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THE INDUS PAPERS

INDUS WATERS TREATY-II: OPTIMIZING THE POTENTIAL

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IPCS Discussion Paper



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Indus Waters Treaty-II Optimizing the Potential

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“How far that little candle throws his beams!

So shines a good deed in a naughty world.”

William Shakespeare, “The Merchant of Venice”.

The Past as Prologue

The general proposition is possible that water can become the reason underlying inter-State conflict; but it can also inspire a peace process between nations. On an optimistic note it has been urged that: “Water challenges have often brought divergent actors together to resolve a common problem. Once cooperative water agreements are established through treaties, they are often resilient over time and produce peaceful cooperation, even among other existing hostilities and contentious issues...In some cases, joint water governance has created cooperation on broader issues. Water can serve as a potential entry point for peace and support sustainable cooperation among nations. “ These general precepts can be extended to the Indus Waters Treaty (IWT), and make the case for proceeding further to enlarge its ambit by establishing a more ambitious IWT II, which is being argued in this paper.

There is no end to the accolades praising the Indus Waters Treaty. No doubt, the Treaty maintains a low profile, but it has remained functional since its negotiation in 1960, despite the adversarial state of India-Pakistan relations over the intervening decades. In fact, the Treaty has weathered the Indo-Pak wars of 1965 and 1971, the Kargil conflict in 1999, and the major bilateral crises that erupted over the Brasstacks Exercise (1986-87), Kashmir (1990), Border Confrontation (2001-02), and Mumbai attacks (2008). In this milieu the Indus Waters Treaty stands out as a shining “good deed in a naughty world.” It was signed in Karachi on 19 September 1960 by President Ayub Khan and Jawaharlal Nehru after being negotiated over some eight years.

It is common ground that the physical partition of British India achieved by the Radcliffe Award in August 1947 was undertaken in the most arbitrary fashion. It ignored the geographical features that could have served as natural boundaries between India and Pakistan, but also the unity of agrarian and irrigation systems that could have permitted their further development in a composite manner. For instance, many dams and headworks on the Indus rivers remained in India, whereas their waters irrigated vast territories in Pakistan. Perhaps, this was inevitable with India and Pakistan being the upper and lower riparian states in the Indus basin. In the event, a major crisis in bilateral relations occurred soon after Partition on 1 April 1948 when the (East) Punjab government closed the Ferozpur headworks on the Sutlej to establish ownership rights over its canal systems. On the intercession of Jawaharlal Nehru these supplies were restored after a month, but this traumatic event—largely an over-reaction by the (East) Punjab government—has entered the collective memory in Pakistan, inducing a primordial angst that India could prevent the waters in the Indus rivers from reaching Pakistan.

Proceeding further, the conception of the Indus Waters Treaty owes to David Lilienthal, former Chairman of the Tennessee Valley Authority, who suggested in August 1951 “that India and Pakistan jointly manage the [Indus] water system, and that this be substantially expanded with new dam and

canal construction to increase the mutual benefits. The World Bank took up Lilienthal's idea, and India and Pakistan agreed to participate in technical discussions." It is of great significance that Lilienthal wished that the waters of the Indus basin should be cooperatively exploited, treating it as a single unit, and dealing with this question as a technical, rather than a political, issue.

Negotiations between officials from India and Pakistan began in 1952, but quickly ran into difficulties. India wished to establish a new arrangement for distributing the Indus waters by identifying storage and power generation sites on the Indian side with Pakistan sharing in their costs in proportion to the benefits it would receive. Pakistan, however, adopted the extreme position that its pre-Partition share in these waters should not be reduced, which required denying India any share in the western rivers, and allowing limited rights (30 %) in the eastern rivers.

The World Bank joined these negotiations in 1954 and evolved the formula that ultimately resolved this impasse. In essence, the World Bank solution envisaged a separation of the rivers comprising the Indus basin. India was granted exclusive rights to the three eastern rivers (Beas, Sutlej, Chenab), and Pakistan gained exclusive use of the three western rivers (Indus, Ravi, Jhelum). Pakistan was permitted to utilize the waters of the three eastern rivers for domestic and non-consumptive use ; it was not allowed however, to interrupt the flow in these rivers during their passage through Pakistan. Similarly, India was allowed the use of the western rivers for domestic and non-consumptive purposes. Further, India was also allowed the use of the western rivers for agriculture and generating hydro-electricity, subject to some restrictions. This arrangement provides the bedrock of the Indus Waters Treaty.

The World Bank, along with some international donors, notably the United States, agreed to finance the construction of dams and canals in Pakistan and make up for the loss of the Eastern rivers by offering Pakistan a solatium of over \$ 1 billion. In addition, India also agreed to make payment of \$ 62 million to Pakistan to enable the construction of the replacement works on the western rivers to make up for its loss of waters from the eastern rivers. The Indus Waters Treaty visualized the creation of a Permanent Indus Commission, consisting of a Commissioner each from India and Pakistan to resolve any problems that came to their notice or were referred by their Governments relating to the working of the Treaty. Should no agreement be possible by the Commission the Treaty envisages the settlement of differences and dispute by referring the matter in contention to a Neutral Expert; it also provides for mediation and arbitration modalities.

Parsing the Indus Waters Treaty

In retrospect, the Indus Waters Treaty only became possible after an encompassing principle was discovered agreeable to India and Pakistan. Indeed, it was soon apparent that the bureaucrats and technical experts negotiating the Treaty were not capable of resolving the political differences underlying the dispute. In essence, the World Bank scheme only carried forward the logic of Partition by extending the logic of Partition, and sequestering the physical and natural assets of the two countries. It is a matter of great significance that the IWT was reached between a civilian and a military leader. General Ayub Khan, it would be recollected, had seized power in 1958 from the weak and squabbling civilian governments in Karachi. The pivotal role of the military thereafter in Pakistan's decision-making apparatus is well-documented while, in India, civilian control over the decision-making is an equally well-established principle. In this milieu, the continuance of the Indus Waters Treaty over the last six decades indicates that the Pakistan military believes that its advantages outweigh its disadvantages.

Viewed from the Indian perspective, gaining access to the three Eastern rivers permitted the construction of the Bhakra dam and the Rajasthan Canal, crucial for developing (East) Punjab and Rajasthan. However, the IWT has its critics in India who argue that India needlessly surrendered 80 % of the Indus waters by agreeing to reserve the three western rivers for the exclusive use of Pakistan. As the upper riparian state, India had a preemptive right to these waters. In consequence, the

remaining 20 % of the Indus river waters has proven inadequate to meet the needs of the growing population in India that subsists on these waters, like the agriculturists in the Kashmir Valley. Besides, pressure is growing on the demand for water in the Indus basin for potable and industrial purposes. It should be appreciated that Pakistan had entered into a military alliance with the United States in 1954, and had, later, become part of the CENTO and SEATO alliances. Its proximity to the United States and its NATO allies gave Pakistan a clear advantage in these World Bank dominated negotiations vis-a-vis India that reposed faith in a non-aligned foreign policy conceived by Nehru.

India's official disenchantment with the terms of the IWT reflected later in its rejection of a multi-billion dollar proposal made by President Carter in 1978 to support "an eastern version of the 1960 Indus water accord, Ganges-Brahmaputra agreement [that] would have led to massive financial investments in flood control, hydroelectric power and irrigation to spur development in the subcontinent's poor and densely populated northeastern corner." The World Bank was willing to finance this project and undertake the complex negotiations with Nepal and Bangladesh to operationalise it. But, India did not evince any interest in this proposal as its water specialists were "opposed to the idea of an international regime for the eastern waters, echoing their long-standing view that India had lost out to Pakistan in water-sharing arrangements under the Indus treaty."

Problems encountered with the Treaty

These contentions can be inconclusively argued; but it must be conceded that the Indus Waters Treaty remains a sub-optimal arrangement and has failed to live up to its full potential. Its negotiators took the easy way out by accepting a partition of the Indus rivers without examining the more challenging, but rewarding, issue of developing a spatial plan to optimize the use of these waters. The compromise solution reached of partitioning the rivers between India and Pakistan limited the potential benefits of the IWT as envisioned by Lilienthal and the World Bank. In fairness, it should be admitted that the IWT did remove an irritant in India-Pakistan relations that could have escalated into a larger conflict. Most likely, the negotiators were exhausted after discussing the Treaty over eight years, and might have felt that a sub-optimal Treaty was all that was possible at that stage. Consequently, the IWT did not anticipate the deleterious effects of a future depletion in the river flows of the Indus basin due to the problems of global warming, population growth and industrial development. The effects of higher glacier melt and changing rainfall patterns were not taken into account; they were probably not fully understood at that time.

Apropos, a former Foreign Secretary has regretted that: "Had the unity of the system been maintained, the Bhakra and the Sutlej Valley projects which were planned prior to partition could have gone ahead; the technical viability and the economic benefits of a canal from the Chenab to the Ravi had been clearly established and need not have been abandoned; Tarbela could have been built as a project to give irrigation acreage not only for Pakistan's Punjab but also for the lower basin areas of the Sind; and the nucleus of joint management of the existing network might have facilitated hydroelectric projects of benefit to both countries. ...The provisions of the treaty, as they stand, foreclosed optimal gains in agricultural production and power generation "

Demographic pressures provide an urgent reason now to rethink these basic issues underlying growing water scarcity in the Indus rivers. The aggregate current population of China, India, Pakistan and Bangladesh of over 2.84 billion, comprises 41.3 per cent of the global total. Some 60-65 % of this population lives in rural areas, and is dependent on agriculture for its livelihood. The dependence of these countries on irrigation for their agriculture adds quantum measures to this problem of water scarcity. The largest concentration of the world's irrigated lands — around 65 per cent — is in Asia, with South Asia accounting for 35 per cent. Northern India and Pakistan have the highest irrigation density within South Asia, which includes the Indus basin. A paradox here to which attention should be drawn is that providing irrigation water often creates demands for more water. This paradox might be illustrated from the fact that the availability of assured water from the Bhakra dam has permitted

paddy cultivation in Punjab. Earlier, it was a traditional wheat growing area, which requires much less water than paddy. However, since paddy provides greater profits, the cultivators have shifted from wheat cultivation to paddy, which has led to greater demand for water.

The kneejerk reaction in Punjab, which is part of the Indus basin, to the demand for more water has been to exploit its ground water resources. But, the indiscriminate digging of tubewells has led to other problems. An economic journalist has commented on the situation in the Punjab: “Fast-expanding tubewell irrigation was initially the driving force of agricultural growth...Excessive tubewell pumping, perversely encouraged by the supply of free electricity to farmers, has exhausted sweet ground water in some districts but farmers started pumping the brackish water underneath. This led to salt deposition on the soil, rendering some areas infertile. The supply of virtually free canal water has deprived the state of revenue to maintain canals and ensure proper drainage.”

More alarmingly, the presence of toxic metals like arsenic, nickel and uranium has been detected in drinking water, leading to an abnormally high incidence of cancer in the Malwa belt. A large outlay has now become necessary to ameliorate this condition by setting up chlorination plants and mechanically operated reverse osmosis systems with an automated teller system. An abundance of scientific data highlights the risks that are multiplying to the region's aquifers. A serious economic problem has also arisen from the rapid sinking of the water table, necessitating that the existing tubewells be continually deepened. But, this adds to capital costs and costs of pumping out water, which increases the costs of agriculture, requiring that credit supply, and inputs like fertilizers, pesticides, electricity, and diesel be subsidized. Demands are also made that agricultural products be procured by the state government at high prices, which cannot be afforded by the urban poor. More subsidies are then needed to ensure that the urban population gets food items at reasonable prices and do not revolt. The cascading effects of this mis-governance of the agricultural sector are plainly evident.

What can be done?

The problems due to water shortages and the resultant stress highlights the need for giving more thought to internal governance. Technology should be beneficially harnessed to increase the efficacy of water usage for irrigation since agriculture accounts for 70 % of its total utilization. The technologies available are drip irrigation, seepage reduction by lining canals, and introducing drought resistant crops. The growing of coarse grains like millet, bajra and jowar has become unprofitable, but soya cultivation has taken off in other parts of India—all these crops are especially suited for areas with marginal soils and scanty rainfall. Food plants could also be developed by genetic mutation that tolerate salt and could cope with the salination problems in the Indus river basin, and some interesting research has been done in this area. Besides, the Punjab Agricultural University has established that the earlier practice of undertaking rice transplantation in the first fortnight of July, when the monsoon had advanced into Punjab, would greatly reduce water usage. In fact, the current practice of transplanting paddy in May-end is especially wasteful since May and June are the hottest months of the year with high water evaporation rates leading to higher irrigation demand and overexploitation of ground water.

Under the Seventh Schedule of the Indian Constitution the “regulation and development of inter-State rivers and river valleys, to the extent they are so declared by Parliament,” lies with the Central Government [Entry 56, Union List]. The State Governments are charged with “water supplies, irrigation and canals, drainage and embankments, water storage and water power,” [Entry 17, State List], apart from having responsibility for agriculture, land issues and fisheries. State governments are also responsible for local management, But: “ Getting funds down to the local level, building local capacity, and providing incentives for efficient local actions are general problems of India's federal system, and solving these problems is particularly urgent for dealing with India's current and future water resource challenges. One possibility, is a hierarchy of specialized water management

associations, including more widespread local water user associations and river management bodies, linked in a federal structure, to achieve better vertical coordination.”

Wisdom lies in working within existing institutions to the largest extent possible rather than establishing new ones that will compete with them. Traditional panchayats with their affiliate institutions like nyaya panchayats and water user panchayats are recognized local authorities with credibility and acceptance. It is, therefore, important that Departments of Water Resources/Irrigation at the State level do not displace them or weaken local practices that have traditionally been accepted and ensure greater efficiency of water use. Ideally, therefore, the efforts being made by India and Pakistan to mitigate the looming water shortages in the Indus basin must begin with adopting better water management practices at the local and national levels.

But the understanding must dawn on both countries that they need to collaborate on water management for mutual advantage. Indeed, the urgency in this matter also acquires relevance due to South Asia's chronic shortage of power to ensure its energy security. India is at present the world's sixth-largest energy consumer. With its primary energy demand expected to grow by about 127 per cent over 2008–2035, accounting for 18 per cent of the total global rise in energy consumption, India will be second only to China in contributing to the increase in global energy demand. The urgent need to augment its energy supplies has led New Delhi to explore its hydropower potential, which is mostly located in North and Northeast India. Its plans to construct storage dams here will impinge on Bangladesh and Pakistan, which forebodes heightened tensions in the region, unless the embedded problems are amicably settled through negotiations.

Nothing illustrates this reality better than the tenor of Indo-Bhutan and Indo-Nepal relations in regard to jointly exploiting hydropower. The Chukha project in Bhutan (1974) provides a template for such beneficial cooperation between upper and lower riparian states. The dam is located in Bhutan. But its costs were borne by India, which is being paid for by Bhutan selling the electricity generated (after meeting its domestic demands) to India at negotiated and periodically adjusted prices. This modality now serves as the model for several other Indo-Bhutanese projects that are being completed. On the other hand, Nepal has been unable to exploit its hydroelectric resources approximating some 84,000 MWs by a similar modality largely due to its internal political dissensions. The ironical results have been that Bhutan enjoys the highest, but Nepal has the lowest, per capita income in South Asia.

Coming to India-Pakistan cooperation in water management, better coordination seems imperative between the national water management organizations in India and Pakistan to address the seminal issues excoriating the Indus Waters Treaty. The modality of consultations between the Indus Waters Commissioners has proved inadequate since it lacks the mandate to address non-technical and political issues. Hence, the need has been suggested to have “a new regulatory body that encompasses all the nations with stakes in the Himalayan rivers. This body would incorporate a mix of expertise and interests — including a panel of technical experts, experienced diplomats from each country and representatives of key interest groups...serve as a knowledge clearing house and source of technical information for a range of water issues. It could also monitor the health of river basins, the progress of various projects and adherence to international agreements.”

China's presence in this body would be essential despite this being anathema to India. But China's ability to interdict water supplies in South Asia makes the case for its inclusion in any such problem solving body. An urgency has been imparted for establishing this supra-national body in appreciation of the fact that the retreat of the Himalayan glaciers is no longer a disputed issue, but has become a matter of growing concern; it highlights the crisis that is already upon us.

Conclusions

A new dispensation is, therefore, needed to enable a spatial and holistic development of the Indus basin as a single entity to serve the best interests of both countries. An integral exploitation of the entire river basin would permit its optimal development; indeed, making the distinction between upper and lower riparian states is meaningless for addressing generic issues like ground water pollution, environmental degradation and climate change that transcend national frontiers. An integrated river management system would, assess the total availability and demand for water in the Indus basin before planning the infrastructure to optimize water usage, flood control, redistribution of water from surplus to deficit areas, preserving water quality and so on.

Indeed, the agenda for negotiating an expanded Indus Waters Treaty or IWT-II is straightforward. It could include schemes for further storages and interlinking canal systems to serve the needs of both irrigation and power generation, apart from flood control, navigation, fisheries, and tourism. It should appreciate that the state which gains advantages needs to recompense the state that suffers in consequence, which is relevant for beneficial measures like compensatory afforestation and providing relief and rehabilitation to the oustees displaced by the project. Further, the spatial development of the Indus basin could include creating new townships, agricultural markets (mandis), road and rail networks, and agriculture-based industries. A IWT-II would also function as a huge confidence-building measure between India and Pakistan. Viewed in this perspective there would be fruitful opportunities for enlarging bilateral India-Pakistan trade, people-to-people contacts, and human security related cooperation in the spheres of education, public health, forestry and, in truth, almost every aspect of economic and social development in the Indus basin where there is mutual interest in proceeding ahead.

Incidentally, Article VI of the IWT provides for the regular exchange of data on river flows in the Indus basin and their utilization, which lays the foundation for greater India-Pakistan cooperation. More specifically, Article VII recognizes their “common interest in the optimum development of the Rivers” by installing hydrologic observation stations, carrying out new drainage works, and “undertaking engineering works on the Rivers”. This enunciation of principles permits the extension of the IWT to incorporate a more ambitious IWT-II to develop the Indus rivers basin for the benefit of both countries.

Article XII, moreover, allows this modification of the IWT “by a duly ratified treaty concluded for this purpose between the two governments.” The present modality of dealing with each river waters dispute as it arises is irksome, time-consuming and tension-promoting. It is also expensive. For example, the disputes over the Baglihar and Kishenganga projects were only resolved by external intervention after prolonged and costly litigation. And this could recur with every project that India wishes to construct on the three Western rivers. It bears reiteration that the existing IWT allows India to build storages for non-consumptive purposes on the western rivers subject to conditions spelt out in the annexures; these storages have not yet been constructed by India, but their need has accelerated with water shortages increasing.

The IWT is under stress and could become another cause for India-Pakistan tensions and conflict. A bleak conclusion has been reached that: “Given the overall political climate, it is unlikely that the two countries will agree to modify the treaty and convert it from a water portioning (sic) treaty into a water resource development treaty.” Nevertheless, the need for a more comprehensive Indus Waters Treaty II that addresses these multifaceted problems cannot be postponed much longer. The greatest obstacle to the fruition of an IWT II is the trust deficit between India and Pakistan, as also in J&K and Azad Kashmir with New Delhi and Islamabad respectively. As stridently voiced by a Pakistani writer the waters of the Western Rivers could be “gone for ever—courtesy Treaty II as were the Eastern Rivers courtesy Treaty I. Transmitted through India’s interlinking River network they may discover one day Pak Indus waters slaking thirst of multitudes of people and millions of acres of parched lands in the water-starved Tamilnadu and Karnataka states 2000 miles away in the southern Peninsula leaving in the wake Pak lands bone dry.”

The danger from voicing such extreme views is that it invites an equally strident reaction in India, and especially in J&K, where the belief is popular that India needlessly “lost” 80 % of the Indus waters to Pakistan, which was the lower riparian state. Further, this genre of permanent victimhood has led to suggestions that India should contemplate action under Article 62 of the Vienna Convention on the Law of Treaties, which permits countries to withdraw from a treaty of unlimited duration, on the grounds that a ‘fundamental change of circumstances’ has taken place. Luckily, such extreme beliefs are only confined to ideologically driven, fringe elements in India, but their views could not gain traction in the heated debate proceeding between India and Pakistan. A great deal depends here on the inclinations of the leadership in India and Pakistan. Apropos, IWT-I reached closure only when Nehru and Ayub reached agreement with each other. Another lesson worth remembering from the IWT-I experience is that the most critical negotiations were held outside South Asia in various Western capitals, which offers a useful precedent for future such discussions.

Admittedly, water is an emotive issue; it raises irrational fears and encourages nationalist primitivism to be easily generated. Jamait leaders, for example, like Hafiz Saeed have routinely been whipping up anti-India sentiments on the Indus waters issue. So have several J&K leaders and conservative parties in India, drawing attention to the “unfairness” of the IWT schema. The need to allay such negative sentiments and move forward constructively to share a dwindling resource cannot be postponed much longer. A case exists therefore for educating public opinion about the benefits that would accrue to India and Pakistan by extending the ambit of the Indus Waters Treaty to maximize its benefits .