

Book Review

***Climate Change and Water Resources* by Sangam Shrestha, Mukand S. Babel and Vishnu Prasad Pandey (eds). IWA Publishing, London, 2014. 376 pages. ISBN: 9781780405902 (Hardback)**

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Climate changes have played a role in the shaping of the Earth for millions of years, illustrated by floods (even mentioned in the Bible and in the Greek Mythology!), droughts, glaciation, heat waves and the appearance and disappearance of various sorts of animals and plants, including mankind. Yet we are presently facing a kind of environmental political correctness concerning the anthropogenic aspects of climate change, which, adopted by a number of politicians and journalists, does not necessarily rely on sound science and is often used to promote political agendas. For instance, some aspects in the preparation of COP21, which took place in France at the end of November and early December 2015, illustrate that the political deviation of scientific results cannot be underestimated.

In that respect this book comes at the right moment and should be a reading assignment to the participants of COP21, as it provides a sound scientific basis for a balanced and rather comprehensive analysis of climate change and, especially, for a very important aspect of climate change, its relationship to water, namely water resources policy, governance and management. In particular, it provides a correct identification of the anthropogenic factors or drivers of climate change, free of political and media exaggerations and biases.

Built in a logical way, it is composed of 11 chapters: (1) Global Climate System, Energy Balance, and the Hydrological Cycle; (2) Climate Variability and Change; (3) Detection and Attribution of Climate Change; (4) Uncertainty in

Climate Change Studies; (5) Climate Change Impacts on Water Resources and Selected Water Use Sectors; (6) Economics of Climate Change; (7) Climate Change Vulnerability Assessment; (8) Climate Change Adaptation in Water; (9) Managing Climate Risk for the Water Sector with Tools and Decision Support; (10) Transboundary River Systems in the Context of Climate Change; (11) International Negotiations on Climate Change and Water.

Starting with setting the scene by describing what the global climate system is, and its relationships to energy through the Greenhouse effect and to water through a short but clear description of the hydrological cycle, the book thoroughly analyses the factors of climate variability, correctly positioning the physical factors and the anthropogenic factors, in a very scientific way. It gives a balanced scientific background to 'global warming' that will help scientists but also the general public, who should and could have access to the book, to better understand what it is all about. Besides the scientific chapters on uncertainty and vulnerability, which will satisfy scientists and engineers, and on economics, useful to managers, the more qualitative chapters on climate change impacts and climate change adaptation to water completed by the chapter on risk management will provide the political decision-makers and managers a useful survey of examples, methods and models. I personally appreciated the chapter on transboundary waters and climate change, as transboundary surface waters and now more and more transboundary groundwater are being studied and included in water resources

management at the international level. For instance, this is stimulated by UNESCO, where I directed the project on Transboundary Aquifers Education and Training for Sustainable Management.

Finally, the book concludes with an interesting specific chapter on international negotiations which have become highly significant, especially with the increased use of trans-boundary waters, and the development of Water Diplomacy.

Besides its scientific qualities, which I have tried to show, the book has a great pedagogical value, and I think it will be rather easy to read by non-specialists and students to whom it will provide a good state of the art of the relationships between climate change and water resources management, useful guidelines for the professionals and an extensive list of references for all.

I wish this book all the success it deserves.