

CASE STUDY 3: THE INDUS RIVER BASIN*

The Indus Waters Treaty, which arranges the use of the River Indus water between India and Pakistan, is praised as one of the most sophisticated international water agreements. It has proved stable despite several complications taking place during its negotiations and implementation. Among the multitude of water treaties, this is the only agreement that physically divides a river system between the riparian states. Finally, it is also the only water treaty whereby a third party, the World Bank, played not only a crucial role in brokering the specific arrangements but was also a signatory.

The treaty is now almost 50 years of age. The two signatory states face increasing water scarcity problems, mainly due to high inefficiency of water use in irrigation (80% of the water is used for low value agriculture production), increased levels of water pollution, and competing needs driven by high population growth (Briscoe and Malik, 2006; World Bank, 2005c). These “physical” aspects, coupled with the sometimes precarious political relations between the riparians, give rise to concerns regarding the sustainability of the treaty. In this case study, we describe the key issues that lead to the original dispute and played an important role during the negotiation process between the riparians. We also consider the variables that continue to affect the long-term sustainability of the agreement.

FEATURES OF THE BASIN

The Indus River system (Map CS3.1) consists of several tributaries that collect snowmelt and rain from the highest peaks of the Himalayas and carry it to the Arabian Sea, traveling 5,000 km. Seven of the rivers in this system (Table CS3.1) cover most of the system’s drainage area of about 950,000 km² and a catchment area of nearly 470,000 km² in four countries, Afghanistan, China (Tibet), India, and Pakistan, and includes the Kuram, Swat, and Kabul that rise in Afghanistan, and the Indus and Sutlej that rise in Tibet. In the discussion below, we will refer only to the basin part that is shared by India and Pakistan, which comprises five rivers — the Indus, Beas, Ravi, Chenab, and Sutlej.

The Indus Basin is a geographically contained system that is characterized by huge water supply variations. The mean annual rainfall ranges from less than

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Map CS3.1: The Indus Basin



Source: World Bank (Permission granted to reproduce map.)

100 mm in parts of the lower Indus region, above the Arabian Sea, to more than 750 mm in the northern foothills, below the Himalaya mountains. The area is subject to seasonal monsoons, which dump rainfall during the months of July and August, and severe droughts. Rainfall and water flow (from snowmelt) variability in the river

Table CS3.1: Catchment Areas and Runoff of the Indus River System.

River/Tributary	Gauging Station	Catchment Area (km ²) ^a	Average Annual Runoff 1922–1961 (billion m ³) ^b
Sutlej (E) ^c	Rupar	48,300	17
Beas (E)	Mandi Plain	16,900	16
Ravi (E)	Madhopur	8,100	9
Chenab (W)	Marala	29,600	32
Jhelum (W)	Mangla	33,600	28
Kabul (W)	Warsak	67,600	21
Indus (W)	Attock	265,300	115
Total		469,400	217

^{a,b}It should be noted that different sources provide different estimates of the area and the runoff of the Indus system.

^cE = eastern rivers; W = western rivers.

Sources: Harza (1963); Kirmani (1959); and Bureau of Reclamation (1963).

is vast, with about 3/4 of the flow occurring between 4 months of the year — June and September (Alam, 1998; Salman and Uprety, 2002).

The major economic activity in the basin is irrigated agriculture. Until the British annexation of Sind and Punjab regions in the 19th century, inundation irrigation was the main technology, depending on availability of water in the river. Had it not been for the modern irrigation network developed after the annexation, the basin would not prosper to the extent it had. Modern irrigation, at that time, provided the framework around which both Pakistani and Indian Punjab grew to their present economic importance (Alam, 1998; Kux, 2006). By 1947, the irrigation system in the basin consisted of 26 million acres of irrigated agriculture, 34,000 miles of major canals, and 50 million people relying on a system consisting of 13 additional canals that were already in place (Alam, 1998).

The dispute between India and Pakistan over the Indus water has to be addressed in the context of a broader set of issues. These issues go far beyond water and are rooted in a period before India and Pakistan became independent. While the Indus dispute was resolved by means of a treaty that has held for nearly 50 years, there are new issues that have recently emerged (see Epilogue section) which threaten the stability of the treaty (World Bank, 2005a, 2005b, 2005c). With population growth rates that more than doubled over the last 50 years (India grew from 400 million to over 1 billion and Pakistan grew from 40 to 150 million between 1950 and 2000), the demands on the Indus River are mounting.

HISTORY OF WATER AND OTHER DISPUTES IN THE INDUS BASIN

Disputes over water-sharing in British India were not uncommon, but they were also not the only issues among the various parties inhabiting British-ruled (Raj) India.

The British administered 2/3 of India's territory while the rest was ruled by more than 500 Indian Princes (Maharajas). Each of these principalities, including Jammu and Kashmir, were large enough to become nation states had they been independent (Kux, 2006). This partition of the land gave rise to differences in interests, over control and management of natural resources, leading to local disputes that were resolved locally (see below) with the intervention of the British administration (Salman and Uprety, 2002).

Another source of tension, escalating at times to bitter disputes, was the nationalistic differences and power struggle between Muslims and Hindus. While the Muslims had dominated most of the Indian subcontinent for nearly 600 years (1191–1757) they have been politically demoted by the British and faced difficulties adjusting to the new Raj realities. The Hindus on the other hand adapted relatively well to the new political and administrative opportunities (Kux, 2006, p. 4). Despite the political situation, the 215 million Hindu Indians and the 70 million Muslim Indians resided peacefully side by side.

It was not until the early 1900s when the Muslim League in the Indian Congress was pushing for Indian self-government, which both Muslims and Hindus could support, that socio-political and economic safeguards were secured. However, with the Hindu majority leaders not agreeing to all proposed safeguards, the Muslim–Hindu united front collapsed, leading to a long period of retaliations of both Hindus and Muslims against the British Raj (Kux, 2006). In 1935 the pressure for independence mounted, and the Government of India Act was approved. The decision facilitated self-rule at the provincial level and the central Indian Government. In essence, the 1935 Act led to the termination of the British Raj and eventually to the partition of British India into the independent states of India and Pakistan on 15 and 14 August 1947, respectively.¹ These events are an integral part of the Indus Basin water dispute and its resolution. They will be elaborated later.

Irrigation-Related Disputes and Their Resolution

Even before the partition of India and Pakistan, the Indus posed problems between states of British India, and between British India and Indian Princes. The problem became international only after partition, though, and the attendant increase in hostility and lack of suprallegal authority exacerbated the issue. Pakistani territory, which had relied on the Indus waters for centuries, now found the water sources originating in another country, one with whom geopolitical relations were increasing in hostility.

Treaties negotiating resolution to early conflicts on the Indus Basin began as early as 1874, when Britain and Indian Maharajas agreed on the percentage of water each would receive from the Hathmatee Basin for irrigation purposes. At the time, the British and the Maharaja of Edur agreed to the construction of the weir,

¹The reader could realize that by condensing the process some important omissions are unavoidable. For a short but more concise historical background, see also Kux (2006, pp. 3–18).

and the British agreed to pay for damages if the sites were flooded. In 1892, the State of Jind and the British government agreed to allocate water for irrigation in exchange for payment. The only problem with the above agreements was that the Indian parties had little, or no choice, in the matter since they were much weaker than their British counterparts. Such power asymmetry characterized much, or all, of the negotiations that took place during the pre-partition period (Salman and Uprety, 2002).

By the late 1940s, the irrigation works along the river were the most extensive in the world. These irrigation projects were developed over the years under one political authority, that of British India, and any water conflict was resolved by executive order (Salman and Uprety, 2002). The Government of India Act of 1935, however, placed water under provincial jurisdiction, and several disputes did occur, especially at the sites boasting more extensive works, notably between the provinces of Punjab and Sind.²

In 1942, a judicial commission was appointed by the British government to study Sind's concern over planned Punjabi development. The Commission recognized the claims of Sind, and called for the integrated management of the basin as a whole. The Commission's report was found unacceptable by both sides, and the chief engineers of the two sides met informally between 1943 and 1945 to try and reconcile their differences. Although a draft agreement was produced, neither of the two provinces accepted the terms and the dispute was referred to London for a final decision in 1947 (Gulhati, 1973).

Before a decision could be reached, the Indian Independence Act of June 1947 internationalized the dispute between the new countries of India and Pakistan. Partition was to be carried out in 73 days, and the full implications of dividing the Indus basin seem not to have been fully considered. That being said, Sir Cyril Radcliffe, who was responsible for the boundary delineation, did express his hope that, "some joint control and management of the irrigation system may be found" (Mehta, 1988, p. 4). Heightened political tensions, population displacements, and unresolved territorial issues, all served to exacerbate hostilities over the water dispute when it arose.

As the monsoon flows receded in the autumn of 1947, the chief engineers of Pakistan and India met and agreed to a "Standstill Agreement," which froze water allocations at two points on the river until 31 March 1948, allowing discharges from headworks in India to continue to flow into Pakistan. On 1 April 1948, the day that the "Standstill Agreement" expired, in the absence of a new agreement, the provincial government of East Punjab (India) discontinued the delivery of water to the Dipalpur Canal and the main branches of the Upper Bari Daab Canal. At an Inter-Dominion conference held in Delhi on 3-4 May 1948, India agreed to the resumption of flow, but maintained that Pakistan could

²As was suggested by Undala Alam in her review of this case study (personal communication, October 30, 2006) "The provincial governments of Punjab and Sind developed their irrigation independently and in direct competition of one another. This was long before the 1935 Act made water a provincial responsibility. There were two commissions (Anderson and Rau) set up to resolve the Punjab-Sind dispute, neither of which were ultimately successful."

not claim any share of those waters as a matter of right. Pakistan contested India's position which was aggravated by the Indian claim that, since Pakistan had agreed to pay for water under the Standstill Agreement of 1947, Pakistan had recognized India's water rights. Pakistan countered that they had the rights of prior appropriation, and that payments to India were only to cover operation and maintenance costs (Gulhati, 1973; Salman and Uprety, 2002; Alam, 1998).

While these conflicting claims were not resolved, an agreement was signed, later referred to as the Delhi Agreement, in which India assured Pakistan that it will not withdraw water without allowing time for Pakistan to develop alternate sources. Pakistan later expressed its displeasure with the agreement in a note dated 16 June 1949, calling for the "equitable apportionment of all common waters," and suggesting the case be turned over to the World Court of Justice. India preferred rather that a commission of judges from each side attempt to resolve their differences before turning the problem over to a third party. Stalemate continued through 1950 (Gulhati, 1973).

In the early days of statehood, India and Pakistan had approached the World Bank with separate applications for loans to develop their portion of the Sutlej River, which was at the center of their dispute. The World Bank, a relatively new international institution in the late 1940s, had great interest in getting involved with such significant development investments. However, the requested loans by India and Pakistan were in essence incongruous. Nonetheless, if the Bank could successfully resolve the dispute between the two riparians, its reputation would be boosted in the international arena.

ATTEMPTS AT CONFLICT MANAGEMENT — THE NEGOTIATION PROCESS³

In 1951, Indian Prime Minister Nehru invited David Lilienthal, former chairperson of the Tennessee Valley Authority (TVA), to visit India and discuss the possibility of adapting the TVA regime to India's water problems. Lilienthal also visited Pakistan and, on his return to the US, wrote an article outlining his impressions and recommendations. His article was read by Lilienthal's friend Eugene Black, president of the World Bank (Bank), who contacted Lilienthal for recommendations on helping to resolve the Indus waters dispute (At the time it was known as the "Canal Waters Dispute" and only involved the Sutlej River). As a result, Black contacted the prime ministers of Pakistan and India, inviting both countries to accept the Bank's good offices. In a subsequent letter, Black outlined "essential principles" that might be followed for conflict resolution. These

³Based on Gulhati (1973); Mehta (1988); Biswas (1992); Alam (1998, 2002); Salman and Uprety (2002); Kux (2006).

principles included:

- that there was enough water in the Indus system for both countries;
- that the water resources of the Indus Basin should be managed cooperatively;
- that the problems of the Basin should be solved on a functional not political level, without relation to past negotiations and past claims.

Black suggested that India and Pakistan each appoint a senior engineer to work on a plan for development of the Indus Basin. A Bank engineer would be made available as a consultant. Both sides accepted Black's initiative. The first meeting of the Working Party included Indian and Pakistani engineers, along with a team from the Bank which met for the first time in Washington, D.C. in May 1952.

When the two sides were unable to agree on a common development plan for the Basin in subsequent meetings in Karachi, November 1952, and Delhi, January 1953, the Bank suggested that each party submit its own plan. Both sides did submit plans on 6 October 1953, which largely agreed on the water supplies available for irrigation, yet varied tremendously on how these supplies should be allocated (Table CS3A.2).

The irrigation systems that have to be re-allocated among the two riparian states, not only infringe upon the political sovereignty but also made it impossible in years of less than average water flow in the rivers. The Bank carried out its own independent studies to examine the relevant issues and prepared an adequate set of works to provide alternatives to Pakistan's uses of the Eastern Rivers. The studies confirmed that there was not enough surplus water in the Western Rivers, particularly in the critical crop periods. In addition, storage reservoirs were necessary to meet the shortages.

The Bank concluded that not only was the stalemate likely to continue, but that the ideal goal of integrated watershed development for the benefit of both riparians was probably too elusive of a goal at this stage of political relations. On 5 February 1954, the Bank issued its own proposal, abandoning the strategy of integrated development in favor of one of separation (Table CS3A.2). The Bank proposal called for the entire flow of the eastern rivers (Ravi, Beas, and Sutlej) to be allocated to India, and all of the western rivers (Indus, Jhelum, and Chenab), except for a small amount from the Jhelum, to be allocated to Pakistan. According to the proposal, the two sides would agree to a transition period while Pakistan would complete link canals dividing the watershed, during which India would continue to allow the waters historically used by Pakistan to flow from the eastern rivers. The Bank also recognized that it was virtually impossible to resolve the dispute without additional sources for financing the replacement and construction of new storage works.

The Bank proposal was given to both parties simultaneously. On 25 March 1954, India accepted the proposal as the basis for agreement. Pakistan viewed the proposal with more trepidation, and gave only qualified acceptance on 28 July 1954. Pakistan considered the flow of the western rivers to be insufficient to replace their existing supplies from the eastern rivers, particularly given limited available storage capacity.

To help facilitate an agreement, the Bank issued an aide memoir in 1956, calling for more storage on the western rivers, and suggesting India's financial liability for "replacement facilities" — increased storage facilities and enlarged link canals in Pakistan, which could be recognized as the cost replacement of pre-partition canals (Table CS3A.2).

By 1959, the Bank recognized that the main obstacle to a final agreement was deciding which works would be considered "replacement" and which "development." In other words, the dispute lingered over India's financial responsibilities and the respective works. To circumvent this problem, Black suggested an alternative approach in a visit to India and Pakistan in May. Perhaps the parties could settle on a specific amount for which India is responsible, rather than squabbling over individual works. The Bank might then help raise additional funds for watershed development. India was offered financial help with construction of its Beas Dam. Pakistan's plan, including both proposed dams, would be considered favorably. With these conditions, both sides agreed to a fixed payment settlement, and to a 10-year transition period during which Pakistan would be able to continue using its historic flows from the eastern rivers.

In August 1959, Black organized a consortium of international donors to support development in the Indus Basin, which raised close to \$900 million, in addition to India's commitment of \$174 million (£62 million) in 10 installments. The Indus Waters Treaty (IWT) was signed in Karachi on 19 September 1960 and government ratifications were exchanged in Delhi in January 1961.

The Indus Waters Treaty addressed both the technical and financial concerns of each side, and included a timeline for transition. The main points of the treaty included:

- an agreement that Pakistan would receive unrestricted use of the western rivers, which India would allow to flow unimpeded, with minor exceptions⁴;
- provisions for 3 dams, 8 link canals, 3 barrages, and 2500 tube wells to be built in Pakistan;
- a 10-year transition period, from 1 April 1960 to 31 March 1970, during which water would continue to be supplied to Pakistan according to a detailed schedule;
- a schedule for India to provide its fixed financial contribution of £62 million, in 10 annual installments during the transition period;
- additional provisions for data exchange and future cooperation.

The treaty also established the Permanent Indus Commission, made up of one Commissioner of Indus Waters from each country. The two Commissioners would

⁴This sentence does not suggest that the rivers, and water therein, belong to India, given that some of the rivers flow through territory (Kashmir) still claimed by each country.

meet annually in order to:

- establish and promote cooperative arrangements for the treaty implementation;
- promote cooperation between the Parties in the development of the waters of the Indus system;
- examine and resolve by agreement any question that may arise between the Parties concerning interpretation or implementation of the Treaty;
- submit an annual report to the two governments.

In case of a dispute, provisions were made to appoint a “neutral expert.” If the neutral expert fails to resolve the dispute, negotiators can be appointed by each side to meet with one or more mutually agreed-upon mediators. If either side (or the mediator) views mediated agreement as unlikely, provisions are included for the convening of a Court of Arbitration. In addition, the treaty calls for either party, if it undertakes any engineering works on any of the tributaries, to notify the other of its plans and to provide any data that may be requested.

Since 1960, no projects have been submitted under the provisions for “future cooperation,” nor have any issues of water quality been submitted at all. Other disputes have arisen, and handled in a variety of ways. The first issues arose when India did not deliver a set allocation of water between 1965–1966, but became instead a question of procedure and the legality of commission decisions. Negotiators agreed that each commissioner acted as government representatives and that their decisions were legally binding. Another controversy surrounding the design and construction of the Salal Dam was resolved through bilateral negotiations between the two governments. Other disputes, over new hydroelectric projects and the Wuller Barrage on the Jhelum tributary, have yet to be resolved.

EPILOGUE: THE CHENAB DAM DISPUTE

India plans to implement the Baglihar Hydropower Project on the Chenab River in the Indian state of Jammu and Kashmir. The project has been in planning since 1992. Pakistan government regards this as an abrogation of the Indus Water Treaty and raised objections to the design, height, storage capacity, and gates of the spillway structure of the Baglihar power plant. Furthermore, Pakistan has argued that the construction of the dam will temporarily deplete the flow in the river during the sowing season in Punjab province in Pakistan. The monsoons may further worsen the conditions. India continues to claim that Pakistan’s arguments do not hold weight because the treaty clearly states that power generation projects can be built on any of these three western rivers of the Indus River system as long as they benefit the local people and generally do not interrupt the flow of the river.

Soon after bilateral talks in January 2004 failed, Pakistan asked for the intervention of the World Bank (World Bank, 2005a). The World Bank announced (World Bank, 2005b) that it would appoint a “neutral expert”, Mr. Lafitte to arbitrate. The neutral expert was selected after being approved by the two riparians. A report has been released. (Another hydroelectric project which is being objected to by Pakistan

is the Kishan Ganga project being constructed on the Jhelum river by India, and is seen as contravening the Indus Waters Treaty.)

Pakistan's concerns in this dispute, which are expressed in terms of design parameters, surround the following points: (a) Pakistan feels that India will be able to store excessive amounts of water behind the dam, more than the Treaty permits, leading to control over irrigation water flow on one hand and ability to flood downstream areas; and (b) Pakistan takes issue with the fact that construction began before it granted approval. Pointing to the capricious nature of flood analysis and the possibility that climate change may increase future floods, Mr. Lafitte determined that it is sensible to use 16,500 m³/second. A related point contested between the two riparians was whether the Baglihar dam needed a gated or ungated spillway. To minimize India's ability to regulate the river's flow, Pakistan insisted that since the Baglihar was a run-of-the-river plant it required an ungated spillway. Drawing attention to its need to regulate floods and manage heavy sedimentation that would otherwise decrease the plant's useful life, India argued that a gated spillway is essential. Lafitte argues for the need to incorporate the latest available technology and standards that were not present at the time the IWT was negotiated. Given the new knowledge, Lafitte agreed with India's need for gated spillway. This decision, however, produced another disagreement, where should the gated spillway be located. Pakistan insisted it was not at the highest level as specified by the IWT. Lafitte argued that "sound and economic design and satisfactory construction and operation" confirm the position selected by India. Consistent with Pakistan's concern about India's increasing ability to control the Chenab River, it disagreed with the Baglihar dam's 37.5 Million Cubic Meters (MCM) of "pondage", or live storage capacity, used to generate power, arguing that it should be 6.22 MCM instead. Lafitte determined that the structure's pondage should be decreased to 32.5 MCM and the dead storage should be increased by one meter of its original design.

The neutral expert also settled the two remaining issues, the freeboard's height and power intake levels, with slight modification to their design. The Baglihar originally had a freeboard 4.5 meters high, but after consulting the latest technology, Lafitte decided that India should power the freeboard by 1.5 meters. Finally, Pakistan argued that the intake level for the turbines were not at the highest level as specified under the IWT. The neutral expert determined that the height should be increased by three meters (Zawahri, 2007, most facts are cited).

The World Bank's Role in the Treaty and its Implementation

The World Bank has played an important role in the negotiation and implementation of the Indus Waters Treaty. As Salman asks, was the World Bank a third party that mediated or only provided good offices to the negotiating riparians (Salman, 2002)? It can be further posed whether by being a signatory to the treaty was the

World Bank, in many ways, a partner to the agreement? And if so, what were its motives for such deep involvement?

As Salman (2005, p. 191) cites the President of the World Bank at that time, Mr. Eugene Black: “Not only did the Indus issue stand in the way of constructive action by the Bank in the subcontinent, it was cause for concern in a wider sense. With two of the Bank’s potentially largest customers so bitterly opposed, the world’s investors might regard the Bank’s own prospects with a skepticism that would cripple its ability to raise money through borrowing.”

Indeed, the World Bank increased its lending to the two countries following the Treaty. For example, between 1960 and 1970 the World Bank approved five water-related projects in the Indus Basin, totaling US\$ 220.7 million in current prices or US\$ 10.7 billion in 2004/5 prices (World Bank, 2005c, p. 94).

Therefore, the Bank’s reputation due to its role in resolving the dispute, and subsequently making loans to both countries, has been an important factor in this case. In addition, the World Bank acted as a mediator-party to the treaty. By being a signatory to the treaty, the World Bank has signaled (documented it in a special clause in the treaty) that it will continue to help settle “differences” and “disputes.” The Treaty classifies the issues on which there is disagreement into three parts: (i) question to be dealt with by the Commission, (ii) difference to be dealt with by the Neutral Expert, and (iii) dispute to be dealt with by the Court of Arbitration. There is a role for the Bank in the appointment of the Neutral Expert, and a limited role in the establishment of the Court of Arbitration. Accordingly, the World Bank appointed a neutral expert in 2005 in the dispute over the Baglihar Hydropower Project on the Chenab River in India. The neutral expert has published the results in February 2007, as was discussed earlier.

ANNEX

Table CS3A.1: Time table of major events associated with the Indus Waters Treaty.

Month/Year	Event
1939	Punjab–Sind Dispute (Rau Commission)
1947	Partitioning (Radcliffe/Arbitral commission)
12/1947	Standstill agreement
3/1948	Standstill agreement expires
4/1948	Dispute formally began
5/1948	New agreement (The Delhi Agreement)
1950	Pakistan denounces agreement
1950/51	Negotiation continues
7/1951	Lilienthal article published
9/1951	World Bank offer of good offices
9/1951	World Bank offer accepted
1952	Standstill agreement
1952	World Bank approach proposed
1953	World Bank approach abandoned
1953	Plan 1 proposed by parties
1953	Plan 2 proposed by parties
1954	World Bank new proposal
1954	India accepts, Pakistan questions proposal
1956	World Bank modifies proposal
1958	Pakistan accepts proposal
1959	Outline of agreement negotiated
1960	Agreement concluded
2005	Chenab dispute

Sources: Compiled from Salman (2002, 2005); Alam (1998, 2002); and Gulhati (1973).

Table CS3A.2: Offers and counteroffers in the negotiation process of the Indus Treaty.

Initial Positions of India and Pakistan	
India	Pakistan
Claims rights over water flowing/originating within its territory (Sovereignty)	Claims historical rights of water used originally by Punjab and Sind
The majority of the rich water sources are in India; 10 out of the 13 canal systems are in Pakistan; 2 are in India; and 1 is divided between India and Pakistan	
World Bank First Proposal (Rejected)	
Suggested the adoption of Lilienthal's original proposal where the two states will jointly operate existing irrigation schemes and develop new ones	

(Continued)

Table CS3A.2: (*Continued*)

First Countries Plan (Rejected)	
India	Pakistan
90 MAF ^a to Pakistan; 29 MAF to India; total water allocated 119 MAF	102.5 MAF to Pakistan; 15.5 MAF to India; total water allocated 118 MAF
Second Countries Plan (Rejected)	
India	Pakistan
<i>To India:</i> 7% of the water of the Western rivers and all the water of the Eastern rivers	<i>To India:</i> 30% of the water of the Eastern rivers, and no water from the Western rivers
<i>To Pakistan:</i> 93% of the water of the Western rivers, and no water from the Eastern rivers	<i>To Pakistan:</i> 70% of the water of the Eastern Rivers, and all the water of the Western rivers
World Bank Second Proposal (Accepted)	
<i>To India:</i> Eastern rivers Sutlej 13.5 MAF Beas 12.7 MAF Ravi 6.4 MAF Total 32.6 MAF	<i>To Pakistan:</i> Western rivers Indus 90.0 MAF Jhelum 23.0 MAF Chenab 23.0 MAF Total 136.0 MAF
Eastern rivers to India and Western rivers to Pakistan. In addition, a system of institutions and financial agreements to secure and develop water resources, recognizing the need for additional storage of water during the dry season, and additional funding for terminating Pakistan's use of Eastern rivers.	

^aNotes: MAF = million acre-feet. 1 acre-foot = 1235 m³.

Sources: Based on Biswas (1992); Alam (2002); and Salman (2005).

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