

Book Review

Management of Transboundary Rivers and Lakes

Water Resources Development and Management Book Series Olli Varis, Cecilia Tortajada & Asit K. Biswas (Eds) Springer-Verlag, Berlin, 2008, price not given, 304 pp., ISBN 978-3-540-74926-4

The optimal development and management of transboundary rivers and lakes is an important subject that is still under a process of gradual evolution. This subject has not been an easy one, either, to deal with at major international fora. There are at least two important reasons for this situation. The first relates to national sovereignty, which all nations jealously guard. The second is the reality of very differently perceived 'national interests' on the shared waters of the basin countries on a large number of transboundary rivers or lakes, where no operational treaties exist among the riparian nations. In addition, notwithstanding serious efforts made over the past five decades, the non-navigational uses of international watercourses remains an important area that is not yet regulated by any binding international Convention or Treaty. Therefore, it is a welcome development that by the efforts of the Helsinki University of Technology and the Third World Centre for Water Management (with intellectual support of the International Water Resources Association), Springer has brought out a book on the *Management of Transboundary Rivers and Lakes*. It is based on many invited papers presented and discussed at an international workshop held in Espoo, Finland in August 2005.

As the excellent overview by Asit Biswas brings out, globally, there are over 260 transboundary river basins and around 40% of the world's population lives in such basins. However, each such basin is different not only by its size, water availability and requirements but also by political, institutional and legal frameworks involving them. Power relationships among the sharers are also very asymmetrical. Hence, any attempt to transfer knowledge and experience from one river basin to another should be handled with care and caution. Development and management plans for specific basins should be formulated on consideration of their own specific conditions and requirements rather than the adoption of an imported model. Notwithstanding the above caution, the knowledge about how the various transboundary watercourses were handled by the states that share them will be an obvious and useful first step for the preparation of the management plan for any particular shared river or lake. The root of the word 'rival' is from the Latin term that means using the same river. However, as Biswas points out, nations sharing the same river need not consider each other rivals but as sharers of prosperity that is generated through their synergetic cooperation in a properly conceived framework that can lead to a 'win-win' situation for all.

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Biswas has competently summed up in the first chapter the various points made but also set out briefly the existing legal regime for managing international water courses. That the sustained effort over 30 years by the UN system to codify the law has not been successful because only 16 countries ratified the draft Convention shows the difficulties inherent in this complex task In addition to the 'overview', there are 10 chapters that analyze the water management in a specific transboundary river or a group of them. They represent a selection from different parts of the world and include the following: South African Rivers complex, Okavango (covered in the South African complex, too), Jordan, Finland's transboundary waters, Ganges, Indus, Mekong, transboundary waters of China, Great Lakes basin of North America and the Rio de la Plata. It may be seen that a number of other cases of shared waters are missing from this list, but only the listed rivers formed part of the project by the sponsors on which the book is based on.

Anthony Turton's analysis of the South African hydropolitical complex covers six shared basins, the Incomati, Cunene, Limpopo, Okavango, Orange and Zambezi. Basinwide regimes exist for all except for the Zambezi where, too, one is expected soon. Half of them have been theatres of conventional and guerrilla war in the recent past but the water management structures and institutions had withstood their rigours, obviously because water is so important for each riparian state. Four of the economically most developed states of this region, viz, Botswana, Namibia, South Africa and Zimbabwe are waterscarce. Thayer Scudder in another analysis of the Okavango river basin points out three interesting major constraints that threaten the sustainable development of this basin. The first is the nationalistic sovereignty issues with no common basin-wide vision, the second is environmental and the third involves inadequate coordination and lack of common vision even among the many researchers, donors and consultants. Scudder considers that the large number of international actors in the basin is dysfunctional. A significant feature of this basin pointed out by Turton is that it is highly internationalized through a global environment movement that will not allow the Okavango delta to be harmed in any way, even though the available research has shown that the impacts cannot even be measured with currently available technology.

The Jordan River basin is very water short. The Upper Jordan basin above Lake Tiberias is now shared by Syria, Israel and Lebanon while its main tributary Yarmouk is shared by Lebanon, Syria, Palestine and Jordan. Syria, Israel, Jordan and Palestine share the lower Jordan basin. The water abstractions, mainly by Israel, are already equal to available flows. The 1994 Peace Treaty allocated the available waters between Jordan and Israel and the Oslo Accord 1993 between Palestine and Israel contains the concept of mutualism on specific water sharing schemes. But there is a current stalemate of the water dialogue at the basin level.

Finland is very rich in water resources. It has transboundary watercourses with each of Sweden, Norway and Russia. There exist joint water commissions on them and Finland's cooperation has been successful in managing transboundary watercourses.

Asit Biswas's analysis of the Ganges-Brahmaputra-Meghna (GBM) system draws on his vast experience gained by dealing with the issue for decades. However, his presentation here is mainly confined to the Ganges subsystem. The geographically interlinked character of the three main rivers of the GBM region and their varying characteristics necessitate an integrated holistic approach. A cooperative framework with appropriate trade-offs alone can provide substantial benefits to each of the nations concerned that will be larger than what each can ever hope to achieve by its solitary

efforts. Biswas cites the excellent example of cooperation in the development of the rivers shared by India and Bhutan. He, also, rightly points out that the stumbling blocks in the way of realizing this prosperity relate to the legacy of mistrust and asymmetrical power relations in this region. He has not discussed the rivers of the Tibet region of China, which are also in GBM.

Thatte has elaborately traced the history of water management in the Indus basin over the last century and more. He has brought out the havoc wrought on water management in the basin due to the partition of the subcontinent and demarcation of new borders on religious basis in 1947 as the British colonial rule ended. The problems created by this are still being tackled. His analysis of the Indus Water Treaty (1960) shows his intimate handling and knowledge of its actual working. He has not only brought out the limitations of IWT but also made suggestions for desirable changes to enhance benefits to both sides by optimal utilization of the waters of the Indus system.

The Mekong basin has been subjected to serious and costly international efforts for its basin planning. Attempts at regional cooperation in developing Mekong basin are over five decades old and have strong donor funding support. However, as the chapter on Mekong points out, the "Mekong River Commission and its predecessors have not been too successful in the comprehensive development" of the basin. Both China and Myanmar, who form the upper basin, are not involved in these efforts and in their absence there can be no comprehensive planning. Worse still, China's efforts to build a number of dams in the upper basin have been without consultation with the other basin countries.

In another chapter, James Nikum, an observer of China from outside, makes an interesting analysis of the "upstream superpower—China" and its minimal involvement in international rivers. He considers that the international dimensions of China's shared rivers "appeared to be of so little concern to China's policy makers". China, particularly the Tibet region, is upstream on nearly all rivers that cross the border. China is one of the only three countries that voted against the adoption of the UN watercourse convention. Nikum considers that this was "to reaffirm its position of the primacy of national sovereignty over resources in its boundaries". He concludes by saying that other things being equal, China would be unwilling to be cooperative with its numerous coriparians, given its upstream location in most cases".

The Great Lakes-St Lawrence River system, shared by Canada and the USA, is the world's largest fresh water ecosystem. Its management has been a part of the legal and institutional framework governing Canada-US boundary waters management since the 19th century. For 'boundary waters', each country has an equal right for their use. For waters that exist on one side of the boundary but will flow across each country has an exclusive right of use subject to the obligation to provide access to legal remedies for injuries to the other side. It is the maintenance of water quality that has become more important in recent decades. The International Joint Commission (IJC) monitors and reviews the implementation of the principles agreed between the two countries.

Lilian Laborde's review of the Rio de la Plata traces the history of water management in that system shared by five countries. The Rio de la Plata Basin Treaty (1969) provides the basic institutional mechanism to promote the harmonious development and physical integration of the basin's water management. Navigation and generation of hydropower are important uses in this system. The author considers that the basin is now ripe for integrated water management based on political consensus. The fresh approach aims at overcoming the present fragmentation in sectors, matters, countries and bilateral organizations.

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This book will serve as a valuable source of information for all those who are interested in various facets of optimally and harmoniously developing and managing transboundary watercourses and lakes. It gives a rare insight into the many challenges and opportunities of managing transboundary waters, which are politically sensitive. The authors and the editors must be complemented on undertaking this difficult task that has been well managed.

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Note

 Formerly, Member, Central Water Commission, Additional Secretary to the Government of India, Chairman, Brahmaputra Board, Commissioner, Ministry of Water Resources, Member, Indo-Bangladesh Joint Rivers Commission, Chairman, Indo-Bangladesh Joint committee for implementation of the Indo-Bangladesh Agreement on Ganga waters.