Ben Crow with Alan Lindquist and David Wilson, Sharing the Ganges: The Politics and Technology of River Development, University Press Limited, Dhaka, 1995, 272 pages, Price Taka 350.

Just when it appeared that Bangladesh was unable to attract enough attention from the world community on the burning issue of Farakka, a British author, Ben Crow, presents an indepth study on this very topic. The central concern of Ben Crow's recently published book, Sharing the Ganges: The Politics and Technology of River Development is to bring out the political and technical ambiguities that have so far prevented any solution to this bilateral problem. The author aims at demystifying the fears, misperceptions and myths which have so far determined the course of discussion on the river. How successful has Ben crow been in piercing the political and technical ambiguities? Before an answer can be attempted, a brief presentation of the findings of Crow is in order.

Apart from the **Introduction**, the book is divided into eight chapters. The findings are presented in a chronological order, beginning from the mid-19th century and continuing until the present. In the final chapter, the author presents some agenda of regional cooperation in the post-Cold war South Asia. Crow bases his research on interviews with key personalities involved in the issue as well as on reports, official minutes and documents. The author's experiences, of course, have not been all that pleasant. Access to minutes of official discussions and materials was at times

difficult as independent research on this conflict is monitored and sometimes discouraged (p.11).

According to Crow, the Ganges water dispute went through four major phases beginning from the decision to construct the barrage until the late 1980s when Bangladesh insisted on negotiation of a permanent sharing agreement of all major rivers. Crow argues that during all four phases the tendency on both sides to politicize science and technology was too evident (p. 22).

A detailed historical background of the Farakka Barrage project with special emphasis on the technicalities that led to the decision to divert water from the Ganges into the River Hooghly constitutes the subject of the first chapter. Crow reveals that although the first governmental inquiry into the condition of the Hooghly River took place in 1853, there was no unanimity as to the actual condition of the river until the day the actual construction began. In fact most investigations showed that conditions were not deteriorating to the extent that a solution was indispensable. Although the decision to construct the Farakka Barrage with the avowed objective of improvement of the Calcutta Port banked mainly on the report of Dr. Walter Hensen whom the Government of India commissioned to know if the Indian engineers were working on the right lines, and "to confer international scientific legitimacy on the project", Hensen's report has never been made public (p.41-42). Moreover, Hensen's key findings were contradicted by equally definite but opposite conclusions of two American professors who were requested by the Government of Pakistan to enquire about the conditions. According to their report, the Farakka project would only aggravate the problem (pp.42-43). Interestingly, both sets of studies used the same body of data, according to Crow.

If there were technical doubts about the barrage, why then did the Indian Government decide to build it? Was it built for mali-

cious purposes as believed in Bangladesh? The answers to these questions are sought after in the second chapter: The Decision to Build Farakka. Crow covers in detail the meetings and discussions among the politicians, ministers, MPs etc. to conclude that these mediatory actors were central in bearing pressure on the centre to carry on the project. To them, "the Farakka Project was seen as a technical panacea for the political and economic decline of West Bengal" (p.63). Crow argues that the central concern of the project has been to improve the Calcutta Port and not the overt intention of harming East Bengal (now Bangladesh). He, however, admits that the decision was made on inadequate technical grounds, for political reasons and with lack of sufficient foresight, such as 'consideration of downstream consequences' (p. 72).

The third chapter (Conflicts and Disagreement:1947-1971) focuses on the international repercussions of the decision to build the Farakka, which led to the first phase of the international dispute over the Farakka Barrage between India and Pakistan. Crow is of the opinion that the Indian decision makers, to be more specific, Nehru and later, Mrs. Gandhi, had deliberately delayed formal negotiations with Pakistan at least not until the construction had begun. Indian attitude towards resolution of the dispute was governed by overall maligned relations with Pakistan, as revealed by the author's interview with Mrs. Gandhi (p.94). Pakistan's most potent response, according to the author was the declaration that it would construct a retaliatory dam on the Ganges, which, however, was not carried out. Crow's archival research shows that there was some agreement on sharing of water in the last days of united Pakistan. But those could not materialise because the events were overtaken by the birth of Bangladesh. The newly born state now replaced Pakistan as actor in the dispute bringing in qualitatively different type of inter-state interactions.

The fourth chapter covers Co-operation and Agreement during the period 1971-1977. Crow shows that with the birth of Bangladesh, a period of cooperation followed specifically in the field of water resources, due to Bangladesh's acceptance, in general, that India had a right to use the Farakka Barrage (a major shift from Pakistan's stand on the issue) and in return, the Indian Government's recognition of Bangladesh's right to negotiate the sharing of the water. However, the best that could be achieved after tortuous negotiations was an interim agreement in early 1975 for sharing of water for forty days ending 30 May which paved way for 'experimental operation' of the barrage. Whether the interim agreement would have been repeated in 1976 and in the years since or the operation of the barrage was only experimental could not be observed or ascertained because of the political changes in August and November 1975. The period of acrimony and uncertainty that followed, however, culminated into a relatively more durable agreement on water sharing following a spell of political change in India, namely, coming of the Janata government to power in New Delhi. It was the political decision of the Janata government, according to the author, that made the understanding and accord possible (p. 122).

The author pauses for a moment in his narration of the protracted course of political negotiations on the Ganges and examines the Effects of Farakka as a consequence of the diversion the Ganges in Chapter Five. The author presents the viewpoints of Bangladesh and India about the effects of the water diversion during 1976-77 quoting documents of the two governments respectively, and quotes yet a third one, a joint study of Bangladesh and World Bank, known as Special Studies, while passing his own comments. The author admits of the adverse consequences of the reduced flow of water on agriculture and forestry. However, Crow tends to argue that some of the effect of

Farakka claimed by Bangladesh are exaggerated. These include such of Bangladesh's claims as: sedimentation and flooding as the primary cause for reduced flows of the River, the diversion of water at Farakka as the reason for changes in groundwater levels, industrial disruption and salinity intrusion as a consequence of reduced flows etc.

The author's next query in Chapter Five is whether the Farakka Barrage has solved the problems of Calcutta Port. The argues that low rate of growth of traffic, the declining share of traffic of India's major ports, underutilisation of capacity in the Calcutta Port Complex etc. did not allow the port to grow. Thus, the decline of the port was not caused by physical constraints on the river but by the slow rate of industrial growth in the hinterland of the port. He concludes: "The sad reality of the Farakka Barrage is that it was a heroic piece of engineering designed to solve the wrong problem." (p.158).

Chapter Six deals with the politics of Augmenting the Ganges Flow: Negotiations and Stalemate 1977-1982. While the Joint River Commission (JRC) which at one point was upgraded to ministerial level struggled to come up with a formula of augmenting the flow of the Ganges, the coming of Mrs. Gandhi back to power also witnessed a reversal of Indian position on sharing of water. In the early eighties, negotiations took a different turn. On Gandhi's insistence, the 1977 agreement was replaced by a Memorandum of Understanding (MOU) in October 1982 with General Ershad. The difference between the two is that the MOU dropped out the clause which guaranteed Bangladesh 80 per cent of the flow, irrespective of the actual flow. In his own words, "it (the MOU) reflected the increasing irrelevance of the question of sharing the Ganges flow and the failure to make progress on the more important issue of augmenting water resources in both India and Bangladesh" (p. 161).

In commenting on the Indian proposal for augmenting the Ganges, the author notes that "the Indian government did not propose the Brahmaputra-Ganges link canal in order to threaten the sovereignty and resources of Bangladesh. But that was, nevertheless, how the scheme was perceived". He also believes that "the Indian scheme focused on the Brahmaputra because India wished to stake a claim (not an unreasonable one, it must be noted) to the water of the river' (p.184). The author, however, admits that the "basis for choice which each government made was, nevertheless, political," (p. 184.)

Chapter Seven focuses on the Rise and Fall of New Initiatives taken at state level during 1983 and 1987. It was during this period that the author takes note of Bangladesh's initiative to ease the deadlock. The Bangladesh Government proposed a new 'package proposal' which was favoured by the Indian Government because it did not involve a third party to the negotiations and because the proposal of a 'link canal' within Bangladesh was similar to that proposed by India but rejected by Bangladesh. The other factor, according to the writer, was the favourable political environment in New Delhi. The then Prime Minister, Rajiv Ghandi was determined to solve this outstanding bilateral dispute. Yet the plan fell through. In his investigations, Crow shows how disagreement between politicians (the new liners vs the old liners) and lack of political support both in Bangladesh and India created obstacles to any progress. According to Ben Crow, a similar opportunity that arose between 1985 and 1987 following the Nassau Accords was once more lost due to the same reasons.

The eighth and last chapter deals with Some Dynamics of Regional Co-operation. The author believes that an agreement on sharing the common rivers could not be reached because 'the negotiators on both sides have frequently returned to hard-line, nationalistic positions' (p.218). Although the author has discussed

the Ganges dispute from political and technical perspectives, his recommendations are of an economic nature dealing with somewhat unrelated topics. According to him, the solution lies in series of exchange of national economies where the goal would be to increase the standard of living of all those economies in South Asia. For instance, Nepal can offer India and Bangladesh hydroelectric power, while Bangladesh can offer India and Nepal navigation, transit and communication rights. These economic exchanges will be considered as commodity transactions. He concludes his book with the assertion that "the shadow of Farakka has for long hidden the common interests of West Bengal and Bangladesh in the maintenance of dry season flows and mitigation of flood flows in the Ganges" (p.238).

After having read a book, the first task of the reviewer is to see how successful has the author been in making his argument, in particular, how logically has the author reached his/her conclusions based on the premises and empirical data of the study. A second concern of the reviewer is to assess the contribution of the volume to the body of scholarship. Taking the second question first, it should be pointed out that Ben Crow's is possibly the first comprehensive and indepth volume which brought out the impact of the dual dynamics of technology and politics, on the one hand, and inter-departmental and inter-personal politics, on the other, on the course of the negotiations on the Ganges water disputes. He has really gone deep into the problem and shared many insights that the readers otherwise might not have had access to.

Having said that, one also wonders how insightful the *insights* are which come out the purported piercing analysis of the technical ambiguities concerning the dispute. If an issue involving technicalities has been subject of inter-state politics and diplomacy, it is almost a truism that the technical aspects will be politicisised. More importantly, one notices the trappings of

'hostage to fortune' arguments because had one of the technical proposals, Bangladeshi or Indian, clicked, then there would not have been any scope of terming them ambiguous or politicised. Secondly, one can question the counter-factuals when the author speaks of two lost opportunities in the 1980s. It is true there have been internal dissension on the negotiation processes in both India and Bangladesh. But imputing the onus just to internal problem is perhaps to trivialise the level mistrust and misgivings prevailing at the inter-state level.

A Bangladeshi reviewer will confront many more difficulties with the views expressed in the book. There may be some questions as to his efforts to remain unbiased in the inter-state context. For instance, why did the author rely more on Indian sources including interviews and documents and less on Bangladeshi books and interviews? The book trifles Bangladesh's position on the effects of Farakka, as Crow suggests that many of Bangladesh's accusations lacked enough evidence. Thus, when the author says in the preface of the book:

We seek to look behind partisan governmental accounts to reconstruct what happened in different rounds of discussions and understand what has contributed to resolution or stalemate of the conflict.

Readers having insight to the whole issue would however, not agree with the author. Many would tend to find some of the inferences of Crow to be biased and largely influenced by a few key Indian officials who had been involved some way or other in this conflict. To be more specific, in Chapter Two the author has concluded, "If it does nothing else, this chapter should lay to rest the myth that the Farakka Barrage Project was intended to harm East Bengal. The concerns which informed the decision were concerns about Calcutta Port". A few others who have made research on this subject, however, believe that the real motive

behind the Indian authorities' decision to go ahead with the construction of Farakka Barrage despite cautions voiced by both national and international experts over it's efficacy was to create a mechanism to pressurise Pakistan as well as placate West Bengal which had been voicing dissatisfaction over Central Government's dealings with it on several issues. Even if one buys the argument, one immediately needs to contest the author's sense of absolving India of all responsibilities of the adverse consequences on the lower riparian.

In Chapter Five the author has tried to look into the effects of Farakka Barrage on Bangladesh on the basis of IECO special studies of the seventies. The Government of Bangladesh had time and again made in-depth investigations and studies on the adverse impacts of Farakka diversions on Bangladesh and made their outcome officially known to the Indian authorities. The Bangladesh reports of 1980 and 1982 on the review of 1977 Agreement and various other subsequent documents elaborately described the adversities being caused in Bangladesh by Farakka. All these were based on extensive field monitoring and scientific studies. The Bangladesh claims on various Farakka adversities are now well substantiated. For the millions living in the Ganges dependent areas in Bangladesh who had been suffering due to Farakka since long the statement of Ben Crow that "Finally, the assertion of the Bangladesh Government that there have been serious adverse consequences for the health of the people and the ecology of south-west Bangladesh is poorly supported by the available evidence" would only appear to be biased and perhaps motivated.

A thorough reading of Chapter Seven entitled, "The rise and fall of New initiatives: 1983-1987" would reveal that the author himself believes that the key to solution of the Indo-Bangladesh dispute over sharing the Ganges lies in the importation of water

from the Brahmaputra. The author appeared to be overenthusiastic about the so-called new-line strategy of the Bangladesh ex-Ministers Obaidullah Khan and Anisul Islam Mahmud. While the author tried to draw all attention of the readers to the inter-basin transfer of water from the Brahmaputra to the Ganges for augmenting the Farakka flows as a solution to current problem of sharing the Ganges. He did not appreciate a couple of very important factors like

- Bangladesh has no alternative to Ganges flows as water of the Ganges in this country is not replaceable by the Brahmaputra water.
- The flows available in the Ganges basin itself can very well augment the dry season flows at Farakka and bring in various other important benefits for all the co-basin countries.

The author has also avoided to highlight the consequences of the inter-basin transfer of Brahmaputra waters to the Ganges which would have far-reaching consequences. The negative impact of the transfer on agricultural productivity, irrigation, power, forestry, fishery etc. is sufficient to threaten the present and future economic development of the entire Brahmaputra basin encompassing a large area and population of Bangladesh as this river would be left almost dry during the lean season after large scale transfer from its flows. To facilitate such a transfer a large canal would need to be excavated (on any of the proposed alignments) that will lead directly and indirectly to the displacement of more than a million people depriving them of their land, home and hearth. It needs-man ratio in the world and about 90 percent of the people are dependent on land for their livelihood. Such a canal would also disrupt communication and truncate the land with no clear appreciation of the potential adverse impacts on the hydrological, geological and geomorphological consequences on the region.

To many readers Ben Crow thus might appear to be a proponent of the Indian concept of 'Ganges for India, and Brahmaputra for Bangladesh and India as well'.

In Chapter Seven the author has claimed that during the period 1983-87, Bangladesh negotiators were willing to accept sharing of the common rivers as follows:

Ganges - 60:40 (Bangladesh:India)

Brahmaputra - 75:25 (Bangladesh:India)

All other common rivers - 50:50 (Bangladesh:India)

None in Bangladesh is aware that such proposals were ever mooted by any Bangladesh delegation. Such a statement not substantiated by any sort of documentary evidence by Ben Crow might appear to be an attempt by him to add confusion to the already existing chaos over the issue of sharing of water of transboundary rivers between Bangladesh and India.

On the question of legal position the author has perhaps, avoided to undertake indepth study on the subject matter and, therefore, has evaded the legal aspect. As a riparian country, Bangladesh has a legitimate share on the natural as well as on the augmented flows from the Ganges and its tributaries. Bangladesh cannot be deprived of her historic and rightful share of the Ganges waters by upstream activities. It is felt imperative that the cobasin countries should recognize the community of their interests in the utilization, sharing and development of transnational water resources and the right of every cobasin country to equitable share of these resources. None should act in a way as to cause a substantial damage to rights and interests of other cobasin countries.

The multiplicity of bilateral and plurilateral treaties that States have concluded with respect to international rivers offer further evidence that States feel under a certain sense of obligation to work out an apportionment of the use of the waters of international rivers. The fact that many of the important rivers of the world are regulated by treaties concluded by the riparians is some indication at least that these nations are responding to some sort of imperative created by the law. The number of such treaties, the fact that they are concluded the world over, and the frequency with which such treaties are concluded indicate that prohibition of unrestricted diversion of water corresponds to a universal legal principle.

In Bangladesh, the Ganges waters are used for:

- Drinking water and municipal supply
- Irrigation
- Navigation
- Industry
- Fisheries
- Precluding saline intrusion from the sea and thus avoiding harm to agriculture and forestry
- Ecology and environment.

These are all existing uses which have been made of the Ganges by Bangladesh, most of them for centuries, so that a pattern of interdependence between land, water and human life has been set up. The uneasy balance between man and nature that has been established in the delta of the Ganges turns essentially on water. Opposed to this long standing and life sustaining use of the waters of the Ganges is the totally new use by India, through the diversion by India at the Farakka Barrage, of the Ganges waters for the port of Calcutta. Thus the diversion in the dry season in particular is a totally new use. In short, one new and wasteful use by India must be weighed against a multiplicity of vital and long-established uses by Bangladesh.

The injury caused to Bangladesh through the diversion of water from the Ganges during the dry months is substantial. India's need is the protection of the Hooghly from siltation, but that can be met by dredging of the channel that will cause absolutely no injury to Bangladesh. There are thus means by which the needs of India can be met without causing injury to Bangladesh.

The United Nations has taken up an initiative to prepare a codification for use of international waters. The draft is presently under discussions. It is expected that the draft would be finalized soon. The draft is presently under discussions. It is expected that the draft would be finalized soon. This codification would definitely help to resolve the conflicts on the water issues and promote co-operation among the co-riparian countries.

Neila Husain Research Associate BIISS, Dhaka