### **EDITORIALS**

- The Brave New World of Wikileaks
- All for Food Security
- Perfecting Patronage

### COMMENTARY

- A Political Agenda to Minimise Wages
- Bihar: Development and Disparities
- A Process without Peace
- RALH Gunawardana: His Life and Work

### **BOOK REVIEWS**

- Gender and Partition in Eastern India
- Sepoy Religion in the Service of Empire

### PERSPECTIVES

Can a Bridge Be Built over the Indus?

### THE VERDICT ON AYODHYA

- Dissecting the Judgment
- Secularism and the Indian Judiciary
- Idols in Law
- Issues of Faith
- Was There a Temple under the Babri Masjid? Reading the Archaeological 'Evidence'

### SPECIAL ARTICLES

- How Colonial India Made Modern Britain
- John Locke and the Governance of India's Landscape

### DISCUSSION

Elephant in the Room

### **CURRENT STATISTICS**

India's Quarterly GDP Estimates

# **An Agenda to Minimise Wages**

How can workers in India's largest public works programme – the National Rural Employment Guarantee Scheme – be paid less than the statutory minimum wage? page 10

### The Troubled Indus

It requires far-sighted political leadership, especially in India but also in Pakistan, to build a bridge over the troubled waters of the Indus. page 28

## **Disparities within Bihar**

A survey of 80 villages in Bihar shows that there is an uneven distribution of benefits from public investment and development initiatives. page 13

### Colonial India and Britian

The view that colonialism did not have a major impact on the modernisation process of the colonising countries of Europe has not been critiqued adequately. page 73

### **VERDICT ON AYODHYA**

The verdict of the Allahabad High Court in the Babri masjid title suits represents the triumph of political expediency and religious fervour over judicial soundness and integrity. Legal logic and historical evidence have either been twisted or just conjured up to suit preconceptions, and arrive at a finding of ownership on the basis of the dubious legal proposition of faith. page 33 onwards

# Troubled Waters: Can a Bridge Be Built over the Indus?

JOHN BRISCOE

Whereas once the Indus Waters Treaty could correctly be described as a beacon of light in an otherwise gloomy relationship between India and Pakistan. this is no longer so. The odds now are that the crumbling IWT will be a cause for further tension and conflict between India and Pakistan. It is also true that with far-sighted political leadership, especially in India but also in Pakistan, a bridge could be built over these troubled waters and the Indus could, again, become a catalyst for cooperation.

John Briscoe (*jbriscoe@seas.harvard.edu*) teaches environmental engineering at Harvard University.

### **Preamble**

thas been one of the great privileges of my life to work for almost 40 years on the challenges of water management in the south Asian subcontinent. Starting with a Harvard University/Government of India collaborative programme on planning of the Ganga and Narmada rivers in the early 1970s. I lived in Bangladesh (in the 1970s) and Delhi (from 2002 to 2005 when I was senior water advisor at the World Bank). In 2006 I published, with Indian colleagues a book titled India's Water Economy: Facing a Turbulent Future and with Pakistani colleagues, one titled Pakistan's Water Economy: Running Dry.

Writing on a subject as fraught with mistrust as the Indus requires a level of "personal declaration" that is not necessary in most other contexts. So whose views do I represent? America? No I am not American but South African. The World Bank? No, but this requires a bit more explanation. I worked for 20 years for the World Bank, the last 10 as Senior Water Advisor and then as the country director for Brazil until the end of 2008 when I accepted a faculty position at Harvard University.

Institutions like the World Bank necessarily have to craft institutional positions on complex issues. Healthy institutions ensure that there is space for the expression of a wide variety of views in coming to decisions. As is described in detail in Chapter 13 of Sebastian Mallaby's (2005) landmark history of the World Bank, my views were frequently different from the views of management of the Bank. Furthermore, I have not been involved in any internal discussion in the World Bank on Indian and Pakistan water issues since 2005. The interpretations in this article do not depend on any confidential information but are based entirely on my own reading of documents and reports that are in the public domain. So this paper represents the personal views of a mere university professor, who speaks in the name of no one else or no other institution.

Over these 40 years I have acquired a deep affection for the people of both India and Pakistan, and am dismayed by what I see as a looming trainwreck on the Indus, with potentially disastrous consequences for both countries. Whereas once the Indus Waters Treaty (IWT) could correctly be described as a beacon of light in an otherwise gloomy relationship, the situation has changed: because of the growing investment in hydropower in Indian-held Kashmir; because of the declining water availability in Pakistan; because the Baglihar verdict of the Neutral Expert has gutted the IWT of its essential balance, because the World Bank has withdrawn from its once-heroic engagement with the Indus and because of the appropriation of the water dialogue by extremists on both sides. The purpose of this article is to delve into some of these questions, and to suggest how to find a way out before it is too late.

### The Indus Waters Treaty

In the 19th century, the British constructed most of what is today the world's largest contiguous irrigation system in the Indus Basin. However, the boundaries between the two states drawn in 1947 paid no attention to hydrology. Eighty per cent of the irrigated area was in Pakistan, but after Partition a large portion of the headwaters for the rivers which serviced most of this immense area were in Indian-held Kashmir.

Seeing that India and Pakistan were unable to resolve this issue, the World Bank offered its help. After 10 years of intense negotiation, in 1960 the IWT was signed by then Indian Prime Minister Jawaharlal Nehru, Pakistani President Ayub Khan and the World Bank.<sup>1</sup>

There are four essential elements to the treaty. The first relates to the division of the waters. The waters of the three western rivers (the Indus, the Jhelum and the Chenab) were allocated to Pakistan, and the waters of the three eastern rivers (the Ravi, the Beas and the Sutlei) were allocated to India.

The second was a financing plan to assist Pakistan in building the vast "replacement works" (Tarbela Dam on the Indus and Mangla on the Jhelum in Pakistan-held Kashmir and the massive link canals) which were needed to store and transport water from rivers in the west to the irrigated areas of Pakistan. India contributed about 20% of the almost \$1 billion (in 1960 dollars) required.

The third element relates to use of the hydroelectric potential of "Pakistan's rivers" before they reach Pakistan. This was a major bone of contention in the negotiations. India had a legitimate desire to harness the hydroelectric potential of "Pakistan's rivers" before the rivers reached the Line of Control. Pakistan was well aware that the backbone of its economy was irrigated agriculture that was built around the natural flows of the rivers, and thus worried that its security would be seriously compromised if India built dams which could alter the timing of water coming to Pakistan, especially from the Jhelum and the Chenab. The compromise reached in the IWT was that India could use the hydro potential on the rivers, but that there would be restrictions on the manipulable storage that India could construct on these rivers, thus eliminating the possibility of the dams being operated in a way that would adversely affect Pakistan.

The fourth element of the treaty is the dispute resolution mechanism, which sets up rules whereby first recourse is for the Indian and Pakistani IWT commissioners to resolve potential problems. If this fails then there are provisions for external arbitration, either through a neutral expert appointed by the World Bank, or through an international court of arbitration.

### **Troubled Waters**

The treaty is widely described as the only institutional mechanism that has worked between India and Pakistan over the past 50 years. In part this is because of the intelligent design of the treaty, but it is also true that it "worked" because for decades India did very little to develop the hydropower resources on the Jhelum and the Chenab in Indian-held Kashmir. Over the last decade this situation has changed dramatically. India has initiated a major (and entirely appropriate, in my view) programme of hydropower development across its Himalayan region. As part of this strategy, and in part to try to address the grievances of the Kashmiri people, India has constructed and is constructing and planning a large number of large hydropower projects

on the headwaters of "Pakistan's rivers" (the Indus and especially the Jhelum and Chenab) in Indian-held Kashmir.

Under this unprecedented pressure, the IWT is creaking. The Indian perspective is that Pakistan uses the treaty to put an unending set of obstacles in India's path. The Pakistani perspective is that New Delhi operates with impunity, and that the cumulative upstream water storage being created by India constitutes an existential threat to Pakistan's security.

### The Baglihar Case

The differing views of Islamabad and New Delhi first came to a head after India started constructing the 450 megawatt (MW) Baglihar project in 1999 on the Chenab river. Pakistan believed that the Indian design violated the IWT because the dam included gated spillways which meant that the manipulable storage was larger than that allowed under the IWT. The Indian view was that if they were unable to operate the reservoir more flexibly, it would rapidly fill with silt, as had happened in the earlier Salal project. The Indian and Pakistani IWT commissioners were unable to resolve the "difference". with Pakistan asking the World Bank to appoint a neutral expert in 2005.

The essence of the neutral expert's verdict, delivered in 2007, was that: the IWT had a provision for updating the implementation of the treaty as new knowledge accumulated; what has emerged as global good practice for silt management would be impossible with the rigidities of the treaty; and therefore India should be allowed to draw water out of the dam at lower levels than those specified in the treaty.

To understand this interpretation a brief technical digression is needed. Water stored behind a dam is divided between "live storage", which the operator of the dam can manage through both gated spillways and power intakes, and lower-level "dead storage", which the operator cannot manage as he does not have outlets in the dam low enough to release this water.

The neutral expert, applying considerable semantic subtlety, essentially argued that live storage was not the same as "manipulable storage". He argued that only storage that could be used for the operational purpose of generating power constituted "live storage". So if India was creating more "manipulable

storage" on the grounds that this was necessary for silt management, then, in the judgment of the neutral expert, this was not live storage and should be allowed. This finding would only make sense if Pakistan's concern in the treaty was to define exactly where the power outlets could be in the Indian dams (which it never was and is not). But it makes no sense if Pakistan's concern was India's capacity to manipulate flows into Pakistan (which it always was and still is).

For Pakistan the (non-appealable) Baglihar verdict was a huge blow because it reinterpreted the IWT to remove the fundamental physical protection (limits in manipulable storage) which Pakistan had against the creation of an Indian ability to seriously manipulate the timing of flows of water into Pakistan.

From the Pakistan perspective, salt was rubbed into this raw wound when India did not (in Pakistan's view) comply with the IWT-specified process for filling Baglihar.<sup>2</sup>

### The Kishenganga Case

Today's flashpoint - the Kishenganga project in Indian-held Kashmir – is unique. In India the westward-flowing Jhelum river has two main tributaries. The northern tributary, which flows at a substantially higher elevation in the foothills of the Himalayas, is the Neelum river. The southern tributary, which flows at a much lower elevation, is the Jhelum itself. The two tributaries join just after they reach Pakistan. This odd configuration offers a unique opportunity – build a barrage across the Neelum, build a tunnel down to the Jhelum, put a power station at the bottom and generate substantial amounts of power. There are two obvious sites where this can be done - one upstream in India and one downstream in Pakistan.

The engineers who drew up the IWT were well aware of these possibilities and stipulated that India could build its project only if there is no existing use which will be affected in Pakistan. India is now building the "eastern scheme" (the 330 MW Kishenganga project) while Pakistan is building the "western scheme" (the 1,000 MW Neelum-Jhelum project). The immediate stakes and investments are large – approximately \$350 million in India and \$1,000 million in Pakistan. Disillusioned with the neutral expert process after Baglihar, in May 2010 Pakistan

declared this to be a "dispute" to be taken to a Court of Arbitration.

The situation is further complicated by the fact that India has a series of hydropower projects being planned, designed and constructed on the headwaters of Pakistan's three rivers which will create something like 40 days of live storage on the Chenab alone. From the Pakistani perspective this ability to hold and release water constitutes a serious threat to water security in Pakistan.

The Neelum-Jhelum case is unique because it is the one case in the Indus Basin where there is an intrinsic conflict between India and Pakistan. In all of the other cases upstream storage of water in India could, if normal relations pertained, easily be translated into benefits for downstream Pakistan. These benefits would include the more reliable timing of flows, storage of water during floods and perhaps even energy sharing.

### Views from Both Sides of the Border

Pakistan – much like Egypt – is a country built around a single river system. Securing its water supply is a central, existential challenge which has been a high priority for every government of Pakistan. Pakistan's water security is now under a series of unprecedented threats.

Threat One comes from rapid internal population growth. At Partition there was 5,000 cubic metres of water for every Pakistani. Today the population is five times the size, and availability is down to 1,000 cubic metres per person, well below the globally-accepted threshold for water scarcity. As the pie shrinks so do long-simmering conflicts among Pakistan's provinces over water.

Threat Two comes from poor water management in Pakistan, with low agricultural productivity per unit of water, and substantial quantities of land and water rendered unusable due to salinity.

Threat Three comes from climate change. Of all the great rivers that rise in the Himalayas, the Indus is unique in that it is a river in a low-rainfall area. Whereas the snowmelt contributes only 8% of the flow of the Ganges and 12% of the flow of the Yangtze, it contributes 45% of the flow of the Indus. While the glaciers of the Himalayas will not, as the Intergovernmental Panel on Climate Change infamously claimed, be gone by 2035, there is no doubt that climate change and changes in glacial formation and

snowmelt in the Himalayas constitute a huge threat to the water security of Pakistan.

Threat Four comes because such a large proportion of Pakistan's water comes from its neighbours. The Kabul river contributes 20% of the flow of the Indus. There is no treaty with Afghanistan, which has ambitious plans to develop the resources of this river. And then, of course, there is the Indus, and the now-vulnerable Indus Waters Treaty.

This general picture is well understood in Pakistan, both technically and viscerally. Because of these deep visceral concerns, it was obvious that sooner or later extreme groups in Pakistan would latch on to "the water issue" and particularly the Indian connection to Pakistani water insecurity. So Lashkar-e-Taiba leader Hafiz Saeed has become vocal about the Indian role and rails about blowing up the Baglihar Dam. And much of Pakistan's conspiracy-driven press latches on to the "India is stealing our water" theme. Both because the vulnerability is real and because of its explosiveness inside Pakistan, water has become a major security concern for Pakistan. It is reported that on a recent visit to Washington, Pakistan's army chief, General Kayani argued that water had replaced Kashmir as the primary nonmilitary concern with India.

Living in Delhi and working in both India and Pakistan from 2002 to 2005 I was struck by a paradox. One country was a vigorous democracy, the other a military regime. But whereas an important part of the quality Pakistani press regularly reported India's views on the water issue in an objective way, the quality Indian press never did the same. I never saw a report which gave Indian readers a factual description of the enormous vulnerability of Pakistan, of why Pakistan was so concerned and why Baglihar was such a blow to Pakistan. How could this be, I asked? Because, a journalist colleague in Delhi told me, "when it comes to Kashmir - and the Indus Treaty is considered an integral part of Kashmir – the Ministry of External Affairs instructs newspapers on what they can and cannot say, and often tells them explicitly what it is they are to say".

This apparently remains the case. Earlier this year the "water issue" was the subject of discussion between the secretaries of foreign affairs of India and Pakistan. I read, in Boston, the electronic reports on the disagreement

about "the water issue" in The Times of India, The Hindustan Times, The Hindu, The Indian Express and The Economic Times. (Respectively, http://timesofindia.indiatimes. com/india/Water-Pakistans-diversionarytactic-/articleshow/5609099.cms, http:// beta.the hindu.com/news/national/article 112388.ece, http://www.hindustantimes. com/News-Feed/india/River-waters-Thenext-testing-ground/Article1-512190.aspx, http://www.indianexpress.com/news/Pakheats-up-water-sharing/583733, http://economictimes.indiatimes.com/news/politics/ nation/Pak-takes-water-route-to-attack-India/articleshow/5665516.cms). Taken together, these reports make astounding reading. Not only was the message the same in each case ("no real issue, just Pakistan shenanigans"), but the arguments were the same, the numbers were the same and the phrases were the same. And in all cases the source was "analysts" and "experts" - in not one case was the reader informed that this was reporting an official Government of India position.

Equally depressing is my repeated experience – including at a recent major international meeting of strategic security institutions in Delhi – that even the most liberal and enlightened of Indian analysts (many of whom are friends who I greatly respect) seem constitutionally incapable of seeing the (obvious to an outsider) great vulnerability and legitimate concern of Pakistan.

I learned more about "the public mood" earlier this year. As part of the admirable aman ki asha ("a desire for peace") series I was requested to, and wrote, an article on the Indus Treaty to be simultaneously published in Jang and The Times of India. The article was published in print and electronically (Briscoe 2010) in Jang (and The News, the Jang's English language outlet) but The Times of India did not publish it. I got an avalanche of emails (almost all from India) in response to this article and it generated a cottage industry of comments on the internet. (For example see the threads on this on the site "Bharat Rakshak: Consortium of Indian Defence websites".) It was perhaps not surprising that many called me a jihadi or an ısı general in disguise or a Paki-lover. There were two more distressing and more surprising strands. One was that emails from some of India's most prominent intellectuals excoriated me for knowing nothing, defending the indefensible Pakistan and putting my nose in something that was not my business. A second was a more ominous thread when the issue of "using water against Pakistan" was raised. In the past the standard Indian response was "you are falling into the Pakistani habit of mistrust and bad faith – India would never use water as a weapon". Now the tone is strikingly and stridently different – after Mumbai we, India, should use anything and everything, including water.

There is a silver lining to what I see as this generally dark cloud. I was contacted by what I have always considered India's premier publication, the *Economic and Political Weekly*. While not implying that EPW agreed with what I had written, the journal stood proudly for the principle that India must hear a variety of views on this issue and invited me to submit this piece.

# The Attitude and Role of the Government of India

I am obviously not privy to what the Government of India thinks about this matter. But I have a couple of observations.

First, on transparency and communications. One of the interesting letters I got in response to the Jang piece was from a prominent Indian anti-dam campaigner (with whom I have tangled many times because of our different views on dams). He wrote that I should not be surprised by Indian lack of transparency and high-handedness on water with Pakistan, because that is the way the Indian water bureaucracy deals with its own people! Lack of transparency is important internally, but even more so when it comes to Pakistan. The automatic assumption from the Pakistani side is that any lack of transparency and compliance is deliberately aimed at harming Pakistan. Such views have wide resonance because Pakistan is a country in which mistrust and conspiracy theories are almost national traits. The recent report (Sify News 2010) that India has agreed to set up an automatic telemetric system to measure flows and to have these transmitted directly to the Pakistan ıwt Commissioner represents a huge step forward (even if there is still a long way to go before this actually happens).

Second, on what this means for India. I travel regularly to Pakistan and have yet to meet anyone who thinks putting bombs in

sufi shrines in Lahore or massacring people in train stations in Mumbai is a good thing to do. Supporters of jihadi groups certainly matter (a lot) but they are numerically small. An ominous development is the way in which jihadi leaders have seized on the Indus water issue. They understand clearly that every Pakistani is concerned about this, and if they can portray the Government of Pakistan as incapable of defending the country's interests vis-à-vis India, they can use water as a means to get much greater traction with far more Pakistanis. In my view this is a very dangerous development, not least for the security of India. In my view, too, the Government of India would be serving India's security interests best by finding a way of lancing this festering boil and finding a way of calming Pakistani nerves which are (in my view) legitimately jumpy on the water issue.

Although there are some promising developments (such as an agreement on a telemetric system), I see the Government of India mostly adding fuel to the fire. An important example is India's attitude to Pakistan's acute internal needs for more water infrastructure.

First the background. As mentioned earlier, India actually helped finance the IWT-initiated programme for building "replacement works" in Pakistan, which included the construction of Tarbela on the Indus and Mangla on the Jhelum (in Pakistani-held Kashmir). What was clear at the time was that these investments were just the first of many that Pakistan had to make to reduce its vulnerability to droughts and floods and to generate clean hydropower. Over the intervening 40 years Pakistan has not built another large dam leaving the country desperately vulnerable to variability, as the cycle of endemic drought and epidemic floods shows. (To cite just one comparison with the infrastructure that is considered necessary in such an environment in a rich country. The us can store 1,200 days of average flow on the Colorado; Pakistan can store 30 days on the Indus; all Organisation for Economic Cooperation and Development countries harness over 70% of their hydroelectric potential; Pakistan harnesses a little over 10%. And the contrasting experience of floods this year in the Yangtse and Indus is striking. The Gorges Dam was, as designed, drawn down before the rainy season, and reduced the peak flood in the Yangtse from 70,000 to 40,000 cumecs. Because infrastructure-poor Pakistan has neither energy nor irrigation security, Tarbela is filled at the beginning of the monsoon season, leaving no buffer for flood management.)

There is no question about who is to blame for this lack of response – the Government of Pakistan, which has been unable to negotiate a solution with the provinces on a new large dam on the Indus. So it was a major step forward when, finally, a few years ago the then President Pervez Musharraf broke ground for building of the Bhasha Dam above Tarbela on the Indus.

Since this is obviously an internal Pakistani affair and one would have expected India to have nothing to say about it. But this is not quite what has happened.

Earlier this year, the Indian high commissioner in Pakistan gave a long and in many ways impressive speech on the Indus Water Treaty and related water issues in Karachi (Sabarwal 2010). After a detailed description of the IWT, the high commissioner turned his attention to Pakistan's internal water challenges. Citing a World Bank report (of which I was the principal author) the HC correctly states that "Pakistan needs to raise storage capacity by 18 million acre feet by 2025 in order to meet the projected water requirement". He concludes, correctly but misleadingly, that "India has nothing to do with these issues of water management that are internal to Pakistan".

But India has intervened. In 2006, in answer to a question in Parliament, the minister of state in the ministry of external affairs explained that "Government conveyed, through diplomatic channels to the Government of Pakistan, its protest against the proposed construction of Basha Dam in territory that is part of the State of Jammu and Kashmir, which is an integral part of India". Just a few months before the Hc's speech in Karachi, *India Today* reported that

the Pakistan government's approval for the construction of the mega Diamer-Bhasha dam in the Northern Areas, in Pakistan-occupied Kashmir (PoK), could initiate a fresh row with India... New Delhi says the proposed project would not only be located in an illegally held territory but ... it is also concerned over reports that the dam may be built with Chinese assistance (Roy Chaudhury 2009).

This could all be dismissed as a minor inconsequential diplomatic exchange of notes if this did not give credence to a widelypublicised claim that India was using its new-found diplomatic weight to discourage the World Bank from financing Bhasha. In 2005 the World Bank had agreed that building Bhasha was a very high priority for Pakistan and agreed that the Bank would consider a request from Pakistan to contribute financing the \$8 billion project. Subsequently, as told by Pakistani officials, the World Bank suddenly announced that it would not finance Bhasha or any other water infrastructure in Pakistan-held Kashmir. Pakistani officials explain that they were told by the World Bank that this was because of the Bank's Operation Policy (OP) on Disputed Territories. What was not explained was that the op does not, in fact, prohibit the Bank from so engaging, but only requires that the borrowing country (or the Bank) inform the other party which is given, not a veto right, but an opportunity to explain its objection.

Since the IWT, signed by India, explicitly gives Pakistan the right to develop the waters of these rivers, and since India not only did not object to but co-financed Mangla (in Pakistan-held Kashmir), prima facie it seems unlikely that there would be a material basis for upholding such an objection from India. To the best of my knowledge both the World Bank and India have declined to comment on the substance of this case and so the (numerous) reports on this matter in Pakistan go uncontested. The following quote from The Nation in Pakistan a few months ago4 gives a taste of how this is interpreted in Pakistan:

The National Assembly Standing Committee on Interprovincial Coordination has been told that India has stopped the World Bank from funding the Bhasha Dam with the argument that the area of construction, Gilgit-Baltistan, was a disputed territory. This was revealed to the Committee on Friday by the Member (Water) wappa, Syed Raghab Abbas Shah, when he testified to it. This reveals the Indian mindset, which did its best to cause damage to Pakistan, but it also speaks volumes about the World Bank, which joined in the conspiracy to prevent Pakistan from developing its water resources, as well as ensuring the Indian sabotage of the Indus Waters Treaty. That is despite the fact the Bank itself is the guarantor of the Treaty, and the party which is responsible under the Treaty to help settle any disputes that might arise over the Indus Waters.

### A Bridge over the Indus?

This is not a pretty picture and not one where the silver lining is bright. There would appear to be two basic alternatives if the outcome is not to be a form of "water war" (which would not really be about water, but in which this powerful symbol would be the straw that broke the camel's already-strained back).

Option One for India is to continue to consider Pakistan's concerns as game-playing and to continue to disregard what are, to an outsider, existential concerns of obvious and deep seriousness which will inevitably be a potent recruiting tool for anti-Indian jihadis in Pakistan.

Option Two starts with the governments of India and Pakistan deciding that it is in their own interests and collective interest to head off this looming trainwreck. Pakistan is, as the weak, water-dependent, downstream state, obviously happy to "come to the table on water". The big question is about India, and this water ball is, very much, in India's court. The less-certain question is whether India will conclude that its own security is dependent on a stable and cooperative Pakistan and to see that a fair and balanced "new regime on the Indus waters" can be critical not only in its own right but as a catalyst for a broader normalisation of ties. It is easy to sketch what the outlines of such a "new regime on the Indus" might be - transparency and neutrality of data (on which there have recently been some important, if small, steps taken), the building of joint projects with benefits flowing both ways and even operating rules on Indian dams that would benefit Pakistan. The process is the tricky part and hard to conceive without involvement of trusted third parties, not to diminish national autonomy, but to break the culture of mutual mistrust. But India has long resisted any type of third party engagement on the issue of Kashmir (which remains related to the water issue) and instinctively rejects even the mildest of questions from even the friendliest of potential interlocutors in this regard. The rejection impulse is strengthened by India's emergence as a player on the global stage. In addition the "natural and historic partner" for the two countries on Indus waters - the World Bank – is no longer the bold institution it was when it waded in to "solve the Indus Water problem" with convening power and financing in 1950.

While much of this ball is in India's court, Pakistan's actions matter, too. It would obviously be much easier for the Government of India to take the above unilateral step on water if the Government and Army of Pakistan were seen, by India, by the world, and by its own people, to end its too-cute-by-half dance with those Pakistani organisations which commit acts of terrorism in India.

In summary, the odds are that the crumbling IWT will be a cause for further tension and conflict between India and Pakistan. But it is also true that with farsighted political leadership, especially in India, but also in Pakistan, a bridge could be built over these troubled waters and the Indus could, again, become a catalyst for cooperation.

#### NOTES

- The chief Indian negotiator wrote a superb book on the Treaty from the Indian perspective (Niranjan D Gulhati 1973). To my knowledge there has never been a similar book written by anyone from the Pakistan team. There are a number of academic treaties examining the political process involved in the treaty, one of the best of which is Undula Alam (1998).
- The IWT (Annexure E) specifies that filling must take place between 21 June and 31 August and that downstream flows at the Marala border cannot fall below 55,000 cusecs during filling. Publiclyreleased data from Pakistan show much lower flows downstream on three days in August, and that filling continued until the middle of September, again with a large impact on downstream flows. I am not aware of similar Indian data in the public domain, but was informed by the editor of a prominent Indian newspaper that "I have crosschecked the facts with those in the know here in New Delhi...The dam was filled before the 31st August.. and the minimum flows of 48,000 cusecs (sic) was not met on only one day... but that no one (in New Delhi) views this as a deliberate act."
- 3 Ministry of External Affairs, New Delhi. Rajya Sabha's Q and A. Q 2910 Building of Diyamar Bahsa Dam by Pakistan.
- 4 http://www.nation.com.pk/pakistan-news-newspaper-daily-english-online/Opinions/Editorials/ o4-Jul-2010/India-conspires-again

### REFERENCES

- Alam, Undula (1998): "Water Rationality: Mediating the Indus Waters Treaty", PhD thesis, University of Durham.
- Briscoe, John (2010): "War or Peace on the Indus", Jang and The News, Karachi, 3 April, http:// thenews.jang.com.pk/print1.asp?id=232342.
- Chaudhury, Roy Dipanjan (2009): "India Concerned over Pak Dam Project", *India Today*,
- Mallaby, Sebastian (2005): The World's Banker, Penguin Press.
- Niranjan, D Gulhati (1973): "Indus Waters Treaty", An Exercise in International Mediation (Bombay: Allied Publishers).
- Sabarwal, Sharat (2010): "The Indus Water Treaty", High Commissioner of India to the Karachi Council on Foreign Relations and Pakistan-India Citizen Friendship Focrum, MEA, 3 April.
- Sify News (2010): "India, Pakistan Agree to Install Telemetry System on Indus to Record Water Flow", 23 July, sify.com/news