Water Governance in India: exploring the field
Guest Editors

Dik Roth
Associate Professor - Sociology of Development and change Group, Wageningen University, Wageningen, the Netherlands

Jeroen Warner
Wageningen University and Research, Wageningen, the Netherlands

Chief Editor

Dr. Anjal Prakash
Programme Coordinator – HI-AWARE, River Basins Programme, International Center for Integrated Mountain Development, Nepal

Managing Editor

Monica Priya
Research Associate, South Asia Consortium for Interdisciplinary Water Resources Studies, India
Water Use and Poverty Reduction

Edited by Md. Fakrul Islam

Md. Sadiul Alam Chyon
SAWA Fellow, Institute of Water and Flood Management, Bangladesh University of Engineering and Technology; Assistant Engineer, Bangladesh Water Development Board (BWDB), Bangladesh
Email: mdsadiulalambuetwre@gmail.com

Reviewer’s Remarks on the Book

As a part of my field training at Bangladesh Water Development Board (BWDB), I had to visit the Teesta Barrage and its (once) prosperous command areas. The visit made me wonder what the optimal solution to the predicaments suffered by the local agriculture-based people was. Md Fakrul Islam’s book "water use and poverty reduction" has documented an explicit and pragmatic answer to this continually reverberating query of both Indian and Bangladeshi water policy analysts and diplomats. The author, a scholar, is currently serving a stint as Professor at Rajshahi University, which is located close to the study area where he conducted an intensive field survey as a part of his PhD studies. Within a few months of Bangladesh starting the Teesta barrage construction, India decided to build a barrage of their own at Gazoldoba, some 60 kilometers upstream from the Bangladesh Barrage site at Dalia. Following the commissioning and operation of both the barrages, several problems emerged. India began the leveling up of water by closing the gate in lean periods and opening the gate during the monsoon, apparently and justifiably for their own agricultural and power production use, but which resulted in water scarcity and excess waters in Bangladesh. Though the situation was comparatively optimal in the beginning years, drastic loss of Gross Regional Production (GRP) in the Teesta basin resulted from both climate change-driven lack of natural flow volume and development of additional dams further upstream in India. The GRP has been quantifiably delineated in the book and with this background as status-quo, the study aimed to develop an Input-Output (I-O) model as well as propose some policy recommendations to ameliorate the situation for both the countries.

Islam wandered across borders, surveying residents of 14 villages of Nilphamari district in Bangladesh and 3 Panchayats at Jalpaiguri in India. In addition to the demographic details of the respondents such as average household income and literacy, various land and crop data in the Dalia and Gazoloba target areas during 1994-1996 and 1996-2000 have been gathered. The land data includes comparative distribution of land ownership types of land, and total hectares cultivated in the rainy season as well as uncultivated due to scarcity of water; whereas crop data includes distribution of crops cultivated in the dry season yield, and monetary value. Furthermore, data on the comparative distribution of health and hygiene and source of drinking water were also gathered, conducting face-to-face interviews using a semi-structured questionnaire, the author then analyzed the data with MS Excel and SPSS. I believe the study was successful due to the synthesis of a huge volume of respondent opinions and subsequent methodical triangulation, which provided a far more comprehensive portrayal of the scenario in both the target areas. The author extensively studied and documented international water sharing issues transboundary rivers, which is the root cause for many problems in general and Teesta here in particular. He delves into the legal, rights-based, economic, social, environmental, and other aspects of international river water sharing and thoroughly analyzes various. Literature on equitable share, obligation, equitable allocation through efficiency, benefits and equity, to name a few. Most importantly, the Input Output (I-O) model and the computer simulation helped to document how an equitable share of water for both the countries can be ensured by expediting the regional cooperation. This mathematical model was developed with meticulous care and what I feel is the book’s most useful contribution. The results show that if Dalia in
Bangladesh receives 6% more of their current average allocation of 15% for the dry season, GRP for both Nilphamari and Gazoldoba will be optimized, and additionally the environmental flow requirement will remain appreciated. The proposed bilateral water-sharing model suggests that for the same percentage of water sharing, crop production and employment will be optimized for India. Finally, he also presented some alternative policy recommendations, which I found to be very apt given the current situation as outlined in Maya Mirchandani’s "The Teesta water dispute: geopolitics, myth and economics". I sincerely believe that this book can be used not only for policy perspectives for stakeholders in Teesta river basin, but also for the context of any Asian trans-boundary river water sharing conflicts.

References

Islam M. F. 2016. Water use and poverty reduction, volume 8, Springer

SaciWATERs

B - 87, 3rd Avenue, Sainikpuri,
Secunderabad - 500 094, Telangana, India
www.sawasjournal.org

Designed by Raju Kakkerla