

Speech by High Commissioner of India at the function organized by the Karachi Council on Foreign Relations and Pakistan-India Citizens Friendship Forum

Global water resources, taken for granted by mankind, are getting increasingly scarce and coming under added stress because of growing population. Water supplies are getting adversely affected by factors such as climate change. Because water is a precious resource, its depletion is a matter of serious concern and arouses public anxiety. But precisely because water is precious, public discourse on its growing scarcity ought to be well informed, so that it leads us to the right approach in ensuring the water security of our own and coming generations.

Ladies and Gentlemen, the issue of water sharing that arose between our countries in 1947, was settled with the coming into force of The Indus Waters Treaty in 1960. This treaty was the result of 8 years of painstaking negotiations carried out by India and Pakistan with the good offices of the World Bank. The Treaty was voluntarily accepted by the two sides as fair and equitable. The thoroughness with which it deals with various aspects of water sharing is a testimony to the hard work put in by the negotiators of both sides to produce an enduring framework. It laid down the rights and obligations of both sides in relation to the use of waters of the Indus system of rivers. It also laid down a framework for resolution, in a co-operative spirit, of the questions, differences or disputes that might arise in implementation of the Treaty, through bilateral means or use, if necessary, of the services of a neutral expert or a Court of Arbitration.

Those who question the fairness of the Indus Waters Treaty to Pakistan need to note that it assigned 80% share of water of the Indus system of rivers to Pakistan. The Treaty gave the use of Eastern Rivers (Sutlej, Beas and Ravi) - with a mean flow of 33 MAF - to India, while giving the use of the Western Rivers, viz. Indus, Jhelum and Chenab - with a mean flow of 136 MAF - to Pakistan. Since Pakistan was dependent on water supplies from the Eastern Rivers until the 15th of August 1947, India also agreed to pay a sum of 62 million Pounds Sterling to Pakistan to build replacement canals from the Western Rivers and other sources. These were clearly not the gestures of an upper riparian bent upon depriving the lower riparian of water, as is alleged by some today. The Treaty also permitted limited use of water of Western Rivers by India as follows: -

- a) Domestic use: - This includes use for drinking, washing, bathing and sanitation etc.
- b) Non consumptive use: - This covers any control or use of water for navigation, floating of timber or other property, flood control and fishing etc.
- c) Agricultural use: - India can draw water from the Western Rivers in terms of maximum permissible Irrigated Crop Area. The total area permitted to be irrigated by India is 1.34 million acres.
- d) Generation of Hydroelectric Power :- India can use water from the Western Rivers for run -of- the river hydroelectric projects as well as for hydroelectric projects incorporated in a storage work, but only to the extent permitted in the provisions regulating storage of water by India from the Western Rivers.
- e) Storage of water by India on the Western Rivers: - The Indus Waters Treaty allows India storage capacity on Western Rivers to the tune of 3.6 MAF, in addition to the storage that already existed on these rivers before the coming into force of the Treaty. Out of this, 1.25 MAF is general storage. The remaining quantity is split between 1.6 MAF for generation of hydroelectricity and 0.75 MAF for

flood control. In terms of rivers, 0.4 MAF storage is allowed on the Indus, 1.5 on Jhelum and 1.7 on Chenab.

This limited use of water from Western Rivers by India is subject to the conditions laid down in the Treaty to protect the interests of both countries. However, India is yet to use fully its entitlement to the waters of Western Rivers. As against its storage entitlement of 3.6 MAF, India has built no storage so far. Out of the area of 1.34 million acres, permitted for irrigation, we are currently irrigating only 0.792 million acres. We have exploited only a fraction of the hydroelectric potential available to us on these rivers. Out of a total potential of 18,653 MW, projects worth 2324 MW have been commissioned and those for 659 MW are under construction. In any case, even after India starts using its full entitlement of water from the Western Rivers under the Treaty, it will amount to no more than 3% of the mean flow in these rivers.

In order to ensure that implementation of the Treaty received constant attention, a Permanent Indus Commission was created, with a senior and widely experienced Commissioner for Indus Waters from each side. The Commission is charged with the responsibility to establish and maintain co-operative arrangements for implementation of the Treaty, to promote co-operation between the Parties in the development of the waters of the Rivers and to settle promptly any questions arising between the Parties. Each Commissioner for Indus Waters serves as a regular channel of communication in all matters relating to implementation of the Treaty. The Commission undertakes a general tour of inspection of the rivers once in five years and special tours in the interim. The Commission meets regularly at least once a year and in the interim as required. It has so far undertaken a total of 111 tours, both in India and Pakistan, and has held 104 meetings. The Commission has shown tremendous potential in ensuring smooth functioning of the Treaty. In the 50 years of the Treaty, only once was an issue, viz. Baglihar, referred to a neutral expert. We believe that the potential of the Permanent Indus Commission can and ought to be used more effectively. In fact, we could even have the Commission sit in the nature of a consultative dispute avoidance body and take the views of experts – national and international – with a view to bringing up-to-date technology to the notice of the Commission to help it reach correct and acceptable solutions.

Ladies and Gentlemen, public discourse in Pakistan has of late increasingly focused on certain alleged acts of omission and commission on the part of India as being responsible for water scarcity in Pakistan. "Water issue" between India and Pakistan is spoken of as an issue whose resolution is essential to build peace between our two countries. Preposterous and completely unwarranted allegations of "stealing water" and waging a "water war" are being made against India. It is alleged that we are hindering water flows into Pakistan and developing the infrastructure to stop and divert these flows to serve our own needs. Such accusations bear no relation whatsoever to the reality on the ground. The fact is that India has been scrupulously providing Pakistan its share of water in keeping with the Indus Waters Treaty. We have never hindered water flows to which Pakistan is entitled, not even during the wars of 1965 and 1971 as well as other periods of tense relations and we have no intention of doing so. Those, who allege that India is acquiring the capacity to withhold Pakistan's share of water, completely ignore the fact that this would require a storage and diversion canals network on a large scale. Such a network simply does not exist and figures nowhere in our plans.

I shall now deal with the apprehensions, misconceptions, misinformation and allegations pertaining to India that characterize the debate on water scarcity in Pakistan.

The Indus Waters Treaty does not require India to deliver any stipulated quantities of water to Pakistan in the Western Rivers. Instead, it requires us to let flow to Pakistan the water available in these rivers, excluding the limited use permitted to India by the Treaty, for which we do not need prior agreement of

Pakistan. Reduced flows into Pakistan from time to time are not the result of violation of Indus Waters Treaty by India or any action on our part to divert such flows or to use more than our assigned share of water from Western Rivers. Water flows in rivers depend, inter alia, on melting of snow and quantum of rainfall. India itself suffered serious draught conditions in 2009, with around 250 districts bearing the brunt of draught. Rainfall during the monsoon season was 20% less than normal countrywide, with many states in the North experiencing a much higher percentage of shortfall. Even winter rains have fallen far short of normal. The quantum of water flow in Western Rivers, as indeed in any other river, varies from year to year, dipping in certain years and recovering in some subsequent years. Permit me to illustrate this point by using the flows data in respect of the three rivers.

Let us start with the river Chenab by using the average flows data for the month of September over a period of ten years since 1999 at six recording points, beginning deep on the Indian side at Udaipur and moving westwards to Marala, where Chenab enters Pakistan. The flows (Discharge in Cusecs) are as follows:-

| Year | Above Marala | Akhnoor | Salal | Dhamkund | Premnagar | Udaipur |
|------|--------------|---------|-------|----------|-----------|---------|
| 2008 | 22991 | 18453 | 17306 | 18001 | 15611 | 8271 |
| 2007 | 32568 | 28765 | 27250 | 28653 | 22686 | 10195 |
| 2006 | 68901 | 55345 | 41943 | 37548 | 27285 | 11149 |
| 2005 | 43157 | 32364 | 30079 | 34597 | 31006 | 10358 |
| 2004 | 31978 | 25492 | 24955 | 31115 | 24450 | 11500 |
| 2003 | 45062 | 31690 | 30127 | 37558 | 27920 | 11484 |
| 2002 | 36954 | 24123 | 23864 | 26056 | 20446 | 10720 |
| 2001 | 29027 | 21798 | 20696 | 24171 | 20248 | 10624 |
| 2000 | 37583 | 29280 | 29650 | 34363 | 26232 | 12265 |
| 1999 | 48242 | 33004 | 35349 | 46498 | 33258 | 14313 |

It will be seen from the above table that increase or decrease of flows at Marala is reflected in the flows at all the points on the Indian side. This shows that when Pakistan receives reduced flows, it is because of reduced flows available on the Indian side and not because of any diversion of water by India. Increased or reduced flows at Udaipur get reflected at all the subsequent points. This point is also illustrated by the following table of the annual flow in Chenab (MAF) from 1997-98 to 2008-09:-

| | 97-98 | 98-99 | 99-00 | 2000-01 | 01-02 | 02-03 | 03-04 | 04-05 | 05-06 | 06-07 | 07-08 | 08-09 |
|---------------------------|-------|-------|-------|---------|-------|-------|-------|-------|--------|-------|-------|-------|
| Merala | 27.41 | 26.57 | 22.80 | 18.72 | 19.96 | 25.39 | 24.96 | 21.81 | 22.22* | 28.18 | 19.32 | 19.65 |
| Akhnoor +Jammu Tawi | 23.60 | 20.72 | 18.08 | 15.70 | 16.42 | 19.20 | 21.06 | 17.96 | 22.13 | 24.24 | 17.83 | 18.03 |

*Does not include data for June, 2005.

The above table shows that decrease of flow entering Pakistan is accompanied by corresponding shortage in India.

The following table illustrates flows in Jhelum (MAF) at Uri during the period 1997 to 2009:-

| | 1997 | 98 | 99 | 2000 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| June-December | 3.78 | 2.89 | 1.35 | 1.99 | 1.32 | 1.85 | 2.95 | 1.59 | 3.31 | 3.08 | 2.13 | 2.51 | 2.45 |
| Annual | 8.29 | 5.03 | 3.07 | 3.24 | 4.32 | 6.37 | 5.63 | 4.98 | 6.31 | 6.25 | 4.49 | 5.67 | --- |

The annual flow in Jhelum at Uri, which was 8.29 MAF in 1997, dipped to as low as 3.07 MAF in 1999, but has subsequently recovered to register figures of 6.37 MAF in 2002, 6.31 MAF in 2005 and 5.67 MAF in 2008. The June to December flow in Jhelum at Uri shows the same pattern.

Combined annual flows (MAF) for January-December period in Indus at Nimoo and Chutak for the years 2001 to 2009 are no exception to the above trend as will be seen in the following table:-

| 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|------|------|-------|------|------|-------|------|------|------|
| 6.00 | 8.96 | 11.30 | 6.51 | 9.41 | 10.58 | 8.41 | 9.95 | 9.93 |

It will be seen from the above table that the combined flows rose from 6 MAF in 2001 to 11.30 MAF in 2003, only to dip to 6.51 MAF in 2004. The flows have been steadier in recent years, registering 9.41 MAF in 2005, 10.58 MAF in 2006, 8.41 in 2007, 9.95 in 2008 and 9.93 MAF in 2009.

The data that I have provided in respect of flows in all the three Western Rivers clearly demonstrates that these flows have followed a curve moving up and down, depending upon climatic factors from year to year, rather than showing progressive decline, which would be the case if there were any truth in the allegations of India building infrastructure to progressively deprive Pakistan of its share of water.

A complaint has often been made that India has not been providing data of water flows regularly. In accordance with the Indus Waters Treaty, India and Pakistan exchange daily data on about 600 Gauge and Discharge sites on a monthly basis. India has been fulfilling its obligation in providing this data. However, if for some reason, data for particular points is not available, it is so indicated and such information, when received, is provided as supplementary data. I am told that this practice is followed by both sides. India has also supplied in the past, as a gesture of goodwill, data on floods to enable Pakistan take timely action for preventing damage as a result of floods.

One also hears the accusation that India is building hundreds of dams/ hydroelectric projects to deny Pakistan its share of water. This does not correspond to the reality on the ground. There are no quantitative limits on the hydroelectricity that India can produce using the Western Rivers. There is also no limit to the number of run-of- the river projects that India can build. However, India has so far undertaken a limited number of projects. We have provided information to Pakistan, as per the Treaty, in respect of 33 projects. Out of these, 14 are in operation, 13 are under construction, 2 are still at the proposal stage, 3 have been

dropped or deferred and work on one project stands suspended. Out of these 33 projects, as many as 20 have a capacity of 10 MW or less. Projects identified for implementation in the coming years number 22. This certainly does not make for hundreds of dams/ hydroelectric projects.

The Indus Waters Treaty requires India to provide certain specified technical information to Pakistan at least six months before the commencement of construction of river works for a hydroelectric or storage project (the period is two months for a Small Plant), in order to enable Pakistan to satisfy itself that the design of a plant conforms to the provisions of the Treaty. If Pakistan raises any objection, it has to be resolved in accordance with the provisions of the Treaty. India has been meeting its obligation to provide the specified information as necessary. In all the cases in the past, India has responded to all queries from Pakistan about such projects, even if these were not strictly in keeping with the Treaty, in order to address Pakistan's concerns. This has resulted in endless delays and cost overruns. The Tulbul Navigation project is a case in point. India provided information to Pakistan on this project as a matter of goodwill. As a further gesture of goodwill, works on the project were unilaterally stopped by India in October, 1986 and remain suspended to this day. However, infinite queries from Pakistan could amount to a virtual veto on Indian projects. This is not the intention of the Treaty in requiring India to provide information in advance of the river works. India is within its rights to proceed with the construction of a plant at the end of the period of advance notice, even if Pakistan raises objections, subject to any subsequent changes in design or any other consequences that may flow from resolution of the matter under Article IX of the Treaty.

India had communicated information concerning Baglihar project on Chenab to Pakistan as early as in 1992. Pakistan's objections were referred to a neutral expert in 2005 at the request of Pakistan. The expert upheld India's design approach and suggested only minor changes in the scope of construction. Pakistan subsequently objected to the initial filling of the Baglihar reservoir. However, this was done by us in keeping with the Treaty provisions. In fact, the Pakistan Indus Commissioner was invited to India at his request in July, 2008 to be briefed about the procedure of initial filling. The actual filling was done in August the same year within the time window specified in the Treaty.

The Kishanganga hydroelectric project on a tributary of river Jhelum has also been objected to by Pakistan, inter alia, on the ground that Pakistan has existing uses on the waters of Kishanganga (Neelum). The matter has been under discussion since 2004. However, details of the claimed existing uses are yet to be substantiated. We believe that the matter should be resolved at the Commission level, keeping in mind the provisions of the Treaty and the findings of the neutral expert in the Baglihar case. In August 2009, we also informed Pakistan that in case technical experts were unable to resolve the issue, efforts could be made to take it up at government level.

Ladies and Gentlemen, India has all along adhered to the provisions of the Indus Waters Treaty and will continue to do so. However, it is natural for questions and issues to arise in the course of implementation of any treaty. We believe that the Permanent Indus Commission is the best forum to resolve all such matters. However, for any issues that cannot be resolved in the Commission, Article IX of the Treaty provides a mechanism for settlement of differences and disputes, which can be resorted to by the aggrieved party. Since the Indus Waters Treaty provides an elaborate framework for distribution of water and resolving any questions, differences or disputes, we fail to understand attempts by some quarters in Pakistan to inflame public passions on the subject. Angry statements targeting India can neither increase the quantity of available water, nor can such statements become a substitute for the mechanism in the Treaty to resolve differences regarding its implementation.

Concerns have also been expressed about some Indian projects on Western Rivers from the environmental point of view. I would like to assure you that we have strict norms for such projects under our Environmental Protection Act and Forests Protection Act. These norms include Catchment Area Treatment Plans and Compensatory afforestation.

We have often heard the bizarre allegation that India wants to deprive Pakistan of water to dry up its canals and drains etc, which besides serving as irrigation channels, can also serve as defensive features in times of war. The Chenab Canal network is mentioned in particular in this connection. There is no truth in this allegation. It is clear from what I have mentioned so far that India has not taken any action to deprive Pakistan of its share of water and consequently to dry up its canals.

Another piece of misinformation being spread by certain circles is that a dam/hydroelectric project is being built by the Government of Afghanistan on the Kabul River with India's assistance and this would adversely affect the flows of this river to Pakistan. I would like to inform you that there is no truth in this allegation. Those who make it ought to know that a dam or hydroelectric project is not something that can be built surreptitiously. It is highly undesirable to mislead people by making such baseless allegations on issues, which are easily verifiable on the ground.

Ladies and Gentlemen, the issue of water scarcity in Pakistan cannot be analyzed fully without looking at the picture in the large part of the Indus basin – around 65% - that lies in Pakistan's territory or territory controlled by Pakistan. A preponderant portion of the water of the Western Rivers flowing through Pakistan is generated in the catchment area within Pakistan or territory under Pakistan's control. This share of water is completely controlled by Pakistan. Therefore, it is difficult to understand the excessive and, in many cases, exclusive focus of the public discourse on water scarcity in Pakistan on flows from India. Moreover, as water gets increasingly scarce, the issues of water management and avoidance of wastage of water assume greater significance.

The per capita availability of water in Pakistan is reported to be around 1400 cubic meters or even less. Speaking of the availability and use of water in Pakistan, the Pakistan Water Sector Strategy issued by the Ministry of Water and Power, Government of Pakistan, in 2002 stated the following: "The Indus River and its tributaries on average bring about 152 million acre feet of water annually. This includes 143 MAF from the three Western rivers and 8.4 MAF from the Eastern Rivers. Most of the inflow, about 104 MAF, is diverted for irrigation, with 38 MAF flowing to the sea and about 10 MAF consumed by system losses." The same report stated that out of the 38 MAF flowing to the sea, 93.7% flow is during the Kharif season and for several months during winter, there is no flow to the sea. The report further stated that a part of this water could be effectively used for supplementing the irrigation water, hydropower generation and meeting the agreed environmental needs through storage in multipurpose reservoirs which could carry water over the winter season to ensure a good start to the Kharif cropping season. These statements do not signal shortage of water, but the urgent need for a closer look at the management of available water resources.

According to the report "Pakistan's Water Economy" issued by the World Bank in 2005, salinity also remains a major problem in Pakistan. According to the same report, much of the water infrastructure in Pakistan is in a state of disrepair. Water loss between canal heads and farms is reported to be significant, as high as 30%. The report further states that Pakistan has only 150 cubic meters water storage capacity per capita as against 5000 cubic meters in the US and Australia and 2200 cubic meters in China. Pakistan can store barely 30 days of water in the Indus basin. The report points out that "Relative to other arid countries, Pakistan has very little storage capacity. If no new storage is built, canal diversions will remain stagnant at about 104 MAF and the shortfall will increase by about 12% over the next decade." The

Pakistan Water Strategy calculates that Pakistan needs to raise storage capacity by 18 MAF (6 MAF for replacement of storage lost to siltation and 12 MAF of new storage) by 2025 in order to meet the projected water requirements of 134 MAF. Water productivity in Pakistan also remains low. According to the above report, crop yields, both per hectare and per cubic meter of water, are much lower than international benchmarks. Improved irrigation efficiency, through techniques such as sprinkler irrigation and drip irrigation, is the answer to this problem. India has nothing to do with these issues of water management that are internal to Pakistan, but which nevertheless ought to be integral to any discourse on water scarcity. Only Pakistan can seek solutions to these matters.

Ladies and Gentlemen, the Indus Waters Treaty is an example of mutually beneficial co-operation between India and Pakistan for the last 50 years. It has withstood the test of time. Article VII of the Treaty, which deals with future co-operation, recognizes the common interest of both sides in the optimum development of the rivers and lists out the avenues of future co-operation. We need to adhere to the spirit of co-operation, inherent in the Treaty, in ensuring its implementation and to identify further areas of co-operation within its framework. Let me end with the hope that the Indus Waters Treaty, which has completed its first fifty years successfully, will continue to guide us on water sharing in the future.

Karachi
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