

## Book review

### ***Flood Risk and Social Justice: From Quantitative to Qualitative Flood Risk Assessment and Mitigation* by Zoran Vojinovic & Michael B. Abbott. IWA Publishing, London, 2012. 563 pages. ISBN: 9781843393870 (hardback)**

Ognjen Bonacci

**Emer. Ognjen Bonacci**  
UNESCO-IHE Governing Board  
and  
Faculty of Civil Engineering,  
Architecture and Geodesy,  
University of Split,  
Matice hrvatske 15,  
21000 Split,  
Croatia  
E-mail: obonacci@gradst.hr

The book entitled *Flood Risk and Social Justice: From Quantitative to Qualitative Flood Risk Assessment and Mitigation* is part of a series of books on Urban Hydroinformatics published by IWA Publishing.

This book introduces a novel and modern approach for dealing with floods and flood-related disasters which have been increasing ever more rapidly throughout the world. By far the greatest toll from floods and flood-related disasters is in the so-called 'developing' world where the resources for dealing with such problems are either inadequate or non-existent. This book is a direct response to these and some other issues as an initiative to promote a socially just approach to the problems of flood risk. The primary aim of the book, which the authors have undoubtedly achieved, has been to fill the gap that currently exists in both literature and practice. The current literature treats the problem of flood risk from either a quantitative or a qualitative point of view. The quantitative point of view is based on modern science generally, as it uses ordering, numbering, counting and computing as these are related to the material world. The qualitative point of view, however, refers to those other aspects which have not been sufficiently analysed and have consequently been even less understood within the present context. The authors have undoubtedly made significant and original contribution in this respect by bringing a new way of thinking and a new paradigm which combines quantities and qualities. The

authors are from UNESCO-IHE Institute for Water Education (Delft, The Netherlands), the leading institute in water education in the world.

The book is divided into four parts:

- Part I: The nature of urban flood risk;
- Part II: Introducing social and ethical aspects into flood risk mitigation;
- Part III: Scientific and technical aspects of flooding;
- Part IV: Technological aspects of flood risk assessment and mitigation.

Part I contains the following chapters:

- Urban areas and flooding;
- Tracing the roots of urban flood risk;
- The nature of risk.

Part II contains the following chapters:

- The technocratic way of thinking;
- Historical perspectives of social justice;
- Characterisations of social justice;
- Realising social justice in the context of flood risk mitigation;
- Leadership and social justice;
- On sociotechnology;
- Data – Information – Knowledge – Understanding – Wisdom;

- The role of hydroinformatics in active stakeholder participation.

Part III contains the following chapters:

- Floods and drainage systems;
- Quantifying urban processes;
- Data collection for modelling;
- Rainfall data analysis and catchment delineation;
- Modelling wet weather and dry weather flows;
- Hydraulic modelling;
- Numerical solutions of governing equations;
- Modelling practice.

Part IV contains the following chapters:

- Flood risk assessment;
- Flood mitigation measures;
- Production of plans;
- Case studies (1. Belo Horizonte-Brazil; 2. Bangkok-Thailand; 3. Australia; 4. SMART tunnel in Kuala Lumpur, Malaysia)

The book approaches the problem of flood risk mitigation from an absolutely new and unique point of view. It is

important to emphasise that special attention was given to floods in urban areas in those environments where the likelihoods of floods and their consequences are the greatest, and where these floods can often be catastrophic.

It is generally accepted that the locations and times of impacts of floods cannot normally be predicted, even as they occur ever more frequently and their impacts become ever increasingly severe. Undoubtedly, the ideas offered in this book are opening new possibilities for achieving more sustainable flood-related solutions. Unfortunately, many of our solutions nowadays are limited in their reach and their effect and this book brings new ideas and gives us hope that we can bring a truly holistic perspective into our worldview.

The book combines technical and social aspects of floods and flood-related disasters in a refreshing and original way. In this respect, the views and ideas offered are absolutely novel and promising. Further to the above, I recommend this most interesting book to all people who are concerned with the risk of flooding and who may have either technical (design, operation construction, etc.) or social (socio-economic, legal, historical, ethical, philosophical, etc.) backgrounds.