

# The Indus Water Treaty (IWT)

Shri BG Verghese

The parameters of the Indus Water Treaty are fair because catchment area in a sense is not as relevant. It is one of the considerations like population and arable area. On that basis it is a fairly rational Treaty. Sind was in the Indus basin. Rajasthan except for a small bit is not. We needed waters for Rajasthan because there was no other source. That was the main argument that there is no other source. Had there been some other river, then that argument might have weakened. In the absence of any other source, it was the proposition that populations in the desert should remain as they are without the benefits of water which could be made available from the rivers.

Just to respond to the question of 62 million pound sterling that we paid, it was for the replacement works. Because some of the important headworks of the irrigation system going into Pakistan from the eastern rivers were in India like Hussianiwala and Harike. And, therefore, they needed to replace them and also to get storages to sustain them. So the replacement and storage works such as at Tarbela and Mangla were part of the package. But we paid for the replacement works and not for the storages. That was done under the preview of the Treaty and was reasonable under international law. You can not leave farmers who have been using waters for decades high and dry. That would not be acceptable.

Besides the three Western rivers a major tributary which was not a part of the Treaty which Pakistan got was the Kabul river. We should not ignore that because Pakistan always says these ratios are in relation to the three rivers each. Kabul river is bigger than say the Ravi and has an additional stream that comes in from Afghanistan.

Our existing irrigation usage of 6,42,477 acres of irrigation in J and K from the Western rivers as in 1960 is protected by way of Ranbir and Pratap canals and other things. There is deterioration

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because of the lack of maintenance. These are normal housekeeping type of problems having nothing to do with the Treaty. Additionally from the Western rivers the Treaty allowed India to irrigate 13,43,477 acres of land. As against that up till 2003, there is still about five lakh acres of land that we are entitled to irrigate. This additional five lakh acres is to be backed by storages on the Western rivers. This is one thing that we have not done so far partly because of security and problems of insurgency. Also other projects were ongoing and we did not have the funds. The allocation of waters to be allowed to be used for domestic uses like drinking water in any quantum. Then certain amount is earmarked for industrial usages that was also spelt out in the Treaty like irrigation and power.

Out of the 3.6 million acre feet (MAF) storage which is allowed, 1.6 MAF is for power, 0.75 MAF is for flood and 1.25 MAF for general storage like irrigation. We can also switch them around within the parameters of the Treaty. The three Western rivers have a hydro-electric (HE) potential of just under 9,000 MW at 60 per cent load factor. Until 1999 only about 1350 MW had been developed and another 1300 to 1500 MW is under development of which only 4 MW is on the Indus.

Outside the J and K there is one area where Pakistan is allowed some of its historic uses till 1960s of the Ravi. That is a small area of about 30,000 acres. We have to subtract that from all our calculations from the Eastern rivers. But below the rim stations, where we have the gauges and the river enters the plains, we have about one MAF of water in the Ravi and its tributaries like the Basantar and so on which come from J and K state to other states of India. The Ravi meanders across the border before it finally enters Pakistan. We have been unable to use that fully, partly because we have not tapped them and partly because of the swinging nature of the Ravi itself. Because if you pond up something you can flood parts of Pakistan. Therefore, the Eradi Commission which looked into the Punjab Haryana water dispute did say that 1.2 MAF of water must be put to a potential use. All the water can not be used because the terrain is such and unless we have an agreement with Pakistan that water can not be used. From the Thein dam which generates power the waters can be tapped at Shahpur Kandi where we are now building a project. This project would also irrigate some of the Kandi areas of Kathua and Samba

in Jammu region. So this will be an additional source of irrigation over and beyond what ever is stipulated from the three Western rivers. This also must be utilised.

J and K has a grievance that they paid the cost of the IWT. It was unfairly saddled on them. They have been denied the potential benefits that they could have received. I think this is a political argument. I do not see any real substance in it because we have not utilised water that we are entitled to. Until we do that saying that "we can use more and we can develop more" is an argument which can only be rational when we have reached or nearly reached what we are allowed to exploit and that we have not done. There is a lot of arable area where the potential of irrigation is somewhat limited due to the terrain. Of course there is a lot of leeway for power that we have to make up and we are going ahead with that.

An additional problem we have is that of drainage, particularly in the southern part of Haryana but more so in the Rajasthan canal where the land slopes from Pakistan towards India. From the point of view of drainage this is a problem. Further South we have to lift water or cut water to get it out to the sea. This has long term problem of potential drainage for us. It can only be resolved by cooperation with Pakistan with commonality of agreement and a quid pro quo in utilising the waters of Ravi and other smaller rivers below the rim stations.

Pakistan's objections to Tulbul, Baglihar, Kishenganga, Dulhasti and so on are purely political. The IWT is one of the best treaties that the UN can boast of. It is one of the triumphs of the UN system. It has worked through war and peace. Therefore, no one is going to see it being disturbed or abrogated in a hurry. So when some people in J and K or in India say that we should abrogate the Treaty, to my mind, it is unwise and unfortunate that at the highest level this was being mentioned over the last two years. Also, informally the J and K Assembly has adopted some resolutions to say that we should think about this. Once you abrogate a treaty then we will be at the wrong end of international opinion. The Treaty has implications for many other things like: why a nuclear treaty? why a Simla Agreement? why a treaty with Nepal or Bangladesh or the USA? People would say that India is not a reliable partner and, therefore, violation of a solemn international treaty brokered by the World Bank 45 years after the event can

not be treated lightly. Some people, may say that "well you can threaten them that we can do it", but that is also a foolish thing to say because your bluff would be called and would be counter-productive. And one of the arguments Pakistan uses for Jammu and Kashmir is that it is its jugular vein. What does that mean? It means that the Indus water is their lifeline and the Western rivers run through J and K and partly POK. Therefore, their logic is that inherently the logic of partition makes J and K a part of Pakistan because the headwaters which are its lifeline are in J and K. Once you abrogate the Treaty, we are pleading Pakistan's case for Jammu and Kashmir. That is again something that we should keep in mind. Whereas our arguments when they say that India would starve them of water is that whether war or peace, this Treaty has survived 45 years and we have unprecedently honoured it and, therefore, the world is convinced that it is no issue. What we need to understand is that the waters issue can not be made an issue by Pakistan to say that they must get Jammu and Kashmir, whether they invaded it or did not fulfill their obligations under the UN Resolutions which they say India must implement now. All these arguments in our favour would be lost if it is said that "150 million Pakistanis have to live, India is snatching their water and thus J and K should go to Pakistan". I think it would be extremely foolish for us to talk about it and it is one of the strategic aspects we should keep in mind.

Crudely saying the Treaty has worked because the performance has to be by India by way of consultations, release of waters, give annual account, indicate all the details on storages and so on. There is nothing that Pakistan has to do except to make complaints, launch protests, and raise questions. This, therefore, is one reason for the Treaty having worked. It is to our credit that when they have played dirty by raising non issues and trying to use that to steer up opinion against India we have continued with our obligations to the Treaty. Which is a good and a wise thing. It is not foolish. I hope we continue to do that as a civilized nation.

The points that Pakistan has raised are not quantified. They would make only generalised statements like "the dam is too high", "Is it necessary in relation to the amount of power potential?", "Why are the gates there and why are the intake channels so low and it can not be raised?", "Why should the submergence spillway

be there?" India's answer is that it is all part of the construction and design but certainly within the parameters of the Treaty.

I think a great failure on part of India since the beginning has been the element of secrecy. We do not tell our own people what the facts are. Arguments put forth for secrecy are that we are corresponding with the World Bank. What does it have to do with correspondence with the World Bank or Pakistan.? This is in the public domain. Why do we not release this information? The result is that as in the whole lot of issues of Jammu and Kashmir or Siachen or Farakka we shoot ourselves in the foot because we keep silent and the other party talks. We listen to what they say. All our scholars and newspapers report what they say including quoting them as primary references in articles. What you are quoting is what is being said by Pakistan or Bangladesh. The Government of India including the Prime Minister of India quote Pakistan and Bangladesh. Our Foreign Ministry quotes Pakistan and Bangladesh and so does our Water Resource Ministry. We do that constantly and the world believes that is right. The myth becomes the reality, the reality a myth. This has happened time and again from day one onwards. It is not only about water, but also on the major issue of Jammu and Kashmir where we talk in the vocabulary of Pakistan. With the result that the press and learned arguments on the Indian side are using the Pakistani arguments. We thus are very much on the back foot and defensive. Then the common Pakistanis are led to believe and take for granted what appears in media. He views the learned discussion on the Indian TV by illiterate people and he concludes that Pakistan is right. Unfortunately, there is an opinion that press on and they will give in.

Let us examine some arguments. Flooding is one. One of the simple things we should do is to have simple maps. But all our maps are secret. The Ministry of Water Resources can not print them as Ministry of Defence will not allow. Nor would intelligence allow it. It is absolutely absurd. With the result that no one knows where Salal or Baglihar is located as it is not marked on the map. Someone would be trying to locate it in Aksai Chin and some in Akhnur to find out where Baglihar is. Now, once you locate it, say, using satellite maps you can see the value of geometry. We say that if we were to pond the water up and then release it, what is the quantum of water stored on a daily or weekly basis that should

be made available? Actually it is quite small. You can not flood very much. It is equivalent of saying that I have a bath tub in my flat and if that overflows then the whole of the Firozeshah road where I live would be under water. Now what is the relationship of the bathtub and the road where I live? It is the same sort of an argument here of that scale and order of magnitude. Baglihar is a bathtub. The Chenab or the Jhelum valley are huge. We have gorges, open land, villages and so on. The myth propagated by Pakistan goes that these would all be flooded out. However, the Baglihar is 170 miles upstream of the Akhnur-Pakistan border and the first impact felt would be well inside our territory if at all this incorrect story of a bathtub equivalent of water can cause havoc. If you study the geology, all the water would dissipate before it reaches there.

The argument put forth is that war is declared at 1400 hours. Pakistani tanks are advancing and are about to launch their offensive into Jammu. We then release the water so that at the critical moment they are flooded. This sort of a scenario would require enormous calculation, anticipation and intelligence for the need to match the travel time of tanks with that of the flooding given the storage available and the velocity that can be achieved in the flow to drown the tanks. But the fact is that sufficient water is not there. The point that I am highlighting is that simple facts are not put forward on the travel time and the terrain. Will any water ever reach there? It is just like the story of the Tehri dam. Shri Bahugana also had inflated and imaginary figures when he mentioned that Tehri dam would break and in two minutes Rishikesh will be flooded, followed by Hardwar, Kanpur and so on till Calcutta is underwater. This is all rubbish. This is not based on scientific facts and geometry. Water would never reach these proportions. It would spread out, disappear and get soaked. But even if it did happen then Salal- I would be the first breaker. The water would be stored there. If Salal breaks it will cause greater damage to India.

Also we can not dry a river up. There is no diversion scheme. Once you store the water it just goes over the dam or gates. If the velocity or pressure is high, then the dam will break. So are we going to risk all of that to notionally flood out Pakistan which in any case is not going to happen with that volume. So we can not dry or flood them. These fears are all hyped up and are bogus. Now

this does not require engineering skills. What it requires is common sense. I do not see why we do not use these arguments when we have these basic figures. How much water will be stored for two days of flow or a week's. Why can not we then use this knowledge to show and demonstrate the bogus stories where the damage will be first on the Indian side?

But Pakistan wants to say no, because Jammu and Kashmir is the core issue and till that is settled nothing can go forward like trade, opening of additional visa offices, exchanges and so on. Therefore, Baglihar, Tulbul and other projects would also not go forward. It is a part of that argument. Unless the core issue is settled" hukka pani band". So this is part of the "pani" of the "hukka".

The trap we fell into at the time of Salal was to make compromises. For Tulbul we thought that if we stop work within three months the matter would be resolved. But once you stop, it is very difficult to restart because then you have to justify as to why you started. Therefore, this time we have wisely said that the work will continue and you can continue with your argument. The dam will be completed. If later the neutral expert says that there is a dispute and that dispute goes to an arbitration tribunal and the Tribunal awards in the favour of Pakistan then we will examine the situation at a later date. Meanwhile we do not have to worry about it. I think it is a wise course and Pakistan would have to live with and understand that.

As regards Kishenganga (called Neelum by Pakistan), that is different kind of a problem. We want to build a dam by diverting the waters into the valley and then take it back in the Jhelum lower down below Wular lake. As a run-of-river scheme the argument is that you can move waters from the Jhelum to the Jhelum so that there is no loss of water to the Jhelum. The only point is at the stretch where the dam is and where the water is returned to the main river should not be left high and dry. There you have to keep water for domestic purposes like drinking water and so on and other nals and streams also join the river. In any case the storage and the diversion of the water is limited because of the Treaty. We are not diverting the entire waters. So there will be sufficient water available which will be restored within a week - that is the time given under the Treaty where if you divert it elsewhere you have to restore the water to the same river within a week's time. I

believe within or even less than seven days it is easily done. The only point that Pakistan makes is that they are thinking of building a HE dam on the Neelum in POK at the confluence of Neelum with Jhelum near Muzaffarabad to generate some 900MW (called Neelum-Jhelum project). The Treaty says that what shall be protected is existing usages. If you had an existing dam that was generating say some amount of electricity- that has to be protected. But not something that you propose doing and which you may never build or do so in your own time much later. That is not a protected use. Therefore, as I see it from their point of view, there is no derogation of the Treaty. This is not an engineering issue but a political issue. I think it would be a great mistake that sometimes in our discussions with Bangladesh over Farakka or with Nepal or Pakistan we bring the engineers in to negotiate what is an essentially a political issue. Engineers need to be there to explain the technical aspects of it. But these are political issues. The IWT is essentially a political issue and we need to deal with it on that basis.

Pakistan needs water and so do we. But both are wasting it in Punjab and Haryana. Everyone is asking for more water without it properly being used and it is causing damage by overuse and bad use. Both are not attending to drainage. The demographic trends are worse off in Pakistan than in India. The growing population of 150 million in Pakistan may settle for 300 million in the next 60 or 70 years. It has to be fed and so on. The bulk of it would be dependent on Indus waters. Therefore, they need that water including for desalination and pollution control. There is thus a need for additional water on both the sides including for ecological reasons. The IWT was a good treaty. I see no basic reason why we need to complain. Certainly the objections of J and K are not well founded. These are political claims based on misunderstanding. But the IWT was a conflict resolution crisis management Treaty. It began to immediately diffuse a situation which started with the cutting off the canal waters that was resolved by Liaqat Ali and Nehru. After that further discussions started leading to the IWT proper. It made a division that was totally fair. But it did not optimise in terms of its uses particularly. There is a potential on the Pakistani side and on the Indian side too which has not been tapped or harnessed to its entirety. As far as the Eastern rivers are concerned it has been taken care of by the Bhakra Nangal, Pong and the

constructions going on the Ravi systems upstream. But not much has happened on the side of Pakistan in POK on the Western rivers in the Northern Areas beyond Kargil and Ladakh in those upper reaches. These upper reaches are where a lot of potential lies. The Kalabagh dam in Pakistan has run into difficulties due to cost and Punjab gets all the benefits. Musharraf has given some signals to go ahead with it. For the purpose of power they had a project of Ghazi Barocha near Tarbela which is a run-of-the river scheme. Now they are thinking of one near Skardu. But whether they will be able to do it with the rising discontent and problems there-one really does not know. I feel that there is a potential in the upper catchment of the Western rivers which are controlled by India and which could be beneficial to both sides. They need India's cooperation to exploit that. We need Pakistan's cooperation to exploit the waters of the Ravi, Basantar and so on below the rim stations in Punjab and for drainage in Pakistan. Drainage is not a small problem. In the long-term it will become a major problem. Therefore, each one has a problem for which the solution lies in cooperation. Vast unexploited potential in terms of storage, some flood moderation, certainly power and irrigation, and possibly navigation need to be tapped within the parameters of techno-economic possibilities. Displacement is not a major problem in those uninhabited areas. Taking into account the ecology, human, and economic factors, this is possible.

I have, therefore, urged for a need for an Indus II. It should not be strapping Indus I, but as the Treaty itself says that "scope for further cooperation and optimising the uses" by having an Indus II Treaty superimposed to carry forward IWT-I. This can be done through joint collaboration, investigation, management and other protocols that can be worked out. This is something where international financial institutions and the World Bank would be willing to play a part. This also could be a part of the solution to the J and K problem in the long-run. It, therefore, needs to be fed into the peace process. That there is a potential is very clear. But we do not know how much of this potential is really realisable. But this requires the investigation of a concept. When it does, you knock it away by saying that do not talk about it. I think this is a part of the solution to the peace process. It needs to be examined as there is a lead time needed for that. So we need to get ISRO, the

engineers and other agencies to produce ground surveys, studies, space maps, cost benefit analyses and so on. Then we need to broach it to Pakistan. There was a conference that I attended in Pakistan about 18 months ago dealing with water. I gave a similar proposition in the presence of Water and Power Development Agency (WAPDA) engineers and others. The proposal was welcomed. They know ultimately at the end of the day they need the water. For that they have to cooperate with us.

Therefore, it is one thing to talk about Jammu and Kashmir and another when the shoe pinches and you say that even the gas pipeline must come from Iran and it is wonderful idea and has nothing to do with Jammu and Kashmir and so on. So when one talks about water they may be prepared to separate out that as they see a real benefit for them as they are facing a crisis in water in the long-run. This could be something that would ease the way forward.

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