 1996, after engagements at various levels, India-Bangladesh Water Sharing Treaty was signed. This treaty was result of the then Minister for External Affairs of India, I. K. Gujral’s policy of extending stretched friendly arm towards the neighbours and the role played by the then Chief Minister of West Bengal Jyoti Basu. This was the first time an agreement on the Ganges between India and Bangladesh was called a treaty; the previous agreements were called “Partial Accord,” “Agreement” and “Memorandum of Understanding (MoU)”. The choice of the term “Treaty” is seen as implying a stronger political commitment on the part of the signatories. Moreover, whereas the 1977 Agreement and the two MoUs of 1982 and 1985 were signed by ministers, either of irrigation or foreign affairs, the treaty was signed by the two Prime Ministers.<sup>69</sup> In addition, the treaty was to remain in force for a period of thirty years, and “.....shall be renewable on the basis of mutual consent”<sup>70</sup> This treaty addressed the two concerns – Farakka and the idea of ‘augmentation’. The Indian proposal was for the augmentation of the water-short Ganges from the water-surplus Brahmaputra through a huge link canal from Jogighopa to Farakka, running right across Bangladesh. The Bangladesh proposal was for the augmentation from within the Ganges system by storing its monsoon flows behind seven high dams in Nepal. Each side had serious reservations on the other’s proposal and endless discussions produced no agreement. This disagreement was addressed by the 1996 water-sharing treaty between the two countries.<sup>71</sup>

On the dark side, though Jyoti Basu has rejected the theory that the Indo-Bangladesh agreement on sharing of the Ganges water would be detrimental to the West Bengal’s interests, he said that the treaty was not absolute. “Let us see for the first

<sup>66</sup> Avtar Singh Bhasin, *op. cit.*, p. 680.

<sup>67</sup> *Ibid.*

<sup>68</sup> *Ibid.*

<sup>69</sup> M. A. Salman and Kishor Uprety, *op. cit.*

<sup>70</sup> Ramaswamy R. Iyer, *op. cit.*; Ministry of Water Resources (1996), Government of India, *Indo-Bangladesh Water Treaty*, New Delhi, available at [www.mowr.gov.in](http://www.mowr.gov.in), accessed on 30 June 2011.

<sup>71</sup> Punam Pandey, “Revisiting the Politics of Ganga Water Dispute between India and Bangladesh”, *India Quarterly*, Vol. 68, No. 3, 2012, pp. 268-281.

two years..... let us see how the problem of Calcutta port is resolved".<sup>72</sup> This statement was taken as a critic and the Bangladesh Nationalist Party (BNP) criticised the water sharing treaty. Allegations were made about "secret clause" and "trade off". This was denied by India. The Indian External Affairs Minister I. K. Gujral, in his interview on 14 December 1996 to *Daily Star* said that there is "no secret clause" in the water accord and there has been "no trade off of any kind" between two countries.<sup>73</sup> Discrepancies occurred in the treaty, soon after. Since then, the Joint River Commission (JRC) has met many times to look into them.

The tensions between India and Bangladesh erupted again over sharing of water from river Teesta. The sharing is according to Article IX of the Ganges Water Sharing Treaty of 1996. In its Thirty-Second Meeting held at Dhaka on 19-20 July, JRC set up a Joint Committee of Experts (JCE) headed by the Secretaries of Water Resources of the Governments of India and Bangladesh to work out arrangements for long term/permanent sharing of the waters of common rivers between the two countries in phases. The Commission accorded priority to the sharing of the Teesta water and directed the JCE to hold its First Meeting within one month. In 2000, Bangladesh presented the draft of agreement.<sup>74</sup> During his visit to Bangladesh in September 2011, the then Indian Prime Minister, Dr. Manmohan Singh was all set to sign a treaty on sharing of water from the river Teesta<sup>75</sup> but could not because West Bengal Chief Minister Mamta Banerjee refused to release that much water to Bangladesh, while Chief Ministers from other riparian areas - Sikkim, Tripura and Meghalaya - had no problem.<sup>76</sup> During her visit to Bangladesh in 2014, the new External Affairs Minister of India, Sushma Swaraj too could not move ahead over the Teesta River issue. Another irritant in India-Bangladesh river dispute is over construction of 163 metres, run-of-the-river, and multi-purpose project - Tipaimukh dam over the river Barak. This project was first discussed in 1972, then in 2005 and since 2011 there is wide opposition to it in Bangladesh where it is felt that with the help of this project, India will divert water flow.<sup>77</sup>

### 3.3 **Water Conflicts between India and Nepal**

Nepal is small, but rich in water-resources, and upper riparian to all Indo-Nepalese transboundary rivers. It is estimated that these Nepalese rivers could generate up to 83,000 MW of hydroelectric power, which is more than the combined total hydroelectric power produced by the USA, Canada and Mexico.<sup>78</sup> To harness the hydro-power, India and Nepal have concluded various water-sharing treaties. The

<sup>72</sup> Avtar Singh Bhasin, *op. cit.*, p. 1108.

<sup>73</sup> *Ibid.*, p. 1109.

<sup>74</sup> *Ibid.*, p. 1222.

<sup>75</sup> This treaty would have raised the share of Teesta River to Bangladesh from 36 to about 50 per cent.

<sup>76</sup> S. Chandershekhra, "Bangladesh-India: The Teesta Mess: Way Forward", *South Asia Analysis Group*, Paper No. 4846, 08 January 2012, available at [www.saag.org](http://www.saag.org), accessed on 11 January 2014.

<sup>77</sup> *The Hindu*, 21 November 2011.

<sup>78</sup> Surya P. Subedi, *Dynamics of Foreign Policy and Law: A Study of Indo-Nepal Relations*, New Delhi: Oxford University Press, 2005.

public opinion in Nepal has always been very critical of Kosi (1954) and Gandak (1966) agreements. It is being maintained that as the barrages were constructed quite close to the Indian border, Nepal was unable to benefit from them. Had the projects been located further up in Nepal, it could have received a fair share of waters for irrigation from them.<sup>79</sup>

The most controversial treaty between India and Nepal is Mahakali River treaty, which was signed in February 1996. The Mahakali River begins where two rivers, the Kali originating in the Taklakot area in the east and the Kuthi-Yanki originating in the Zanskar range of the Himalayas meet at Kawa Malla in the Darchula District in Nepal. Both merge to form Mahakali River and flow southwest, where it makes numerous oxbow lakes and is joined by many tributaries, the largest of which are the Chamlia River and the Chavandigad River.<sup>80</sup> The efforts towards exploitation of the Mahakali River waters began before India's independence from Britain. The colonial government formalised with its Nepalese counterpart in 1920, the negotiations of the Sarda Treaty in the form of an Exchange of Letters. The treaty provided for the construction of a barrage on the Mahakali River (which is known as the Sarda River in India) at Banbassa bordering the present Mahendra Nagar in Nepal.<sup>81</sup> Nepal had objections with this treaty and it constantly tried to renew this treaty but it could not and the treaty continued for 76 years, from 1920 to 1996, when it was replaced by the Mahakali Treaty.<sup>82</sup>

Before the treaty was signed, Tankapur Agreement was reached on 6 December 1991. The Agreement provided for the construction of the left afflux bund (the retaining wall) on Nepalese territory for which the Nepalese provided 2.9 hectares of land (MoU on Tanakpur Barrage Project, 1991). This MoU is being considered as a hasty decision and lopsided one in favour of India, so it is highly criticised. It is considered that the then Nepalese Government, led by Girija Prasad Koirala did not appreciate the legal, socio-economic and political ramifications involved in the issue, or decided to overlook them to appease India. The deal, which relinquished 2.9 hectares of land to India to build a dam and a 120 megawatt power station in return for a share of the water and power, was criticised by most of the political parties of Nepal.<sup>83</sup> The issue raised in the objections dealt primarily with a concern for the Nepalese territorial sovereignty and a belief that Nepal had not benefited from the project as much as India had. Those opposing the agreement argued that because the agreement dealt with natural resources it fell under the articles of the constitution and required ratification by a two-third majority of Parliament. A writ petition was filed in the Supreme Court, with the Prime Minister as one of the respondents, challenging the

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

<sup>80</sup> *Ibid.*

<sup>81</sup> Ministry of Water Resources (1997), Government of India, *Mahakali Treaty and Pancheshwar Multipurpose Project*, New Delhi, available at [www.mowr.gov.in](http://www.mowr.gov.in), accessed on 23 December 2009.

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

<sup>83</sup> Ramaswamy R. Iyer, *op. cit.*

validity of the Tanakpur Agreement. The Supreme Court issued its verdict in December 1992 and concluded that the Tanakpur Agreement was indeed a treaty that required ratification by the Parliament and was not a mere MoU.<sup>84</sup> Under the treaty, Nepal's rights over Mahakali have been limited to as low as four per cent, it is quite clear that much has been lost in this agreement. To hide their failure, the political parties passed a stricture on the treaty through *sankalpa prastav* in Parliament.<sup>85</sup>

Post-Mahakali treaty, Nepal has raised various objections over it, due to which the project is yet to start. The Maoists even demand for re-visiting the treaty. After this Nepal always shies away from entering any new arrangements over transboundary river water, though it has not raised serious qualms over continuation of old agreements and projects. In February 2012, in the first meeting of Joint Ministerial Commission on Water Resources in New Delhi, the move was made to set up Pancheshwar Development Authority to break the deadlock over construction of the multipurpose 6000 MW Pancheshwar dam. The two sides agreed to fast track completion of the Detailed Project Report of Sapta Kosi High dam and the Sun Kosi Storage-cum-Diversion scheme by February 2013. India would also "study" the demand for compensation sought of crops and damage to land for water resources projects. India also responded positively to Nepal's request for power from India. It was agreed to expedite the process for implementation of medium-term strengthening works for additional power supply to Nepal.<sup>86</sup>

India's Nepal policy is also keeping China into consideration. As a sovereign country, Nepal has maintained relationship with both countries and never hesitates to welcome any proposal from China which is beneficial to it. This is not a new development rather is in practice since late 1960s. Over water issue as early as in 1978, Nepalese Prime Minister Kirtnidhi Bista in New Delhi in a Joint Communiqué on 17 April 1978 said that Nepal would be happy if China could participate in the regional development of water resources and could spare some finances for such development.<sup>87</sup> But to keep India in line regarding the Bangladesh proposal to augment the Ganges flows, he said, "we will consider any proposal only when jointly approached by India and Bangladesh and the advantage that Nepal will get out of it".<sup>88</sup> This stance is still maintained by Nepal.

In 2014, during the Indian Prime Minister Narendra Modi's visit to Nepal, the two countries signed hydropower treaties. On Arun-III, the two countries signed Project Development Agreement. Pancheshwar and Upper Karnali projects too were pushed up.<sup>89</sup> There were minor dissensions against the deal from Communist Party

---

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

<sup>85</sup> Dipak Gyawali, *Water in Nepal*, Kathmandu: Himal Books, 2007, p. 54.

<sup>86</sup> *The Hindu*, 17 February, 2012.

<sup>87</sup> Avtar Singh Bhasin, *Nepal-India, Nepal-China Relations*, Vol. 1, New Delhi: Geetika Press, 2005, p. 696.

<sup>88</sup> *Ibid.*

<sup>89</sup> India-Nepal Inks Nine Deals: Modi Inaugurates Bus Service, Gifts Helicopter, available at <http://timesofindia.indiatimes.com/india/India-Nepal-ink-9-deals-Modi-inaugurates-bus-service-gifts->



of Nepal-Maoist and Communist Party of Nepal-United Marxist Leninist.<sup>90</sup> Not only the two parties but many political groups and people too, after 1996, have expressed reservations against the signing of any water treaty with India.

#### 4. Minimal Regional Cooperation

Water conflicts intertwined with other existing reasons for disputes have given rise to water nationalism among the South Asian riparian states.<sup>91</sup> This is on the rise in both upper and lower riparian states. Situations may aggravate after the River Linking Project (RLP) would come into operation because many rivers, which are part of the project, cross the border of India.<sup>92</sup>

An inference can be drawn, from above discussion, that the South Asian riparian states due to their political relationship cannot manage water-related bilateral disputes. In such situation, the regional organisations can mediate. A strong tendency for cooperation among the riparian states on international river basins is found where a prior history of cooperation exists.<sup>93</sup> But it is not the case always, as picnic table talk between Jordan and Israel to manage Jordan River took place in 1960s.<sup>94</sup> Unfortunately, post-1947 South Asian states do not have such history. Due to this, South Asian Association for Regional Cooperation (SAARC) since its formation in 1985 has not been a very effective organisation. In 2008, in its fifteenth summit held at Dhaka, provision on basin management was adopted by the SAARC leaders but has not been effectively operationalised.<sup>95</sup> Unlike SAARC, in many other regions where successful basin management system is active, regional organisations like European Union (EU) have played a key role. In cases where regional organisations have not shown any interests, the riparian states have taken initiatives. Nile River Basin Initiative (NBI) in North Africa and Mekong River Commission (MRC) in Southeast Asia are two examples.

Any such cooperation in South Asia is possible when there is a peace, which can be attained only if the intrusion of power politics is checked, national sovereignty adjusted, and efforts made toward material unity in an increasingly interdependent world.<sup>96</sup> As political situation is just opposite, where the South Asian states are marred

---

helicopter/articleshow/45274649.cms, accessed on 09 February 2014.

<sup>90</sup> Pramod Jaiswal, "India-Nepal Hydroelectricity Deal: Making it Count", available at <http://www.ipcs.org/article/south-asia/india-nepal-hydroelectricity-deal-making-it-count-4652.html>, accessed on 20 December 2014.

<sup>91</sup> Jayanta Bandhopadhyay, "Water System Management in South Asia", *Economic and Political Weekly*, *op. cit.*

<sup>92</sup> To know about the RLP, see Jayanta Bandhopadhyay and Shama Parveen, in Yoginder K. Alagh, Ganesh Pangare and Biksham Gujja (eds.), *Interlinking of Rivers in India: Overview and Ken-Betwa Link*, New Delhi: Academic Foundation, 2006, pp. 23-52.

<sup>93</sup> K. Conca, Wu F and Mei C, "Is there a Global Rivers Regime? Trends in the Principled Content of International River Agreements", *International Studies Quarterly*, Vol. 50, 2006, pp. 263-285.

<sup>94</sup> Aron T. Wolf, "Healing the Enlightenment Rift: Rationality, Spirituality and Shared Waters", *Journal of International Affairs*, Vol. 61, No. 2, 2008, pp. 51-73.

<sup>95</sup> Available at [www.saarc-sec.org](http://www.saarc-sec.org), accessed on 20 December 2014.

<sup>96</sup> David Mitran, *A Working Peace System*, Chicago: Quadrangle Books, 1966, pp. 26-27.

into various conflicts, it is not appropriate to think about treating the river as a single unit and not a sovereign property of a particular state. Due to existing political tensions, water sharing related norms have not been developed in South Asia. There is a lack of imagination over benefits sharing paradigm<sup>97</sup> due to cooperation over transboundary river water. One of the major benefits can be de-escalation of political tensions by reaping economic benefits. Another one is as most of the major South Asian rivers originate in Tibet in China which in future may be diverted or used to satisfy water demands of the Chinese people.<sup>98</sup> In such situation, if the South Asian states cooperate, they can present their grievances as a united force, and not as an individual country. The former would be an easier way to bargain with China.

Despite all, the South Asian countries are little expected to cooperate over water issue. Technically, Ramaswamy R. Iyer finds following problems on the application of regionalism instead bilateralism over South Asia's water issue:<sup>99</sup> *First*, in South Asia there is no agreement on what constitutes a basin. *Secondly*, the idea of planning for a basin or sub-basin as a whole has not made much headway even within India, so how come it participates in similar formulation with other country(ies). *Thirdly*, the commitment of Nepal and Bangladesh to the idea of basin-wide planning is imperfect. *Fourthly*, the language of 'integrated, basin wide planning' seems to carry implications of centralised technology driven planning, and 'regional co-operation' usually implies at the governmental or technocratic levels. Both these terms are needed to interpret in a wider sense so as to cover co-operation at the level of peoples, and for purpose beyond engineering and technological reasons.

In many cases, the bilateral solutions to water disputes have been easier to reach at, but not always. Some rivers have their presence in third country also. For example, Brahmaputra which starts from Tibet in China, flows in India before going to Bangladesh, similarly river Karnali, Sutlej etc. too start from Tibet. In such situations, any sort of water security in future cannot be conceptualised without taking into consideration the water interests of the country of its origin, despite having many international norms supporting the water rights of the other riparian states and of historical users.

---

<sup>97</sup> In the transboundary water resources sense, benefit-sharing refers to a paradigm or policy tool that identifies the gains of interstate cooperation beyond merely the sharing of water, but incorporates the sharing of opportunities that water brings to a country, a basin and a region. See, Inga M Jacobs, *op. cit.*, p. 207.

<sup>98</sup> The signs are visible. China is in the process of constructing big multi-purpose projects to divert water from Tibet to Chinese mainland. This affects the flow of not only Brahmaputra, shared between India and Bangladesh, but also IRS.

<sup>99</sup> Ramaswamy R. Iyer, *op. cit.*

## 5. Conclusion

In this paper it has been discussed that the historical memories related to partition, communal divide and intermittent wars have bittered the political relationship between India-Pakistan and India-Bangladesh.<sup>100</sup> This sort of relationship influences decisions related to water. Though the people to people contacts are being encouraged to promote cooperation between the states, the practice has little impact on their bilateral relationship. There is absence of epistemetic community which can influence water-related decisions, at present, though it played a significant role in signing of the 1996 India-Bangladesh Ganges River Water Sharing Treaty.

As mentioned in this paper, SAARC is not a very effective organisation. According to its Charter, the member states are prohibited from raising bilateral disputes on its platform. This makes the SAARC to play no role in addressing any sort of bilateral conflicts, despite having regional implications and repercussions. On the contrary, almost all regional organisations have played important role in diluting and resolving bilateral disputes among the member states. Any move to make SAARC to do so requires an amendment in its constitution, which leading member states do not want because present arrangement serves their interests better. Hence, in the given situation, one cannot expect a lot from SAARC.

Finally, since multi-purpose water projects are reasons for most of the water-related conflicts between India and its neighbours, there is a need to establish cooperation over such projects or to promote demand-side management of water to manage the bilateral water conflicts. Allegations against the upper riparian for 'water theft', causing floods or droughts in lower riparian etc. are quite usual. Though the upper riparian state may not have an intention to regulate water of lower riparian states, the state-centric theories guide the former to do so in its 'interest' for 'security' or due to 'being a rational actor'.

---

<sup>100</sup> On India-Bangladesh post-1971 developments like 'illegal' migration, which creates tensions in bordering states play a role in India's relationship with Bangladesh. See, Antara Datta, *Refugees and Borders in South Asia: The Great Exodus of 1971*, New Delhi: Routledge, 2013.