

**Connecting the Drops:
The Negotiation of the Indus Water Treaty**

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Abstract

In a world burdened by burgeoning populations and faced with declining water resources, water is likely to trigger conflict. Since the partition of British India in 1947 and the creation of the modern states of India and Pakistan, the two South Asian countries have been involved in four wars (one undeclared), as well as many border skirmishes and military stand-offs. Yet despite being strong adversaries, India and Pakistan have had a comprehensive water treaty, the Indus Water Treaty, active for over 50 years. This thesis explores the complex, drawn-out negotiation of the treaty, from its beginnings in 1950 to its eventual creation in 1960. Furthermore, this thesis looks into the significance of the final agreement, and its implications for India and Pakistan's overall relationship.

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Chapter I. Introduction

Fifty years ago, an officer and his battalion stood idle on the bank of the Indus River. The troops took shifts throughout many hot days and cool nights patrolling a dam the Indian government had recently built. The government constructed the dam to divert the water from the Indus into Punjab, a Northwestern Province of India. The troops were to detain or, if necessary, shoot intruders who entered the fenced radius surrounding the riverbed. This area lay just inside the hotly contested Pakistani border – a region already marred by fighting, death and destruction. But the officer and his men proudly fulfilled their duty to support the flicker of a truce that India and Pakistan had strived for years to create: the Indus Water Treaty.

This particular officer was my grandfather, Colonel Birinder Chand Mehra. During the time my grandfather served in the army, India and Pakistan fought several wars, but managed to make peace regarding water resources on the border of the two countries. The dam was part of a greater plan to divide the water of the rivers in the Punjab region between India, and the newly created Pakistan. This treaty was unprecedented given the adversarial nature of India and Pakistan, and the negotiations that created the treaty make it all the more unbelievable. This thesis is the story of the Indus Water Treaty, the treaty my grandfather protected in the 1960s.

A Rocky Past

Ever since Britain dismantled its Indian empire and partitioned the sub-continent in 1947, India and Pakistan have been arch-rivals. The conflict between India and Pakistan began as a clash between Indian and Muslim nationalism during British colonial rule. The

Indian National Congress led the Indian-nationalist struggle, while the Muslim League mobilized Muslim-nationalist supporters. As the British government retreated from South Asia after World War II, it urged these two organizations to negotiate a constitutional framework for post-colonial India. But the bitter tensions created by the colonial legacy of divide and rule made it impossible for the parties to meet this demand within the prescribed time for Britain's handover of power. Consequently, the British government imposed its own plan and departed. According to this plan, devised by the last British Viceroy, Louis Mountbatten, areas whose populations were predominantly Muslim, were to join Pakistan, while Hindu-majority areas were to be part of India. In the princely states of South Asia, which were not governed directly by the British, the decision to join either India or Pakistan was left to their rulers. The incompetence and apathy with which the British colonial regime handled its departure had catastrophic consequences. Some three million people lost their lives and seventeen million were compelled to leave their homes.

At the time of partition, the Hindu ruler of the state of Jammu and Kashmir, a sub-dominion with a majority Muslim population, had not committed to either Pakistan or India. Both Pakistan and India claimed the region. Pakistan backed a Muslim rebellion in the province, and India sent troops to support the Hindu maharaja (prince). A border war ended the following year with the establishment of a ceasefire line, also known as the Line of Control, which divided the province. About a third of the state lies on the Pakistani side: Pakistan considers it a Pakistani state, while India refers to it as "Pakistan-occupied Kashmir." Indians and Pakistanis fought a second war over Kashmir in 1965, and conflict has been endemic in the region ever since.

In 1974, India exploded its first nuclear weapon. Pakistan commenced its own program to build a nuclear bomb to counter India's. Tensions remained high between the two countries, particularly over the fate of Jammu and Kashmir. In the late 1980s, Muslim separatists organized militant groups in the India-controlled part of the province. India accused Pakistan of giving military aid to the rebels. In 1996 and 1997, the foreign ministers of both countries met, and there were border meetings between military officials. In 1998, in response to a new series of Indian underground nuclear tests, Pakistan exploded its first nuclear bomb. Both countries also had built long-range missiles that could reach all the cities of both countries.

Fears became widespread that a regional nuclear war might arise from the tensions between India and Pakistan, with many millions of casualties and likely global consequences, including possible involvement of other nuclear powers. A nuclear war seemed perilously close in 1999 when war broke out again in Jammu and Kashmir, with India carrying out air strikes and Pakistan supporting militants on the ground. Fifty thousand refugees fled from both sides of the border area. That year, Pakistani General Pervez Musharraf, took over Pakistan's government, installing a military dictatorship.

After the September 11th terrorist attacks on the United States, the U.S. pressured Musharraf's government to combat Islamic militants associated with al-Qaeda, and the ruling Taliban of Afghanistan. Relations between India and Pakistan improved considerably thereafter. In May 2003, India and Pakistan restored full diplomatic relations and began peace talks. In November 2003, India and Pakistan agreed to a full ceasefire in Kashmir. Pakistan encouraged separatist groups in Kashmir to abide by the ceasefire. India and

Pakistan also cooperated on relief efforts following an earthquake in Kashmir in October 2005 that killed 80,000 people.

Tensions between India and Pakistan flared again in November 2008, when terrorists arrived by boat in Mumbai and attacked prominent targets, including popular restaurants and luxury hotels. The attacks resulted in more than 180 deaths and more than 300 injuries. Investigators discovered that the attackers, several of whom were Pakistani, had planned the attack in Pakistan and had set off for India from Karachi. India warned that it would strike against Pakistani terrorist camps to protect itself. In June 2009, an Indian court issued arrest warrants for 22 Pakistani citizens in connection with the Mumbai attack and demanded that they be extradited from Pakistan to face trial. Pakistan has refused, saying that the suspects could be tried in a Pakistani court. In July 2009, the Prime Ministers of India and Pakistan met in Egypt and demonstrated a willingness to renew peace talks and cooperation between their countries, especially in combating terrorism. But disagreements regarding who would try the perpetrators shut down peace talks for 2 years.

In November of 2010, the American president, Barack Obama made a state visit to India. During a joint press conference with Indian Prime Minister Singh, Obama asserted that the United States had no interest in imposing a solution to the issue of Kashmir. Obama did, however, offer to help India and Pakistan work out a mutually agreeable solution to the conflict. A few months later, India and Pakistan announced they would resume talks.

In June 2011, India and Pakistan formally resumed peace talks, with the foreign secretaries of both countries meeting in Islamabad on the 23rd and 24th. The meetings yielded positive results, and further, higher-level meetings were scheduled. Progress

between the two countries was threatened, however, when Mumbai was again struck by a deadly terrorist attack in July. Three coordinated explosions struck the center of the city during rush hour, killing eighteen people and wounding more than 100 others. No terrorist groups claimed immediate responsibility and, in a possible sign that it wishes to continue to work toward peace, India refrained from blaming Pakistan for the attack. Tensions flared occasionally between 2011 and early 2014, but the spirit of cooperation between the neighboring countries survived.

In India, in the lead-up to the general elections of 7 April 2014, the Hindu nationalist Bharatiya Janata Party (BJP) ran ahead in national polls and its leader, Narendra Modi, was expected to become the next Prime Minister. Analysts predicted that Modi, if elected, would assert India's foreign policy interests more aggressively, particularly in Afghanistan. Modi was viewed warily by many Muslims in both India and Pakistan. Modi and other BJP leaders pledged that, if elected, their highest priority would be economic development. Voters gave Modi and BJP a decisive victory, with the party claiming an outright majority in Parliament, something no party had achieved in thirty years.

In early October 2014, the conflict over Kashmir led to renewed violence on both sides of the border. India accused Pakistan of initiating the shelling of cross-border targets, stating that Indian soldiers returned gunfire and mortar shells in response. Pakistan declared that India had started the attack. Five Indian civilians and four Pakistani civilians were killed in the bombings.

In March of 2015, a Pakistani high court overturned the detention of Zakiur Rehman Lakhvi, largely believed by Indian officials to be the planner of the 2008 terrorist attacks on Mumbai. India immediately demanded that Lakhvi not be released. The Pakistani

government detained Lakhvi. In April, a Pakistani court again ordered Lakhvi's release, and he was released on bail the next day. Violence in Kashmir flared again. Cross-border firefights and shelling took place in mid-July 2015, killing five civilians. In July, Pakistan claimed to have shot down an Indian drone that it said had violated Pakistani airspace.

Pakistan called off high-level security talks with India in New Delhi in August 2015, less than a day before they were set to begin. Pakistan accused India of "concocting terror incidents" and expressed displeasure over India's decision not to let Pakistan officials meet with Kashmiri separatist leaders during their visit. In January of this year, a group of armed attackers entered the Pathankot Air Force Base in the Indian state of Punjab, near the border with Pakistan. The attackers exchanged fire with military personnel, and some evaded capture for three days while hiding out on the base. To this day, gun fire is still common across the border, and a ceasefire does not seem imminent.

The Puzzling Treaty

Over the last nearly 70 years, India and Pakistan have been in conflict or at war. The Indus Water Treaty is the only example of lasting, sustained cooperation between the two countries. In 1960, India and Pakistan concluded the treaty, which enabled them to divide water from the Indus and its tributaries. International actors, especially the World Bank, took an interest in the problem and pushed the parties to agreement. The World Bank provided funds and technical advice. The two countries set up a joint body to carry out the treaty and to handle disagreements, and to this day India and Pakistan meticulously observe their obligations under this treaty. The treaty suggests a mystery: how, despite

decades of cold war and occasional hot war, did India and Pakistan successfully resolve the fundamental problem of sharing the water of the Indus rivers?

Chapter II. Background of the Negotiations

Fresh water is vital to the economies and societies of countries, especially to those in the arid realm (Solomon). Recently, water scarcity in certain regions of the world, notably the Middle East, has fostered expectations of international conflict, and war, based upon increasing competition for shared water (Wolf). However, what is apparent from the evidence is that at least for the last 60 years international cooperation over shared water resources, even between hostile countries, is the norm. One prominent example of such international cooperation is the Indus Waters Treaty, signed in 1960 by India and Pakistan. Signed by two enemies, the treaty has survived through two Indo-Pakistani wars and a nuclear arms race.

But how and why did Pakistan and India put aside their enmities and agree to sharing the water of the Indus Rivers? In this case the intervention of the World Bank as mediator was critical to bringing the parties together and helping them reach a deal. But what was it in the mediation that made a difference?

The literature on international cooperation suggests one answer: water rationality. This concept predicts cooperation regarding shared water resources because war does not lead to long-term national water security (Alam). Such security is only possible through good water management at the national and international levels. According to this concept, the basic need for fresh water drives countries to cooperate with their co-riparians, despite negative public rhetoric employed by the politicians who would make cooperation seem unlikely.

The concept of water rationality prompts several questions relevant to explaining the successful negotiation and mediation of the Indus Water Treaty. First, how did the

disputants get the political space to explore cooperative measures safely? How did the governments understand the incentives and disincentives of compromise and settlement? Given that direct bilateral negotiations between India and Pakistan were unsuccessful, what did the World Bank as mediator do to encourage the negotiations?

Previous Literature on the Indus Water Treaty

As Biswas points out, “the negotiating process of the Indus River Treaty clearly indicates the critical role of a third party in facilitating such an agreement, provided it can play an impartial but active and constructive role, and supplement it with potential significant financial aid on successful completion of the negotiation” (Biswas, 1992). The intervention of the World Bank in the Indus Water dispute between India and Pakistan began the long walk to a mediated settlement. Matters between the disputants had reached breaking point as bilateral talks on a number of outstanding issues had failed to reach an acceptable conclusion. India had been adamant that no third party should intervene in its dispute with Pakistan over the state of Jammu and Kashmir. However, over the specific issue of water in the Indus River dispute India was, ultimately, willing to allow a mediator to assist the resolution process. This the Bank did by offering its good offices.

As will be shown in succeeding chapters, effective intervention by a third party can change the nature of a bilateral dispute when the conflicting parties are unable to resolve the dispute through direct bilateral negotiations. Mediators encourage parties to move away from conflict and stalemate, as their principal means of interaction, towards a more constructive process. The change from the “blaming” routine that characterizes so many conflicts, is facilitated by the voluntary nature of mediation (Yoffe). The disputants and the

mediator all have to volunteer to join this process. Good mediators retain control of the process, while the disputants retain control of the outcome (Bercovitch).

Successful mediation can lead to the resolution of a conflict however entrenched it may appear. Bar-Siman-Tov describes successful conflict resolution as distinct to conflict management; it involves “the reconciliation or elimination of fundamental differences and grievances underlying a conflict. Conflict resolution occurs when the incompatibility between the preferences of the various parties to a conflict disappears or when the sources of a conflict situation are removed” (Bar-Siman-Tov).

Even if the conflict is not resolved through mutually acceptable outcomes, the process of mediation is beneficial to the disputants as it allows them to interact with each other away from the rhetoric of public politics. This, too, can change attitudes that may serve to make later agreement more likely. This thesis will focus upon the mediator and the means by which the mediator can intervene, and assist the disputants.

Little has been written about the treaty. A few scholars have discussed the varying needs of the disputants to come to an agreement. By virtue of geography time worked in favor of India; it could afford to take its time whereas Pakistan was under pressure to complete an agreement. On the other hand, as some point out, a combination of geography, financial concerns deriving from the potential loss of the eastern rivers, and political instability made Pakistan extremely cautious in its negotiations.

Although few scholars have written on the negotiation of the treaty itself, those who have are critical of the outcome. Mehta, and Kliot, argue that the Indian and Pakistani negotiators carried insufficient weight within their own political structures (Mehta and Kliot). The result was, Mehta claims, a less flexible negotiation process than would have

occurred had politicians or more senior bureaucrats been involved (Mehta). Yet, as my thesis shows, politicians from both sides were periodically involved in the talks, most notably the Indian Prime Minister, Nehru. Mehta further points out that the involvement of politicians also entails a risk of the negotiations being rendered a footnote in a larger political tussle (Mehta). The problem with this criticism is that it negates his previous criticism. Either the negotiators carried sufficient weight or when politicians got involved the talks fell captive to politics. It's hard to see how both can be true.

Furthermore, authors who have written on the treaty have judged it to be a sub-optimal agreement (Alam and Mehta). The treaty divided the Indus basin, contravened the concept of developing the water through an integrated basin management approach. In addition, the critics add, the duplication of irrigation works has diverted the use of resources (hydrological and financial) away from the task of optimizing the situation faced throughout the basin - delivery and application of water. At the same time that some criticize this aspect of the treaty, others believe that the decision to divide the basin was innovative problem solving that led to the final agreement. Though the treaty may be ecologically sub-optimal, it was the most feasible politically given Indo-Pakistani relations.

Original Contribution

As aforementioned, not much has been written on the Indus Water Treaty. No one has explained exactly how the treaty came into resolution, other than brief and sweeping claims about the role of the World Bank in the treaty, and commentary on the political positions of the two main actors, India and Pakistan. To remedy this gap, my thesis looks further into the negotiation through the analysis of World Bank minutes, and memoirs and

articles written by key players of the treaty, housed both in the World Bank Archives in Washington D.C., and the archival boxes of David Lilienthal in the Princeton University Archives. In looking at the negotiation period, and the actions of the three participants, I used material from the World Bank's archives that had previously been unexamined. The Indus Basin Files contains material from the actual negotiations undertaken with the Bank's good offices. I used material from the Indus Basin Files, and Lilienthal's archived papers to understand the procedures the mediator, in this case the World Bank, undertook in pursuit of a final agreement.

The Lead up to Negotiations

The negotiations themselves are difficult to understand without some historical context. Before Partition, The British developed an elaborate system of irrigation canals in the Indus basin in the 19th century. Most of the canals were constructed in the provinces of Punjab and Sind. However, each province built its own works independently due to lack of an integrated approach. Due to a lack of storage facilities, competition for the run-of-river flow increased and led to a dispute between Sind and Punjab in the 1930s. Events leading to the Partition obstructed any final settlement of the dispute.

Irrigation in the Indus River basin dates back centuries; by the late 1940s the irrigation works along the river were the most extensive in the world. These irrigation projects had been developed over the years under one political authority, that of British India, and any water conflict could be resolved by executive order. The Government of India Act of 1935, however, put water under provincial jurisdiction, and some disputes did

begin to crop up at the sites of the more-extensive works, notably between the provinces of Punjab and Sind.

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 to 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.

Before a decision could be reached, however, the Indian Independence Act of August 15, 1947 internationalized the dispute between the new states 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. Heightened political tensions, population displacements, and unresolved territorial issues, all served to exacerbate hostilities over the water dispute.

As the monsoon flows receded in the fall 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 March 31, 1948, allowing discharges from headworks in India to continue to flow into Pakistan.

On April 1, 1948, the day that the "Standstill Agreement" expired, in the absence of a new agreement, India discontinued the delivery of water to the Dipalpur Canal and the main branches of the Upper Bari Daab Canal. Several motives have been suggested for India's actions. The first is legalistic-that of an upper riparian establishing its sovereign

water rights. Others include an Indian maneuver to pressure Pakistan on the volatile Kashmir issue, to demonstrate Pakistan's dependence on India in the hope of forcing reconciliation, or to retaliate against a Pakistani levy of an export duty on raw jute leaving East Bengal. Another interpretation is that the action was taken by the provincial government of East Punjab, without the approval of the central government.

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

The question over the flow of the Indus is a classic case of the conflicting claims of up- and down-stream riparians. The conflict can be exemplified in the terms for the resumption of water delivery to Pakistan from the Indian headworks, worked out at an Inter-Dominion conference held in Delhi on May 3 and 4, 1948. India agreed to the resumption of flow, but maintained that Pakistan could not claim any share of those waters as a matter of right. This position was reinforced 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 (Biswas).

While these conflicting claims were not resolved, an agreement was signed, later referred to as the Delhi Agreement, in which India assured Pakistan that India would not

withdraw water delivery without allowing time for Pakistan to develop alternate sources. Pakistan later expressed its displeasure with the agreement in a note dated June 16, 1949, calling for the "equitable apportionment of all common waters," and suggesting turning jurisdiction of the case over to the World Court. India suggested rather that a commission of judges from each side try to resolve their differences before turning the problem over to a third party. This stalemate lasted through 1950.

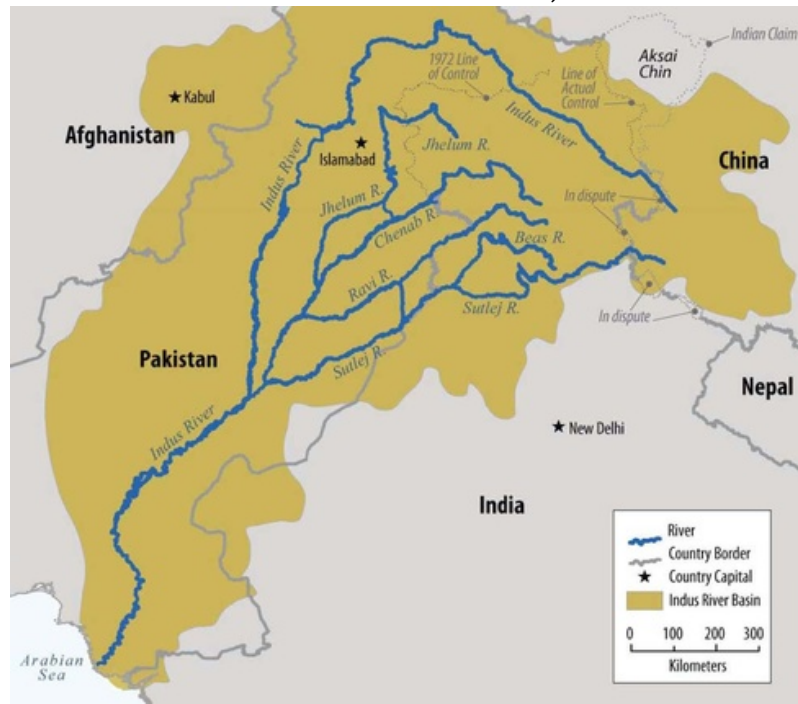
What is the Indus Region?

The Indus River originates in the Tibetan plateau, making its 3,200 kilometer journey southwards along the entire length of Pakistan, before emptying into the Arabian Sea. The river basin is divided between Pakistan, which has about 60% of the catchment area, India with about 20%, Afghanistan with 5% and around 15% in Tibet. The two major riparians, Pakistan and India have extensively dammed the Indus River to provide for irrigation and hydro-electricity. For reference, a riparian zone is defined as the area of interface between land and a river or stream.

The Indus has five main tributaries. The Jhelum, the largest of these, originates in the Valley of Kashmir. The Chenab, a second tributary, flows through the Jammu region of the state of Jammu and Kashmir before entering the Indian state of Punjab. The remaining three tributaries (Ravi, Sutlej and Beas) either originate or flow through India's state of Himachal before entering Indian Punjab.

As a result, if the Line of Control (LoC) between India and Pakistan in Kashmir, were to move from being a defacto to a recognized international border, India would permanently become the upper riparian and Pakistan the lower riparian of the Indus River and all of its tributaries. This is how the area is treated at the moment, but not established by law.

The Indus is a river system that sustains communities in both India and Pakistan. In Pakistan, it is the only river system supporting the country, where more than 92% of the land is arid or semi-



<https://www.quora.com/Is-India-violating-Indus-water-treaty-by-building-Dams-over-the-western-rivers-under-the-IWT-1960>

arid. In India, it is one of two main river systems supporting the country's northwest: Punjab, Haryana and Rajasthan, which are generally considered to be water deficient areas.

Given that over half of Pakistan's population is employed in the agricultural sector and that Punjab produces more than 20% of India's wheat and is known as the "bread basket" of the Republic of India, the importance of the Indus River to the well-being and economy of both countries cannot be overemphasized.

Chapter III. The Process of Negotiation over the Basis: 1950-1955

The World Bank succeeded in engaging itself in the dispute resolution process India and Pakistan had started, half-heartedly, a few years before. Mediation by the Bank could potentially help the disputants find an alternative to the stalemate that had characterized their previous encounters. Based upon the Lilienthal principles, discussed below, the Bank encouraged the disputants to find a solution that would satisfy both India and Pakistan's needs. The Bank hoped to explore possible options in order to "expand-the-pie" and demonstrate that there was enough water in the Indus Basin to meet both India and Pakistan's needs. Nonetheless, for the Bank to help resolve the dispute it had to do more than demonstrate alternative options existed. India refused to give up its claim to the Eastern Rivers, and Pakistan refused to relinquish these rivers as well. The World Bank initially attempted to get the disputants to draw up a joint plan for the development of the Basin's waters for the benefit of both countries. However, the differences between the disputants remained sufficient for the Bank to ask the Indian and Pakistani delegations to draw up separate plans. When these separate plans failed to bridge the differences, the World Bank presented its own plan in 1954. The mixed response to the Bank's original plan threatened to torpedo the mediated talks. However, a compromise was reached by suggesting another option. The 1954 Plan and the talks preceding it focused on the development of a comprehensive plan that would utilize all the waters of the Basin. This would, in effect, be a permanent plan. With difficulties plaguing the discussions for this plan, the Bank suggested reaching temporary agreements that would meet the immediate water needs of the countries. These ad hoc agreements would be negotiated in parallel with the comprehensive plans. The search for acceptable options appears to have been an

evolutionary process, with the issues in dispute naturally influencing the nature of the options. This chapter delves into the first 5 years of mediation between India, Pakistan, and the World Bank.

The Lilienthal Principles

Independently of the World Bank, the United States was exploring, informally, ways to cooperate with India. Its intermediary in this particular enterprise was David Lilienthal, who had formerly been Chairman of the Tennessee Valley Authority. Propelled partly by an idealistic zeal that sought to challenge the 'red peril' of communism, and partly by self interest, Lilienthal regarded India as representing for "the United States and democracy an opportunity" (Lilienthal Papers).

In October 1949, the Indian Prime Minister, Jawaharlal Nehru, had invited Lilienthal to visit India. Convinced that India was not yet lost to communism, and despite its neutral stance could still be recruited into the American camp, Lilienthal began preparing for a trip to the Indian Subcontinent in January 1951. Armed with the blessing of the US Secretary of State, Dean Acheson, and information gathered from the World Bank regarding the situation in the Indian Subcontinent (World Bank 1/31/51). Lilienthal visited the two dominions in February 1951 (Lilienthal Papers).

In January 1951, the U.S. Government was already aware that the Sutlej River dispute constituted a major obstacle in Indo-Pakistani relations (Lilienthal Papers). This was further confirmed, a month later, in discussions with the Government of Pakistan. The Foreign Minister, Zafrulla Khan, and the Secretary-General of the Pakistani delegation to

the United Nations (UN), Chaudhuri Mohammad Ali, discussed the situation as it stood with India regarding the rivers flowing through West Punjab (Lilienthal Papers).

Though the River Sutlej dispute was of importance, it remained subordinate to the dispute over Kashmir for both countries. This subordination continued into the domestic and international realm of Indo-Pakistani relations. As the Prime Minister of Pakistan, Liaquat Ali Khan, was to state: "Unless the Kashmir issue is settled it is unreal to try to settle the issues about water or about evacuees" (Lilienthal Papers). The river dispute was also hostage to the suspicions that permeated Indo-Pakistani relations. The Foreign Secretary, Ikramullah, asked Lilienthal to "bear in mind there is a large element in India that does not accept the partition of India, that is still talking and planning to undo what they insist was a mistake" (Lilienthal Papers).

Lilienthal returned from the Indian Subcontinent, and talks with the Governments of both India and Pakistan, convinced that the water dispute had to be tackled first. Only then, Lilienthal argued, would relations between the two Dominions be calm enough for discussions on Kashmir. Because, Lilienthal warned, as the situation stood presently India and Pakistan were close to war Lilienthal warned (Lilienthal Papers). Lilienthal "urged that the tortured question of water rights be removed from the politicians' negotiating table and handed to the engineers of the two countries to work over, with the technical and presumably financial help of the World Bank" (Lilienthal Papers).

Lilienthal saw three principles as essential to the dispute's resolution. Firstly, recognition by the disputants that there was enough water in the Indus Basin for both India and Pakistan's existing and future uses. Secondly, the water in the River Sutlej, alone, would be inadequate for resolution, therefore, the water in all six rivers of the Basin should be

considered. And thirdly, to avoid past claims and disputes from obstructing the resolution process any further, the matter should only be approached from a functional perspective. Lilienthal also envisaged the involvement of a third party in bringing the disputants to the negotiating table such as an institution in the manner of the World Bank (Lilienthal Papers).

Initial Talks

Lilienthal's assessment of the Indus Basin dispute generated the principles that would guide the World Bank's mediation. Lilienthal believed that the key element of the dispute was the competition for the waters of the River Sutlej, a portion of what is known as the eastern rivers. India wanted to develop new uses of the Sutlej and Pakistan, though it too wanted to develop new uses, wanted to safeguard its existing uses. Though neither disputant denied the right of the other to make use of the water, India and Pakistan prioritized their own uses.

Lilienthal's principles stipulating the treatment of the Basin as a single unit and the sufficiency of water within the Basin allowed all India, Pakistan, and the World Bank to interpret the principles in their own way. The World Bank hoped that the disputants would reach agreement by finding an optimal development plan. Optimal development would mean using all the waters of the Indus Basin, for the joint benefit of the riparians, in the most economic and efficient manner possible. The Bank believed this approach would remove the reasons for the dispute over the River Sutlej since all the waters were now open for consideration. This had been a major point of contention in past discussions.

India believed that the principles recognized its need for the Sutlej waters, and therefore welcomed them. Since independence India had been unilaterally constructing works to utilize these waters. Though it would take time for the works to be completed in totality, India was eager to make each component operational as they were being finished. In 1951, at the beginning of talks, India believed there was enough water within the whole Basin to meet all demands for water, especially since most of the water was “at present unused and running waste” to the Arabian Sea (World Bank 9/18/51). The Indian Prime Minister, Jawaharlal Nehru stated: “We are convinced that there is more than enough water in the Indus Basin to satisfy the needs of both India and Pakistan, provided it is properly exploited” (World Bank 9/25/51). Therefore, by looking at all the waters of the Basin, India believed, Pakistan would realize there was enough water, and India would get access to the River Sutlej.

From early in 1951, Pakistan also welcomed the intervention of an international agency in its long-standing dispute with India, as initial talks continued to fail. Most importantly Pakistan sought absolute security of its existing water uses. This Lilienthal had recommended, and the World Bank sought and received assurances that neither party would diminish supply to each other for the duration of the Bank’s intervention. With such assurances in hand, the consideration of all the rivers in the Indus system appeared to be to Pakistan’s advantage too. Different provinces in Pakistan had different existing or planned irrigation schemes, which under the Lilienthal principles would have to be taken into regard, and safeguarded, in any final settlement.

Although India and Pakistan agreed to enter into discussions based upon Lilienthal’s principles, their bargaining positions did not change. Though obliged to respect each

other's need for water, India and Pakistan would not agree upon a common approach to developing the Basin jointly. Frustrated by the impasse, the World Bank asked the parties to submit separate plans outlining their concepts of development. The resultant plans highlighted the differences more acutely, and the World Bank was forced to propose its own plan to keep the talks going.

On October 6, 1953, the Indian and Pakistani delegations presented their respective proposals for the comprehensive development of the Indus Basin (World Bank 10/6/53).

The plans had a number of aspects in common:

- Each country favored its own uses above the other's
- Both estimated similar amounts of water available within the basin;
- Both plans, in effect, eschewed an integrated approach and divided the waters between them;
- Both India and Pakistan appeared to recognize India's use of the Indus basin could really only come from the eastern rivers;
- Neither side allowed each other allocations for planned uses and future development.

The Indian 1953 proposal was optimistically called the "Comprehensive Long-Range Plan for the Most Effective Utilization of the Water Resources of the Indus Basin" and dealt with the whole Indus Basin. In terms of the percentage of water allocated to Pakistan, it appeared to be more generous than Pakistan was being towards India. India was giving Pakistan 76% of all the water, whereas Pakistan was allocating a meager 13% to India (World Bank 10/6/53). However, such apparent generosity came at a price. India was proposing to requisition all the water of the eastern rivers (Sutlej, Beas, Ravi), and 7% of

the western rivers for its own existing and planned uses. Pakistan was to meet all its uses from the remaining 93% flow of the western rivers (including the Indus, Chenab, and Jhelum).

Just as the Indian Plan naturally favored India, the Pakistani Plan favored Pakistan. In effect, though confined to the Pakistani section of the Indus Basin, the plan proposed to allocate all the water beyond India's present-day uses to Pakistan. Indian uses amounted to 70% of the eastern rivers or 13% of the total water supply in the basin. For reference, the eastern rivers supplied approximately 20% of the total Indus Basin water supply, with the western rivers making up the remaining 80%. Aside from an issue of quantity, Pakistan was keen to maintain its present sources of water. The highly developed areas of West Punjab were fed principally from the eastern rivers. To change the source of this water supply would be considerably more expensive, as link canals, and dams, would need to bring replacement water from the western rivers. Pakistan was unwilling to carry the additional expense, especially as it felt it was legally justified in demanding the status quo be maintained. In other words, the quantity and source of water supplied to Pakistan's uses would remain unchanged.

A Bank report on the India's 1953 plan (World Bank 10/12/53 contested five points in the Indian plan:

- The method by which the total amount of water available in the basin was calculated;
- The fact that allocations to Pakistan were less than its uses already in existence;
- That the Indian plan ignored Pakistan's pre-partition plans, and underestimated Pakistan's needs;

- That India was still claiming the same amount of water (including part of Pakistan's existing uses) as it had in the unsuccessful conferences in 1950;
- That the plan proposed pooling together all the water of the basin and then allocating it in accordance with the Indian Designee Engineer's instructions.

This last point requires elaboration: the Designee Engineer would decide which areas in both countries were usable by the rivers, and the amount of water needed (World Bank 10/12/53). The Indian Plan thus appeared to suggest that water uses and allocations would be decided without conferring with the Pakistani irrigation authorities. The Bank report's author advised Pakistan that "because of the character of the submission of the Indian Designee, it appears to me it might be to the best interest of Pakistan to emphasize the additional uses of water that were conceived before Partition" (World Bank 10/12/53). This implied accepting Indian plans and that extra-basin transfers would occur, but it also meant that Pakistan's pre-partition uses had equal weighting as the Indian project. This means that the Pakistani and Indian plans were then held at the same level in Bank mediation. But, as it turned out, both countries rejected each other's plan by the end of 1953. In order to keep the negotiations from falling apart the Bank decided to put forward its own proposal for the comprehensive development of the Indus Basin.

The Indian and Pakistani Plans were markedly different "in concept and in substance" a Bank official stated (World Bank 5/2/54). Though later discussions would produce some concessions, these were insufficient to result in agreement and the "margin of difference" between India and Pakistan remained wide (World Bank 5/2/54). The principal difference was the matter of existing sources. Pakistan believed it had the right to not only the quantity of water it had enjoyed prior to partition, but that it was also entitled

to receive this water from the same source. This belief fuelled Pakistan's efforts in finding a comprehensive plan. India, though not contesting Pakistan's right to water for its existing uses, did challenge the issue of maintaining the same source.

By 1954, additional talks outside official means commenced between Indian and Pakistani leaders, as well as World Bank officials. The proposed supplementary talks were aimed at not substituting the primary discussions, but at assisting the negotiations on an unofficial basis. Despite apparent conciliatory efforts by the two delegations to resolve the conflict, reports from the Indian subcontinent reinforced their differences. As the dry season of 1953 officially started in mid-October, Pakistan's irrigation authorities began to complain that India was not supplying the full quota of water it was expected to, and that the Indian army was obstructing the collection of necessary data regarding the amount of water being sent (World Bank 10/14/53). The Indian army was not alone in being accused of obstruction. The Pakistani army also refused to allow Indian engineers to enter the section of riverbanks that they controlled. The Indian Special Commissioner pointed out that "both Commissioners are helpless in the matter" (World Bank 10/14/53).

Pakistan made a formal protest to the Bank regarding the shortage in supply; in turn the Bank informed India of the formal complaint (World Bank 10/28/53). The issue of shortages rose to the senior most levels, eventually reaching the President of the World Bank, and the Prime Ministers of both countries (World Bank 10/28/53). Prime Minister Nehru wrote to Prime Minister Ali that having made enquiries into the issue of shortages: "There is NO reason for complaint. Apparently misunderstandings have arisen over methods of calculation and rotational program period. There have been NO actual

shortages of any substance on the U.B.D.C while on the S.V canals Pakistan received much larger supplies than due” (World Bank 11/2/53).

A World Bank Led Plan

The issue of shortages remained a consistent and persistent irritant during the negotiations. An additional problem that threatened to create further problems for the Bank-led discussions was the distribution of information regarding the dispute, water shortages and the talks themselves. Pakistan had prepared a pamphlet for publication on the subject of the Indus Basin dispute, despite clear instructions and agreement not to disseminate information (World Bank 11/23/53). Statements in parliament by ministers of the Pakistan government were also ill-timed. The Minister for Industry was quoted as saying of the procedure for reporting shortages that “Pakistan had agreed to give this procedure a trial at the request of the World Bank, which had lent its good offices in this matter, even though she doubted the efficacy of this agreement” (World Bank 11/5/53). India, naturally, was unhappy with this development and complained to the World Bank (World Bank 11/23/53). India also made public announcements regarding the Indus Basin dispute, including by its Prime Minister in parliament (World Bank 5/18/54). As the President of the World Bank was to explain, in proposing the Bank’s February 1954 plan: “The Indus Basin Working Party have labored long and industriously at their task, but for some time it has been evident to me that no further progress could be made at the engineering level unless the Bank took some initiative” (World Bank 5/18/54). The report explained that the difficulties of the dispute rather than the capabilities of the delegate meant it unlikely, “that the engineers would be able to make, in open discussions in the

Working Party, the kind of concessions that are required to bring about a settlement” (World Bank 5/18/54).

The World Bank soon realized that “the problem could not be solved solely by technicians; the Bank would, positively, have to negotiate according to a strategy or strategies of its own” (Iloff, 1970). Therefore, after considerable thought and effort, the Bank decided to put forward its own proposal. Discussions with the sides led the Bank to believe that “both would welcome such action” (World Bank 5/8/54). The World Bank was clear, though, of the limitations to its plan, and openly acknowledged that, “the proposed plan will not fully satisfy either side” (World Bank 5/8/54). But the Bank pointed out that “no plan could do that; there is not enough water to fulfill all demands” (World Bank 5/8/54).

The World Bank believed that progress between the two countries was not being obstructed by technical matters, but by three basic difficulties that had political implications (World Bank 5/2/54). Firstly, that the water supplies and storage potential within the basin, were “inadequate to the needs of the basin.” Secondly, though the Working Party was trying to create a comprehensive plan that treated the Indus Basin as a single economic unit, two separate sovereign territories were involved. And thirdly, the delegations presented plans that differed dramatically in concept regarding the issue of existing sources of supply (World Bank 5/2/54).

Therefore, on February 5, 1954, the World Bank presented its ideas to the Indian and Pakistani delegations in Washington, D.C. The underlying principle was the division of the waters of the Indus Basin. Pakistan would have complete control and use of the western rivers, the Indus, Jhelum and Chenab. India, in turn, would have complete control

and use of the eastern rivers, the Sutlej, Beas and Ravi (World Bank 5/2/54). The Bank claimed that its “proposal is no arbitrary compromise, arrived at by mathematically splitting the differences between the two sides” but a “plan based on concepts of its own, which produce a fair and economic result” (World Bank 5/2/54). Nonetheless, comparisons with the Indian and Pakistani plans show the Bank’s allocations to be halfway between the two (World Bank 5/2/54). The Bank reasoned that having an independent plan would negate the problems outlined above. Moreover, the “mutual independence afforded by the Bank proposal would also bring benefits of a different kind. The location of works serving each country on territories under its control, and the assurances against interference by either country with the supplies on which the other depends, should reduce the chances of disputes and tension and contribute to improved relations,” according to the World Bank officials (World Bank 5/2/54).

The President of the World Bank, Eugene Black, was clear that an optimal plan that would fully satisfy both claimants was unattainable. However, what was possible, given the physical and political limitations within the Indus Basin, was a plan that would still be of significant benefit to Pakistan and India. The President urged both governments to accept the principles of the plan without waiting for the accompanying details, which would be worked out later: “I am convinced that this proposal represents the best opportunity for a settlement that has not yet arisen; that an equally favorable opportunity for a fair settlement is not likely to recur; and that this chance should therefore not be missed. For these reasons I urge you to examine the proposal thoroughly and give it your approval” (World Bank 5/2/54). Despite Black’s public support of and commitment to the Bank’s

1954 Plan, the governments of India and Pakistan reserved their judgment on the principle of division.

India was the first to accept the plan, in March 1954 stating, “in the interest of a speedy and constructive settlement and in the spirit of good-will and friendship that has guided my Government ever since the beginning of this controversy, we accept the principles of the Bank Proposal as the basis of agreement” (World Bank 3/22/54). At the same time, the Government of India emphasized that doing so was not without sacrifices: “The Bank Proposal requires India to give up the use of a large part of the waters flowing through her own territory and thus to abandon, for all time, any hope of the development of a considerable portion of the extensive arid lands in India which has no possible source of water supply other than the Indus system of rivers and which will therefore remain a desert for ever. Its acceptance would also imply a very heavy financial burden for my Government; not only would it involve the payment of large sums of money to Pakistan, but would also make new developments in India much more expensive than if all the waters running through her territory and indispensable for her normal development could have been utilized therein” (World Bank 3/25/54).

Pakistan was slower to commit to the Bank proposal. This was a consistent feature of the mediation: India would readily accept Bank proposals, and Pakistan would tread more carefully. This was understandable since Pakistan appeared to have the most to lose from a hasty agreement, and it had already experienced the consequences of one such legal instrument, the 1948 Inter-Dominion Agreement. In this instance, the “Bank's February proposal left the Pakistanis cold because it did not recognize their insistence that they be guaranteed the uses of water from the existing sources, along with previously planned

uses” (World Bank 3/25/54). Pakistan felt “the Bank proposal did not indicate that there would be any provision for reservoir storage on the Pakistan side, and Pakistan felt that it was absolutely essential that she should have this reservoir storage to take care of her irrigation needs during the critical periods of the year when river flow is low” (World Bank 3/25/54). While Pakistan deliberated on its formal reply to the Bank Proposal, it continued constructing irrigation works to safeguard its uses dependent upon the Eastern Rivers. Similarly, India also followed a dual policy of negotiation and construction. Both parties hedged to protect their uses and planned developments in case the negotiations broke down. In addition, neither India nor Pakistan wanted to be held to a one-sided agreement. Thus, with Pakistan not committing to the Bank’s Proposal, India did not want to be held to a promise to stop diminishing supply to existing uses in Pakistan. In early 1954, India regarded the talks as having ended, and made clear that it was not bound by the ground rules of engagement. Pakistan, on the other hand, regarded the talks as merely having adjourned. In April 1954, Pakistan opened the Balloki-Suleimanke (BS) link canal to transfer water from the River Ravi to the River Sutlej, still without a clear commitment to the principle of dividing the Indus Basin.

Pakistan’s construction and opening of link canals to transfer water from the more western rivers to the River Sutlej, gave India the opportunity to demand Sutlej water for its Bhakra canals. These canals had been under construction since after partition and were now on the verge of completion. Pakistan, naturally, was fearful of the effect of increased withdrawals upon its River Sutlej uses and voiced its concern to the World Bank (World Bank 3/25/54). India replied that it would use water surplus to Pakistan’s existing uses (World Bank 5/8/54). India defined this surplus as existing once Pakistan used its new link

canals to transfer water and, therefore, was to press Pakistan to make immediate use of its link canals. Although India insisted that the talks had ended, along with its obligations arising from the talks, it hesitated closing the door to further negotiations. India understood that without Pakistani transfers of water, any additional Indian withdrawals from the River Sutlej would be seen as reducing water to Pakistan's existing uses. This would contravene the undertaking given to the Bank not to diminish supplies for the duration of its good faith. India, therefore, forewarned Pakistan of its intention to open the Bhakra canals in June 1954, and expected its neighbor to make the necessary provisions needed to safeguard its water supply. Furthermore, India wanted an interim ad hoc arrangement whereby Pakistan would have to transfer water in the BS link, so that India could withdraw water for the Bhakra canals (World Bank 10/6/54). The government of Pakistan agreed to interim talks regarding the Bhakra canals, but these talks were not to prejudice the search for a comprehensive plan (World Bank 10/6/54).

Although the BS link canal was designed to have an extremely large capacity, it was never fully realized in operation. This put Pakistan at a disadvantage; by the time the BS link had been completed, India was already withdrawing more water upstream than previously with its new Ravi-Beas (RB) link canal. The Ravi-Beas link canal reduced further the water available on the River Ravi, which, even before the link, was uncertain at times throughout the year. Therefore, to augment supplies, Pakistan started building another link canal, the Marala-Ravi (MR) link, in September 1953, and completed it in 1956. Unfortunately for Pakistan, the MR link, designed to transfer water from the Chenab River to the River Ravi, could not run at its full capacity (Michel 1967). The Bank acknowledged that the talks were deadlocked. India claimed the talks were finished, but signaled its

willingness to consider a new round. Pakistan on the other hand refused to commit to the Bank's Proposal without adjustments.

A World Bank memo sketched four approaches to resuscitate the talks:

1. To use the Lilienthal approach.
2. To consider the Bank's February 1954 proposal to have been rejected, and therefore start "horse-trading" with the supplies of the eastern rivers.
3. To use the Tipton study.
4. To start work on other aspects of the Indus Basin dispute, such as the canals and cost, leaving the principle of division until later.

The last option was decided upon, since the Bank appeared unwilling to write-off its 1954 Proposal, and in summer 1954 talks were held on interim arrangements (World Bank 10/6/54).

The government of Pakistan wanted to expedite matters that otherwise would have required written correspondence and consent. Therefore, their representation before the Bank included the Foreign Minister, Zafrulla Khan (World Bank 5/27/54). The Vice President of the World Bank pointed out that India had attached great importance to opening the Bhakra canals by June of 1954. He also noted that India had regarded this achievable since Pakistan would be able to transfer surplus water to the necessary areas from the Rivers Chenab and Ravi, if it opened the BS link (World Bank 5/18/54). However, Pakistan dragged its feet in sharing information that would have allowed the Indians to calculate the amount of water they could withdraw. And even with the meeting of the delegations, certain criteria still needed to be completed before an ad hoc arrangement

could be reached. The World Bank doubted that these criteria could be met in time (World Bank 6/10/54).

Pakistan as a whole began the talks on a conciliatory note. One Pakistani official stated that, "it is important that the pressure of time should not interfere with a careful examination of the problems involved" (World Bank 6/10/54). In essence he announced that Pakistan was willing to let India withdraw a small amount of water in order to allow the Bhakra canals to open. Pakistan wanted the Bank to appreciate that its government had given consent to this withdrawal despite having insufficient information regarding the flow of the eastern rivers, and the Bank indeed interpreted "this agreement as a token of their good will" (World Bank 6/10/54). Further discussions were held to iron out disagreements and misunderstandings regarding the amount of water involved, the operational practices and legal position thereafter regarding the situation outside the temporary arrangements (World Bank 6/10/54).

India still expressed impatience with the speed of the negotiations. India asked the World Bank to inform the Pakistani delegation that there was a deadline for further conversation, and unless matters were agreed upon and a procedure resolved by mid June of 1954, the Indian delegation would return to the Subcontinent (World Bank 6/10/54). During the discussions for an ad hoc agreement, the World Bank engaged India and Pakistan in the hopes of resuscitating the Bank's proposal. In May of 1954 the Prime Minister of Pakistan stated that his government was unwilling to accept the proposal unless adjustments were made. The proposal did not meet the test of fairness that the Bank had, itself, laid down. It was essential that any proposal had to assure supply for Pakistan's existing uses (World Bank 5/14/54). The government of Pakistan believed the Bank

proposal, as it stood, did not meet this criterion. The Pakistani government also did not like the abiding principle of the proposal, the division of the Indus Basin. The resultant independence of Pakistani supplies from Indian control was not welcomed since it meant cutting off Pakistan's access to the eastern rivers: "The Government of Pakistan cannot visualize with equanimity the possibility of implementing a plan which would affect its vital interest adversely for all time to come" (World Bank 5/14/54).

India regarded Pakistan's reply as an outright rejection of the Bank's proposal. The World Bank interpreted the Pakistani position differently. In a discussion with the Indian representative, the Bank President agreed that the Pakistani Prime Minister's letter did not endorse a return to the proposal. But the Bank did not regard it as a complete rejection either, and was willing to press for further discussion with Pakistan and clarification (World Bank 5/14/54). The Bank informed the government of Pakistan that its reply was insufficient to form a basis for continued joint discussions. Any further progress would depend on Pakistan accepting the division of the basin as the starting point. If it became clear during the course of negotiations that Pakistan's uses could not be met with the supplies envisaged in the Bank Proposal, then the Bank would use its good offices to bring about the needed adjustments (World Bank 5/2/54).

A World Bank official informed Pakistan of the World Bank's response to Pakistan's reply. Eugene Black, the World Bank President said the " first reaction of Bank has been that it was probable that this reply could only be construed as rejection of the Bank's proposal and that Amjad Ali had previously been warned of this when he consulted Bank on draft" (World Bank 5/14/54). The World Bank was, however, keen to minimize this potential rejection since if the Indian government interpreted the letter as "a rejection of

the Bank proposal it will be impossible for the Bank to persuade them to participate in any further joint discussions” (World Bank 5/20/54). The consequence of this “of course would mean that the Bank could make no further effective contribution” (World Bank 5/20/54).

The Bank, however, had one card to play. Since the Pakistani representatives in Washington had come to Washington for clarifying talks, this gave Pakistan the “opportunity to remove any misunderstandings” (World Bank 5/20/54). The Bank reminded Pakistan of the advantages of the Bank Proposal. Firstly, Pakistan would be assured that India would not interfere with the waters of the River Chenab. Secondly, India would pay for the costs incurred in constructing the replacement works. And thirdly, Pakistan’s existing uses would be protected for the duration of the transition period (World Bank 5/20/54). The Bank representative continued: “True, Pakistan, under the Bank Proposal, will have less water than she would have if it could be assumed that the existing situation would continue. But this is unfortunately an unrealistic assumption, and a more likely and imminent possibility is that India will cut Pakistan’s existing supplies far below what the Bank proposal would assure to her. Therefore it “would be disastrous from every point of view if discussions now broke down and responsibility could be attributed, however unfairly, to Pakistan” (World Bank 5/20/54).

During their discussions with the World Bank, the Pakistani representatives made their position clear: “India has other systems from which water would be available. Pakistan has not. Money for water is no proposition - not a question of sentiment or principle” (World Bank 6/10/54). Nonetheless, after considerable negotiating, the Pakistani representative drafted an acceptance of the Bank’s Proposal during July 1954 (World Bank 7/28/54). The government of Pakistan formally informed the Bank that it

accepted the Proposal of February 1954, as long as the Bank could ensure that all of Pakistan's uses would be met by the Western rivers (World Bank 7/28/54).

But the fate of future talks regarding the Indus Basin dispute did not rest with Pakistan alone. India was reconsidering its acceptance of the proposal, in light of what it considered to be Pakistani foot-dragging. The Indian representatives in Washington D.C., doubted whether their government would be willing to continue with the talks for a comprehensive plan. But a World Bank representative reminded the Indians, that once Pakistan had accepted the Bank Proposal it would make "it very difficult for the Pakistanis thereafter to attack the Bank proposal and would represent a great step forward politically if in no other way" (World Bank 7/28/54). Additionally, while Pakistan regarded the talks for a comprehensive plan as having adjourned, India believed that the talks had in fact ended. As the Prime Minister of India was to explain to the World Bank: "The persistently negative and un-cooperative attitude of Pakistan has, therefore, made impossible the continuation of the talks initiated by you in March, 1952, and Pakistan has thereby voided the understanding under which we have been working for the last two years" (World Bank 6/10/54). Therefore, India was free, once more, to withdraw as much water as it needed for the Bhakra canals. However, if Pakistan indicated it was willing to continue on the basis of the World Bank's proposal, then India would, too, be willing to talk with the understanding that the Bank's good offices would still be available (World Bank 6/10/54). The Indian Prime Minister proposed that: "Although, in view of the situation explained...above, we are no longer bound now by the unilateral restriction implied in your letter of 13th March 1952 under which, de facto, India could not undertake any major new developments whilst Pakistan could do so without any restriction, we would be willing to

include in the arrangements for renewed cooperative work...appropriate provisions for the transitional period which would enable developments to proceed in both countries on an agreed schedule as envisaged in the Bank proposal” (World Bank 6/10/54).

The World Bank informed India that Pakistan’s reply in July 1954, was regarded as “acceptance in principle of the Bank Proposal of February 5, 1954, as the basis for agreement” (World Bank 7/28/54). Coupled with India’s acceptance in principle of the Proposal, this would allow the talks to move towards a “definitive agreement”. The Bank invited representatives of the two countries back to Washington, to continue work on an ad hoc agreement for 1954-55, and restart discussions with the Bank for a general arrangement and procedures to work out a comprehensive plan (World Bank 7/28/54). The Prime Minister of India, in replying to the Bank’s letter of July 1954, disagreed with the World Bank’s interpretation of Pakistan’s acceptance of the Bank Proposal, and the promise it held for further negotiations for ad hoc arrangements (World Bank 8/8/54). Nehru wanted further clarification, and since another Working Party session would necessitate considerable consultation, he proposed holding the meetings in the Indian Subcontinent. This would prevent unnecessary delay and expedite progress towards an ad hoc arrangement by the end of August 1954. The Prime Minister asked the World Bank to send its representatives, as soon as possible, to work out the details (World Bank 8/8/54). Prime Minister Nehru continued: “Although since the voidance of the understanding contained in Mr. Black’s letter of March 13, 1952, there is no longer any need for an ad hoc agreement exempting India from the unilateral restriction of the standstill clause contained in that letter, the Government of India are fully aware, and understand this also to the Bank’s view, that early agreement on a transition arrangement is necessary in order to

create the proper atmosphere for the successful negotiation of an agreement regarding the basis of a new Working Party” (World Bank 8/8/54).

Eugene Black chose to ignore the Indian suggestion for negotiations in South Asia and reiterated his invitation to the governments of India and Pakistan to send their representatives to Washington D.C. (World Bank 8/13/54). Black felt that any further talks should be held in Washington, DC, and that these considerations still applied for those now being proposed. This was “to avoid delegates being subjected to political pressure all the time and to avoid tendentious press propaganda in the sub continent” (World Bank 8/13/54). The World Bank proposed that the new discussions follow an agreed terms of reference, in order to retain focus on what was in dispute, and the objective of the talks. And therefore, with the August 1954 invitation, the Bank also sent two annexes. Annex A outlined the “Terms of reference and procedure for resumption of cooperative work on basis of Bank Proposal”, and Annex B proposed the “Transitional Arrangements for September and October 1954” (World Bank 8/13/54).

Both governments responded cautiously, accepting Black’s initiative but also insisting on qualifications. The Indian Prime Minister continued to insist that the discussions for the ad hoc arrangements should be held in India (World Bank 8/13/54). The Pakistani Foreign Minister outlined his government’s concerns that their existing and planned uses should be met from the Western rivers. If this were infeasible, then the government of Pakistan would expect the World Bank to lend a hand to bring about the necessary adjustments (World Bank 8/13/54).

The World Bank sent out the General Counsel and the Bank’s Engineer to the Indian Subcontinent to iron out any misunderstandings or disputes before the advent of the joint

comprehensive talks in Washington (World Bank 10/6/54). Such endeavors met with mixed success. In theory, the General Counsel had arranged for India and Pakistan to exchange data with one another. Practice looked somewhat different; the Executive Director for Pakistan, informed the General Counsel in October 1954, that despite repeated requests for this data, India had not furnished it. Pakistan gave notice, that it “also therefore constrained to stop giving the data” (World Bank 10/6/54). The Bank’s President, who was in the Subcontinent during October 1954, also produced mixed results. The Pakistani Minister for Interior remained unclear about the implication for Pakistan, if it was to accept the Bank Proposal, and was concerned that it would lead to the “Bank proposal opening way for India establishing future claims on Jammu Kashmir waters” (World Bank 10/6/54). This matter was cleared up somewhat when the Chief Minister of Punjab asked Eugene Black to explain the “exact scope of the words ‘relatively insignificant consumptive uses’” (World Bank 10/6/54). The Chief Minister went on to explain to the Interior Minister that, the President had: “explained that these words were not meant to convey anything more than really insignificant uses, such as minor extensions of irrigation from existing channels or the use of insignificant amounts of water from small feeder streams etc. According to him these words certainly did not cover the construction of new channels or major extensions of existing channels. Nor did they cover the construction of new major works, such as storages, dams, tunnels etc.” (World Bank 10/22/54).

After these clarifying talks in the Indian Subcontinent, India and Pakistan once more informed the World Bank they would participate in the talks in Washington (World Bank 10/22/54). The Bank representatives discussed, amongst themselves, arrangements and procedures to be adopted in these forthcoming talks. A definition for historical use and the

incumbent allocation was also decided upon: “The historical withdrawals were based on pre-participation years. It has been agreed to ignore all withdrawals for the post-participation period” (World Bank 10/22/54).

The date for the forthcoming talks was, however, subject to continued postponement. It had originally been hoped to hold these joint talks in August 1954. But India and Pakistan still wanted clarifications and assurances from the World Bank during the summer. The designated start date shifted from mid-November to the beginning of December. Though the number of days was small, each postponement, whether arising from the Pakistani or Indian camp, generated considerable uncertainty and distrust (World Bank 10/22/54). The World Bank was stuck in the middle of the delays. When the talks did finally start, in December of 1954, certain aspects of the interaction had changed. Firstly, there was now a deadline by which the cooperative work had to produce some positive results. Unlike the previous Working Party sessions, the new round would consist of a succession of cooperative periods, often lasting a year, but which had to be formally extended by the Bank and the governments involved. Secondly, the make up of the delegations had changed. India and Pakistan both sent in new teams of ministers for fresh starts on the negotiations.

We can glean why the Bank worked so hard to keep the Indus Basin discussions alive from the explanation that Eugene Black gave the Prime Ministers of India and Pakistan. The Bank felt that if the situation, following the breakdown of talks, was allowed to continue in its present impasse there would be regrettable consequences for both countries. Therefore, the Bank felt it had the responsibility to “persevere zealously” with their efforts, as long as there appeared the possibility of reaching a solution (World Bank

10/22/54). Although the talks on the Indus Basin dispute were to restart, the Bank knew that differences had not diminished, and it could not rely upon the search for a comprehensive plan to get agreement. It would need to develop new means to get agreement, and continue to placate Indian and Pakistani fears, pending any comprehensive plan.

Chapter IV. The Process of Negotiation over the Basin: 1955-1960

The stalemate in finding a permanent solution to the water issue led to a myriad of interim agreements, while a permanent agreement continued to be discussed. Despite their lukewarm response to the World Bank's 1954 plan, India and Pakistan remained committed to the mediation process. Nonetheless, having persuaded the parties to return to the table for another attempt at cooperation, the World Bank presided over the search for alternative means. The renewed approach did not remove the previous obstructions, nor did it appear that the dispute would be resolved quickly.

Yet Pakistan's need for water remained; the demand for food and livelihoods was not suspended. Therefore, in 1955, the Bank proposed negotiating temporary agreements for the delivery of water by India to Pakistan, on an ad hoc basis. An additional impetus was India's desire to open the new Bhakra canals off-taking the River Sutlej (World Bank Archive 7/2/55). These negotiations continued alongside the search for a proposal to permanently resolve the Indus Basin dispute.

The Bank representative explained to the heads of the Indian and Pakistani delegations that engineers from all three parties were to have free access to each other regarding technical issues. Furthermore, he urged that efforts should be made to reach agreement on any outstanding technical questions. However, any changes or compromises of a fundamental nature were to be made only at the highest level of government clearance (World Bank Archive 7/2/55). In other words, the delegation heads would sketch the broad outline, which the engineers could color in separately. This was essentially a step back from the World Bank's approach of the prior five years.

Interim Agreements

The World Bank recognized early in the summer of 1954, shortly after receiving the Indian and Pakistani responses to their plan, that interim arrangements would be necessary. It surmised work would progress on developing a comprehensive plan, and simultaneously work would proceed on developing principles to bring about temporary measures for the winter and summer of 1954 and 1955 (World Bank 7/21/54). Pakistan, with an eye to its existing uses, accepted continued negotiations with the understanding that their uses would be protected by these interim arrangements, while other negotiations proceeded (World Bank 7/28/54). The Bank informed India that Pakistan accepted the criteria for continued cooperative work, and for negotiating the transitional arrangements for the period up to October 1955 (World Bank 7/28/54).

When the negotiations started again in December 1954, Pakistan was keen to prioritize the interim arrangements above the comprehensive plan's development. However, the Bank was reluctant to comply, because as its representative explained "it can only create ill feeling." This, the Bank feared, might lead to the process breaking down, and therefore obstructing the comprehensive plan (World Bank 7/2/55). Pakistan wanted to secure supply for its needs before India demanded water for its new uses. The perennial competition between new and existing uses continued with greater alacrity, with the impending opening of the Bhakra canals. India had a strong impetus for demanding interim arrangements. With progressive completion of the Bhakra project, domestic expectancy for water in India grew high. India warned the World Bank that many of the Bhakra canals were ready to receive water, "and that great difficulties will be created in India unless some water is released to them" (World Bank 7/2/55). Under such conditions the political

atmosphere would harden, making further cooperation with Pakistan difficult to justify to the Indian government's domestic audience.

The World Bank, fully cognizant of the situation between India and Pakistan, wished to postpone talks on the interim arrangements (World Bank 12/14/54). It argued that India would want to make withdrawals for use in the Bhakra canals in April 1955. Clearly this would be at the expense of Pakistan's existing uses. Pakistan was constructing the Marala-Ravi (M-R) link to transfer water from the Chenab to the Ravi. This was to replace water India planned to take from the eastern rivers for its new uses. As it became apparent that the M-R link would not be operational before May 1956, India refused to wait until then before it could make its withdrawals. Instead, India proposed sharing the resulting hardship with Pakistan on a rationing basis (World Bank 12/9/54).

Negotiations on the interim arrangements, also known as ad hoc agreements, finally started in January 1955. The World Bank had not succeeded in postponing the discussions until March as it had hoped to do. Unfortunately, the mistrust and suspicions characteristic of the comprehensive plan negotiations pervaded these new discussions too. At a joint meeting in May 1955 between the Bank, India and Pakistan to discuss the ad hoc agreements, the disputants' attitude was clearly demonstrated, as well as the third party's frustration. "After much bickering" India and Pakistan agreed that there was "no difference" between their data, only in the principles upon which these figures were based (World Bank 5/17/55). It was agreed that Indian and Pakistani officials would meet later to sort this difference out.

This did not alter the tone of the discussions. The Bank representative was forced, "almost in exasperation", to remind India and Pakistan that it was absurd to spend so much

valuable time over small issues, when there were much larger issues within the Indus Basin to agree upon for the whole system to function (World Bank 5/17/55). He also confirmed that if in twenty-four hours, India and Pakistan had not agreed upon the figures, the Bank would propose its figures instead. The disputants were to bear in mind two concepts. Firstly, that the Bhakra canals should receive some water and secondly, that the quantity awarded to India should not put “too serious” a strain upon Pakistan. Using strong language by the standards of international diplomacy, the Bank representative said, “that he was completely out of sympathy with both India and Pakistan in their attitude over this whole issue”, and added that, “considerably more reasonableness will have to be shown if any progress is to be made” (World Bank 5/18/55).

India and Pakistan managed, amidst the repeated bickering, to reach agreement on the ad hoc amounts of water to be shared between them. The Bank’s President telegrammed Prime Ministers Nehru and Mohammad Ali Bogra in June 1955, expressing the Bank’s hope that the good work would continue and lead to an acceptable conclusion “in the same helpful atmosphere.” Especially as the ad hoc agreement was a clear “manifestation of Pakistan’s willingness to cooperate” (World Bank 6/27/55).

A succession of agreements were then signed: April 1, 1955 - September 30, 1955; October 1, 1955 - March 31, 1956; April 1 1956 - September 30, 1956; and April 1 1959 – March 31, 1960. The only period for which the parties were unable to agree was October 1, 1957 – September 30 1958. This may be linked to a temporary further souring of relations between the two countries. At the time, Pakistan’s Prime Minister Hussain Suhrawardy, regarded India with more disgust than the previous and following Pakistani Prime Ministers who dealt with the formation of the treaty. Unfortunately, agreement on ad hoc

supply was not matched with equal success in the search for a permanent and comprehensive plan.

Officials within the Bank disagreed on the course that should be pursued to get a settlement. The General Counsel suggested formulating a treaty from a progressive series of ad hoc agreements rather than chasing the elusive comprehensive plan. The Bank President, however, considered a comprehensive plan as essential to a long-term settlement of the Indus Basin dispute. After the presentation of the World Bank's proposal in February 1954, and the continuation of the mediations in December 1954, representation of the Bank was made one Bank member's full-time responsibility. Under this representative the Bank used both approaches simultaneously as the idea of a comprehensive plan held considerable attraction for Pakistan, which wanted its water supply independent of India.

The 1956 Aide-Memoire

Pakistan made it clear in the new round of talks that it believed the 1954 World Bank plan allocated insufficient water to Pakistan's needs. During critical times in early and late summer, Pakistan faced severe water shortages to its crops. Just when water would be needed the most, when the crops of one season were maturing and the new crop about to be sown, the flow of the western rivers were inadequate to meet even replacement needs. Therefore, storage facilities were needed to ensure an adequate supply at these critical times. Pakistan prevailed upon the World Bank to accept this need for storage. Only after the Bank's consultant engineering firm, TAMS, verified Pakistan's position in 1956, did the Bank accept that storage facilities were a necessity. Based upon the consultant's report, the

Bank submitted to India and Pakistan an Aide Memoire to the original Bank Proposal on May 21, 1956 (World Bank 5/21/56).

The Aide Memoire envisaged building storage facilities on the western rivers to make up the deficit Pakistan would otherwise face, and to offer once more the World Bank's good offices to obtain necessary adjustments to the 1954 World Bank proposal: "The Bank continues to hold the view that the 'division of the waters' contemplated by the Bank Proposal of February 1954 affords the best prospects for a settlement of the Indus Waters question; that out of the flow-cum-storage potential of the rivers allocated to them, India and Pakistan could each develop very substantial irrigation uses, additional to those that they now enjoy; and that no insuperable engineering difficulties are likely to arise in either country in constructing the physical works necessary to develop these additional supplies. The works would, however, be costly; and their financing would present a serious financial problem" (World Bank 5/21/56).

Less than a month after presenting the Aide Memoire, the World Bank began preparing a plan of action in the event that India and Pakistan accepted the proposal, though there was no guarantee of acceptance (World Bank 6/18/56). The World Bank representatives decided that if the proposal was accepted each country should be asked to prepare its own plan based upon the principles embodied in the Aide Memoire. The Bank informed each side that it would expect the engineering firm to review and comment upon these plans, and draw up a final plan that would then be sponsored by the Bank. Any plan put forward by the parties should, according to the Bank, have four criteria. First, it should meet the uses envisaged in the Aide Memoire. Second, the plan should be practical. Third, it should be economical. And last, the plan should use the water as it flowed in the river to the

maximum rather than rely upon storage, using dams only if there was no other alternative. In addition, the plan and its estimate of India's financial liability were not to be based upon Pakistan's vision of developing its irrigation uses in the long term, but rather on what was necessary to meet the replacement needs (World Bank 6/3/56).

During June 1956 Pakistan met with the World Bank at different levels of representation to discuss matters concerning the Indus Basin situation. Prime Minister Chaudhuri Mohammad Ali met with the Bank President and one of the Vice Presidents in London for general talks (World Bank 6/5/56). In New York, members of the Pakistani delegation met with the Bank's consultants for more detailed technical discussions (World Bank 7/2/56). The minutes of the latter meeting appear to illustrate the difficulty the Bank faced in its role as intervener in the dispute (World Bank 7/2/56). Firstly regarding information, despite the Bank's efforts to communicate relevant material to both sides, the disputants remained sensitive to the smallest rumor of being excluded. These suspicions led one Pakistani delegate to state that, "he wanted to know if there were any secrets that he hadn't heard about" (World Bank 7/2/56). Secondly, the process of gathering information could be problematic if it led to implications regarded by the disputants as being detrimental to their position. Therefore, the Pakistani delegation questioned why the Bank was investigating irrigation economics in Pakistan. The delegation wanted to know whether it was linked to the rumors they had heard suggesting Pakistan was "getting a free ride." The Pakistani delegation refuted the charge of freeloading at length and appeared to suggest that the negotiations would not result in Pakistan receiving any new allocations of water (World Bank 7/2/56).

The Pakistani delegation's claim that Pakistan was not being provided with water for any new uses has its roots in Pakistan's attitude to the timing of plans for particular projects. Pakistan distinguished between projects or 'uses' that had been planned before partition from those that were planned after partition. The pre-partition planned uses were, in Pakistan's view, not to be considered as new projects. Therefore, water allocations to these projects made under any plan were not to be taken as providing water to new developments but as being part of the replacement package. India contested this interpretation, as it believed Pakistan was trying to include development works under the replacement banner. This, as has already been pointed out, would result in India having a larger financial obligation to Pakistan. With limited funds, and its own irrigation needs to develop, India naturally did not want to spend large funds on schemes from which it would not benefit directly. This, in turn, led to a debate upon the benefits being received by each country from certain works in the proposed plans.

India also challenged Pakistan to accept the Aide Memoire in June 1956. Pakistan agreed instead to continue with the cooperative work, but with qualifications regarding the ultimate plan. The World Bank, in turn, did not regard the Indian and Pakistani replies as constituting a clear and definitive commitment to continuing the search for a comprehensive plan. The Bank's proposal to continue the work, nonetheless, based upon its 1954 Plan and Aide- Memoire Plan suggests the World Bank was reluctant to throw in the towel. India and Pakistan's acceptance in September 1956 of the Aide Memoire, gave credence to the Bank's persistence.

A joint meeting was again held in Washington, D.C, between the World Bank, India and Pakistan, marking the start of a new round of talks and discussions about procedure.

The Bank set the agenda, pointing out that as the disputants agreed to continue cooperative work until March 1957, the pace of work would have to reflect a “very industrious schedule” (World Bank 9/19/56). The World Bank proposed that India and Pakistan both prepare plans using the principles embodied in the Aide Memoire. The disputants were to ensure that the plans were workable, would exploit the flow of the western rivers water to the maximum, and make the minimum inroads into Pakistan’s storage capacity. It was important that these plans should accomplish the uses envisaged in the Aide Memoire, and incorporate details of all the works needed, such as link canals, barrages and storage facilities, all with their locations and capacities. The World Bank, mindful of the need for urgency, expected these plans to be ready by October 1956, followed soon after with their estimates of construction costs. To assist preparation of these plans, the Bank proposed to make itself available for any technical discussions required (World Bank 9/19/56).

In accordance with the schedule agreed at the joint meeting, India and Pakistan submitted their plans based upon the Aide Memoire in October 1956 to the Bank in separate meetings (World Bank 10/16/56 and 10/22/56). Discussing the Pakistani Master Plan in January 1957, a Pakistani official pointed out that the first stage of the plan would take thirteen years, cost \$1.3 billion and only supply water for replacement needs. The World Bank’s reply was that it was a waste to spend so much time and money to achieve so little and, furthermore, it was difficult for the Bank to associate itself with something that the Pakistanis were not even enthusiastic about themselves (World Bank 1/23/57).

Within these talks, India argued that it would not benefit from the works being constructed to replace eastern rivers water in Pakistan (World Bank 10/4/56). Under the “Principle of Benefits” India would not be financially liable to Pakistan; however, under the

“Principle of Equity” each country would be liable to the other. Therefore India argued a solution had to be found in equity rather than benefits (World Bank 10/2/56). Indian officials went on to suggest that India should pay for replacement works to a “certain extent,” so “the costs of the replacements works should be shared by the two countries” (World Bank 10/4/56). This is what the World Bank had initially wanted in their Aide-Memoire proposal, but had been previously rejected. To reiterate that Pakistan was the principal beneficiary from replacement works, officials listed some of the additional gains India believed Pakistan would earn: reduced variability in supply, receiving water when it was needed, and allocations for new projects rather than having to rely upon historic withdrawals. Therefore, India added that Pakistan would “of course” bear the costs of these additional benefits.

1957 Heads of Agreement

The Aide Memoire validated Pakistan’s persistent claim for storage facilities. Though Pakistan won one battle with the plan’s acceptance, the war for the Indus waters still engaged all three parties. Storage facilities are costly affairs, and under the Bank-determined criterion of beneficiary-pays, India was reluctant to accept any bill that Pakistan was gleefully running up as it shopped for dams and supporting works. The location, number and size of these dams were hotly contested, as was the principle of who was benefiting. If, as Pakistan claimed, these dams were part of the replacement works, then India as the beneficiary would be financially liable. But if India was correct in stating that these dams were part of the development aspect of any comprehensive plan, then Pakistan would have to pay. With the participants at an impasse over implications of the

Aide Memoire, in 1957 the World Bank yet again asked each country to prepare its own plan for the basin. The alternative plans would have to meet the financial requirements of India and the physical requirements of Pakistan. Talks continued from September 1956 through to March 1957. On one level, arrangements for ad hoc agreements were being negotiated that would afford Pakistan time to consider a comprehensive plan, and on another level negotiations continued for the comprehensive plan.

The Indian and Pakistani plans that emerged differed substantially in concept and cost due to differing priorities. India prioritized the cost of works in Pakistan over the need for the works, thereby approving an unrealistically frugal list of works. By contrast Pakistan prioritized works over cost, and proposed unrealistically grandiose plans for the Indus Basin's development. Pakistan's plan prompted the Bank to urge Pakistan to seriously re-examine its irrigation plans and objectives. The bloated Pakistani plan was due to the Pakistani view that the negotiations' aim was to restore Pakistan to its 1947 status vis-à-vis water. However during the post-Partition period, Pakistan's demographic statistics had begun to change as the population increased; as did the agricultural statistics with land being lost to waterlogging and salinity. Therefore, Pakistan regarded an equitable outcome as one that not only included plans and finances for replacement works, but also for development works, thereby enabling Pakistan to return to its 1947 water status. As the Bank's representative opined, "These arguments obviously did not carry much weight with the Indians" (World Bank 10/4/56).

The World Bank President's proposal to the Prime Ministers of India and Pakistan that cooperative work continue through September 1957, was accepted in April 1957. With the assurance that the talks were not going to break down imminently, the World Bank

took the step of reviewing the progress thus far, to determine future action. In May of 1957, the Bank presented a draft of its ideas or “Heads of Agreement” to the Indian and Pakistani delegations. Intended, as ever, as the basis of resolving the Indus Basin dispute, the Heads of Agreement advocated three principles. First, the division of the Indus Basin; secondly, allowing a transition period for the change in water management to occur; and thirdly, the establishment of a commission to prepare plans and oversee the division of the water. The Heads of Agreement marked the entrance of a commission to manage water and relations into the proposed outcome. But other than this new innovation, the Heads of Agreement failed to ignite interest amongst the protagonists.

Mid way through 1957 the Bank’s representative travelled to the Indian Subcontinent to discuss the proposal with each of the governments, but failed to make any tangible progress though, as he was to point out: “In the course of my conversations with the Government of India and the Government of Pakistan during my visit to the Sub-Continent, I have been repeatedly assured of the desire of both Governments to reach an agreed solution of the Indus Waters question” (World Bank 6/24/57). Pakistan remained the principal objector. Wary of its opponent, Pakistan wanted clear agreement upon matters before it agreed to part with the eastern rivers. Therefore, it focused upon the absence of an agreement regarding the implementation of the basin’s division, and the absence of a financial plan.

The World Bank re-worked the Heads of Agreement, making it more general by focusing more upon the principles it embodied, and offered it back to the Indian and Pakistani delegations. As the Bank’s representative stated: “I have come to the conclusion that the best prospects of carrying forward the tripartite discussions to a successful

conclusion lie in my attempting to obtain from India and from Pakistan respectively, acceptance of certain general Heads of Agreement, based on the Bank Proposal of February 5, 1954, and of the Aide-Memoire dated May 21, 1956, as a firm starting point from which we might proceed to the formulation of the detailed text of an international water treaty” (World Bank 6/24/57). The re-formulated Heads of Agreement contained a caveat to agreement for both India and Pakistan that was a testimony to the continued suspicions residing at the negotiating table. “The acceptance by either Government of the above Heads of Agreement, or any one of them, as a basis for an approach to an international water treaty, shall not, in the event of failure to conclude such a treaty, be invoked by the other Government in support of any of its legal rights of claims” (World Bank 6/24/57).

The Bank asked the delegates to comment, by July 1957, upon the proposal’s acceptability as a base upon which to continue discussion. India and Pakistan made their comments by the July deadline. At the Bank representative’s suggestion, the delegations met with the World Bank separately for oral discussions, and to give their opinion upon the other delegation’s written comments regarding the Heads of Agreement. The objective of the exercise, the representative told the delegates, was that they “received the comments of each Government on the views of the other, the Bank would then be in a position to reach a conclusion as to whether the employment of its good offices could make any further contribution to a solution and, if so, along what lines we should proceed” (World Bank 6/24/57).

Negotiations were not just held between India, Pakistan and the Bank, but internally within the delegations too. For example, as the negotiations dragged on with little hope of reaching a successful conclusion, the World Bank’s President began to question the

institution's continued involvement in the process. However the appointed Bank representative who was more intimately involved in the negotiations was able to persuade the President to let the Bank remain involved. Another example of internal differences was the Pakistani delegation's constituency. Provincial differences typified the delegation and acted to hamper progress. One particular province, Sind, was concerned that its own plan for the use of the River Indus would be lost to replacement works that would mainly benefit Punjab, and therefore Sind pushed for development works to be included.

1958 Marhu Tunnel Plan and London Plan

In the Spring of 1958, India presented its Marhu Tunnel Plan to the World Bank and Pakistan. The plan envisaged India taking water from the River Chenab and returning the same amount of water, in fixed quantities, to Pakistan from the eastern rivers. From the World Bank's perspective, the Marhu Plan had a number of advantages to recommend it "over any other approach so far contemplated in the settlement of the Indus Basin dispute," principally, the scheme's economy in time and cost (World Bank 1958). The Bank's attitude to the ideas in the Marhu Scheme can be summed up in the following quote (World Bank 1958): "The ultimate objective of this approach would be to afford India the exclusive use of the quantity of water in the Eastern Rivers and to afford Pakistan the exclusive use of the quantity of water in the Western Rivers, as envisaged in the Bank Proposal of February, 1954. The principle of Pakistan independence of deliveries of water from India, envisaged in the Bank Proposal, would, however be abandoned because of considerations of cost. The quantitative division would be effected by permitting India to divert Western river water for use in India, whilst at the same time requiring India to make substantially equivalent

fixed deliveries of water to Pakistan. The system of works necessary to achieve the ultimate objective would be constructed in three phases and, to the extent that works were constructed whether in Pakistan or in India, to maintain historic Pakistan uses, the cost would be borne by India. The principle would be maintained throughout that the development of additional irrigation uses in India should not take place at the expense of historic irrigation uses in Pakistan.”

In fact certain members of the Bank’s team thought so highly of the scheme, that if Pakistan was to reject the plan, the Bank would be “in a strong position to terminate its good offices” (World Bank 1958). Nonetheless, when Pakistan did reject the plan, despite the World Bank’s recommendations, the Bank did not withdraw from the talks. Though the plan required less financial cost to implement, Pakistan regarded the Marhu Scheme as too costly to its interests in the long term. Not only would it involve Indian “interference” on the Chenab River, but more importantly, Pakistan would remain dependent upon India for its water. This latter element was something Pakistan appeared unwilling to give in on. Pakistan promised to present an alternative plan that preserved its water independence. Nonetheless, meeting in Rome in April and May 1958, discussions continued regarding the Marhu Tunnel Plan (World Bank 5/15/58). Interspersing the discussion was the search for an alternative plan acceptable to both protagonists. Using information the Pakistani delegation had supplied, the World Bank proposed locating storage facilities upon the River Jhelum. The stored water would supply replacement water for the Sutlej Valley Canals (SVC), and be cheaper than building a link canal from the Indus to the Sutlej.

The Bank, having conceded in the Aide Memoire that storage was necessary for replacement, wanted to confine all replacement storage to the Jhelum. To persuade the

Pakistani delegation of this required resolving an internal Sind-Punjab dispute, which the Bank attempted to do. Appearing to agree with Sind, the Bank suggested using the Indus for development, and the Jhelum for replacement. Pakistan agreed to consider the proposed Jhelum storage and prepare a plan based upon it. While internal Pakistani sensibilities jostled, and the World Bank attempted to remind Pakistan of the need for overall national rather than just provincial benefits, the Bank also had to consider the Indian perspective. India was only willing to pay for replacement works in Pakistan that arose from transfer of the eastern rivers to India. Therefore, the advantage of using the Jhelum for replacement storage was to reduce the cost of replacement works and make Indian compliance more likely.

At the July 1958 meeting held in London, Pakistan presented its aptly named London Plan to the World Bank and India as a cheaper alternative to the Aide Memoire. In eliminating the Upper Indus Link, which would have been expensive to construct, Pakistan opted instead for an array of dams and ten link canals. The cost of Pakistan's cheaper alternative plan varied according to the source. The Indian delegation estimated it as approximately US \$666 million or Indian Rs. 3,300 million (World Bank 12/2/58). The Pakistani estimate was in fact higher at approaching US \$728 million (World Bank 2/5/59). The Tarbela dam on the River Indus would provide storage water for development in Sind, and replacement in Punjab. Replacement water would flow to lower Punjab via two trans-Thal links going from Kalabagh to Jhelum, and Taunsa to Panjnad. The Mangla Dam on the Jhelum River in Pakistani-held Kashmir would supply replacement water to Punjab (World Bank 2/5/59). Three additional subsidiary dams were also proposed on tributaries of the

rivers Jhelum and Indus. Water stored on the Jhelum would be transferred to the upper parts of Punjab and Bahawalpur via a series of link canals.

Negotiations were adjourned to give India time to study the plan in detail. By October 1958 the World Bank was discussing with India policy decisions that would enable the country to accept the Pakistani London Plan. However, events in Pakistan were unfolding that would change the nature of the negotiations dramatically. In October 1958, civilian rule in Pakistan came to an end for the first time with the successful military coup d'etat staged by General Mohammad Ayub Khan.

Not surprisingly, India's reply to the London Plan was unfavorable. In a separate meeting with the Bank, the Indian delegation stated that: "This plan cannot be regarded as an appropriate basis for working out a replacement plan under the Bank Proposal" (World Bank 12/2/58). India balked at the size of replacement works and, of course, at the congruent financial obligation. In December 1958, the Indian delegation presented yet another plan to the World Bank, and to Pakistan. In what appears to be both a voice of frustration and an attempt at gaining credibility for the plan, the Head of the Indian delegation, in a separate meeting with the Bank, said it was presumptuous to call it an Indian plan when it was really the result of comments the Bank, and its representative had made or insisted upon India. To this the Bank representative interjected that: "Mr. Gulhati should not put the blame of the Marhu Plan on the Bank's shoulders" (World Bank 12/5/58). In what was the first joint meeting of the new round of talks, the Bank reminded the disputants that each side had spent approximately \$1 million on the dispute resolution process so far. Moreover, the World Bank would not be able to continue such expenditure

for much longer, and therefore it hoped progress would be faster in the sessions ahead (World Bank 12/9/58).

India proposed using a number of sites on the Chenab River in Jammu-Kashmir and Himachal Pradesh. Two diversion tunnels would be built to transfer water from the Chenab to other rivers for transfer to the canal command areas. One tunnel would go from the Chenab River to a tributary of the Ravi, and the second tunnel would go from a tributary of the Chenab, the Chandra, to the Beas River near Palchar. If a storage dam was still needed then one would be built at Dhiangarh on the Chenab. If Pakistan authorized use of these sites, India could guarantee delivery of half of its replacement needs. The Indian Plan's cheaper construction costs and time requirements made the plan, as Gulhati was to state, "in the Indian view the only practicable Plan for a solution of this dispute" (World Bank 12/2/58). The time factor was of considerable importance to India as it had already completed a number of works and was constructing more to use the Eastern rivers' water. An additional benefit in India's view was that it would be responsible for the replacement works' construction, and could work at a rate to suit its own timetable (World Bank 12/9/58). An obvious implication of the Indian Plan's proposal to build on the Chenab, and to supply water to Pakistan, was the continued dependency Pakistan would have upon India. This lack of independence had already been rejected in Pakistan's reply to the Indian Marhu Tunnel Plan a few months earlier. As time and cost was of prime importance to India, independence in water supply was of prime importance to Pakistan.

In February 1959 at a meeting between the World Bank and the Pakistani delegation, Pakistan reiterated that the Indian Plan was unacceptable for three main reasons. First, it would not achieve the necessary results; second, it was politically

undesirable; and lastly, it did not conform to the Bank's 1954 Plan and 1956 Aide Memoire which entailed the independence criterion (World Bank 2/3/59). This was reiterated in a document the Pakistani delegation prepared for the Bank: "There are important major issues like the control of the Chenab by India, Pakistan's dependence on India for deliveries etc. which are not acceptable to Pakistan under any circumstances" (World Bank 2/5/59).

Summary

The World Bank had upon initial intervention in the Indus Basin dispute expected to help India and Pakistan create a comprehensive plan for the integrated management and use of the Basin's waters. Unfortunately, the idea of an integrated plan had to be abandoned early on with the presentation of the Pakistani and Indian plans in 1953. It was clear that the concepts underpinning the plans were incompatible. The World Bank proposed, in 1954, to make this incompatibility explicit and divide the water resources of the Indus Basin, something the other plans had held implicit.

The division of the Basin was a step that Pakistan was, initially, reluctant to accept. It feared that if the division was instituted without any assurance to Pakistan's existing uses and provision for financing of the necessary works, then it would be worse off than before the Bank's mediation. Thus, Pakistan only accepted the principle of division once it was clear that provision for storage facilities was also to be included in any final settlement. India, happy though it was to accept the division of the Basin, was wary of incurring a heavy financial obligation to Pakistan and rejected the extravagant plans Pakistan proposed as the basis of agreement. The plans that were presented by the disputants reflected the concerns each party had. Despite the obvious disagreement the plans entailed,

both India and Pakistan repeated the underlying concepts in the “alternatives” they proposed. India presented plans that had as their main concern the cost of construction and implementation. Thus, its plans were often the most economical when compared to Pakistan’s. However, Pakistan was to refuse India’s plans, because they often involved a continued dependence upon it for Pakistan’s water. This was something Pakistan was no longer willing, after April 1948, to countenance. Pakistan’s plans reflected its desire for an independent water supply, and works that could incorporate future development plans the country might entertain. Thus, its plans were often grandiose and involved a heavy financial input from India, which the latter was unwilling to accept.

The World Bank was equally reluctant to let the talks collapse, and attempted to address the concerns each disputant had in order to perpetuate the talks. Therefore, the Bank suggested holding talks for a comprehensive plan in tandem with talks to arrange a temporary supply of water to Pakistan, and to India. Thus, ad hoc agreements were negotiated that would enable India to withdraw a set amount of water upstream of Pakistan’s uses, thereby making operational the new works India was building. Pakistan, in turn, was assured of a set amount of water from which to meet its existing uses in conjunction with supplies transferred across from the Western rivers to these uses via its link canals. Agreement, in both the temporary arrangements and the comprehensive plan talks, was subject to “hard” negotiation by both disputants.

Chapter V: Agreement and Treaty Provisions

The negotiations of a potential treaty dragged on through 1958 and 1959, with no sign of a clear end anytime soon. While the disputants were preparing plans that they regarded as providing a settlement to the long-standing dispute, as far back as July 1958, the World Bank had begun its own preparations for yet another proposal (World Bank 7/29/58). At the time when Pakistan asked whether “the Bank planned to put a plan on the table”, the reply was: “the Bank would prefer to have a plan put forward by either side agreed to by both India and Pakistan. However, if such a plan cannot be agreed to, then the Bank would put forward a plan which would be the plan the Bank thinks would effect replacement and form the basis of discussions for financial assistance from other governments. This plan would not be put forward as the Bank Proposal but rather as a plan representing the Bank’s view, for discussion with both sides” (World Bank 7/29/58).

At a meeting in January 1959, with the Pakistani acceptance of the Bank’s 1954 Plan and the 1956 Aide Memoire in hand, the World Bank suggested the delegations return to their countries to collect data. Pakistan was to transmit its data by post to the Bank and India, who would comment upon the data with a view to the final plan that was now to be negotiated. India clearly wanted to move faster so that it could withdraw more water for its own works sooner. The Head of the Indian delegation stated that he did not understand why Pakistan took so long to provide information and how he was to explain the delay to the Indian government. India argued that Pakistan surely had the facts already since it had made preparations for the BS II link, and that the necessary calculations could be done in Washington, D.C (World Bank 1/16/59).

The Pakistani delegation was concerned about the proposal the World Bank was preparing since the effect of the plan, if it was accepted, would be felt in Pakistan. Therefore, the delegation attempted to 'influence' the Bank's outlook. At another meeting in January 1959, the delegation made it known to the World Bank that it hoped the Bank would discuss its views with the delegation, before finalizing them in a plan. The Bank was, also, reminded that any mistakes in forecasting the gains and losses in the rivers would fall on Pakistan's shoulders (World Bank 1/16/59).

In a meeting in February 1959, the delegation made an "earnest request" that the Bank's plan take into account three uses Pakistan considered important: sailab, post-partition increased uses, and reclamation. If the Bank's plan could not meet these uses, then it was to ensure that water was available to Pakistan for these uses. Reference was made once more to the gains and losses calculations, and the Bank was asked to give Pakistan the benefit of any doubt if it arose. The Bank gave a rather stern reply. "Pakistan must remember that the Bank did not get into this dispute to design and build a development scheme for Pakistan, but to find a settlement of this dispute" (World Bank 2/5/59).

The Indian delegation for its part was still concerned about the financial contribution India would be asked to make. In March 1959, the World Bank and India met to discuss the Indian position vis-à-vis the principle of beneficiary-pays. It was made clear to India that the Bank no longer regarded the Marhu Tunnel concept as an acceptable basis for a final plan. Therefore, the Bank would not be putting forward a plan based upon it (World Bank 3/5/59). The Indian delegation presented its views to the Bank on the final plan and its financial liability in a paper entitled, "Some Technical Considerations Relating

to the Allocations of Costs of a Replacement Plan.” The World Bank understood this paper as presenting the Indian government’s views on its financial liability to Pakistan. If this was the case, the Bank’s representative said that he would make a recommendation to the Bank’s President not to go to the Indian Subcontinent in May 1959 (World Bank 3/16/59). The President was to have separate talks with the political leadership of both countries regarding various aspects that still needed agreement. The Head of the Indian delegation explained that the report was informal and contained only his own views as he did not know those of the government of India, but suspected that they would want to reserve their judgment for the moment.

The 1959 “Settlement Plan”

The World Bank presented its “Settlement Plan” on March 26, 1959. The Plan, which was based upon the Bank’s 1954 proposal, provided for replacement and development works in India and Pakistan. The Bank sought to distribute the financial burden evenly between the two countries by applying the principle of beneficiary-pays, and taking into regard each country’s ability to pay. Therefore, Pakistan was asked to absorb the cost of existing replacement works, and India’s payments were calculated to reflect the actual cost of construction. Using loans to pay for works benefiting them, India was liable for the link canals, and Pakistan liable for the storage facilities. If the Settlement Plan was acceptable to the parties, the implementation of this plan would oblige India and Pakistan to sign an international water treaty. This treaty would, in turn, establish an Indus development commission for at least the duration of the transitional period.

In May 1959, the Bank's President travelled to India to discuss with the Indian government its financial contribution, arrangements for the transitional period, and India's opinion on the incorporation of a reservoir at Mangla as part of the replacement plan. Understanding was reached on five issues: First, India's contribution would be limited to \$174 million. Second, the transitional period would last for ten years and if Pakistan exceeded this time, it would be penalized financially. Third, if however Pakistan needed to extend the transitional period, it could do so for a single three-year period. Fourth, as part of the Settlement Plan's planned projects in India, the foreign exchange costs of building the Beas dam would be met with loans. Fifth, India's claim to sovereignty in Jammu and Kashmir would not be harmed, and in fact a suitable formula would be arrived at to protect that claim, which was to be left completely out of a water agreement.

The World Bank found some measure of success in its talks with the Government of Pakistan. The original scheme the Bank was proposing had to be amended when the Pakistani government showed that it could still lead to "small shortages on some canals in exceptional years" (World Bank 5/14/59). It was apparent to the Bank that Pakistani thinking had "crystallized around the storage facilities" (World Bank 5/14/59). An exchange was agreed in which Pakistan would assume the some of the replacement works' costs, and remove off channel storage at certain river storage locations.

Iterations of this settlement plan went back and forth between India, Pakistan, and the World Bank for another year. The activities of the World Bank during summer 1959, had succeeded in resolving a number of issues and found agreement on the basis of a treaty. India's objections to the Bank's Settlement Plan had been dealt with in the main part with the fixing of the Indian financial contribution. A couple of outstanding issues remained

between the two disputants over consumptive uses in Jammu and Kashmir and transitional period arrangements. Pakistan had also agreed to the Settlement Plan after it had been adjusted during its government's conversations with the Bank in the Subcontinent. Yet it was to be over a year before the Indus Waters Treaty would be signed, and the Indus Basin Development Fund become operational. The delay was due to a disagreement between the World Bank and Pakistan regarding the cost of the works envisaged in the final plan.

The Final Agreement

Throughout the prior 10 years of negotiations, possibly the most contentious portion was where the money would come from to build necessary infrastructure. By August 1959, six 'friendly Governments' had agreed to underwrite the international water treaty: Australia, Canada, New Zealand, West Germany, the United Kingdom and the USA. Together these Governments would subscribe close to \$800 million for the works needed in India and Pakistan to bring about a peaceful settlement to the question of the Indus waters.

Contributions to the Indus Basin Development Fund
(Source: World Bank Archive)

Country	Amount in millions (US \$mil)	Recipient	Type
Australia	£A 6.96 (15.54)	Pakistan	Grant
Canada	US \$ 22.1 (22.19)	Pakistan	Grant
New Zealand	£NZ 1.0 (2.78)	Pakistan	Grant
West Germany	DM 126 (30.21)	Pakistan	Grant
UK	£ 20.86 (58.48)	Pakistan	Grant
USA	\$ 177	Pakistan	Grant
	\$235 in Pkn Rs	Pakistan	Grant
	\$ 70	Pakistan	Loan
	\$ 33	India	Loan
World Bank	\$ 80	Pakistan	Loan
	\$ 23	India	Loan

Comprising grants and loans the money was directed to the Indus Basin Development Fund (IBDF), set up to administer and distribute the funds. By January 1960, the Indus Basin Development Fund Agreement had been drafted and sent to the countries concerned: Pakistan and the 'friendly Governments'. The contributing countries would pay into the World Bank their agreed share, and the World Bank then would furnish the administration. The Bank decided that payment for the construction costs would only occur after purchase and the production of receipts.

The main text of the international treaty was drafted by December 1959. After considerable discussion by the government of Pakistan on its outstanding issues with India and the financial disagreement with the World Bank, a final draft of the treaty was prepared. On September 19, 1960, the President of Pakistan, General Ayub Khan, and the Prime Minister of India, Jawaharlal Nehru, signed the Indus Waters Treaty in Karachi.

The ratification of the Indus Waters Treaty, in January 1961, signified the end of Pakistan's dispute with India over the waters of the Basin. However, another dispute was developing, this time between the World Bank and Pakistan over the financial assistance Pakistan was receiving under the treaty. This too was, eventually, settled with an additional supplement in 1965 to Pakistan to build the Tarbela Dam. The Bank retained a close interest in the implementation of the treaty throughout the transitional period of the next 5 years after signing.

Treaty Provisions

It is extremely important to understand what came out of the treaty. The Indus Water Treaty is unique, as it focused on equitable division rather than the sharing of the Indus

Rivers. This very feature of the treaty technically restricts the optimum utilization of the river basin. The Indus Water Treaty addressed both the technical and financial concerns of each side, and included a timeline for transition. The main points of the treaty included (Alam, 2002):

- an agreement that Pakistan would receive unrestricted use of the western rivers, which India would allow to flow unimpeded, with minor exceptions
- provisions for three dams, eight link canals, three barrages, and 2500 tube wells to be built in Pakistan
- a ten-year transition period, from April 1, 1960 to March 31, 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 ten 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 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 which may be requested.

Also according to that agreement, the flow of the three western rivers of the Indus basin—the Indus, Jhelum, and Chenab (except a small quantity used in Jammu and Kashmir state)—is assigned to Pakistan, whereas the flow of the three eastern rivers—the Ravi, Beas, and Sutlej—is reserved exclusively for India. In India a number of dams, barrages, and link canals have been built to distribute water from the eastern Indus tributaries to the Punjab and neighboring states. The Harike Barrage, at the confluence of the Beas and Sutlej, channels water into the Indira Gandhi Canal, which runs for about 400 miles (640 km) to the southwest to irrigate some 1.5 million acres (607,000 hectares) of desert in western Rajasthan. The main canal was completed in 1987.

Following promulgation of the 1960 treaty, the Pakistan Water and Power Development Authority built several linking canals and barrages to divert water from its western rivers to areas in the east lacking water. The biggest of those canals is the Chashma-Jhelum link joining the Indus River with the Jhelum River, with a discharge capacity of some 21,700 cubic feet (615 cubic meters) per second. Water from that canal feeds the Haveli Canal and Trimmu-Sidhnai-Mailsi-Bahawal link canal systems, which provide irrigation to areas in southern Punjab province.

The Indus Waters Treaty also made provision for the construction of two major dams in Pakistan. The Mangla Dam on the Jhelum River near the town of Jhelum is one of the largest rolled earth-fill dams in the world. It has a crest length of about 10,300 feet

(3,140 meters) and a maximum height of more than 480 feet (146 meters)—a figure that includes the results of a project, completed in 2009, that raised the height of the dam by 30 feet (9 meters). Mangla Reservoir, created by the dam, is 40 miles (64 km) long and has a surface area of 100 square miles (260 square km). The project generates some 1,000 megawatts of hydroelectricity. In addition, the reservoir has been developed as a fishing center and a tourist attraction as well as a health resort.

The second gigantic project is the Tarbela Dam on the Indus, 50 miles (80 km) northwest of Rawalpindi. The dam, of the earth- and rock-filled type, is 9,000 feet (2,700 meters) long and 470 feet (143 meters) high, and its reservoir is 50 miles (80 km) long. The dam's generating capacity is some three times that of the Mangla Dam, and its total potential is considerably greater. A third major structure, completed in 2004, is the Ghazi Barotha hydroelectric project, located below Tarbela. The Indus is partially diverted there to a powerhouse that can generate 1,450 megawatts.

On the Indus itself there are several important headworks, or barrages, after the river reaches the plain. In the mountainous region the principal waterways west of the Indus are the Swat Canals, which flow from the Swat River, a tributary of the Kābul River. Those canals provide irrigation for the two chief crops of the area, sugarcane and wheat. The Warsak multipurpose project on the Kābul River, about 12 miles (19 km) northwest of Peshawar, provides irrigation for food crops and fruit orchards in the Peshawar valley and is designed to produce 240,000 kilowatts of electricity. In the plains region the Kalabagh, or Jinnah, Barrage controls the system of canals in the Thal Project, organized in 1949. The project, which irrigates a former desert area, is aimed at expanding agriculture, developing rural industry, and promoting the settlement of population in villages and

towns. Farther downstream is the Chashma Barrage. Still farther the Taunsa Barrage, designed for the irrigation of land in the Dera Ghazi Khan and Muzaffargarh districts, also produces about 100,000 kilowatts of electricity. Within the Sindh there are three major barrages on the Indus—Guddu, Sukkur, and Kotri, or Ghulam Muhammad. The Guddu Barrage is just inside the Sindh border and is some 4,450 feet (1,356 meters) long; it irrigates cultivated land in the region of Sukkur, Jacobabad, and parts of Larkana and Kalat districts. The project has greatly increased the cultivation of rice, but cotton also has become a major crop on the left bank of the river and has replaced rice as a cash crop. The Sukkur Barrage was built in 1932 and is about 1 mile (1.6 km) long. The canals originating from it serve a cultivable area of about 5 million acres (2 million hectares) of land producing both food and cash crops. The Kotri Barrage, also known as the Ghulam Muhammad Barrage, was opened in 1955. It is near Hyderabad and is nearly 3,000 feet (900 meters) long. The right-bank canal provides additional water to the city of Karachi. Sugarcane cultivation has been expanded, and yields of rice and wheat have increased.

Chapter VI: Conclusion

The mediation of the Indus Water Treaty was a cyclical process. Agreement was not reached spontaneously after the issues were addressed and relevant options considered. Rather, agreement was present and absent in all stages of the mediation. For example, before the World Bank could lend its good offices, India and Pakistan had to agree to the Bank's intervention. Thereafter, the disputants agreed to comply with certain ground rules for the duration of the Bank's good offices. Moreover, to accept Bank mediation, India and Pakistan had to agree upon the issues that characterized the dispute. Agreement not only took place at different stages, it also occurred at different scales. Before reaching a final settlement, the parties agreed on relatively minor decisions, such as sharing particular data regarding river discharge, and then conceded on larger issues that changed the very nature of the talks, such as the principle of dividing the Indus Basin. On the other hand, sometimes the absence of agreement upon even the smallest issue, such as data-sharing, was sufficient to obstruct the talks and lead to considerable time being lost over minor details.

Despite the appearance, and reality, of a tortuous negotiation process, India and Pakistan did reach several agreements prior to the final agreement that led to the Indus Water Treaty. The governments of both countries agreed to send delegations to discuss the Indus Basin dispute under the World Bank's good offices. They accepted the principles Lilienthal espoused, and attempted for a short duration to find a common route to development of the Basin. There was an understanding that data were to be a shared resource. Talks were resumed, in December 1954, on the agreement that India and Pakistan would engage in cooperative work for a specific duration. The delicate issue of financial liability was overcome through mutual acceptance of the principle of beneficiary-

pays. However, despite these agreements, substantial differences remained and forestalled the final agreement. With hindsight, it is tempting to see these disagreements as delays to reaching the final agreement, but at the time of the negotiations the disagreements appeared more serious. The obstacles were significant and involved issues of political interest and incentives. Pakistan was most hampered by political concerns as domestic instability created considerable problems for their delegation to the Indus Basin talks. Other difficulties obstructed the talks, but these were of a technical and financial nature. Nonetheless, in the end the parties overcame their differences and constraints and signed the treaty.

Both countries had agreed to the World Bank's proposal in 1954, and the Aide Memoire in 1956. Whereas India was willing to develop a comprehensive plan implementing the principles embodied in these two proposals, Pakistan's acceptance was more begrudging. Dissatisfied with the amount of water being allocated, Pakistan had only accepted the 1954 proposal to keep the negotiations going. Its attitude vis-à-vis the Aide Memoire was more encouraging, as it recognized Pakistan's claim that storage was essential in the Indus Basin to meet the needs of both parties.

But why when there was some agreement in 1956, was a treaty not signed until 1960? What obstacles stood in the way of agreement? The obstacles can be broadly defined as political, financial and technical. Of the three, the most important was political. India, by virtue of being upstream, had continued with its unilateral development of the water in its territory. Though there were provincial disagreements about the allocation of water, India was not beset by the same political problems at the center as Pakistan was. Pakistan's downstream status, the reason for its fears vis-à-vis India's water withdrawals, led to it

demanding continued water supply to its existing uses. Though the World Bank attempted to ensure undiminished supply before the start of the talks, in 1952, the matter had become highly complicated (World Bank 3/13/52). The issue of maintaining the status quo at times threatened to stymie the talks.

Though technical and financial matters influenced Pakistan's decisions, the most pertinent factor was the political situation within the country. During the length of the negotiations, rival political leaders of Pakistan fought to get power or maintain their power. Seven different candidates held the Prime Minister's office during that interim. India only had one prime minister throughout the entirety of the talks – Nehru. One consequence of the political jostling in Pakistan was a hardening of outlook towards the value of the negotiations as politicians vied with each other to appeal to the public. Another consequence arising out of political weakness was that politicians could not afford to make decisions that could be used against them in the domestic arena. Away from Karachi, the Pakistani provinces were also vying for water, and this created considerable political challenges.

Although the negotiations began under the relatively strong leadership of Liaquat Ali Khan, subsequent Pakistani prime ministers were unable to countenance agreement with their biggest enemy, India, for fear of a domestic backlash. Nor, would it appear, could they stop the negotiations outright in case this too became a weapon in the hands of their political opponents. Therefore, the negotiations limped along beset by the absence of a commitment to make or break the process. It was not until the October 1958 military coup d'état that the leadership was strong enough, and had the political interest, to reach a decisive settlement with India on the canal waters dispute.

As one student of mediation writes, “To exert any influence at all, to change or affect aspects of a dispute, requires the possession or control of some valued resources” (Michel 1967, page 260). The World Bank’s obvious resource was financial capital, which it used to provide an incentive to get final agreement. However, finances were insufficient to get agreement, as already pointed out, and at times were also an obstacle in themselves. Unsurprisingly, financial obstacles during the mediated talks revolved around which party would pay for the necessary works. To determine each party’s portion of responsibility towards the cost of works, the World Bank determined that payment would be proportional to the benefit derived. For example, since India would benefit by the allocation of the eastern rivers to it, it would be India’s responsibility to pay for the link canals situated in Pakistan that would provide India with access to the rivers.. Therefore, the first financial obstacle arose with each party trying to show that it was not the principal beneficiary from particular works, so as to avoid the liability to pay. The second financial obstacle, which is linked to the first, was the overall cost of works in the final development plan. Storage facilities are very expensive to construct and neither country could afford to pay for them. The Bank overcame both these problems: the first by applying the principle strictly, and the second, by creating a fund to which interested “friendly Governments” contributed.

Technical difficulties arose in the calculations of needs and the size of works required to supply the needs as understood. Therefore, before the 1956 Aide-Memoire, Pakistan had insisted that without storage facilities or a large portion of the eastern rivers, its needs would not be met. Technical surveys by a consulting engineering firm confirmed Pakistan’s claim and storage facilities were accepted in principle. The calculation of losses

and gains in the rivers and canals were also problematic, as it had implications for the size of replacement works and link canals. As late as December 1958 the disputants still challenged the calculation of gains and losses from canals, ponds and rivers. When Pakistan suggested gathering a body of experts to decide the issue, Eugene Black hesitated because, “he feared that such a decision would be no more acceptable to both sides than a decision made by the Bank engineers” (World Bank 12/16/58). Other problems arose with estimations of the amount of water available to Pakistan. None of these problems, however, proved insoluble, in part because the Bank’s engineers proved adept at innovation.

An additional technical problem arose with the management of water and water-carriers that crossed the international boundary. For example, in Spring of 1956, while the delegations discussed proposals for a comprehensive plan, difficulties arose regarding repairs to other headworks. Rather than resolving the matter between the Indian and Pakistani engineering staff at ground level or referring the matter to the Indian Special Commissioner and the Pakistani Irrigation Commissioner, the matter was put before the World Bank. When the matter was finally settled with the intervention of the Indian Prime Minister, the Bank was glad that the situation had been resolved by a “display of good sense on both sides of the frontier” (World Bank 3/28/56).

The breakthrough came with the change in Pakistan’s political interest with the 1958 coup. Pakistan unreservedly accepted the World Bank’s proposals of 1954 and its 1956 Aide Memoire. In doing so, the political leadership of the country undertook to divide the basin, and change the source of its supply by relying almost exclusively upon the might of the western rivers through dams and link canals. The decision to reach an agreement with India on this contentious issue rests most probably with the political leadership, but it

was Pakistan's engineers who determined which of the plans on offer to select and advised the political leadership accordingly.

One other obstacle to agreement did arise for the Bank's representatives. The World Bank had entered into the Indus Basin dispute in 1951 thinking its involvement would be needed only in the short-term as agreement would be reached relatively quickly. But as negotiations crept along at a snail's pace, members within the Bank's management began to question their continued presence in these talks, especially when India and Pakistan's commitment to resolution appeared to waver. Thus, "the Bank's mediation was not only between India and Pakistan, but with Black as well, since he more and more wanted to abandon the whole exercise - having believed in the beginning that agreement could be reached in a reasonably short time" (Iloff 1970).

Final Thoughts

The Indus Water Treaty has been maintained for over fifty years. Even during short wars between the signatories, India and Pakistan maintained their obligations to each other under the terms of the Treaty. The World Bank took some pride in this, remarking about the 1965 Indo-Pakistani war: "except for two or three days when shots were fired... the agreement between India and Pakistan was carried out without any interruption during their recent war" (Lilienthal Papers).

The role of the World Bank as a third party was pivotal in crafting the treaty. It provided the negotiating space required by the two countries. It put forward creative ideas to solve what seemed like intractable problems. It leveraged its financial muscle to remove the deadlocks created during the negotiations. The Bank created a context in which the two

adversaries could pursue policies of water rationality. The Bank helped the adversaries see that only through cooperation could they achieve their goals of water security.

The biggest breakthrough in problem solving during the negotiations was to focus the treaty on equitable division rather than the sharing of the Indus Rivers. As some critics point out, this very feature of the treaty restrains the optimum utilization of the river basin. The treaty may be sub-optimal on the utilization and development of the Indus Basin, but it is the best the two countries could agree upon after long lasting negotiations spread over 12 years. In the future, as India and Pakistan need greater amounts of water and as the supply of water from the Indus rivers declines, the Indus Water Treaty, like some other treaties, will come under stress. India and Pakistan must ensure that its discussions and negotiations over water sharing are protected from national politics. In an ideal world the two countries will move from an equitable division of the Indus Rivers to a more efficient sharing of the waters. Rivalry and mistrust between the two countries, not the provisions of the Indus Water Treaty, will restrain their search for greater cooperation in water management.

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IBRD: Iliff, Wheeler, Griffin, Drisko, Guinness; Pakistan: Mueenuddin,
Mahbub, Dr Quraishy, Khalil; and India: Gulhati, Jaini, Malhotra, Ram,
Vasudeva.

5/20/54 Second Meeting in G Street office between India, Pakistan and IBRD. Present were
IBRD: Iliff, Wheeler, Griffin, Drisko, Guinness; Pakistan: Mueenuddin,
Mahbub, Dr Quraishy, Khalil; and India: Gulhati, Jaini, Malhotra, Ram,
Vasudeva.

6/10/54 Meeting at 3pm in G Street office between India, Pakistan and IBRD.
Present were India: Gulhati, Jaini, Malhotra, Ram, Vasudeva; Pakistan:
Mueenuddin, Mahbub, Dr Quraishy, Khalil, Altaf, Memon; and IBRD: Iliff,
Wheeler, Bengston, Drisko, Guinness.

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8/8/54 Meeting at 10am between the IBRD and India. Present were IBRD: Iliff,
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5/18/55 Joint meeting held at 4pm between IBRD, Pakistan and India. Present were IBRD: Iliff, Wheeler, Bengston, Drisko, Guinness; Pakistan: Mueenuddin, Hamid, Mahbub, Quraishy, Kirmani, Niaz, Soonra and India: Gulhati, Jaini, Malhotra, Ram, Vasudeva.

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7/29/58 Meeting at 3pm between the IBRD, Pakistan and India. Present were IBRD:

Iliff, Wheeler, Bengston, Guinness; and Pakistan: Mueenuddin; joined later

by India: Gulhati.

12/2/58 Meeting at 3pm between the IBRD and India. Present were India: Gulhati,

Malhotra, Ram; and IBRD: Iliff, Wheeler, Bengston, Drisko, Guinness,

Russler and Lorber.

12/16/58 Meeting at 10am between the IBRD and Pakistan. Present were IBRD: Iliff,

Wheeler, Drisko, Guinness, Russler, Lorber; and Pakistan: Mueenuddin,

Hamid, Khalil, Kirmani and Manzoor Ahmed.

1/16/59 Meeting at 3pm between the IBRD, Pakistan and India. Present were the

IBRD: Wheeler, Bengston, Drisko, Guinness; Pakistan: Mueenuddin,

Hamid, Niaz, Ahmed; and India: Gulhati, Malhotra, Kalra and Ram.

1/19/59 Meeting at 10am between the IBRD and Pakistan. Present were the IBRD:

Iliff, Wheeler, Bengston, Drisko, Guinness, Russler, Lorber; and Pakistan:

Mueenuddin, Hamid, Khalil, Kirmani, Niaz, Ahmed and Malik.

3/2/59 Meeting at 11am between the IBRD and Pakistan. Present were IBRD: Iliff,

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