



Indus Water Treaty: Options for India

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No Armies with bombs and shellfire could devastate a land so thoroughly as Pakistan could be devastated by simple expedient of India's permanently shutting off the source of water that keeps the fields and people of Pakistan green.

—David Lilienthal

Introduction

The historic Indus Water Treaty (IWT) was signed on 19 September 1960 at Karachi. The relevance and importance both the countries attached to the Treaty was evident from the fact that the then Indian Prime Minister Late Pandit Jawaharlal Nehru and the then President of Pakistan Late Field Marshal Mohammed Ayub Khan signed the Treaty personally, which had been brokered by the World Bank. The aim of the Treaty was to create a framework for sharing the control of the waters of River Indus and its eastern tributaries, namely, Jhelum, Chenab, Ravi, Sutlej, and Beas between India and Pakistan.

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Genesis of Problem

The Indus River Basin (IRB) is formed by River Indus and a network of its tributaries with River Kabul joining it at Attock and Panchnad (formed after the mergere of five rivers, namely, Jhelum, Chenab, Ravi, Sutlej, and Beas) joining at Mithankot. Total area of IRB is 11,65,000 km² and of this area, 47 per cent lies in Pakistan and 39 per cent in India, eight per cent in China, and six per cent lies in Afghanistan.¹ Towards the last quarter of the nineteenth century, it became apparent that the water resources of the individual rivers were not in proportion to the potential irrigable land. The supply from the Ravi River, serving a large area of Bari Doab, was insufficient while Jhelum and Chenab had a surplus. Thus, first major canal, the Upper Bari Doab Canal (UBDC) was constructed in 1859.² An innovative solution, the Triple Canal Project, was constructed during 1907-15. The project linked the Jhelum, Chenab and Ravi rivers, allowing a transfer of surplus Jhelum and Chenab water to the Ravi river. All these efforts of the developments over the last century have created a large network of canals and storage facilities that provide water for more than 26 million acres (1,10,000 km²), the largest irrigated area of any one river system in the world.³ More than 50 million people are dependent on these waters.

It is worth appreciating that the partition of India had internationalised the dispute. Pakistan felt its livelihood was threatened by the prospect of Indian control over the eastern tributaries of the River Indus (Ravi, Sutlej, and Beas), that fed water into the Canal system, in the Pakistani portion of the basin. India felt that it was her right to exploit the water resources available which she had inherited, consequent to the partition and Pakistan's insistence on her historical rights in view of the new ground realities was not justified. India, using the 1941 census, claimed that there were 21 million people in the Indian Punjab and 25 million in Pakistani Punjab, yet out of 1,05,000 km² irrigated annually in the IRB less than 20 per cent or 21,000 km² was in East Punjab territory. Therefore, India now wanted to correct the situation by establishing its own claim to the water of eastern rivers.⁴ Another relevant aspect was that Pakistan's perception on sources of rivers of the IRB being in India was

flawed. Rivers Indus and Sutlej had their sources in China, Kabul had its origin Afghanistan and only Jhelum, Chenab, Ravi, and Beas originated in India. This made China and Afghanistan becoming Upper Riparian States in cases of Indus, Sutlej and Kabul respectively, with attended implication for the availability/control of water for the lower riparian states. Thus, insistence on the dispute being bilateral was flawed from very inception.

In 1948, David Lilienthal, formerly the chairman of the Tennessee Valley Authority and of the US Atomic Energy Commission, visited the region. Like Radcliffe earlier, Lilienthal also recommended that India and Pakistan should work out a plan to develop and operate all the water resources available within the IRB system jointly, build new dams and irrigation canals with a view to get additional yield from the Indus and its tributaries, and the financial support to this plan could be provided by the World Bank.⁵ Lilienthal's idea was well-received by officials at the World Bank, and, subsequently, by the Indian and Pakistani governments. India's previous objections to third party arbitration were remedied by the Bank's insistence that it would not adjudicate the conflict, but would rather work as a conduit for the agreement.⁶ However, hopes for a quick resolution to the Indus dispute were premature. Neither India nor Pakistan seemed to compromise their stated positions (Pakistan's Historical 'Rights' argument versus India's argument based on 'Needs').

After nearly two years of negotiations in 1954, the World Bank offered its own proposal. The proposal offered India, the three eastern tributaries of the basin and Pakistan; the three western tributaries. Canals and storage dams were to be constructed to divert waters from the western rivers and replace the eastern river supply lost by Pakistan. While the Indian side was amenable to the World Bank proposal, Pakistan found it unacceptable. The negotiations continued based on the World Bank proposals for the next six years⁷ and finally the Treaty was signed by the leaders of both countries.

Provisions of the Treaty

The Indus system of rivers comprises three western rivers, namely, Indus, Jhelum and Chenab and three eastern rivers, namely, Ravi, Sutlej, and Beas. The Treaty, under Article 5.1, envisages the sharing of waters of the rivers Ravi, Beas, Sutlej, Jhelum, and Chenab which join the Indus river on its left bank (eastern side) in Pakistan. According to this Treaty, Ravi, Beas and Sutlej, which constitute the eastern rivers, are allocated for exclusive use by India before they enter Pakistan. Some of the important provisions of the Treaty are as follows:⁸

Under the Treaty, the waters of eastern rivers are allocated to India. Pakistan for agricultural purposes may withdraw from certain tributaries of Ravi, namely, Chenab, Bein, Tarnah and Ujh, a total of 45,400 acres of water.

India is under obligation to let flow the waters of the western rivers except for the following uses:

- Domestic use;
- Non-consumptive use;
- Agricultural use as specified; and
- Generation of hydro-electric power, as specified.

India has been permitted to construct storage of water on western rivers up to 3.6 Million Acre Feet (MAF) for various purposes. No storage has been developed so far. (This was the state at the time of signing the Treaty.)

India has been permitted agricultural use of 7,01,000 acres over and above the Irrigated Cropped Area (ICA) as on 01 April 1960. Out of this additional ICA of 7,01,000 acres, only 2,70,000 can be developed till storages are constructed and 0.5 MAF of water is released there from every year.

India is under obligation to supply information of its storage and hydroelectric projects as specified.

Infirmities in the Treaty

Treaty does not cater for the changing social, economic, and environmental issues. Increased urbanisation from 485 million in 1961 to 1.39 billion

in 2011 has affected the water demand. This has also led to massive deforestation, increased pollution and the drainage system getting blocked, thus adversely affecting the water availability and consequent demand supply gap on either side of the border.⁹ Regional climate change is reducing the flow in the rivers in IRB.¹⁰ It is anticipated that by 2040, River Indus is likely to become a seasonal river.¹¹ Because of global warming and consequently melting glaciers bring tremendous amount of silt with them, the reservoirs at Tarbela, Trimmu, and Mangla on Pakistan's side and Salal on Indian side have substantially silted and almost 25 per cent of their holding capacity is wasted.

Allocation of Water Interpreted Differently

Both countries consider it unfair because Pakistan considers her demand should have been considered based on rights (Existing canal network prior to independence) but India wants it to be interpreted on the basis of needs. Pakistan accepted the distribution, and the same is quite evident from the statement of Field Marshal Ayub Khan post signing of treaty. He said as follows:

Every factor was against us. The only sensible thing to do was to try and get a settlement, even though it might be second best, because if we did not, we stood to lose everything.¹²

The Treaty has too many engineering provisions and gives Pakistan undue right to vet the designs of the Indian projects. No wonder none of the proposed Indian projects are getting cleared easily. Be it Salal, Bagliar earlier and now Kishenganga, Ratle and Tulbul Navigation Project have all been facing problems for clearance. It is worth noting that as against 3.6 MAF which India can store till date, the total storage capacity that has been created is mere 0.5 MAF¹³

The IWT can be modified if both the parties agree according to Article XII.¹⁴

Uri Incident and Subsequent Developments

On 18 September 2016 Pakistani terrorists attacked an Army Administration Base near the town of Uri in North Kashmir. The nation

was enraged with Pakistan's continued support to terrorists moving to mount pressure on Pakistan the government decided that the meeting of the Indus water commissioners of the two countries can 'only take place in an atmosphere free from terror'. This means that the meetings of the commissioners, held twice a year, stands suspended with immediate effect. New Delhi has also decided to maximize the potential of India's use of water on the three western rivers in the areas of hydro-power, irrigation, and storage. The government has also decided to 'move expeditiously' on the three power projects on the Chenab river, namely, Pakaldul (1,000 MW) which are under construction, along-with Sawalkot (1,856 MW) and Bursar (800 MW) which are in advanced stages of planning.¹⁵ The Indian government has formed an inter-ministerial task force to look into all the strategic aspects of IWT with Pakistan. First meeting of the Task Force was held on 23 December 2016 and it was decided to speed up Sawalkot, Pakaldul, and Bursar for execution in a time bound manner.¹⁶

Way Forward

Abrogation of Treaty

All treaties and agreements, bilateral or multilateral, are signed on the basis of the *Pacta Sunt Servanda* principle,¹⁷ i.e. 'agreements must be kept'.¹⁷ Although Pakistan's own record on this account is not very good, Pakistan, despite its protestations, is unlikely to ever abrogate this Treaty because of its own vulnerabilities on account of increasing shortage of water. India due the geography of the IRB is indeed in a position to do that but India prides itself in being a responsible country and should not do it lest it loses its credibility and moral high ground.

Early Completion of Water Retaining Structures and Power Projects

It would be essential to ensure that the infrastructure which needs to be developed to fully exploit the capacity as provisioned as part of the IWT with respect to both western and eastern rivers should be completed expeditiously in a time bound manner. Although never used as a weapon, but completion of all the proposed structures will definitely provide

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an option to India to control water supply in western rivers. It is worth noting that Pakistan has certain sane voices who admit that India has not violated the provisions of the IWT as far as western rivers are concerned. In April 2008, Pakistan's Indus Water Commissioner, Jamaat Ali Shah in a frank interview conceded that the water projects undertaken by India do not contravene the provisions of IWT of 1960. He said that:

In compliance with IWT, India has not so far constructed any storage dam on the Indus, the Chenab and the Jhelum rivers (rivers allotted to Pakistan for full use). The Hydro electric projects India is developing are the run of the river waters, projects which India is permitted to pursue according to the treaty.¹⁸

Such sane voices in Pakistan need to be supported to counter the misinformation campaign by Pakistani authorities.

Pakistan is almost a water scarce country whose problems on account of water are extremely daunting. Lack of water in lower reaches in the Indus has resulted into flow speed reducing to the extent that sea ingress in Sukkur bowl (main rice production bowl) and it is likely to affect the food security of Pakistan. Lack of water is affecting the power generation capacity and above all dissention among various provinces. In such a situation, threat of closing the tap on Pakistan may yield desired results in fight against terrorism and proxy war.

There is a need to complete Shahpur Kandi dam at the earliest so that Ravi Waters which are so desperately needed in Kathua district of Jammu and Kashmir reach their destination and the desired benefit to the locals start accruing. In this connection it is relevant to mention that recently Jammu and Kashmir and Punjab have agreed to fast track the completion. Besides augmenting supply in Ravi Tavi Irrigation Complex it will also provide much needed 206 MW of power.¹⁹ This arrangement will definitely reduce the leakage from Madhopur substantially. There is also a need to harness the water of Ujh, Basantar, Bein, and Tarnah on which Pakistan has only limited

rights. From eastern rivers presently, almost 3 MAF water is unutilised. If harnessed besides providing better irrigation facilities in Kathua Sambha area, it will also help in restricting water going across the border, where one of the major uses of this water is filling the ditches in the DCB defences of Pakistan. There is a definite need to save this water.

India must construct adequate storage facilities to fully utilise the water according to the Treaty provisions.

Afghanistan's authorities with the help of Indian experts have completed the feasibilities and detailed engineering of 12 hydro-power projects with capacity to generate 1,177 MW electricity to be built on the River Kabul. If the 12 projects get completed, they will store 4.7 million acre feet of water squeezing the flow in the river reaching Pakistan.²⁰ India needs to continue its engagement with Afghanistan and assist in dam construction, not withstanding protestations by Pakistan.

Conclusion

India must harness the water sources and construct adequate storage facilities to fully utilise the water according to the Treaty provisions. Given the support to terrorists by Pakistan to create an uncertain security situation in India, the formation of the Task Force to review the IWT is a correct step at this stage. It is time that India uses the water leverage to force Pakistan to review its security compulsions and gain a favourable and long-lasting desired peace in the region.

Notes

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