

The Ganges: 1996 Agreement, Augmentation and Beyond

An Analysis of the Background and Possibilities

by Syed Muhammad Hussain

It is a generally agreed perception that water is increasingly becoming an issue of primal significance. ECOSOC Committee on Natural Resources in a recent strategy paper indicated that as many as 52 countries with a population of more than three billion will be "Water Stressed" or face chronic water scarcity by the year 2025. The growing problem has as much to do with the availability of fresh water in the overall global context as with the fact that such resources, even when available in abundance, may be found in the wrong places or available at wrong times.

For the subcontinent, and, in Bangladesh, in particular, the above appears to be too true. In this perspective, Bangladesh recently urged the world community at the 51st session of the UN General Assembly in New York, to formulate an international code of water ethics to help countries in their efforts towards bilateral and multilateral agreements on sharing of waters. In fact, Bangladesh laid special emphasis on "political will, goodwill and good intentions" to resolve all outstanding problems or new ones with neighbours. (Bangladesh Foreign Minister's address at the 51st UNGA, New York). Bangladesh has been very clear in advocating a simultaneous approach towards the resolution of the problems and overall utilisation of the vast water resources in the Eastern Himalayan region where the welfare and prosperity of the peoples of Nepal, Bhutan, eastern India and Bangladesh are so closely interwoven.

The Ganges-Brahmaputra-Meghna river-systems command a total of approximately 1.73 million km² of drainage area. Almost the whole of Bangladesh and Bhutan and 1.09 million km² in Nepal and almost 1/3rd of India are covered by this vast waterways network. Though the basins of the three rivers are hydrologically self-contained, "opines a noted Indian 1st expert, "they have political, economic and resource interlinkages" (UC Chaubel). Multi-level Hierarchical Modeling of an International River Basin Management and Development of Major Rivers. Ed Aly M Shady et al Oxford University Press, Calcutta, 1996, p 106). Two other interesting points are also made by him which need to be closely noted and which directly corroborate the assertions made by Bangladesh in various forums. The multipurpose water demand is high in the Indian region of the Ganga basin. The drainage pattern in the Delta region (mostly in Bangladesh) is a distributive type, having hydraulic problems such as flooding, river instability, sea

erosion and salinity.

Farakka Barrage and its adverse impact on Bangladesh in multifarious ways are too well known and documented to be recounted here. A few points, however, need to be highlighted in this context:

a) The Farakka Barrage did not reverse Calcutta Port through flushing the Hooghly-Bhagirathi river, as its decline was caused not by physical constraints of the river but the slow rate of indus-

trial growth in the hinterland" (Ben Crow: "Sharing the Ganges"). The real issue is whether the navigable conditions for Calcutta Port could have been or have in fact been improved by the barrage", writes A G Noorani, reviewing four books in the Statesman, Delhi, 13 October, 1996), adding Ramaswamy R Iyer's (Secretary Water Resources Govt 1985-87) rather interesting opinion: "On the whole Calcutta Port has declined, but the reasons for that are unconnected with the considerations behind the Farakka project. It must also be remembered that a secondary objective of the diversion was to counter the incursion of salinity which was adversely affecting Calcutta's drinking water system". One wonders first what was then the "consideration" or the first objective of the Barrage and second, is it not a more, or at least equally, acceptable claim that Bangladesh had, and continues to have, in terms of encroachment of salinity up the combined river course reaching as far as Chandpur and creating a whole lot of devastating impact during the dry seasons? Apart from the consumptive requirements from the Ganges waters for the Ganges Project, there is a need for adequate flows in dry seasons to flush the creeping salinity downstream.

Hence, a logical conclusion is that demand for diversion of waters at Farakka by India/West Bengal is not that crucial or urgent now in comparison to the vital needs of Bangladesh. Kulip Nayak in his famous column "Between the lines" wrote "Much is made about West Bengal's insistence of flushing the Hooghly by the Ganges waters. This has turned out to be a myth. The Calcutta port is as much dependent on dredging now as it was before the Farakka barrage was constructed. Experts have themselves admitted that the water diverted through the barrage has not made Hooghly navigable, even for ships of smaller size" (All depends upon Ganges Water, Saudi Gazette, July 18, 1996).

Earlier or in the same column Mr Nayak commented "... everything seems to hinge on the sharing of the Ganges water. Emotionally, it is a Kasmir for the Bangladeshis. They will judge not only India but also their own government on the equitable sharing of the Ganges waters. Indeed some of their best land has been reduced to a mere bowl of dust. They have suffered a great deal in the last 14 years." It is, therefore, necessary to scrutinise the overall position and of the sharing arrangements stipulated in the 30-year Agreement, 1996.

b) It is generally agreed that without appropriate augmentation of the dry season flow in the Ganges above Farakka, the sharing of the increasingly dwindling flow alone (due to lesser availability and greater withdrawals along the upper reaches) would not ensure adequate quantum to meet the essential requirements of the two countries. The problems in addressing this issue of the two countries. The problem in addressing this issue of augmen-

tation has continued for the last 23 years or so. The 1977 Agreement committed the parties to resolving "the long-term problem of augmenting the flows of the Ganges during the dry season." This, in fact, has been repeated in 1996 Agreement as well.

One could recall that during the signing of the Memorandum of Understanding (MoU) in October 1985 two changes in 1982 MoU were included. There was provision for a joint study of alternatives for sharing and augmentation, and all the joint rivers were included. A Joint Committee of Experts was set up. In October, 1986 a tripartite meeting of experts took place in Nepal, followed by another at Foreign Minister level in January 1987. India agreed to draft and circulate a position paper on Nepal's role in river development. Prepared by the Ministry of Water Resources it was sent to the Prime Minister's office. The paper

is the Summary Record of Discussions of the Second Meeting of the Indo-Nepal Sub-Committee on Water Resources held at New Delhi from 15th to 18th April, 1991. The Indian delegation was led by Dr M A Chitale, Secretary, Ministry of Water Resources, Government of India and the Nepalese delegation was led by Mr B K Pradhan, Secretary, Ministry of Water Resources, His Majesty's Government of Nepal (HMG), Secretary, HMG Nepal stated that "the Saptakosi Multipurpose Project was completely a new project and located in the eastern region of Nepal close to Bangladesh. A number of other water related benefits including the benefits of watershed management for all the three countries could also be derived. An excellent opportunity for mobilisation of financial resources from inter-

sary is to complete detailed field investigations and finalise a joint project report."

Apart from the obvious import of the above position of India, one needs to note that Nepal's request for a possible inland navigation route to the Bay of Bengal was also not found acceptable, since Nepal's intention was to forge the route through the river system in Bangladesh (to Chittagong or Chalna seaport, rather than Calcutta, where Nepal has always been facing enormous difficulties for transshipment of her considerables exports/imports.) However, one is hopeful that over these nine years or so, India may have taken a more positive view of the regulation of flow extend also to Bangladesh. A number of other water related benefits including the benefits of watershed management for all the three countries could also be derived. An excellent opportunity for mobilisation of financial resources from inter-

found acceptable, how come the same project could be undertaken on a bilateral basis with Nepal, totally negating Bangladesh's historic claim? What Bangladesh would be left with is the Farakka Barrage and a series of other high dams in Nepal whereupon the 71 per cent of the dry season flows and about 41 per cent of the annual flows into the Ganges would get reduced drastically over a period of time. And the theoretical possibility of almost zero flow in the dry season, as mentioned in an earlier article ("Ganges Treaty, 1996 and National Water Policy: Are We Being Served Right?" The Daily Star, 23 July, 2000) could indeed become a reality much earlier than one would care to speculate.

The sheer fact that JICA

sponsored Master Plan for Kosi Multipurpose project has been on Indo-Nepal agenda for implementation, it would not be amiss to assert that the total beneficial

Bangladesh's proposal for harnessing the water resources through storage reservoirs in Nepal's territory to the mutual benefit of all the co-basin countries could be effectively pursued in a tripartite framework of regional cooperation. The solution of water problems on a regional basis would strengthen the bonds of friendship among the co-basin countries. A holistic approach to the development of vast water resources available would undoubtedly bring prosperity to the millions of people living in the region and would contribute significantly towards improving their quality of life.

later "disappeared from view" and was never delivered despite repeated promises. Ramaswamy R Iyer, Secretary of the Ministry from July 1985 to February 1987, oversaw the manuscript. His comment on the episode suggest that India was not convinced of the soundness of a multilateral or regional approach" (A G Noorani: Emotions and Waters, The Statesman, Delhi, 13 October 1995).

Involvement of Nepal was torpedoed unilaterally by India in the Ganges and other common rivers development in a somewhat less than honorable manner. That India did not want Nepal to be associated with development of Himalayan water resources is also borne out by then Indian Foreign Secretary Ramesh Bhandari's remarks, "Bangladesh wanted at that time to bring Nepal into tripartite negotiations, but we said that was not necessary. We said, 'We are the link between Nepal and Bangladesh. Let communications go through us'." (Ben Crow and Alan Lindquist: Development of the River Ganges and Brahmaputra: The Difficulty of Negotiating a New Line, The Open University, DPP working Paper No. 19, February, 1990, p 26). Bangladesh was vetoed out by India, when Nepal officially proposed the former's inclusion in the Saptakosi Multipurpose Project. Following is a somewhat lengthy but revealing extract from

national funding agencies and the friendly countries would also be opened resulting into the quicker development of water resources of this region. Hence, whatever arrangements for planning, survey/investigation and development of this project were made, involvement of Bangladesh would be beneficial to all the participating countries.

Mr Pradhan added that the Kosi river being located nearest to the sea, Nepal had a high expectation to open inland navigation linking seaport via Kosi River or through a combination of canals and rivers. The Secretary (WR), Gol said that we have created a join asset Kosi Barrage Project. It has outlived its life and Kosi Multipurpose Project can only protect this asset. Secondly, Kosi has large irrigation potential both in India and Nepal, which will boost the economy of the region. He further stated that in a river like that of Kosi having pronounced meandering tendency, navigation is very difficult and prohibitively costly. In any case navigational aspect can always be looked into separately and need not be linked up with the high dam project, a report for which is already given to Nepal in 1981.

The utility of the project for flood control will be mainly confined within Nepal and India and will not extend to Bangladesh. It is therefore not necessary to involve Bangladesh on the consideration of the Kosi Project. What is necessary

Master Plan to develop Kosi water resources, with assistance from Japan International Cooperation Agency (JICA). The master plan covers the seven tributaries of Kosi with projects for hydropower generation, irrigation, flood control and navigational facilities leading to overall socio economic development in the Kosi basin. Concerns were expressed in 1994 that the normal flow of 15,856 cusec and the augmented flow of 25,000 cusec in the dry season from Kosi project would be fully utilised upstream, affecting adversely the historic flow (of average 15,856 cusec) into the Ganges in dry season, reducing the availability at Farakka and thereby reducing the share for Bangladesh. This is apprehended to become a regular, annual feature for all time to come.

At Indo-Nepal meeting in April, 1991, as noted earlier, this project was discussed and participation of Bangladesh whose vital interest as the lowest riparian state was involved, was found not necessary and it was held by India that, "the utility of the project for flood control...will not extend to Bangladesh". Secondly, if Bangladesh's original proposal to construct Kosi High Dam (being the nearest subsystem to Bangladesh) contributing 23 per cent of 69,000 cusec of average dry season flow of the Ganges at Farakka) to help augment the dry season flow for equitable and fair sharing at Farakka, was not

impact of the project, apart from the augmentation during lean season period in the Ganges flow at Farakka, would be very significant in terms of hydropower generation, navigation, flood control and so on for the region to benefit from. But then, India's power requirements over the next 20 years or so should be in the region of over 25,000 mw and all Indo-Nepal projects with considerable power generation capacities are being lined up as was done earlier by India in Bhutan, Chuka I, II and III built with Indian finance and technical assistance will obviously strengthen the power supply stream in India. Smaller neighbour's modest requirements do not figure in this blueprint.

The classic strategy appears to be to keep the discussions on the Track I and Track II and to do everything meanwhile in one's own national interest through inequitable and unfair bilateral deals under duress with the two co-riparians. Nepal historically has been experiencing *fait accompli* in almost all border rivers Kosi, Gandak, Sharda. Bangladesh has already suffered a Farakka! How long before she would go abegging for the waters of the Teesta, the Brahmaputra, one wonders!

On a slightly different track, it would be quite revealing to recall Ashok Mitra's column "Cutting Corners" titled "Now Comes the Ugly Indian" (The Telegraph, 24

April, 1994). "The story in Bangladesh is not much different the was earlier describing the unauthorised Indian police raid in Kathmandu in hot pursuit of some alleged criminals. Following the liberation of that land by our troops from the stranglehold of the Pakistanis, a dangerous kind of euphoria germinated in New Delhi in the earlier seventies. Many Indian political personalities took it as axiomatic that Bangladesh was our pocket borough and the people there, oozing in everlasting gratitude, were going to do our bidding." In 23 years the historic role of our Mukti Bahini in our glorious War of Liberation seems to have been forgotten and the claim to have achieved the liberation "by our troops" is gaining ground. Further on in the article he adds,

"Had we treated their country with some benign neglect in the post-liberation years, Bangladesh would perhaps have developed a wider threshold of tolerance for India and Indians. Our policy planners however proceeded on the basis of such a heady mixture of naivete and hauteur that to large sections of Bangladeshis even the Pakistanis are now to be preferred to Indians." It is indeed an amazing mind that could suggest "benign neglect" reminds the strategy used for other two smaller neighbours as a remedy to the "heady mixture" wrongly applied by their policy planners.

It is not the intention of this article to attempt an overall analysis of Indian approach to her smaller neighbours, especially Bangladesh. The Daily Star article "How is India as Neighbour?" (Mahfuz Anam, August 6, 2000) does etch out an outline worth taking serious note of. One cannot but find resounding reflections almost everywhere of a warped and debilitating psyche vitiating the excellent prospects of developing an otherwise peaceful and dignified framework to enable the peoples in this region to earn a better quality of life and living, that all of them so richly deserve and that which has been denied them for so long! We all earnestly hope that that is not the case and that such shall not be the conclusions that would dominate all our thoughts a quarter century hence from now! A just dispensation with a dash of good neighbourly generosity, we pray, will make this region a land of milk and honey indeed!

If a quarter of a century of discussions, deliberations and pious hopes both in Track I and perhaps more vigorously in Track II, could not bring about focussed, actionable sets of collaborative recommendations, the future does not hold much of a promise of a breakthrough unless one: clear and agreed technically sound recommendations are prepared on the basis of the huge materials produced in the three countries (and elsewhere) and two: a sort of prefeasibility concept paper for cooperation is prepared to assist the decision-making authorities to pursue the most sensible and technologically, economically, environmentally acceptable line of action, towards realising the

shared dream of bringing about a regime of peace and prosperity in this region so long overdue.

For this, a more generous leadership role from India is an absolute necessity. Being by far the largest, more resourceful country as well as being the middle riparian country, realising more intensely the life and death problems the two small co-riparian countries are faced with year in and year out, an enlightened central role by India in this sphere, in particular will be the key to success. It is to be emphasised that suggested tripartite participation can indeed fully resolve the relevant issues the long term augmentation of the Ganges waters and the multiple uses of the Eastern Himalayan rivers on a cooperative basis for common benefit.

The multifarious problems of management of water resources such as flood control and optimal and multiple utilisation of resources of an international river like the Ganges having several co-basin countries cannot be resolved in isolation by any individual one or two countries. Water resources development programmes on international rivers should be undertaken with due regard to the need and impacts on other co-basin countries. Bangladesh has her vital interests linked with the flows of the Ganges over which a number of major dam projects have been envisaged under Indo-Nepal joint collaboration. Water resources of the Nepalese tributaries of the Ganges are to be harnessed and developed and this needs to be jointly done with the full consent and active participation of all the co-basin countries of the Ganges i.e., Nepal, India and Bangladesh. A problem, which is essentially multilateral, can never be effectively resolved bilaterally.

Bangladesh's proposal for harnessing the water resources through storage reservoirs in Nepal's territory to the mutual benefit of all the co-basin countries could be effectively pursued in a tripartite framework of regional cooperation. The solution of water problems on a regional basis would strengthen the bonds of friendship among the co-basin countries. A holistic approach to the development of vast water resources available would undoubtedly bring prosperity to the millions of people living in the region and would contribute significantly towards improving their quality of life. This would have the added gain of resolving the issue of augmentation, along with the multiple benefits accruing to all the three co-riparian countries. The governments of the three countries, therefore, need to demonstrate a vision for the future and agree on a broad framework for regional cooperation for harnessing and development of the water resources of the Ganges.

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Containing Dengue: Going beyond the Government

by Monirul I. Khan

Can the government alone resist the future spread of Dengue? Plainly speaking, it won't be easy. By saying so, one does not demean the capacity of the government nor exaggerate its failure. It is said rather in acknowledgement of the facts comprising our social reality. Certainly there is no ambiguity about the received wisdom that the governments in countries like ours on most occasions are constrained by numerous impediments ranging from the scarcity of commitment. There are concrete factors accounting for such historical precedence of limited governmental capacity. When we talk about limited capacity of some institution or individuals we invite a notion of comparison. For example, when an epidemic breaks out we notice the limitation of capacity of the government not visibly decipherable in normal time. In the context of Dengue all the factors responsible for limited governmental capacity are at work in full capacity. For example, for each municipal ward there are five staff to spray insecticides. If each ward roughly consists of one hundred thousand people then the ratio of such staff would be one for twenty thousand. If a segment of that population is catered once a week then it would be about three thousand people that an employee spraying insecticide has to cater.

Wastes, open drains, ditches and watersheds are sprayed to contain the reproduction of the mosquito responsible for viral Dengue. Several newspapers are coming up with photographs depicting unattended water-

shed/ditches, the potential breeding grounds of the menacing mosquito. The Dhaka City Corporation (DCC) is falling short of the mark to deal with the problem in an all-out manner. This is not surprising at least for two counts: DCC does not have the experience how to fight out an epidemic and does not have the resources. If society and government are the two actors in taking initiatives for development and eliminate social discontents then the role of society remains passive on many occasions. Some social historian might be tempted to see the genesis of this passivity in our country in the all-encompassing existence of the state since the time immemorial. During the colonial interlude, government was the primary agent to initiate development programmes. In the process society remained alienated from the initiatives pushed through to bring about changes. Such insipidity on the part of society leads to the overpowering of the state disportionate with its capacity.

Limited spread of literacy of the population and weak democratic process could not successfully break the unwarranted suzerainty of the state. Instances that the powerful state and the government of this country could not rise to the occasion when a devastating crisis befell the society surfaced time and again. However, subsequent history shows that albeit slowly, society came forward to complement the limitation of the state in dealing with the problems affecting different sectors. Nonetheless, the collaboration of the government and society could not always bear the

desired results as half-hearted participation on both sides faltered the process of development. GO-NGO Collaboration 1972 onwards Bangladesh witnessed the unfolding of a significant process comprising the uninterrupted emergence of developmental organisations outside the fold of government. They came to be known as non-governmental organisations (NGO). Numerous events created the instantaneous background calling for the emergence of such organisations. A new approach of work was invoked by the NGOs as they devoted to raising awareness of the population deprived severely. The idea was, once the awareness enhanced the deprived people would stand up to claim their rights to legitimate wage, *khas* land, village arbitration authority, social status or political power. Instead of conflict the spirit of collaboration marked the relationship between the government and the NGO. Uphill tasks such as poverty alleviation, women's empowerment or the spread of literacy could be made possible because of cooperation between government organisation (GO) and NGO. At this moment one can draw valuable insights into how that collaboration worked out and use it to fight the menace of deadly Dengue.

Role of Community
Gradually it has been realised that without the participation of the community the implementation of development programmes would not be possible neither would it be sustainable. Several areas and stages concerning development programmes have been identified where the involvement of the community is the backbone to the possible effort by the community and civil society resisting the spread of Dengue. **Outlining Social Mobilisation**
Three things received importance in the analysis of the background to the possible effort by the community and civil society resisting the spread of Dengue. The question is, has it reached all the segments of the population? Is it leading to creation of over-awareness of those who are already aware. Those who do not

have access to electronic and print media adequately will not receive the message of the campaign. In that case special efforts need to be taken to reach the segment that is access-deprived. Through social mobilisation this task may be done. NGOs may inform through their beneficiary groups. Thousands of such social groups now exist all over the country. NGOs who are implementing health programmes may use their forum to raise awareness how to prevent the spread of Dengue. The coordination body of the NGOs certainly has a role to play in this respect.

Resources: Presently the City Corporation is conducting its activities to stop the reproduction of the mosquito responsible to spread the virus of Dengue. Two important activities in this regard are spraying insecticide and the removal of wastes. Insecticide is an expensive item as well as not always available as per need. The limitation of City Corporation has clearly manifested both in preventing sexually transmitted diseases. In the case of Dengue also the same applies. The most important task is to eliminate the places where mosquito lays egg. It could be stagnant water anywhere, such as abandoned tire or cannister or the plant tub. Little care may prevent the possibility of stagnant water or the littering with abandoned tires cannisters or used polythene bags. Electronic and print media are engaged in campaigning the causes and sources of Dengue. The question is, has it reached all the segments of the population? Is it leading to creation of over-awareness of those who are already aware. Those who do not

where it is possible. Relative economic condition of an individual may be taken into account while planning will be chalked out to tap community initiatives.

The affluent may contribute financial resources while the less endowed may contribute labour and time.

Identification of the problem spots: Without the participation of the community, identification of the problem spots will be extremely difficult. In the localities with high density of population and congested dwelling units it will not be possible to locate the breeding spots of the mosquito unless the residents come forward to do it. The staff of the City Corporation engaged in spraying insecticide are paid low that are less motivated. In terms of number also they are few, now if they are given the task of finding out open drains and ditches inside a slum the expected result will not be very optimistic. Successful identification of the breeding spots is possible only when residents themselves will accomplish the task. The clearing up of small bushes and shrubs will be more difficult if it is the exclusive responsibility of the poorly manpowered City Corporation. Every third or fourth day there is the need to clean up the bushes and shrubs. For the last few days waste removal by the City Corporation trucks are taking place regularly since the panic of Dengue is still high. Once there is a