

The Ganges Basin Development: An Actionable Proposal

The kingpin for weaving a meaningful cooperation in the development of water resources potentials in the Eastern Himalayan region is India. And her role has more often than not been looked at with suspicion and hostility and not without any valid reasons.

by Syed Muhammad Hussain

THE issue of harnessing the vast water resources of major international rivers of the Eastern Himalayan region has been under examination for a considerable period of time. Attempts have also been made under official aegis as well as through collaborative efforts of experts in water, environmental and related sectors from the academic and development research professions in the three countries i.e., India, Nepal and Bangladesh, to explore the possibilities of devising a cooperative approach to undertake such a challenging task. As has been emphasized, the ultimate objective of generating maximum benefits through multiple uses of the enormous flows of waters in the eastern part of the subcontinent, home of almost 1/3rd of its total population, should not only justify but also actively encourage redoubling of efforts to pursue a common cause, design an integrated series of projects and undertake a cooperative thrust to realise the objectives to uplift the conditions of the millions of people struggling so dismally even to live below the poverty line, when the rest of the world moves forward into the sunshine of limited prosperity in the 21st century.

In the above backdrop, the following are self-evident facts: that such a vast network of major rivers can only be significantly developed on the basis of commonality of interests, equitable and fair sharing of benefits and apportionment of costs, on a long term basis;

that in terms of a feasible time and spatial scenario, the Ganges Basin logically suggests itself for development. At least three countries with a very sizeable population shall stand to derive maximum benefits through multifarious uses of the Ganges waters throughout all the seasons;

that among various alternatives discussed so far, the one which causes the least disruption in human and physical (including ecological, riverine and drainage layout etc.) terms and equally, if not more, important, the alternative that promises maximum multiple uses of waters of the common river basin, should be acceptable to all the co-riparian states, and

that a tripartite framework of management to oversee the complicated tasks of technical and feasibility studies need to be agreed upon.

It will of course be ideal to be able to prepare a macro Master Plan or several Master Plans to cover the entire range of Eastern Himalayan rivers in the Ganges-Brahmaputra-Meghna (GBM) Basins. One can also fathom the awesome proportions of such an undertaking. Such pious hopes, expressed quite a few decades ago, and even the indubitable suggestion of BG Verghese, one of the most admired experts and authors in this region, in his Coromandel lecture entitled The Gift of the Greater Ganga (10 December, 1977, New Delhi), that the review of all existing schemes and proposals for the development of the Himalayan river system would be advisable in order to safeguard against false starts on short-term gains (quoted in Nandita Bhatnagar's Development of Water Resources in South Asia, BIS Journal, vol. 6, No 3, July 1985, Dhaka) did not lead to any perceptible move. It is not clear whether the commissioning of the Farakka Barrage a few years earlier was a false start in his view, but it is clear that during the 23 years since, not much of a start either way has been undertaken in relation to the Ganges. We are not including the number of bilateral agreements India and Nepal had signed since. Indo-Bangladesh Treaty of 1996 on the sharing of the Ganges waters at Farakka does not also fall within the purview of the present analysis. It stipulates only sharing of waters and does not envisage any project per se at least at this stage. The kingpin for weaving a meaningful cooperation in the development

of water resources potentials in the Eastern Himalayan region is India. And her role has more often than not been looked at with suspicion and hostility and not without any valid reasons. One could quote many instances to corroborate this view. Even in the Report prepared by Patna University, India and Royal Academy of Science and Technology, Nepal it has, inter alia, been observed succinctly that "projects emanating from Indian motivations and initiatives are perceived as ploys to deprive Nepal of its fair and rightful benefits while Nepalese concerns and cautions, born out of its perceived past experience, are dubbed in India as unreasonable demands, intransigent attitude and deliberate stalling by Nepal." (Report on Cooperation for International River Basin Development: case of the Kosi Basin, Feb 1994, Centre for Water Resources Studies (Patna University), India and Kosi Basin Study Team [Royal Academy of Science and Technology], Kathmandu, Nepal).

Commenting on the project formulations, the same Report adds that "The basic and the very first of these cardinal scientific principles i.e., that of basinwise planning, has not been observed in evolving any plan in and for the basin. This cannot be done unless the irrevocable hydrological integrity of the basin is realised, which calls for cooperative development of the water resources. It makes cooperation of the co-basin nations imperative, and hopefully, inevitable." One may, however, recall the one occasion, perhaps the only one over the last half a century, when India and Bangladesh jointly approached Nepal in October 1986. The Secretary-level Joint Committee of Experts (JCE) met the Nepalese Secretary of Water Resources with requests for data and information to assist in the study of augmentation of Ganges flow at Farakka by constructing seven storage reservoirs in Nepal. Nepalese side insisted on being informed as to "what sort of role was envisaged for Nepal", "since Nepal had a very positive attitude towards regional cooperation for mutual benefits" (Ben Crow & Alan Lindquist: Development of the Rivers Ganges and Brahmaputra, Open University, England, February 1990).

Despite JCE's limited mandate, Bangladesh delegate Secretary Muhammad Ali explained that a large number (list submitted by JCE to Nepal contained seven sites: Chisapani in Karnali river, Kaligandaki I and 2, Trisulungga on Trisuli river, Seti, Sapt Kosi and Pancheshwar on Mahakali river) of reservoir sites had been identified... and "if constructed these dams will have the potential to increase the flows of the Ganges during the dry season," adding that "the storage capacities of the reservoirs can be so decided which would be appropriate to the multipurpose activities of hydropower generation, flood attenuation, irrigation and augmentation. These additional benefits would no doubt be of great help in opening new avenues of economic growth and social progress for the three countries there existed excellent potentials for development of surface water resources of the Ganges through a coordinated plan which could be taken up jointly." [Summary Record of Discussions of the Indo-Bangladesh Joint Committee of Experts (JCE) at Singha Durbar, Kathmandu on October 29-31, 1986, P2].

It is intriguing to note that Indian Secretary of Water Resources Ramaswamy R. Iyer in his statement alluded only to JCE's responsibility "among other things, of evolving a long-term scheme or schemes for the augmentation of the flows of Ganga at Farakka, making it clear (again intriguingly, perhaps to avoid creating a precedent of a trilateral meeting) that "he was speaking not as the leader of the Indian delegation, but as one of the joint leaders of the Indo-Bangladesh Joint Committee of Experts" (Ibid,

P3). Secretary Iyer did not refer to any of the multiple uses that the reservoirs could be put to. Undefined role of Nepal in the whole process of study of probably sites located in her own territory, and India's thrust on only augmentation of flows at Farakka, which obviously would not, by itself, be of any interest to Nepal as such, led to what Ben Crow and Alan Lindquist described as a 'complete waste of time and money,' but they concluded that it emphasised the need for India to undertake a reevaluation of its adherence to bilateralism."

Another intriguing episode related to the Indian promise of preparing a paper as to how Nepal could be involved in the exercise. Ben Crow and Alan Lindquist's paper (Feb 1990) attempted to trace the details of the missing Nepal Paper a fascinating study in itself. They concluded that "The failure of the Indian government to supply the Nepal paper after repeated commitments, including at the highest level, is a symptom of uncertainty or conflict". Apparently what the authors refer to is the conflict between the political decisions (taken for higher, more forward-looking and generous reasons) and the bureaucratic machinations (preserving a narrow, short-sighted, unimaginative and

interconnection, and therefore calls for regional cooperation. For concrete programming of this activity all the beneficiaries (Nepal, India, Bangladesh) should get together and work in a common forum." (Ibid, p.4).

The constraints and compulsions of small states in negotiating a fair, legitimate and equitable apportionment of benefits have been painfully evident throughout the last many decades. But even to forge a common forum with a view to exploring the enormous potentials to cover all the needs of all the coriparian countries and more, has proved a daunting task over all these years. This has been so despite the clear recognition of the vastness of benefits that could crown the obviously difficult and long-term challenge of developing the Eastern Himalayan waters. As the region travels from decade to decade into a fruitless future, it is always the present that could carve out a visionary future to offer a lifeline to millions of deprived souls in this region.

While dwelling at length on 'Water, Resources and the Environment, in South Asia,' the Study Mission from the Asia Society, New York, observed, "The solutions to these problems water storage in the season of heavy rainfall, sharing and augmentation of flows in the lean season require cooperation between nations." "Sadly, the recent record has been one more of conflict than cooperation over the shared water resources of Bangladesh, Nepal and India, despite the enormous potential benefits to each of them and several efforts, both regional and international, to jumpstart a cooperative regime. The reasons for this impasse are more political than techno-economic."

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highly questionable self-interest). Regrettably, a historic opportunity was missed and another 14 years of inertia engulfed the prospects of regional cooperation in this vital sector for common benefits. While such a window of promise was shut off, Bangladesh suffered one of the devastating floods in 1988. It would have been so much of a relief just to know then that regional efforts were on to prevent such disasters in future.

It is amazing that the data and information Nepal had virtually refused to share with the Indo-Bangladesh Joint Committee of Experts in October 1986, were made available soon thereafter along with a wealth of additional data, analysis, expert views, etc. to Bangladesh. The Nepal-Bangladesh Joint Study Team in its Report dated November 23, 1989 submitted a detailed study backed by a series of relevant data, plates and tables on the Flood Mitigation Measures and Multipurpose Uses of Water Resources. One of the five major recommendations therein relates to "Harnessing of water resources of the region: IV) creation of reservoirs at upstream reaches for optimal and multiple use of water resources of the region which inter-alia could also achieve flood peak attenuation at lower reaches" (Report on Flood Mitigation Measures and Multipurpose use of Water Resources: Bangladesh-Nepal Joint Study Team, GOB Ministry of Irrigation, Water Development and Flood Control, Dhaka and HMG, Nepal, Ministry of Water Resources, Kathmandu, Nov 23, 1989, page 3). The Report thereafter explains the above further: "The fourth activity needs to be looked into from wider perspective of finding durable solutions to the problems of floods and droughts through multiple and optimal use of the water resources in hydroelectricity generation, navigation and irrigation by means of flow regulation including power systems

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It is necessary at this state to recall that a considerable volume of wide-ranging literature on Himalayan water resources in general and on individual rivers and river systems appear to enrich the understanding of the vastness, complexities and potentials of the water resources of this populous region. Most of the publications relate to the perspectives and interests of the country of the authors concerned. There are, however, some who have sought to deal with transboundary rivers in the basin/region framework, even though a neutral attitude could not always be maintained. It is essential to note that in the non-governmental sector, three institutions of professional research and studies in the three countries have been holding interactive discussions since 1990. Their collaborative efforts over the last ten years have produced two fairly well-documented, intensely-researched volumes of studies: Converting Water into Wealth (1994) and Cooperation on Eastern Himalayan Rivers: Opportunities and Challenges (2000). [Bangladesh Unnayan Parishad (BUP), Dhaka, the Center for Policy Research (CPR), New Delhi and the Institute for Integrated Development Studies (IIDS) Kathmandu]. Despite the fact that these are very valuable contributions to the growing realisation that 'there is a need-based compulsion for formulating a framework for water-based integrated development of the GBM (Ganges-Brahmaputra-Meghna) region (Cooperation on Eastern Himalayan Rivers, p.192), government-level efforts (so-called Track II) have not yet led to any substantive, action-oriented consensus on a cooperative approach to the development

option does not offer; 2) in terms of human, land and environmental costs, Link Canal appears to be totally unacceptable; 3) Link Canal connecting above Farakka could be replaced by link canals within Bangladesh, as suggested later by India, to enable inter-river transfer of waters, as may be necessary in the downstream. In any event, the moot point, apparently missed by Track II practitioners, is not augmentation per se, when designing the framework of cooperation for utilisation of the water resources, but the multiple uses thereof for the common benefit of the three co-riparians which become material. And in that context, the possibility of augmentation is a minor consideration. Furthermore, augmentation of the Ganges waters at Farakka is more directly related to the bilateral arrangements between India and Bangladesh (Nepal is not affected in any way in this regard) and the 1996 Treaty on sharing of the Ganges waters between India and Bangladesh contains a specific provision recognising "the need to cooperate with each other in finding a solution to the long-term problem of augmenting the flows of the Ganga/Ganges during the dry season." (Article VIII).

One, in view of the mammoth size of the undertaking, it would be more practical if as Phase I only the Ganges Basin development is focused on. Ganges Basin has a drainage area of 1,08m sq. km, with a population size of 427m (1996 est) and arable land measuring 65.8m hectares. These constitute 62 per cent, 77 per cent and 83 per cent respectively of the GBM regional figures. In other words, Brahmaputra and Meghna basins together have only 38 per cent of the drainage area, 23 per cent of the population and 17 per cent of the arable land. Hence, in consideration of the benefits to a larger population, and a much larger cultivable area, Ganges Basin should be the ideal project area to start with. In Phase II with a greater degree of expertise and experience gained through the Phase I, Brahmaputra/Meghna basins could be covered under an extended regional cooperation plan.

Two, it should be made clear that regional cooperation in water sector is not a substitute for bilateral efforts and agreements on transboundary rivers in the usual manner. Benefits accruing in the context of one could perhaps spill over to the other as additional gains. Three, in order to keep the momentum of the spirit of cooperation among the three riparian countries, Track II deliberations on the strategies and contents should be continued and encouraged. Their input to the ongoing endeavour and their techno-economic involvement in the whole process would be most useful. People's motivation and awareness of the long-term benefits of the water-based development cooperation would be major contributing factors for a sustained, pro-people welfare process contemplated in this regard. Four, in designing a cooperative approach, techno-economic and functional considerations should be the principal guiding elements. There are quite a few international examples in Joint River Management, even in relation to some major rivers in the developing world. Mekong River Development Plan began as the first experiment in the multilateral development of a river system with the help of an international organisation and financial and technical assistance from a wide range of donors and UN agencies. In the Indus Basin Treaty, the World Bank played a crucial role managing to avoid the political conflicts to cloud the socio-economic benefits of the Indo-Pak Treaty on the Indus. Even though there would be structural and other differences, a common plan to develop the Ganges Basin water resources will certainly benefit from a closer study of similar examples, and

yan Rivers' provides a workable scheme and some elaboration of the components of a possible integrated water-based development framework (p. 173-174).

Several points at this stage could perhaps be made for a realistic start of a process towards the realisation of the above-noted goals.

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Five, once a state-level political decision for cooperation is concretised and a techno-economic pre-feasibility approach paper prepared, a joint move can be fruitfully mounted to obtain financial assistance for a full feasibility study of the overall project and sectoral schemes. Technical assessment and apportionment of overall costs and benefits as per agreed and acceptable formula would determine each state's responsibilities. A mechanism for trilateral management of the project schemes will have to be designed. Adequate assistance from international institutions and donors is expected to be forthcoming once the commitment of the three countries to the cooperative framework for development of the region's water resources is clearly evident. In the light of the foregoing presentation, the following suggestions are made:

1) An approach paper should be commissioned to elucidate the rationale of a regional/tripartite cooperation for undertaking an integrated, multi-sectoral development strategy based on the vast water resources of the Eastern Himalayan rivers, especially the Ganges. An elaboration on each of the potential sectors, along with measurable benefits should be done.

2) The above with an executive summary should be circulated to the heads of government of the three countries. Our Prime Minister may wish to avail of this historic opportunity to propose such a cooperation in this exceedingly vital sector and forward the approach paper to the Prime Ministers of India and Nepal. Our Prime Minister could propose in the forwarding letter that the three governments could agree to hold a meeting at the Secretary (of Water Resources Ministry)-level to examine, amend and expand etc the Approach Paper on a consensus basis. The Secretary-level report can thereafter be placed before the Minister (of Water Resources)-level meeting of the three countries. Their deliberations on the final draft and their recommendations on an agreed basis should be submitted to the Summit meeting of the Heads of Government of the three countries in due course. A tentative time-frame could also be indicated to convey a measure of urgency. The Prime Minister's letters along with the annexed Approach Paper could be personally delivered by a Minister-level Special Envoy to underscore the vital importance Bangladesh attaches to the subject.


While the above preparatory steps are on and the Approach Paper is being drafted for final approval by the Prime Minister, it would be most helpful to create an enabling environment if the Prime Minister during meetings with counterparts from India and Nepal, refers to such a proposal in a general way and appeals personally on behalf of the millions of poor people to undertake jointly a visionary journey into the new millennium with a view to commencing the process of converting the vast water resources into the wealth of nations in the region.

The author is a retired Secretary to Bangladesh Government and former Ambassador to Morocco, Nepal and Zimbabwe.

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by Jim Davis



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সিলেট-৩১১৪

বাংলাদেশ

পিএবিএসঃ ০৮২১-৭১০৪৯১/৭১০৪৯৯ ৭১০৪৫০/৭১০৪৫০

ফ্যাক্সঃ ৮৮০-৮২১-৭১০২৫৭

সংশোধনী নিয়োগ বিজ্ঞপ্তি

এই বিশ্ববিদ্যালয়ের রসায়ন বিভাগের নিয়োগের জন্য ইতিপূর্বে 'ডেইলী স্টার' পত্রিকায় প্রকাশিত নিয়োগ বিজ্ঞপ্তিতে সহকারী স্টোর কিপার পদে উল্লেখিত বৈতনিক স্কেল ও যোগ্যতার পরিবর্তে নিম্নোক্ত বৈতনিক স্কেল ও যোগ্যতা পড়তে হবেঃ

সহকারী স্টোর কিপারঃ

বৈতনিক স্কেলঃ টাকা ১৯৭৫-১০৫ X ৭-২৭১০-ইবি-১১০ X ১১-৩৯২০/=

যোগ্যতাঃ উচ্চ মাধ্যমিক (বিজ্ঞান) ও স্টোর কিপিং এ ২ (দুই) বছরের অভিজ্ঞতা।

বয়সঃ সর্বোচ্চ ৩০ বছর।

বিজ্ঞপ্তিতে অন্য সকল বিষয় অপরিবর্তিত থাকবে।

জিডি-৯৩১

রেজিস্ট্রার

Notice Inviting Tenders

No. 1 of 2000-2001

১. Tenders in sealed cover are hereby invited in Form No 2911 from all classes of approved civil contractors of this department for the undermentioned work and will be received by the undersigned, Executive Engineer, PWD Division-I/II, Rajshahi/Natore/Naogaon and Sub-Divisional Engineer, PWD Sub-Division, Nawabganj up to 12-00 Noon of 18.10.2000 and will be opened on the same day at 12-15 PM.

২. Name of work: Repair and reconstruction of damaged portion of boundary wall attached to Sericulture Seed Farm at Ishwardi in the Dist of Pabna.

৩. Estimated cost: Tk 3,83,607/-

৪. Earnest money: Tk 7,673/- in the form of in Sanchayptra/BD/CD from any scheduled bank. Fixed deposit holder to submit a certificate from the concerned Executive Engineer received within three months.

৫. The tender form together with the schedule of items, specification, terms and conditions, plans etc can be seen and obtained from the office of the undersigned and abovementioned offices during office hours on payment of usual charges up to the previous day of receiving tender.

Md Shah Alam

Executive Engineer

PWD Division, Pabna

DFP-23771-2/10

G-1744

Government of the People's Republic of Bangladesh

Office of the Executive Engineer (R&H)

Ferry Division, Nishindara, Bogra

R&H Department Short

Quotation Invitation Notice

১. Quotation Notice No : 01 (one)/2000-2001 Ferry Division, Bogra.

২. Name of work : Work of transport of utility type-1-018/2000 safely from Dockyard at Sadarghat in Dhaka Ferry Construction Division, Dhaka to Paksey Ferry Ghat for use in Paksey Ferry Ghat under Kushtia Road Division, Bogra (R&H) during 2000-2001 fiscal year.

Head of expenditure: (through ATC of Kushtia Road Division).

As per quoted rate.

৩. Estimated expenditure

৪. Security money (earnest money)

৫. Time limit for completion of work

৬. Eligibility of quotationer

৭. Offices in which quotations will be sold

৮. Offices in which quotations will be received

৯. Last date of selling quotation

১০. Date and time of receiving quotation

১১. Date and time of opening quotation

১২. Date and time of holding lottery

BD of Taka 2.00 (two) lakh to the undersigned.

15 (fifteen) days from the date of issue of work order.

'A' to 'C' general class of (R&H) Department, 'D' general class of (R&H), Workshop Circle, Bogra and 'E' general class of Ferry Division, Bogra enlisted contractors.

Executive Engineer (R&H), Ferry Division, Bogra/Workshop Division, Rajshahi/Santahar, Bogra/Sub-Divisional Engineer (R&H), Ferry Sub-Division, Bogra.

1) Superintending Engineer (R&H), Workshop Circle, Bogra.

2) Executive Engineer (R&H), Ferry Division, Bogra.

3) Executive Engineer (R&H), Workshop Division, Rajshahi/Santahar, Bogra.

15-10-2000 till office hours.

16-10-2000 till 12.00 Noon.

16-10-2000 till 12.05 PM.

(It will be informed on time if it is necessary.)

Md Mosharrar Hossain

Executive Engineer (R&H)

Ferry Division, Bogra

DFP-23881-2/10

G-1750