



**Heidelberg Papers
in South Asian
and Comparative Politics**

**Water, War, and Peace:
Linkages and Scenarios in India-Pakistan Relations**

by

Nasrullah M. Mirza

Working Paper No. 37

February 2008

South Asia Institute
Department of Political Science
University of Heidelberg



**HEIDELBERG PAPERS IN SOUTH ASIAN AND
COMPARATIVE POLITICS**

ISSN: 1617-5069

About HPSACP

This occasional paper series is run by the Department of Political Science of the South Asia Institute at the University of Heidelberg. The main objective of the series is to publicise ongoing research on South Asian politics in the form of research papers, made accessible to the international community, policy makers and the general public. HPSACP is published only on the Internet. The papers are available in the electronic pdf-format and are designed to be downloaded at no cost to the user.

The series draws on the research projects being conducted at the South Asia Institute in Heidelberg, senior seminars by visiting scholars and the world-wide network of South Asia scholarship. The opinions expressed in the series are those of the authors, and do not represent the views of the University of Heidelberg or the Editorial Staff.

Potential authors should consult the style sheet and list of already published papers at the end of this article before making a submission.

Editor	Subrata K. Mitra
Deputy Editors	Clemens Spiess Malte Pehl Jivanta Schöttli Siegfried Wolf
Editorial Assistants	Anja Kluge Florian Britsch
Editorial Consultants	Katharine Adeney Mike Enskat Alexander Fischer Karsten Frey Evelin Hust Karl-Heinz Krämer Apurba Kundu Peter Lehr Kenneth McPherson Marie-Thérèse O'Toole Matthias Paukert Christian Wagner Wolfgang-Peter Zingel

Water, War, and Peace: Linkages and Scenarios in India-Pakistan Relations

Nasrullah M. Mirza¹

“Water is the true wealth in a dry land; without it, land is worthless or nearly so. And if you control water, you control the land that depends upon it”.²

Conflict is a fact of international relations. Its causes range from disputed territories or un-demarcated boundaries associated with vital resources (realpolitik or geopolitics), to political or ideological incompatibilities (ideational politics). Existing or perceived incompatibilities can lead to formation of hostile actors and aggravate conflict behaviour; conflict behaviour can become armed, and, thus, inter-state relations become militarised. Wars have their roots in such a state of affairs. Several factors relating to both schools of thought can be identified in the Indo-Pakistan conflict. From a neo-realistic perspective,³ this study examines India and Pakistan’s conflicting interest, bound as they are to the irredentist territory of Kashmir, and argues that conflict over Kashmir is not exclusively ideological but also fundamentally connected to the control of the Indus water resource. There exists to date no significant research focussing predominantly on this aspect of Indo-Pakistan relations. In fact, the existing literature would appear to conceive of Indo-Pakistan conflict as an ideological, emotional and political. This theory-driven study formulates a model with which to

¹ The author alone bears responsibility for factual accuracy and copyright infringement.

² Stegner in Peter H. Gleick, (ed.), *Water in Crisis: A Guide to the World’s Fresh Water Resources* (New York: Oxford University Press, 1993a), p. 9.

³ Michael T. Klare, *Resource Wars: The New Landscape of Global Conflict* (New York: Henry Holt & Company, 2002) p. 187; Stanley Waterman, “Partition—A Problem in Political Geography,” in Taylor, P. and J. House, eds., *Political Geography* (London: Croom Helm, 1984); Frank R. Pfetsch, *Negotiating Political Conflicts* (Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, 2007), pp. 173-187; Jacob Bercovitch & J. Langley, “The nature of the dispute and the effectiveness of international mediation”, *Journal of Conflict Resolution*, Vol. 37, No. 4 (1993), pp. 670-691; William Zartman, *Ripe for Resolution and Intervention in Africa* (Oxford: University Press, 1985).

address the question of ‘water, war, and peace linkages’ using a rational choice approach and extensive empirical data.

Objectives

The prime objective of this study is to formulate a model which explains the role of international rivers in inter-state relations in general, and the intertwined nature of the disputes over Kashmir and the Indus rivers in particular. The focus lies on uncovering those factors of conflict in the Indus Basin which are not related to identity and investigating their linkage with political ideology, strategic planning, and warfare between India and Pakistan on the one hand and comprehending the circumstances under which enduring rivals prefer accommodation over vital concerns and postpone political issues. The main concern is one of explaining how the conflict over Indus waters has been managed in such a way that, despite being one of the major root-causes of the Kashmir conflict, it has been overshadowed by other concerns in analyses of Indo-Pakistan relations.

The Puzzle

The roots of India-Pakistan conflict can be traced to the bitter and bloody circumstances under which the two South Asian nations emerged onto the global stage in 1947. Kashmir⁴ has continued to be the bone of contention in their relations. Maharaja Hari Singh, the ruler of the ‘princely state’ of Kashmir, sought the continuation of independent status and offered a ‘standstill agreement’ to both India and Pakistan. The offer was accepted by the latter but rejected by the former. The Muslims of Kashmir revolted against Maharaja Hari Singh, allegedly demanding accession of the state to Pakistan. India launched a military offensive on 26 October 1947, claiming that the Maharaja had signed an instrument of accession with its leaders. On 1 April 1948, India cut off the irrigation water from the rivers flowing into Pakistan. Then, in May 1948, Pakistan also mobilised its troops. Both sides captured parts of Kashmir territory. Posturing for a peaceful resolution, India referred the issue to the United Nations Security Council (UNSC) and both countries accepted the UN-supervised ceasefire, agreeing to its resolution of instituting a plebiscite under its supervision, which has not been implemented so far. Since then the only projected ongoing cause of the Kashmir conflict centres around the idea of *conflicting ideologies*: on the one hand India is seeking to maintain its ‘secular outlook’ and negate the very rationale behind the creation of Pakistan, the ‘two-nation theory’, by retaining control over a Muslim majority state, Jammu and Kashmir (J&K), while on the other hand Pakistan is fighting for the region’s ‘liberation’ from the Indian ‘yoke’, aiming for its integration with it.

The *realpolitik* dimension of the Kashmir conflict also surfaced when India withheld the river water supply to Pakistan on 1 April 1948, but was overshadowed mainly because of the anticipated policies of identity politics on both sides, and partly

⁴ In May 1948 Quaid-i-Azam Mohammad Ali Jinnah moved to Ziarat for rest where he remained under medical treatment of a team of doctors including Dr. Riaz Ali Shah till his death in September 1948. Dr. Shah in his Diary quoted (Publishing House, Bull Road publication 1950) Quaid-i-Azam as saying: "Kashmir is the Jugular vein of Pakistan and no nation or country would tolerate its Jugular vein remains under the sword of the enemy". <http://www.klc.org.pk/klc/pumphlet/index.htm>

due to its disassociation from the Kashmir issue, which India demanded as a precondition of accepting mediation on the Indus rivers dispute. The roots of the intertwined nature of the Kashmir and Indus disputes can be traced to the Radcliffe boundary award, according to which the British Punjab was divided between India and Pakistan at the time of Partition, and under which India gained control of the headworks⁵ of two rivers providing irrigation in West Punjab (Pakistan) and the only land-link (from Indian side) to the princely state of Kashmir, through a road over Madhopur headworks.⁶ Consequently, by capturing parts of Kashmir, India gained access to the catchment⁷ areas of the whole of the Indus river system (IRS),⁸ where its five tributaries—the Jhelum, Chenab, Ravi, Sutlej, and Beas rivers—originate. The water issue became a question of survival for Pakistan and soon attracted the attention of the international community. India claimed exclusive rights over the waters of all international rivers originating from its territory. Following twelve years of negotiations and mediation, away from public scrutiny and under the auspices of the World Bank (WB), the issue was resolved in the form of the Indus Waters Treaty (IWT) in 1960.⁹ It was hailed internationally as a model of conflict resolution, however, there were some who questioned its legitimacy and effigies of both the leaders were burnt in the respective state capitals.

The IWT allocated unrestricted use of three eastern rivers—the Ravi, Beas and Sutlej—to India, and three western rivers—the Indus, Jhelum and Chenab—to Pakistan, barring some ‘specified uses’ in Indian-held Kashmir. Although the IWT ensured supplying the waters of all three of the western rivers to Pakistan, it has not eliminated the root-cause of the conflict over the Kashmir territory inherent in its geography. Kashmir is bounded by snow-covered peaks and valleys at the foothills of the Himalayas. The fact that melting snows and heavy summer precipitation in the valleys constitute the only source of fresh water feeding the entire IRS has enhanced its strategic importance. The Indus system serves as a life-line to the predominantly arid lower riparian, Pakistan, and if India ever gave up control of J&K—whether to

⁵ The term “headworks” generally refers to structures being made on the river to control and regulate its flow as per requirements.

⁶ Gurdaspur was recognized as a Muslim-majority district in the statement of 3 June 1947. See Aloys Arthur Michel, *The Indus Rivers: A Study of the Effects of Partition* (New Haven: Yale University Press, 1967), pp. 157, 192; Mosely recounts the story of the “rough sketch map” which was taken down over the telephone on August 8, 1947, and forwarded to Sir Evan Jenkins, showing not only the headworks but the towns of Ferozepur and Zira on the Pakistani side. See Mosley, Leonard, *The Last Days of the British Raj* (New York: Harcourt, Brace & World, and London, Widenfeld and Nicolson Limited, 1962), p. 230.

⁷ The term “catchment area” refers to the upland territory with high ratio of snow falling and rains and the areas which collects the waters through streams to form rivers.

⁸ The IRS has five major tributaries—the Jhelum, the Chenab, the Ravi the Beas and the Sutlej rivers. These in turn have inspired the name Punjab (punj = five & ab = river), the land of five rivers. The Indus rises from Mount Kailas in Tibet and traverses many miles through the Himalayas before it is joined by its tributaries in the Punjab. Thereafter it passes into Sindh (Pakistan) to fall into the Arabian Sea., which the Aryans called the Sindhu, has lent its name to India. Its valley has been the seat of a civilization, that was not only older but also superior in many respects to the fabled civilizations of Sumeria and Egypt.

⁹ The IWT allocated the use and the proprietary rights of the six rivers comprising Indus rivers system, with the three eastern rivers (namely, the Ravi, the Sutlej, and the Beas) going to India and the three western rivers (namely, the Indus, the Jhelum, and the Chenab) to Pakistan. Under the treaty an extended river diversion and canals infrastructure was erected by both the states, mainly with financial aid and technical assistance of some friendly states.

Pakistan or an independent regime of some sort—it would lose its status as an upstream riparian and, therefore, much of its clout in determining the politics and fate of the region.¹⁰ For Pakistan, an unrestricted flow of the IRS is a question of ‘life and death’ and, for India, maintaining control of it is a ‘real political tool’ with which to exercise power over Pakistan by controlling its vital water resources.

Wars were fought exclusively over Kashmir but all have been ended by third-party mediation and the restoration of the UN ceasefire line of 1948. In addition, India has created a number of water issues through the Wullar, Baglihar and Kishenganga dams, which remain unresolved as yet. In May 2002, during a military stand-off with Pakistan, the Indian government considered abrogation of the IWT but suspended the proposal because of the ‘sensitivities’ involved. It remains a fact that both states are not comfortable with the IWT. Concerns have been expressed in Pakistan that “it was the military regime of General Ayub Khan, which surrendered to Indian blackmail and World Bank (WB) and US pressures to sign away every drop of three of the five tributaries of the Indus to India”. On 27 July 2004 Pakistan's legislators passed a motion in the National Assembly “urging to renegotiate the IWT to get more water from the Sutlej river”. Some Indian thinkers are of the opinion that the primary objective of Pakistan’s interest in J&K is to secure its water resources. They anticipate that “conflict between the people of Kashmir and the Government of India will soon become a thing of the past and a water-war between Kashmir and Pakistan is inevitable in the future”.

Realities on the ground have changed with the passage of time. Since 1989 Kashmiris have been in revolt against Indian rule. Opinion among the Kashmiri leadership is divided, with certain parts of it demanding a return to the independent Kashmir of pre-1947. Pakistan has extended ‘moral support’ to their cause but formally denies the provision of any material support. The conversion of the ceasefire line into an international boundary would be acceptable to India, while a further partitioning of J&K would seem acceptable to Pakistan. The present standpoints of both parties thus appear incompatible with the thesis of identity-politics. Since January 2004, both sides have agreed upon a number of confidence building measures without making any progress on the Kashmir dispute, yet the matters over which both reach a diplomatic deadlock revolve around the ongoing water disputes, namely Indian plans to construct dams in the disputed territory of J&K. This forewarns that the Kashmir conflict and the water disputes are intertwined in nature and the Indo-Pakistan conflict is not exclusively ideological. It draws attention to this fact, which was overshadowed by India’s unlinking of the Indus and Kashmir disputes as a precondition of accepting mediation by the WB, and Pakistan’s conscious neglect of the linkage issue in order to secure its survival, reduce its vulnerabilities and minimise perceived losses.

Core Question

The core contention of this study is that the Indo-Pakistan conflict is not exclusively identity-based and that issues based on neo-realistic interests—such as the control of freshwater resources—are equally vital. The following supporting questions underpin the study: (1) Have boundaries been drawn on the geographical basis of the access to water resource? (2) During wars between the rival riparian, has territory been

¹⁰ Michael T. Klare, *Resource Wars: The New Landscape of Global Conflict* (2002), p. 187.

explicitly captured and retained because of its access to water sources? (3) Has river water ever been used as a military, political or economic weapon by the upper riparian? (4) Is the capturing and retaining of Kashmir territory linked to the “hydro-strategic” nature of its geography and can the conflict be considered resource-based? (5) When bilateral negotiations between the rival riparian reach a deadlock, do they necessitate third-party mediation? (6) Why do the disputants accept mediation and how it is conducted successfully? (7) When do the rival states choose accommodation as a preferred security strategy on vital concerns and postpone political issues? (8) What are the imperatives and implications of such accommodation? (9) What kind of scenarios emerge and what is the likely role of river water resources in Indo-Pakistan relations? Three categories of variables, listed below, are measured in order to answer these questions.

Core Hypothesis

If enduring rivals reach a mutually hurting-stalemate, they prefer to accommodate on vital concerns and postpone political issues.

Theory

A necessary prerequisite for the development of an appropriate explanatory model is a theoretical approach which allows for the coexistence of both identity and non-identity related motives for state behaviour, in international as well as bilateral contexts.

Traditional geopolitics has much in common with the kind of power politics defined by classical realism, with its focus upon the geographical composition of a state’s territory vis-à-vis other states and the prevailing international political system.¹¹ Realism argues that competition and conflict between states is inevitable because of the nature of the international environment.¹² Liberalism regards the international

¹¹ Hans J. Morgenthau, *Politics among Nations: The Struggle for Power and Peace*, revised ed., Boston: McGraw-Hill 1993; Clive Agnew and Ewan W. Anderson, *Water Resources in the Arid Realm* (Routledge: London, 1992); John Agnew and Gearoid O. Tuathail, “Geopolitics and Discourse: Practical Geopolitical Reasoning in American Foreign Policy,” *Political Geography*, Vol. 11, No 2. (March 1992), pp. 190-204; John O’Loughlin and Henning Heske, “From ‘Geopolitik’ to ‘Geopolitique’: Converting a Discipline for War to a Discipline for Peace” in Nurit Kliot, and Stanley Waterman, (eds.), *The Political Geography of Conflict and Peace*, London: Belhaven Press, 1991), pp. 37-59; Simon Dalby, “Critical Geopolitics: Discourse, Difference and Dissent.” *Environment and Planning D: Society and Space*, Vol. 9, (1991), pp. 261-283.

¹² Robert J. Art and Robert Jervis, “The Meaning of Anarchy” in Art, Robert J. and Robert Jervis, (eds.) *International Politics: Anarchy, Force, Political Economy, and Decision-Making*, 2nd ed. (Harper Collins, 1985), pp. 2-7; Scott Burchill, “Realism and Neo-realism” in Burchill, Scott and Andrew Linklater, (eds.) *Theories of International Relations* (Basingstoke: Macmillan Press, 1996), pp. 67-92; Robert Jervis, “Cooperation under the Security Dilemma” in Robert J. Art and Robert Jervis, (eds.) *International Politics: Anarchy, Force, Political Economy, and Decision-Making*, 2nd ed. (London: Harper Collins, 1985), pp 86-101; Nurit Kliot, “The Political Geography of Conflict and Peace - An Introduction” in Nurit Kliot and Stanley Waterman, (eds.) *The Political Geography of Conflict and Peace* (London: Belhaven

system as highly interdependent which inherently promotes international cooperation.¹³ Thus a weaker state can enhance its power by collaborating with powerful actors. Constructivists argue that the stability of liberal societies is based on a commitment to agreement where possible.¹⁴ Neorealist theories, commonly applied to conventional explanatory models of conflict and cooperation, define security maximisation – equated with the maximisation of relative power – as the singular most vital national interest of any state. The concept of security maximisation refers to the safeguarding of national resources and is defensive in nature, while power maximisation means gaining control over more and more resources and suggests an offensive strategy. Neorealists contend that in deciding to take a particular path of action, a state weighs up the potential gains against the potential costs in improving their position vis-à-vis each other, especially with respect to their enemies.¹⁵ The state then follows the path that promises the greatest overall gain. Another way of looking at this loss-gain balance is in terms of states' concerns of losing what they already possess. Thus decisions are influenced not only by potential gains, but also by potential losses. If, for example, a state makes gains by cooperating, yet these gains prove insufficient at compensating for the loss of sovereignty over a resource, then cooperation will not occur. Therefore, the balance sheet has to be attractive in rational terms in order for a decision to fall in favour of a specific action.

The general theories cited above do provide models to explain both inter-state conflict and cooperative behaviour but, given the current study's limited focus on the role of vital freshwater resources in the Indo-Pakistan conflict over Kashmir, no model exists that is specifically tailored to explaining these particular phenomena since water-sharing or riparian rights are considered an issue of 'low politics' and the concept of 'water-wars' is a contemporary debate.

Nevertheless, the neo-realist's notion of rational action as a means of achieving a balance of losses and gains for the maximisation of security (again, equated here with the maximisation of power), and the neo-constructivist's tendency to reach an agreement in order to stabilise the continuity of the system, do provide some important insights. A number of geopolitical analysts and researchers have proven, on the basis of empirical evidence, that geography is a prime and sufficient cause of

Press, 1991). pp 1-17; Joe Painter, *Politics, Geography and 'Political Geography': A Critical Perspective*, (London: Arnold, 1995); Alexander B. Murphy, "Territorial Ideology and International Conflict: The Legacy of Prior Political Formations", in Nurit Kliot and Stanley Waterman, (eds.) *The Political Geography of Conflict and Peace*, (London: Belhaven Press, 1991), pp 126-141; Kenneth N. Waltz, "Anarchic Orders and Balances of Power" in Robert J. Art and Robert Jervis, (eds.) *International Politics: Anarchy, Force, Political Economy, and Decision-Making*. 2nd ed. (London: Harper Collins, 1985), pp. 8-28.

¹³ Robert Gilpin, "Three Models of the Future" in Art, Robert J. and Robert Jervis, (eds.) *International Politics: Anarchy, Force, Political Economy, and Decision-Making*. 2nd ed. (London: Harper Collins, 1985), pp 375-396; Miriam R. Lowi, *Water and Power: The Politics of a Scarce Resource in the Jordan River Basin*, (Cambridge: Cambridge University Press, 1995); Miriam R. Lowi, "Rivers of Conflict, Rivers of Peace." *Journal of International Affairs*, Vol. 49, No. 1, (1995), pp. 123-144.

¹⁴ Michael N. Barnett and Raymond Duvall (eds.), *Power and Global Governance* (Cambridge University Press, 2005).

¹⁵ Robert O. Keohane *Neorealism and Its Critics* (New York: Columbia University Press 1986); Waltz, Kenneth "Structural Realism after the Cold War," *International Security* 25, 1 (Summer 2000), p. 5.

conflict between neighbouring states, especially when the territory under dispute possesses some vital resources, such as oil, materials for warfare, or minerals. However, when rival neighbours accommodate each other on substantive concerns in order to achieve a balance of losses and gains, the neo-realist's concept of a 'mutually hurting-stalemate' is able to explain the phenomenon effectively. The interplay of the geographic attributes of the territory in conflict and cooperation, based on the neo-realist's concept of resource wars and the neo-constructivist notion of compromise for the stability of the system, offer an opportunity to bridge this theoretical gap. As the location of a water resource confers strategic importance upon the territory in question—an example being the 'hydro-strategic' nature of the Kashmir territory in Indo-Pakistan relations—a cogent explanatory model is deduced from the neo-realist concept of resource wars or water wars and the neo-constructivist notion of compromise, according to rational choice theory, in a situation of 'mutually hurting-stalemate'.

The debate of whether and how international rivers contribute to conflict or compel disputants towards compromise often centres on the specific causal role of the resource in question. There are two ways (compatible not mutually exclusive) to understand and explain the issue: one can focus on how water resources influence rational actors' behaviour or analyse the hypothesized relationship between the cause (i.e. the location of the vital resource) and its effect (either conflict or accommodation).

The rational actor; which can be an individual, a group, an organization or a state (here a riparian state), chooses to act in such a way as to produce an effect: either conflict and perhaps war, or cooperation and peace. The rational actor state might choose, for example, to acquire or capture the resource-base (i.e. conduct war) or change its resource consumption behaviour (i.e. avoid war); both parties might opt for war but reach a mutually-hurting stalemate; the lower riparian might succumb to the demands of the upper riparian in order to minimize its losses or alleviate the hurting stalemate and the upper riparian accept the peace initiative (thereby achieving accommodation); or both sides might cooperate to maximize mutual benefits (i.e. achieve peace by eliminating the cause of the conflict).

There are four components, each of which influences the ultimate choice that an actor makes. Firstly, it is confronted with "opportunity structures", an external and objective set of options and limitations which determine a set of feasible choices. Secondly, the cognitive processes and circumstantial factors in the actor's environment (its psychological milieu) will influence the range of likely opportunities and obstacles. Thirdly, it has certain relevant beliefs about the repercussions of its possible actions (its operational milieu). Finally, it has preferences regarding various outcomes that it believes will arise from its specific action.

Model

The explanatory power of geographical imperatives, such as opportunity structures, economic constraints and political factors, provides insights into the nature of the relation between cause and effect. These three categories of variables, listed as follows, can be used to analyse this causal relationship: 1) opportunity structures: advantageous geographic location, nature of state boundaries, surface features (man-made and natural); 2) economic constraints: patterns of resource-use, relative

dependency of the lower riparian on resources; and 3) political factors: domestic constraints and external pressures.

Generally, a rational actor state initiates or accepts accommodation when a mutually-hurting stalemate is reached. An upper riparian that enjoys an advantageous geographical position nearly always possesses freedom of action to impose any pre-condition (e.g. a postponement of political issues). An upper riparian will accept an initiative when it perceives that no military solution is feasible and it is unable to complete the intended developmental projects, due to either economic constraints (i.e. the non-availability of funds) or legal restrictions. A lower riparian will more often than not have any other option but to initiate accommodation in an effort to minimise its losses, especially when it is militarily weak vis-à-vis the upper riparian state.

If a lower riparian state feels that its adversary is taking advantage of its position and offering a second-rate solution, there arises the need for a mediator. The involvement of a mediator depends on its institutional interests and its suitability to deal with the issue concerned. The disputants welcome mediation when they are confident of achieving their respective national interests. An interested third party facilitates the process of accommodation and can play a dominant role if it possesses the resources required for the disputants to alleviate, at least, the hurting stalemate. Such partial settlements may not guarantee the promotion of peace between the riparians, since there is no end to the capacity to generate a dispute on the part of the upper riparian. In other words, water is a source of conflict and most often compels the lower riparian (in its disadvantageous geographic location) to initiate accommodation in an effort to minimize its losses, however such solutions rarely become a catalyst for peace between the enduring rival riparian states, until and unless the root-cause of the conflict is completely eliminated.

Data Sources

The study aims at identifying the factors which have contributed to conflict and accommodation over the issue of Indus water resources in Indo-Pakistan relations. The water issue has been unlinked from the Kashmir issue and the process of mediation kept top-secret. Policy-makers remain tight-lipped on the subject as any emphasis of the matter would be contrary to the identity politics both states have perpetuated since their inception. Therefore, fresh and structured interviews with state officials are neither useful nor possible. Public perception is always considered a good yard-stick with which to measure the intensity of a social phenomenon, but in this case public perception is restricted to the scarcity issue only. State diplomacy remains as opaque as before. Visits to India or Indian-controlled Kashmir are neither considered necessary nor permissible given the security circumstances in the region and the sensitive nature of the issue. The most relevant sources of information are to be found in the official correspondence between India and Pakistan, and in their communications with the mediator. The second most important source is the geographical and historical literature. Some useful analyses and opinions are available as primary as well as secondary sources, particularly in the text of the Indus Waters Treaty and in debates over its interpretation that have emerged relating to post-Treaty water issues. Therefore, data is chosen from various sources: primary as well as secondary, archival material as well as interviews.

The primary data, such as regular official correspondence between the states both before and during the mediation process, has been collected from the WB's archives in Washington DC and also from the National Archives, Islamabad. Reliance has been made on the (auto)biographies of leaders and the interviews of stake-holders, conducted by various analysts across a range of time periods. Post-IWT bilateral correspondence pertaining to some major water issues has been collected from the official library of the Commissioner for Indus Waters, Lahore, Pakistan. Official reports, compiled by various inquiry commissions, have been sourced from the respective ministries of the Government of Pakistan, especially those responsible for irrigation, agriculture and water and power. Data related to global water codes and bilateral and multilateral protocols, agreements and treaties have been collected from the UN Treaty Series available in various UN libraries and also, in some cases, on the internet.

In terms of secondary data, all possible sources have been explored: books, research journals, and leading international and regional newspapers available in the major libraries of Pakistan, a network of libraries accessible through the library of the University of Illinois, Urbana-Champaign, USA, and the libraries of the University of Heidelberg, Germany. Various think-tanks, working exclusively in the area of water and environment, such as the International Rivers Network, Berkeley, USA; the Stockholm Environment Institute, Sweden; and the International Water Management Institute, Colombo, Sri Lanka, all served as substantial sources of information.

Scope of the Study

The scope of the study is limited on the one hand to the identification of the major factors which have motivated India to capture or retain Kashmir territory and Pakistan to respond by securing its own water resources, and on the other hand to those factors which have compelled both sides to opt for accommodation as their preferred security strategy. The latter aspect is further extended to include post-IWT scenarios. This is a theory-driven single case study. However, in order to establish a comparative grid, references are made to a potentially similar case of the Arab-Israel conflict, based on secondary sources. General reference is made to almost all water-related issues world-wide, yet a more detailed comparison with the Arab-Israel conflict of 1967 is drawn by applying the same model in order to answer the first two questions raised in this study. A total of nine questions are posed by this study; the first being addressed in chapter 3, the second, third and fourth in chapter 4, and questions five to nine in chapters 5 - 9, respectively. The information used in the study is as of December 2007.

Finding of the Study

A model has been developed aimed at explaining the Pakistan-India conflict over the IRS and its linkage with the Kashmir dispute. At a more general level, the model examines the relationship between freshwater resources and war and peace between riparian states, and investigates the circumstances under which rival riparian prefer accommodation on vital concerns, thereby postponing political issues. The framework utilizes a single case-study method to analyze Pakistan's initiation of accommodative moves vis-à-vis the upper riparian, India, but is equally suited to explaining a number of other cases where Pakistan has initiated accommodation and

India has reciprocated, or vice versa, both with or without third-party mediation. Examples include the Tashkent Declaration (1966), brokered by Soviet Russia following the 1965 India-Pakistan war; the Simla Accord (1972), a bilateral pact following the 1971 war; and the Salal Dam issue, which erupted in 1974 and was settled in 1978. In addition, the ongoing Composite Dialogue process, initiated in 2004, and in fact almost all of the issues that have arisen between India and Pakistan, can be studied with the help of this framework. The framework is equally suited to investigating the phenomenon of accommodation as a preferred security strategy in international relations.

It is concluded that the geographical dimensions of superimposed boundaries and disputed territories (such as surface features or relative locations) have played a major role in triggering water-related conflicts between India and Pakistan. If India had not succeeded in acquiring the Madhopur and Ferozepur headworks—the former also constituting the only land-link (from Indian side) to J&K—the crucial linkage of water and the Kashmir dispute would not have ensued. Even if the Radcliffe boundary award had been able to maintain a balance in allocating the control of the river headworks to both India and Pakistan, the chances of a water dispute would have been minimal since each country would have been in a position to counter-balance a unilateral closure of the headworks undertaken by the other party. The chapter argues that the Kashmir conflict is a product of many factors, but that the hydro-strategic nature of its territory can be identified as a major cause. Access to water resources played a significant role in the division of British Punjab and enabled India to use water as strategic, economic and socio-psychological weapon in the 1948 Indo-Pakistan war over Kashmir. India's actions instilled enormous fear into the Pakistani public, as did its statement that it perceives itself vulnerable until the J&K territory is firmly in Indian hands. This has been of great detriment to the trust Pakistan can ever have towards India regarding its river water life-line, should it ever opt to relinquish its claims over Kashmir territory. India's abandonment of Kashmir would result in the loss of its upper riparian status and its enormous real-political capacity to intimidate, economically strangulate and threaten the very survival of Pakistan.

The Kashmir tangle is explored in terms of its linkage with competition over natural resources. It concludes that, in combination with other factors, the *surface features* and the *relative location* of the Kashmir territory, home to the catchment areas of all the rivers in the IRS, encouraged India to capture Kashmir in October 1947. Retaliation by Pakistan in May 1948 was not a coincidence, but was aimed at safeguarding its life-line. In other words, the complex nature of the Kashmir and Indus disputes is rooted in the geographic characteristics of the territory. The Indian obduracy in maintaining control over Kashmir, and Pakistan's efforts to 'liberate' the area, are intimately connected with the nature of its territory. The anticipation of the Indian leadership that the annexure of the Muslim majority state of Kashmir would destroy the very rationale of Pakistan and the basis of two-nation theory has proved an ideal ploy to maintain control of the real resource.

The rival riparian, Pakistan and India, agree to negotiate only once they have exhausted military options, and that the peace initiative is generally taken by the lower riparian. Bilateral negotiations between the rivals, who are asymmetric in military terms, may not succeed since the more powerful upper-riparian often tries to take advantage of the situation. The Delhi Agreement of May 1948, although temporary, did more harm to the lower riparian. India used the agreement against Pakistan as proof that the former had acknowledged latter's property rights over the three international

rivers originating from its territory. In reality, however, the agreement did nothing more than acknowledge that there was a dispute in which both sides had legal claims. Successive negotiations between India and Pakistan failed to mark any progress on the issue.

Another finding has been that a bilateral deadlock between the disputants necessitated the involvement of a mediator. Interestingly, during this period, both India and Pakistan had applied to the WB for loans with which to complete their planned irrigation projects. Fortunately, the Bank, while refusing to fund projects related to the disputed river, was willing to assist the parties in resolving their dispute. The presence of the WB enhanced the likelihood of accommodation since it accelerated the mutually-hurting stalemate. The WB managed to commit India to not undertaking any new projects and to continuing to supply Pakistan with water for irrigation until a final settlement was reached. It also linked the availability of funding with compliance. The opening of the Bhakra-Nagal Canal brought a mutually hurting stalemate for India and Pakistan. The stalemate was “hurting” or detrimental to India in two ways: firstly, India was unable to benefit despite developing huge irrigation projects in East Punjab; and secondly, the “opportunity cost of time” (i.e. the level of development India could have attained during that period) was soaring every year. Pakistan's situation, on the other hand, was even worse. It was desirous of a settlement without yielding to its legitimate claims over the "historic uses" of the eastern rivers.

The stalemate was equally hurting India and Pakistan when the WB offered its mediation. Pakistan accepted immediately. India though followed the suit but promptly disassociated the Kashmir issue from the water dispute. The postponement of the Kashmir issue amounted to an inferior bargain for Pakistan, who preferred conscious neglect of the issue in favour of addressing the matter of prime concern, thereby attempting to minimize its losses. Because it was becoming evident that either India would unilaterally withdraw from negotiations or the WB would quit as a mediator. A solution which can assure Pakistan an adequate replacement for the perceived loss of three eastern rivers was need of the hour. Pakistan did not have the requisite resources to fight over the IRS with India. Moreover, Ayub Khan's commitment to economic reforms, minimise losses in external military and in domestic economic spheres played significant role in Pakistan's initiative for accommodation.

The presence of the WB as a mediator towards the end of 1951, coupled with the blessing of the USA and some major powers (UK, West Germany, Canada, Australia and New Zealand as loan and funds providers), ensured that India would be restrained from using water as a military weapon against Pakistan. Although armies were deployed on both sides, primed to deal with any military eventuality, and India also attempted to infuriate Pakistan with periodic cross-border firing, Pakistan did not respond militarily. Although India took complete advantage of its upper riparian position by securing full rights to the three eastern rivers and “holding all the cards”¹⁶

¹⁶ Michel points out that under the IWT India not only got full control (and fully diverted) of three Eastern rivers but also has a potential to control all the three Western rivers of the IRS. The IWT in Article III and Annexure C and D give India some specified rights. These provisions relate to the areas in Jammu irrigated by the Ranbia and Pratap inundation canals off-taking from the Chenab river above Marala, and Jhelum river above Srinagar-Verinag and they even allow India to build barrages, but not dams. India can maintain continuous withdrawal for irrigation of those areas that were irrigated on the effective date of the Treaty (1 April 1960), and may even enlarge the irrigated cropped acreage (counted twice if cropped

on the western rivers, it did not bring about the destruction described in Lilienthal's article.¹⁷

It is found that the assumption of mediators' impartiality is not always true because they "are best seen as self-interested actors". However, the nature of the dispute also accords specific significance: although the mediation resulted in an agreement, it only became possible in the face of the adjournment of the political dimension of the Kashmir issue. The involvement of a third party provided a technical solution to the water problem in the shape of the IWT. Despite the inherent flaws in the treaty and their repercussions, it has served as a safety valve for Pakistan's survival at times when the country's very existence was at stake. Nevertheless, the IWT did not eliminate the root-cause of Indo-Pakistan conflict over Kashmir: the issue of control over the hydro-strategic territory.

The settlement of the Salal Dam issue can also be viewed within a similar context for the lower riparian, Pakistan, which was militarily weak after the 1971 War and recovering from the shock of separation of former East Pakistan. There was a strong desire to minimize losses and to achieve internal stability. The nature of accommodation was different from that of the 1950s since Pakistan was entitled to invoke the IWT provisions. Nevertheless, in the 1970s India used the water issue more as a political tool than a military or economic weapon. Also of note here, is that the Salal was the first and last issue settled since the signing of the IWT, all the later disputes are not only still simmering but have grown to be a major irritant in Indo-Pakistan relations.

The IWT, although having delivered substantial gains for both parties, has, in the long-run, engendered more complexities for Pakistan-India relations. The division of an integrated river system has given permanency to the distrust between the two states by minimizing opportunities for their interaction. It has also established the vulnerability of the lower riparian as long as the physical control of the water resources

twice a year) by 70,000 acres in the Indus Valley, 400,000 in the Jhelum Valley, and 225,000 (of which not more than 100,000 in Jammu District) in the Chenab Valley, plus 6,000 acres from the Chenab but out side its basin. For this purpose India may construct barrages of storage capacities of up to 250,000 acres feet (AF) on the upper Indus, 500,000 AF on the Jhelum above Verinag, and 500,000 AF on the Bhaga and Chandra tributaries of Chenab, plus some additional capacity for power generation and incidental storage for flood control up to 10,000 AF on the river Jhelum only. Moreover, India is capable of diverting Chenab water via the Marhu Tunnel into Ravi, Ravi into Beas (at Madhopur), Beas into Sutlej (above Bhakra). Yet possession of the Wullar site at the Jhelum river was another means of intimidating Pakistan, since a dam there could ruin the entire Triple Canals Project. Similarly, a dam constructed on the Chenab at Dhiangarh, north of Jammu, would enable India to withhold water from Marala. It was an extremely advantageous position as later summed up by one of the chief Pakistani negotiators of the IWT: "India held all the cards." For details see Aloys Arthur Michel, *The Indus Rivers: A Study of the Effects of Partition* (New Haven and London: Yale University Press, 1967), p. 238.

¹⁷ No doubt India holds all the cards. Till the time the Kashmir dispute is not resolved to the satisfaction of the parties or the J&K remains under Indian control, India can create extreme security crisis for Pakistan many times greater than it created in 1948. Water weapon is more lethal than a nuclear bomb as was observed by Lilienthal in 1951, See David Eli Lilienthal, "Another Korea in the Making?" *Colliers*, 4 August 1951. "No army, with bombs and shellfire, could devastate a land as thoroughly as Pakistan could be devastated by the simple expedient of India's permanently shutting off the sources of water that keep the fields and people of Pakistan alive".

remain with India. The development infrastructure envisaged under the IWT, while temporarily alleviating the ‘hurting stalemate’, has proved to be unsustainable.¹⁸ Moreover, neither the political leadership nor the public were taken into confidence at the time of signing the IWT, giving rise to one of the major causes of Kashmiri alienation on the one hand, and inter-provincial disharmony in Pakistan on the other.

Thus, the staggering economic costs of maintaining the river diversion and the infrastructure of the link-canal, together with an increasing lack of ecological sustainability in Pakistan, political losses in terms of Kashmiri alienation, and provincial dissonance over water-sharing, hindered river development in Pakistan and J&K. Moreover, the separation of the Kashmir issue from the IRS rendered the dispute purely political or ideological and also equipped India and Pakistan with enough time to consolidate their respective territorial control and harden their attitudes on the Kashmir question. As a result, accommodation may not – and, in this case, did not – resolve or alleviate the animosity felt between the rival riparian. The Kashmir dispute remains, and is likely to intensify, because the rivers Pakistan still depends on are located in, and flow downstream through, the Indian-controlled part of J&K.

In the last fifty-nine years, a number of solutions to the Kashmir dispute have been suggested which portray the Kashmir issue as political, ideological, a question of human rights or a case for self-determination. Barring one or two recent opinions, no reference to the Kashmir dispute based on geographic realities has been found to be available. The dispute arose because the resolution envisaged by the UNSC was the holding of a plebiscite, therefore in the mid 1950s, each party anticipated either the gain or loss of the whole of Kashmir. The division of the IRS was an apposite option available for both in the face of an unknown outcome.

The accommodation reached over the issue of the Indus waters has delayed the resolution of the Kashmir dispute. India’s intentional disassociation of the Kashmir dispute from the Indus issue proved to be a well-calculated policy aimed at keeping the dispute alive as symbol of its secular out-look, however, with the passage of time, the nature of its inherent strategy is becoming apparent. The emerging scenarios are alarming. The linkage of Kashmir and the IRS has acquired prominence. In other words, peace between India and Pakistan is inconceivable without giving due consideration to the geographical imperatives of the IRS. The growing water scarcity will add fuel to the fire and intensify competition over Kashmir, until such time as the disputants once again realize they have reached a “mutually hurting-stalemate” which necessitates further accommodation or an enduring settlement of the Kashmir question.

Some conditions of a mutually hurting-stalemate are partially met. Most prominent is the futility of war. With the nuclearisation of South Asia, a military solution to Kashmir is not only irrational but would be unthinkable in terms of its consequences. In other words, no geographical change is possible through the use of force, which was considered the rational policy instrument until the mid-1970s. Secondly, economic constraints mean that the cost of conflict is detrimental to both states. The Kashmir conflict is engaging a significant proportion of resources and has become a bleeding wound for both India and Pakistan. It is a fact that development in Kashmir is mainly dependent upon the exploitation of water resources for agriculture development and employment opportunities, in addition to the tourism industry, which

¹⁸ Stephen Philip Cohen, “Kashmir—Territory and People: An American Perspective,” *IPRI Journal* (Islamabad Policy Research Institute), Vol. 1, No. 1 (Summer 2001), p. 19.

is suffering tremendously both in Indian-held Kashmir as well as in Pakistan. Since the 1970s, both states have been unable to undertake any major project in the Indus Basin. The IWT checks any unilateral development by India on the western rivers in Kashmir and also hampers development in the Basin by Pakistan. Distrust of the Punjab among the smaller provinces of Pakistan is a legacy of the IWT. Any further deterioration of the water supply in the Jhelum and Chenab rivers will necessitate the diversion of more water from the Indus in order to compensate for the shortfall in the Punjab, and, as a consequence, will further fuel the fiery debate over Kashmir and increase internal dissonance in Pakistan. The situation is even more alarming given Indian plans to interlink the peninsular rivers, which involve controlling of the Jhelum and diverting water from the Chenab into the eastern rivers and onwards.

Overall, the study concludes that water is a cause of conflict and/or war but can also be a catalyst for peace. Upon reaching a mutually hurting-stalemate, states accommodate each other on vital concerns and postpone political issues. The rivalry between India and Pakistan is no exception to this reality. Hence the corollary of the findings is that a compromise on the issue of Kashmir is inconceivable unless a “mutually hurting-stalemate” is reached. Nevertheless, the Indus river resource also offers enormous potential as a catalyst for peace. Yet the dissection and diversion of a single and geographically integrated river system under the IWT has intensified divisive politics in the region and conferred permanency upon the distrust between the two parties. Mediation does play a major role in the relations between nations but any settlement which disregards natural geographic and political realities will likely lack sustainability and endurance. This constitutes a major flaw both in the field of mediation and in the accommodation.

Contribution of the Study

The substantial contribution of this study is the formulation of a theoretical model with which to study the dual phenomena of conflict and accommodation between rival riparian states. The study makes a new case for the claim that neo-realistic interests between rival neighbouring states are the cause of conflict and accommodation, and brings to light an issue of high-politics in the field of international relations, namely the competition for the control of vital water resources. It explains when rival nations compromise on vital concerns and why they put political issues on the backburner.

The study reinforces the belief of geo-politicians that competition over, and control of, vital resources—be they oil, materials for warfare, or minerals—is the main cause of conflict between states, and adds substance to that belief by attributing equal significance to the territorial control of freshwater resources between riparian nations. It addresses the question of linkage between the Indus waters and the Kashmir dispute and highlights its role in political thinking, strategic planning and warfare between India and Pakistan. The discovery of a new dimension of the Kashmir conflict, based on the neo-realistic interests of riparian states in controlling vital water resources, is the hallmark of the study. It also highlights the pitfalls in the field of mediation and exposes the role of self-interested mediators in providing unsustainable solutions.

The study explains how the rival nations pursue accommodation as a preferred strategy in order to secure their foremost national interests of security and power maximization, bilaterally as well as in the international political system, when the

conflict “hurts” both of them. Given that the literature on the neo-realistic security dimensions of the Kashmir conflict is practically non-existent, a further contribution of the study is to bridge this theoretical gap and open up new vistas for research. This comprehensive study, comprising nine chapters, is the first effort in this direction. The study also provides fully practicable policy recommendations.

Policy Recommendations

The desire to resolve the Kashmir issue is not yet two-sided. The most realistic approach would be to allow the issue to remain simmering until such time as the disputants reach a “mutually hurting-stalemate”, thereby necessitating any compromise on the Kashmir issue.

A second, also realistic but more rational and pragmatic approach would be to realize that Kashmir can promise a prosperous future for the Indus Basin riparian. It serves as a life-line to their agrarian economies and possesses enormous potential for the generation of hydro-power, sufficient in fact to cater for the energy needs of the region. In order to achieve this goal, the involvement of a third party to engage and convince the disputants to adopt an integrated approach to the development of the Indus water resources and the resolution of the Kashmir dispute is the need of the hour. A promising investment opportunity in the water sector of the Indus Basin would act as an incentive to an interested mediator.

Last but not least, the issue could be resolved bilaterally, although the requirement for such a resolution would be to institutionalize the accommodative initiatives. The present Composite Dialogue provides a framework for this purpose, but now a proper institutionalization of bilateral cooperation is called for. The Indus water resource issue and the Kashmir dispute demand urgent attention.

As far as water resources are concerned, the Permanent Indus Commission, established in both countries under the IWT, is the only model of accommodative interaction between the two states. It requires further institutionalization, expansion and consolidation.¹⁹ It should be accompanied by a substantial change in the Commission’s charter and its functioning. Equal representation and the involvement of Kashmiri experts, from both the Indian and Pakistani-held parts of Kashmir, is vital. The Commission should be given a broad mandate to foster the cooperative development of the Indus Basin’s water resources. It should be autonomous in all spheres and should function to restore the Indus river system’s co-riparian status in their original beds and streams.

Similarly, but not intended as a permanent measure, a Kashmir Commission should be established with an equal representation of Kashmiris from both sides of Indian and Pakistani-administered Kashmir.

The status of the proposed Commissions should be recommendatory only. The Commissions should be assigned the task of joint research and planning, and come up with joint recommendations for a Basin-wide integrated development of the Indus water resources, along with a solution to the Kashmir dispute. The proposed

¹⁹ Also proposed by Professor Wirsing in Robert G. Wirsing and Christopher Jasparro, “Spotlight on Indus River Diplomacy: India, Pakistan and the Baglihar Dam Dispute,” *Asia-Pacific Center for Security Studies*, (May 2006).

Commissions would thus lay the foundation for the consolidated institutionalization of bilateral cooperation by providing immensely urgent, fully practicable and sustainable resource utilization measures and guiding the two states towards a resolution of the Kashmir dispute.