

\* We hope you had a great year in 2012! \*



# IWRA Update

Newsletter of International Water Resources Association

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## MESSAGE FROM THE PRESIDENT



**Dear members,  
friends and colleagues,**

*Firstly, I would like to give my warmest greetings to all IWRA members, friends, colleagues, and your families for a Joyous Holiday Season, a Merry Christmas, and a Happy and Healthy, Peaceful and Prosperous New Year 2013!*

*Secondly, as President of IWRA, I would like to sincerely thank all IWRA board members for their trust and support, and the very efficient activities that have ensured IWRA's progress in the world. As you know, IWRA has been established for over 40 years as a well-known international water resources organisation since it was established in November 1971 in the United States by Prof. Ven Te Chow and others. After your efforts and cooperation over the last three years, IWRA has undergone significant change and reform under the support of our board members since Jan.1<sup>st</sup>, 2010. Impact and development has been significant.*

*The role of IWRA within the international water community and actions is also enhancing, including: World Water Council (WWC) Board actions and the 6th World Water Forum actions, IWRA was elected again as new WWC Board member, and I am happy to served again as WWC Board Governor for 2013-2015; our very successful XIV<sup>th</sup> IWRA World Water Congress in Brazil; significant contributions to the Singapore International Water Week and the Stockholm Water Week during the last three years; several good actions for the UNESCO Water Programme, the IAC Water Programme, Regional Actions such as ASIA 2010, ASIA 2011, and ASIA 2012, GWSP actions; Shanghai World Exposition where IWRA and ICOLD jointly hosted an event and exhibition during Sept.17-19, 2011, work to creat a Qingdao Centre for Science, Technology and Education, amongst many other actions.*

*Also, I would like to address that IWRA and WWC Strategies and IWRA action plans are also well planned and implemented, such as the Action Plan and Outline for "Integrated Water Supply & Water Demand Management" and others.*

*Regarding the IWRA journal, Water International (WI), more special issues have encouraged rise in its impact factor. Moreover, IWRA's development plans have been applied for international/regional water governance and other activities, such as membership development; creation of an IWRA youth committee; financial management; publications, including WI, this newsletter, our website etc.; and national and regional committee development. The IWRA, as a non-profit, non governmental, educational organisation, provides a global forum to bring together disciplines and geographies by connecting professionals in and out of academia, students, and all other individuals who are concerned with the sustainable use of the world's water resources. The experience of the past three years tells us that the IWRA will continue to face big challenges in organising itself as a truly internationally situated body, in developing its regional & international networks, and in making contributions to world water science, discourse and action.*

*Finally, it is hard to believe how fast time has flown for three years by since the current Executive Board and I started our mandate in 2010. Many achievements have been realised and many actions remain to be completed in coming years to IWRA new Board. I am happy to see the new IWRA Executive Board for 2013-2015 is composed of very widely representative and high calibre people. I do believe under the leadership of Prof. Dogan Altinbilek and the new Board, IWRA will play an increasingly important role in the world on water security and the wise management of water. IWRA has a big future!*

**All the best!**

**Jun XIA**  
IWRA President

## IWRA Executive Board 2013-2015

The elected IWRA Executive Board will take up its functions as of 1st January 2013 under the presidency of Dogan Altinbilek. The board has a mandate of 3 years until the end of 2015. This Newsletter is pleased to present to you the new members:



**Dogan ALTINBILEK**  
**PRESIDENT**



**Jun XIA**  
**PAST PRESIDENT**



**Carl BRUCH**  
**SECRETARY GENERAL**



**Lilian DEL CASTILLO-LABORDE**  
**VICE-PRESIDENT**



**Ngai Weng CHAN**  
**VICE-PRESIDENT**



**James E. NICKUM**  
**VICE-PRESIDENT**



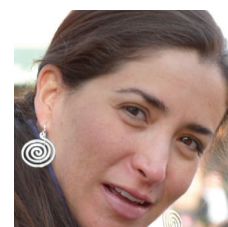
**Gabriel ECKSTEIN**  
**TREASURER**



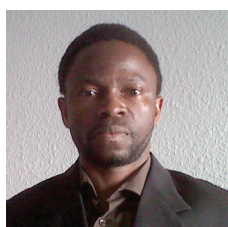
**Giuseppe ROSSI**  
**CHAIR, AWARDS COMMITTEE**



**Raya Marina STEPHAN**  
**CHAIR, PUBLICATIONS COMMITTEE**



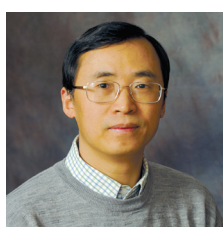
**Paula SILVA**  
**CHAIR, MEMBERSHIP COMMITTEE**



**Emmanuel M. AKPABIO**  
**DIRECTOR**



**Henning BJORN LUND**  
**DIRECTOR**



**Ximing CAI**  
**DIRECTOR**



**Naim HAIE**  
**DIRECTOR**



**Kun-Yeun HAN**  
**DIRECTOR**



**V.K. KANJLIA**  
**DIRECTOR**



**Patrick LAVARDE**  
**DIRECTOR**



**Yuanyuan LI**  
**DIRECTOR**



**Mark REDWOOD**  
**DIRECTOR**



**Kaoru TAKARA**  
**DIRECTOR**

## IWRA Executive Board 2013-2015

### PRESIDENT



**Dogan ALTINBILEK (Turkey)** is a Professor of Water Resources Engineering. He served as Vice-President of the IWRA Executive Board during the 2007–2009 period.

Presently, he is a Governor and Vice President of the World Water Council. He is also an Executive Board member, Past President and honorary member of the International Hydropower Association (IHA). Since 1970, he has been involved in the academic profession holding posts at the Middle East Technical University of Turkey and the King Abdulaziz University of Saudi Arabia. From 1996 to 2001, he was the Director General of State Hydraulic Works (DSI), a major government agency in Turkey for water resources development.

### PAST PRESIDENT



**Jun Xia (China)** is Professor and Director, Center for Water Resources Research, Chinese Academy of Sciences. He has ample experience in leading water research, management and consulting jobs both in China and internationally. He served as a Director of the IWRA Executive Board for the 2001–2003 period, and as Vice President for the 2003–2006 period.

### SECRETARY GENERAL



**Carl BRUCH (USA)** is a Senior Attorney and Co-Director of International Programmes at the Environmental Law Institute. He has helped countries and organisations across Africa, the Americas, Asia, and Europe develop and strengthen their environmental laws and policies, improve institutions, and build capacity. He has edited 9 books and 2 special issues of journals; is a series editor of 6 books on post-conflict peacebuilding and natural resource management; and has authored more than 45 scholarly articles and book chapters. Bruch is a past Treasurer of IWRA, and serves on the Editorial Board of *Water International*.

## IWRA Executive Board 2013-2015

### VICE-PRESIDENTS



**Lilian DEL CASTILLO-LABORDE (Argentina)** is a Professor of International Law at the University of Buenos Aires Law School, in Argentina, with a Ph.D. from the same University. Her courses and areas of interest are mainly, although not exclusively, "Jurisdictional Immunities", "International Jurisdictions", "International Law for the Environment", "Responsibility of States", "Legal Regime of Natural Resources" and "The Law of International Aquifers". In 2010, she retired from the Ministry of Foreign Affairs of Argentina, where she was Director and Coordinator of the La Plata Basin office (1984–2010). Professor Del Castillo-Laborde is member and at present Secretary-General (2011–2014) of the Academy for Environmental Sciences of Argentina. She is also a member of the UNESCO Group of Experts on International Aquifers (ISARM). She is a long-time member of the International Law Association (ILA) and the American Society of International Law (ASIL) where she is at present the UN21 Interest Group chair (2012–2014). Additionally, Professor del Castillo-Laborde is member of the European Society of International Law (ESIL), Board Member of the International Association for Water Law (AIDA) and full member of the Argentine Council for International Relations of Argentina (CARI), where she chairs the Malvinas Islands and South Atlantic Affairs Committee. At IWRA she served as Secretary-General (2007–2009) and Scientific Committee member (2009–2011).



**Ngai Weng CHAN (Malaysia)** is Professor of Physical Geography at the Universiti Sains Malaysia. He has a BA in Geography (Hons) and MA in Climatology & Meteorology from the University of Malaya and a PhD in Flood Hazard Management from Middlesex University (UK). His areas of interest are hydrology, climatology, water resources management, environmental hazards management and environmental humanities. He served as Director on the Executive Board of IWRA from 2010–2012. He is currently Vice-Chair of the Malaysian Water Partnership and President of Water Watch Penang. He was the winner of the Asia Water Management Excellence Awards 2010 in the Individual Category (National). He was a Fulbright Scholar and taught at Memphis University (USA) from 2000–2001 and Visiting Professor at the Asian Institute of Technology (Thailand) from 2006–2007.



**James E. NICKUM (Japan)** with a Ph.D. from the University of California (Berkeley), is currently Secretary General and has served as Editor-in-Chief of Water International since 2007. In these roles, he has engaged in activities such as constitutional reform, expanding collaborative publication, and generational handover. He is a widely published institutional economist specialising in various facets of water and environmental governance, especially but not exclusively in China, which he visited for the first time in 1974 on a delegation with Ven Te Chow.

He has worked at Cornell, Winrock International (Beijing), the East-West Center, and the University of Tokyo, among others.

## IWRA Executive Board 2013-2015

### TREASURER



**Gabriel ECKSTEIN (USA)** is Professor of Law at Texas Wesleyan University in Fort Worth, Texas. He specializes in international and U.S. water and environmental law issues and has written and worked extensively in these areas. He has served as an expert advisor to various organizations, including UNESCO, UN-FAO, US Agency for International Development, World Commission on Dams, Organization of American States, and various local water entities in the United States. He also is the founder of the Internet-based International Water Law Project at [www.InternationalWaterLaw.org](http://www.InternationalWaterLaw.org), and serves on the Executive Council of the International Association for Water Law. Professor Eckstein served as IWRA Treasurer from 2010–2012.

### CHAIR, AWARDS COMMITTEE



**Giuseppe ROSSI (Italy)**, graduate in Civil Engineering, has been Professor of Hydrology and Water Resources at the College of Engineering at the University of Catania, Italy; and visiting scientist at the Colorado State University, Fort Collins (USA) and at the Universidad Politecnica de Valencia, Spain. Main fields of his scientific research include: stochastic hydrology, water resources system management, drought analysis and management. He has been coordinator of several national and international projects on drought analysis, monitoring and management. He is author of more than 170 scientific papers and editor or author of 10 books. He served as Vice-President of the IWRA for the 2010–2012 period.

### CHAIR, PUBLICATIONS COMMITTEE



**Raya Marina STEPHAN (France)** is a lawyer, expert in water law, and an international consultant. She collaborates regularly with the International Hydrological Program of UNESCO on the groundwater resources programme, and with other organisations and institutions. The focus of her work is on shared water resources issues, mainly transboundary aquifers. She has numerous publications on these topics. While her professional field of expertise is water law related to groundwater and transboundary aquifers, her personal interest in the legal issues goes to water law and international water law in general, with its historical aspects, and with a focus on the Middle East.

### CHAIR, MEMBERSHIP COMMITTEE



**Paula SILVA (Mexico)** is a Hydraulic Engineer graduated from the International Hydraulic Institute in The Netherlands. She has worked with small and large-scale irrigation systems in Mexico, as a researcher for the International Water Management Institute, as a rural development specialist with the Jalisco state government and as consultant for the World Bank, the FAO and the Mexican Institute of Water Technology. She currently works in the USA for CH2M HILL, an international engineering consulting firm, in the Water Business Group working on a wide range of water resources management and climate variability projects using hydrodynamic modelling tools.

## IWRA Executive Board 2013-2015

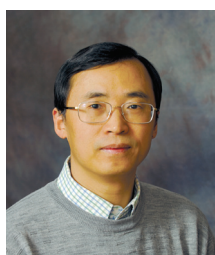
### DIRECTORS



**Emmanuel M. AKPABIO (Nigeria)** (BSc-1st Class, Msc, and PhD) lectures in the Department of Geography and Regional Planning at the University of Uyo, Nigeria. He is a former Commonwealth split-site doctoral scholar, Lancaster (UK) and Uyo (Nigeria) (2004–2006) and a one-time British Academy Visiting Fellow to Newcastle University (UK–2008). He is currently Alexander von Humboldt Fellow and Senior Researcher, Zentrum Für Entwicklungsforschung, Universität Bonn, Germany. He has a broad research interest in Environment and Natural Resources Management, with specific interest in water resources management including water and sanitation in developing countries. He has published extensively in highly refereed Journals.



**Henning BJORN LUND (Australia)** has been at the University of South Australia for more than 20 years, since 2011 as an adjunct professor. Since 2005, he has also been a Canada Research Chair in Water Policy and Management at the University of Lethbridge. He has extensive experience in managing large research projects and his work has been widely used by governments and international organisations. Prior to starting his academic career, Henning was involved in the management of educational institutions, businesses, tropical farming operations and a development aid organisation, serving in various capacities such as board member, chairman and executive director. Henning offers a unique blend of experiences crossing academia, industry and the NGO sector.



**Ximing CAI (USA)** is Associate Professor in the Department of Civil and Environmental Engineering at the University of Illinois at Urbana-Champaign, Ven Te Chow Faculty Scholar in Water Resources. He holds a Ph.D. in Environmental and Water Resources Engineering from the University of Texas at Austin (1999). He has worked as Postdoctoral Fellow and joint Research Fellow at International Food Policy Research Institute and International Water Management Institute. His current research areas include water-energy system analysis and river basin management using integrated hydrologiceconomic modelling tools. He has been involved in numerous studies including global water-food analysis and river basin management analysis in over fifteen major basins around in the world. He is a founding researcher of the Water and Livelihood Initiatives in the Middle-East.

Currently he works as model advisor for the agricultural and water modelling study in the Nile River Basin for the project supported by the World Bank and Nile Basin Initiatives.

## IWRA Executive Board 2013-2015

### DIRECTORS



**Naim HAIE (Portugal)** is a Senior Associate Professor in water resources and environment at the University of Minho. He obtained his PhD from Utah State University, USA. He has been involved in projects in Asia, Americas and Europe. His team was actively involved in the final approval of the European Union (EU) Water Framework Directive in 2000 during the Portuguese EU Presidency. He was the first to develop a hydrodynamic model of (surged) irrigation using an Eulerian system. Recently, he has developed, in collaboration with a prestigious US company, innovative efficiency indicators based on water balance that integrate quantity, quality, beneficial uses, and climate descriptors such as precipitation and temperature at various levels with stakeholder involvement. His research interests include water resources management, efficiency and beneficial including ethical aspects of water systems, and adaptation to uncertainties.



**Kun-Yeun HAN (Korea)** is a professor at Kyungpook National University (located in Daegu) since 1984. His research area includes integrated water management and watershed modeling. He is a Director of the "Research Center of Flood Defense Technology for Next Generation". He is now a Vice-President of the Korea Water Resources Association and the Korean Federation of Water Science and Technology Society respectively. He is working as a member of the Local Board of Directors of the 7<sup>th</sup> World Water Forum, which will be held in Daegu, Korea in 2015.



**V.K. KANJLIA (India)** is the Member Secretary of the Indian Geographical Committee of IWRA and the Secretary of the Central Board of Irrigation & Power (CBIP), one of the oldest organisations in India, established in 1927. CBIP is the Secretariat of the Indian Geographical Committee of IWRA, in addition to the Secretariats of the Indian Chapters/National Groups of ICOLD ITA, ISRM, IGS, and New Delhi Centre for the World Water Council. He is the Secretary General of all these Indian Chapters/National Groups and has been involved in all the aspects relating to development of Hydropower Projects.



**Patrick LAVARDE (France)** is senior Advisor Director at the French Ministry for Ecology and Sustainable Development. From 2007 to 2012, he was Director General of ONEMA, the French National Agency for Water and Aquatic Environments, engaged in water research coordination, national monitoring of water bodies, regulation and enforcement, technical support to stakeholders. From 1998 to 2007, he was the Director general of CEMAGREF, a French national research institution in environmental sciences, one of the Europe's leading institutes on freshwater issues. Deeply involved in the preparation of the 6<sup>th</sup> World Water Forum, he has also chaired the Partnership for European Environmental Research.

## IWRA Executive Board 2013-2015

### DIRECTORS



**Yuanyuan LI (China)** is Vice-President and Professor of the General Institute of Water Resources and Hydropower Planning and Design at the Ministry of Water Resources of China, which is the most important technical supporting agency to the national water resources development and protection planning, policy formulation and management. His research fields include water resources mechanisms, human activities-water resources interaction, water resources system analysis and planning, water ecology and environment protection etc. He has led many nationwide water resources surveys, strategy studies, comprehensive water resources planning, policies formulation and management activities as well as international programmes and cooperation. He has widely published books and papers about water related topics.



**Mark REDWOOD (Canada)** is the Programme Leader of the Climate Change and Water initiative at the International Development Research Centre (IDRC). A graduate of McGill University, he is an urban planner by training, and has worked extensively on water and sanitation, wastewater treatment and use, and water resources management. He now leads a multi-disciplinary team of researchers supporting over 60 projects across the globe.



**Kaoru TAKARA (Japan)** is Professor at Kyoto University. He has worked on hydrology, water resources engineering and water-related disaster issues. He produced 28 Doctors of Engineering (at Kyoto University) during his professorship since 1998, including 18 persons from Asian, African and South American countries. He has made significant international contributions to UNESCO-IHP, APHW, and in a number of scientific journals.



## LATEST ACTIVITIES

### HydroPredict2012

This event was jointly co-organised in Vienna, Austria from 24 to 27 September 2012 by the Universität für Bodenkultur Wien (BOKU), University of Natural Resources and Life Sciences, the Vienna International Commission on Groundwater (ICGW) of the International Association of Hydrological Sciences (IAHS) and Charles University of Prague. IWRA was an institutional sponsor of this event and Prof. Viktor Dukhovny, Chair of the Award Committee of the IWRA Executive Board, participated as a member of the Scientific Advisory Committee of the event, on behalf of IWRA. <http://web.natur.cuni.cz/hydropredict2012>



### 5<sup>th</sup> International Yellow River Forum

The event was organised by the Yellow River Commission in Zhengzhou, China on 25-28 September 2012 and the main theme of the conference was «Ensuring water right of the river's demand and healthy river basin maintenance». IWRA was an institutional sponsor of the event and the lead organisation on one of five thematic streams: «Climate Change and Adaptive Management». This involved the organisation of 8 sessions and 35 presentations. It was attended by President Jun Xia; Secretary General Prof. James Nickum; Board Director, Prof. Shi Guoqing; and Executive Director, Tom Soo. During the event a meeting was held with the Minister of Water Resources of China.

More information can be found at: <http://www.riverforum.cn/>



### 15<sup>th</sup> International River Symposium

The 15<sup>th</sup> International River Symposium was held in Melbourne, Australia from 8 to 11 October 2012.

This year's event theme was «Rivers in a Rapidly Urbanising World» and explored the intricately linked pressures on rivers and waterways as the world's urban population continues to grow and expand.

You can consult the proceedings of the Symposium at the link below:

<http://riversymposium.com/media/proceedings/2012-2/>

### Water issues/challenges and Climate Change Adaptation in Africa

This International Conference was organised from 24 to 28 October 2012 in Bangui, Central African Republic. The main goal of the event was “How does one perceive the impacts of water resources shrinkage on human activities at local, basins, national or regional scales? How could one address these at various levels?”

The summary of the congress and the book of abstracts (in French) can be downloaded following these links:

[http://www.iwra.org/doc/Colloque\\_Bangui\\_2012.pdf](http://www.iwra.org/doc/Colloque_Bangui_2012.pdf)

[http://www.iwra.org/doc/Book\\_Abstracts\\_Bangui\\_2012.pdf](http://www.iwra.org/doc/Book_Abstracts_Bangui_2012.pdf)

### Symposium on Securing Water Supplies for the Future

Gabriel Eckstein, IWRA Treasurer and Professor of Law at Texas Wesleyan University in Fort Worth Texas, chaired a symposium on «Securing Water Supplies for the Future: Risks, Challenges & Opportunities» on 9 November 2012. Topics included: the legal versus physical availability of water; mechanisms for insuring and ensuring water rights and supplies; the role of the market in managing freshwater resources; investment risks related to water-dependent projects; the impact of environmental regulations on water rights and supplies; interstate water conflicts; and state water planning mechanisms for securing water supplies.

Video podcasts of the entire symposium can be viewed by visiting the symposium website at:

<http://bit.ly/TWUWaterLaw>



### General Assembly of the World Water Council in Marseille, France

The General Assembly was organised 18-19 November 2012 and the new Board of Governors of the World Water Council was elected for a three years period. IWRA was re-elected as member of the Board of Governors with President Jun Xia as our representative. In addition, Prof. Dogan Altinbilek, IWRA President-elect, was elected as Vice-President of the World Water Council, and Prof. Benedito Braga, a former IWRA President, was elected as the new President of the World Water Council. New IWRA Board Members for the 2013-2015 period, Patrick Lavarde (France) and Kun-Yuen Han (Korea) were also elected to the Board of Governors of the World Water Council. A warm congratulations to all.

## LATEST ACTIVITIES

### Seminar on groundwater exploitation and protection in coastal urban areas

This event was organised in Qingdao, China on 6-7 December 2012. The seminar is the first collaborative event that IWRA is organising in partnership with the Qingdao Hydrology and Water Resources Survey Bureau within the framework of the agreement signed between the two organisations in 2011. The event focused on the theme of groundwater resources in the context of coastal urban areas and specifically addressed: Groundwater monitoring; Seawater intrusion and the management of coastal aquifers; and international cooperation.

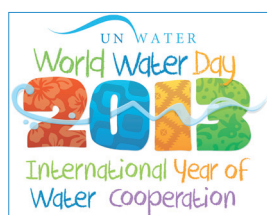
### IWRA Board meeting

The last IWRA Board meeting of the current 2010-2012 Executive Board members was organised on 7 December 2012 in Qingdao, China.

## UPCOMING EVENTS

### IWRA Board meeting

The newly elected Board members for the 2013-2015 period, will hold their first meeting from 3 to 4 February 2012 in Montpellier, France.



### World Water Day 2013

The World Water Day, on 22 March, will share in 2013 the topic of Water Cooperation.

The information about activities for this day is regularly updated on the official website at:

<http://www.unwater.org/watercooperation2013/>

## AGREEMENT WITH OOSKA NEWS

# OOSKAnews

Water news. Water knowledge. Water insight.

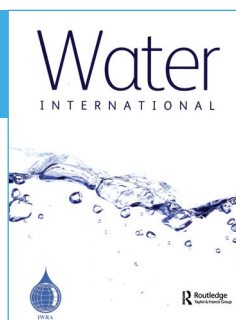
IWRA signed on 16 October 2012 a Memorandum of Understanding with OOSKA news to attempt to establish an International Academy of Water Media to inform, raise awareness amount, educate and engage media participants (and, through this, broader society and policy-makers), in vital water issues. The academy is a "Water '101' for Journalists", ie a learning program to educate and inform media professionals about water issues and thus improve frequency and quality of reportage.



### 11<sup>th</sup> SILUSBA

The 11<sup>th</sup> edition of the Symposium of Hydraulic and Water Resources for Portuguese Speaking Countries (SILUSBA) will be organised in Mozambique (Southeast Africa) on May 2013.

For more information, please consult the official blog: <http://silusba2.wordpress.com/>



## PUBLICATIONS

### WATER INTERNATIONAL VOLUME 37, ISSUE 7, 2012

#### Editorial

*Philippus Wester*

#### IWRA XIV World Water Congress Keynote Speeches (part 1)

- Introduction

*James E. Nickum & Philippus Wester*

- How much more water do we need?

*David Molden*

- Looking to the future: some questions and reflections on water resources management

*José Almir Cirilo*

- Groundwater management: looking to the future so there is a future

*Jennifer McKay*

#### Articles: Rattling Conceptual Cages: Bridges, Pies, Visions and Deep Waters

- Bridging parallel discourses of Integrated Water Resources Management (IWRM): institutional and political challenges in developing and developed countries

*Ross Beveridge & Jan Monsees*

- Losing the watershed focus: a look at complex community-managed irrigation systems in Bolivia

*Cecilia Saldías, Rutgerd Boelens, Kai Wegerich & Stijn Speelman*

- Water governance, ecosystems and sustainability: a review of progress in South Africa

*Nevil Quinn*

- The deep waters of land reform: land, water and conservation area claims in Limpopo Province, Olifants Basin, South Africa

*Janwillem Liebrand, Margreet Z. Zwarteveen, Philippus Wester & Barbara van Koppen*

#### Water Services and Unwasted Wastewater

- Impacts and implications of mobile water payments in East Africa

*Tim Foster, Rob Hope, Mike Thomas, Ilana Cohen, Aaron Krolikowski & Cliff Nyaga*

- Water in the village: prevailing notions and conflicting messages in Akwa Ibom State, Nigeria

*Emmanuel M. Akpabio*

- Privatization and water service provision in the United States: a recommendation for expanded oversight and the development and adoption of best practices

*Sabrina A. Cotta*

- Promoting sustainable sanitation through wastewater-fed aquaculture: a case study from Ghana

*Asantewa Tenkorang, Mark Yeboah-Agyepong, Richard Buamah, Nelson W. Agbo, Rabia Chaudhry & Ashley Murray*

- A participatory modelling approach to define farm-scale effects of reclaimed wastewater irrigation in the Lockyer Valley, Australia

*Jonna D. van Opstal, Frans P. Huibers & Richard G. Cresswell*

- Measuring the economic benefits of the Youngsan River Restoration Project in Kwangju, Korea, using contingent valuation

*Joo-Suk Lee*

- Impact of agriculture activities on a coastal aquifer in Tunisia and options for a better water management

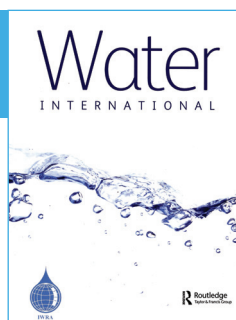
*F. El Ayni, S. Cherif, A. Jrad & M. Trabelsi-Ayadi*

#### IWRA business

- IWRA Executive Board 2013–2015

#### Miscellaneous

- Editorial board



## PUBLICATIONS

### WATER INTERNATIONAL VOLUME 37, ISSUE 6, 2012

#### Special Issue The future of adaptive Water Management: Law and Governance: Select papers from the XIV World Water Congress

- The future of adaptive water management: law and governance

*Stefano Burchi, Ariella D'Andrea, Gabriel Eckstein & Marcella Nanni*

- A comparative review of contemporary water resources legislation: trends, developments and an agenda for reform (article in free-access)

*Stefano Burchi*

- Legislation as a tool in support of adaptive water management in response to climate change

*Marcella Nanni*

- The right to water in a transboundary context: emergence of seminal trends

*Christina Leeb*

- The human right to water as a creature of global administrative law

*Owen McIntyre*

- Are we killing the rain? Meditations on the water cycle and, more particularly, on bioprecipitation

*Jane Maslow Cohen*

- Legal pluralism and customary water resources management in Guatemala

*Ariella D'Andrea*

- Why the Western United States' prior appropriation water rights system should weather climate variability

*Jonathan R. Schutz*

### WATER INTERNATIONAL VOLUME 37, ISSUE 5, 2012

#### Special Issue Climate Change Impact on Water Security & Adaptive Management in China

##### Introduction

Guest editor's introduction

*Jun Xia*

##### Articles

- Drawing down our resources: estimating the total appropriation of water in China (article in free access)

*Jianting Cao, Yuanyuan Li, Fuxin Shen, Yiwei Chen & Jun Xia*

- Water resources vulnerability and adaptive management in the Huang, Huai and Hai river basins of China

*Jun Xia, Bing Qiu & Yuanyuan Li*

- Analysis of streamflow and sediment flux changes in the Yangtze River basin

*Guangju Zhao, Xingmin Mu, Buda Su, Peng Tian, Fei Wang, Jianqing Zhai & Ming Xiong*

- Impacts of climate change on water resources in the Luan River basin in North China

*Sidong Zeng, Jun Xia, Dunxian She, Hong Du & Liping Zhang*

- Climate change impacts on hydrological processes in the water source area of the Middle Route of the South-to-North Water Diversion Project

*Zhang Liping, Qin Linlin, Yang Zhen, Xia Jun & Zeng Sidong*

- Hydrologic response to climate variability and human activities in the Chao River catchment near Beijing

*Chesheng Zhan, Yongqiang Zhang & Jun Xia*

- Change in global radiation and its impacts on the water cycle in the Yangtze River basin from 1961 to 2010

*Dan Zhang, Changming Liu & Xiaomang Liu*

## OTHER PUBLICATIONS

### Handbook of the WaRM-In project (Analysing institutional and political contexts of water resources management projects)

This project was funded by the German Ministry of Education and Research (BMBF).

**The English version of the handbook is accessible at the link below:**

<http://www.irs-net.de/download/publikationen/Warmln-en.pdf>

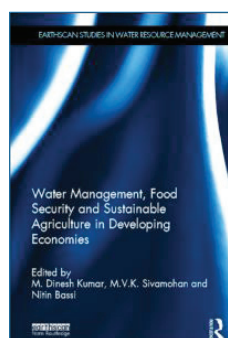
### Water Services Management and Governance Lessons for a Sustainable Future

Edited by *Tapio Katko, Petri S. Juuti, and Klaas Schwartz*

«This welcome addition to the literature on water governance is a timely, thorough, and practical set of assessments of management challenges facing water service providers around the world.»

**You can purchase this book following the link below:**

<http://www.iwapublishing.com/template.cfm?name=isbn9781780400228>



### Water Management, Food Security and Sustainable Agriculture in Developing Economies

Edited by *M. Dinesh Kumar, M.V.K. Sivamohan, Nitin Bassi*

This book addresses strategies for food security and sustainable agriculture in developing economies. The book focuses primarily on India, a

fast developing economy, whose natural resource base comprising land and water supporting agricultural production is not only under enormous stress, but also complex and not amenable to a uniform strategy. It critically reviews issues which continue to dominate the debate on water management for agricultural and food production.

**More information on the publisher page:**

<http://www.routledge.com/books/details/9780415624077>

### Award book of Dr Dinesh Kumar

It gives us immense pleasure in communicating to you that the book by Dr. M. Dinesh Kumar (with contribution from Dr. OP Singh) entitled “Ground water Management in India: Physical, Institutional and Policy Alternatives” published by Sage, New Delhi in 2007 has won Dr. S.R. Sen Biennial Prize Award for the best book in Agricultural Economics and Rural Development, instituted by Indian Society of Agricultural Economics for the years 2007-2008. The award was given to Dr. M. Dinesh Kumar, Executive Director of IRAP and IWRA member at the awards ceremony held at the 72<sup>nd</sup> annual conference of the Society at Banaras Hindu University, Varanasi on 17 November 2012.

### Article from a member:

#### Macro, Meso and Micro Efficiencies in Water Resources Management: a New Framework for Sefficiency (Sustainable Efficiency) by *Dr. Naim Haie*

Efficiency has always been an important performance indicator of water systems, and much more so these years. Many documents, papers and hot debates are produced between those who defend efficiency and those who promote its abandoning. Both use non-systemic expressions, mismatched terminologies, and fragmented methods while holding fast to their “turfs”. A new paradigm is needed that can integrate the various descriptors and variables of a water system both from within the Water Box and out of it. However their integration should promote Sefficiency, because lack of systemic performance indicators will render IWRM more difficult to evaluate and hence less reliable.

After years and finally through a 6-person anonymous reviewer process, the initial work for a new framework (equation) is published in the April 2012 issue of JAWRA ([www.awra.org/jawra](http://www.awra.org/jawra)). It systemically uses the law of the conservation of mass (water balance) as the basis to integrate water flow paths with other crucial issues such as usefulness (quality and benefits), level of analysis, and climate (e.g., temperature and precipitation), while promoting active stakeholder involvement. It seems that the work is opening doors to roads less traveled.

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