



# IWRA *Update*

## Newsletter of International Water Resources Association

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### LETTER FROM THE PRESIDENT



**Friends and Colleagues,  
 Moving headlong into 2012,  
 this edition of our newsletter  
 highlights the increasing  
 number and quality of the  
 activities and initiatives that  
 IWRA will be involved in over  
 the year.**

The 6<sup>TH</sup> World Water Forum will be held in Marseille, France from 12-17 March 2012. IWRA has a long tradition of working closely with the Forum's organiser, the World Water Council; and this Forum is no exception. IWRA is organising a High Level Panel for the theme, «Enabling Environments» at the 6th World Water Forum, entitled «Science, Technology and Policy for Better Water Governance». The panel has been earmarked as a «high exposure event» at the Forum and is supported by all of the main Forum officers. Also, IWRA is coordinating two key Target sessions on Water Accounting and Water Quality on the theme p.2.1 on balancing multiple use of water through IWRM. As President of IWRA, I have been invited to attend several key panel meetings, such as WWAP panel, GWSP Panel during the 6<sup>TH</sup> WWF. I encourage you to participate in these sessions and participate in the process. In this newsletter, Benedito Braga (past IWRA President and current President of the International Forum Committee) has kindly agreed to share with us his perspectives in a short interview.

Other upcoming events in 2012 with active IWRA involvement include Asia2012 in Thailand – a conference on water resources and renewable energy development in Asia; and Hydropredict – Predictions for Hydrology, Ecology and Water Resources Management in Austria; 2012's Singapore International Water Week (SIWW), the 5<sup>th</sup> International Yellow River Forum on October and others.

Seven editions of Water International are earmarked for 2012 with several special editions on Water Governance: The Public-Private Debate; Climate Change Impact on Water Security and Adaptive Management in China; The Use of Models in Policy (in partnership with IWMI); and a selection of law papers from the XIV<sup>TH</sup> IWRA World Water Congress (in partnership with AIDA). A special book on « Water, Food and Poverty in River Basins » will also be published in partnership with the CGIAR. IWRA is also working closely with the Indian Committee to publish and IWRA (India) Journal.

Various other activities are being developed and will be unveiled in due course over the year. 2012 promises to be a fruitful and active year for IWRA!

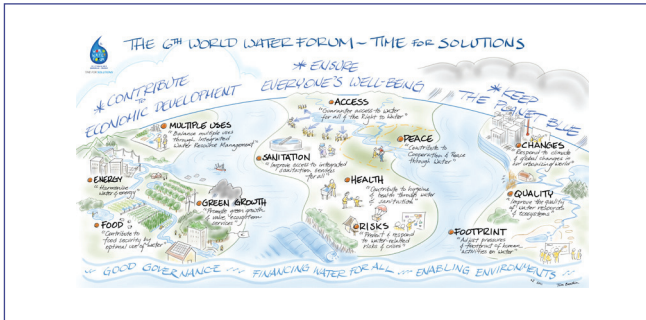
It is hard to believe how fast time has flown by since the current Executive Board and I started our mandate in 2010. Many achievements have been realised and many actions remain to be completed this year. However we need to start planning for a smooth transition to next year's board, I would thus like to make a kind reminder that nominations for positions on the IWRA Executive Board for 2013-2015. Nominations are open until 17 March.

Anyhow, I do believe more elite members and new blood will join the Board. IWRA will make more visible impacts and help to ensure a water secure world for the future.

**Jun Xia**  
**IWRA President**



## IWRA at the 6<sup>th</sup> WORLD WATER FORUM



The World Water Forum is the world's largest triennial meeting around water. The goal of this 6<sup>th</sup> edition in Marseille, entitled "Time for solutions", is to tackle the challenges our world is facing and to bring water high on all political agenda. IWRA was one of the founders and is currently member of the Board of Governors of the World Water Council, who has organised the World Water Forum since 1997.

At this year's World Water Forum in Marseille, IWRA will be leading two technical sessions on:

### 2.1.3 Which water quality for which use?

Coordinated by Executive Director Tom SOO

Co-coordinated with EUREAU

This session is scheduled on:

**Tuesday 13 March on 14:30-16:30**

Room PC4 - Patio 2 - Palais des Congrès (Rez de Jardin Level)

*The current and future challenges imposed by global changes (anthropogenic, natural and climate) that lead to deteriorating quality of water bodies and numerous resource imbalances demand an ever "smarter" approach through Integrated Water Resources Management (IWRM). This approach requires more efficient management of water that takes into account the quantity and the quality of water needed for each use, with related resources, ecosystems, social values and other considerations.*

*Water destined for drinking, irrigation or bathing requires different qualities. Today, good water quality is crucial for the environment. It is important to distinguish between the water resources that are available and the water quality required, i.e. "which water resource and which quality for which use?" Given the increasing tension between the*

*different usages of the limited water resources, one major problem is defining optimal resources management based on the specific requirements of each use. Logically, this would imply protecting natural resources and reserving water of naturally good quality for the most demanding uses (such as drinking water). Today however, this is not necessarily the case. It is important to provide guidelines to achieve this dual objective. This means indentifying the decision criteria according to the quality of water required for each use.*

*The session brings together efforts from various parties: regulators, practitioners, researchers and other stakeholders. The session will highlight existing water quality guidelines and processes, present different perspectives (technical, legal, economic, institutional) as well as various case studies from around the world.*

### 2.1.7 Water accounting & management for balancing multiple uses of water.

Coordinated by President Jun XIA

This session is scheduled on:

**Wednesday 14 March on 11:00-13:00**

Room PC9 - Goude 1 - Palais des Congrès (Level 1)

*Urgent challenges to water resources management for the next decade and beyond include water & health (such as drinking water), water & food, water & nature, water & energy, water & trans-boundary cooperation and climate change & adaptation, all of which are related to water security in regional & global scales. Improving water supply & demand managements requires dealing with a range of policy, institutional, and technical issues. Balancing multiple use of water is one of the keys for Integrated Water Resources Management (IWRM).*

*Multiple use of water focusses on ensuring efficient, equitable, and sustainable water use; and on reducing poverty and improving the well-being of the community. Water policies need to take into account all uses and users of water. There are many challenges on how to cope with the rising competition for water between multiple kinds of users and allocate the water in ways that are equitable, efficient and sustainable. IWRM represents a basic approach to balancing multiple uses of water.*

*The session aims to identify, disseminate and share methods and means for efficient water systems operations. It will focus on Water Accounting to accurately assess all the uses and users of water by quantifying the different uses of water and providing a better understanding of the relative quantities used by different sectors. Existing case studies of water accounting under conditions where there are multiple uses give an indication of the performance of water authorities, water service professionals and water users within the IWRM framework.*

## FOLLOW IWRA DURING THE WORLD WATER FORUM

	MONDAY 12	TUESDAY 13	WEDNESDAY 14	THURSDAY 15	FRIDAY 16	SATURDAY 17
AM			11:00-13:00 <b>SESSION 2.1.7</b> Water accounting	IWRA Board meeting	IWRA Members informal meeting at Taylor&Francis Stand	
PM	14:30-15:00 Launch ceremony WWDR4  17:00-19:00 <b>SESSION 2.1</b> Intro: balancing multiple uses	14:30-16:30 <b>SESSION 2.1.3</b> Which water quality for which use?	17:00-19:00 <b>HIGH LEVEL PANEL</b> Water, Science and Policy	14:30-15:30 <b>SESSION 2.1</b> Synthesis on balancing multiple uses		

**High Level Panel on «Science, Technology and Policy for Better Water Governance». This session is scheduled on Wednesday 14 March on 17:00-19:00**

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*This High Level Panel brings together leading political personalities and representatives of international scientific and technical NGO's from around the world. The panel will discuss the roles of science, technology and policy in enabling the environment for good water governance.*

*The world is facing ever increasing and diversifying challenges to manage its limited water resources and ensure good water governance. Anthropogenic pressures due to an urbanising and growing population will impact on water resources and its fair use; natural changes and climate change will exacerbate an already delicate and complex situation.*

*While it is clear that the implementation of water policy and the application of water management practices are at the forefront of addressing the above challenges; scientific knowledge and technological progress can and must provide the objective input that is needed to enable sound policy making, integrated governance and effective cross-sectoral management. This concertation needs to be done at the local, national and international level. The panel will also discuss the current state and future of mechanisms, interfaces, processes and frameworks that enable successful exchange between science, technology and policy.*

All IWRA members are encouraged to come to the IWRA sessions. The programme of the Forum is available on the official website at:  
[www.worldwaterforum6.org/en/programme/](http://www.worldwaterforum6.org/en/programme/)

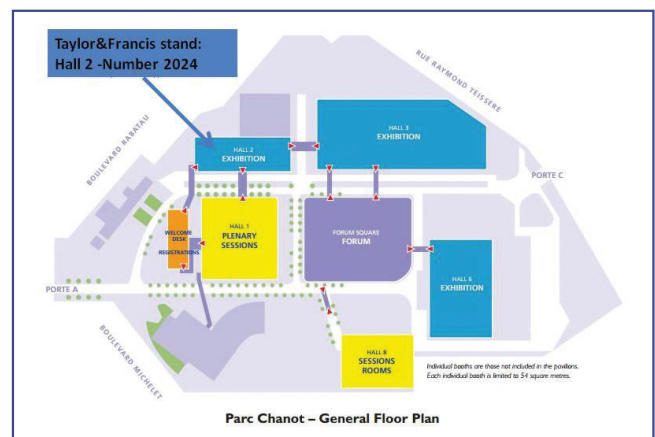
## IWRA AT TAYLOR & FRANCIS STAND



During the World Water Forum, we invite all IWRA members to go to Taylor&Francis stand, number 2024 in Exhibition Hall 2 (see location in the above map).

**We will organise an informal meeting there on:**

**Friday 16 March at 10:30.** We invite you to meet other members, talk with our publishers and with our editors.



## IWRA BOARD MEETING

IWRA Executive Board will hold its 5<sup>th</sup> board meeting during the 6<sup>th</sup> World Water Forum in Marseille, France on **Thursday 15 March morning.**

## UN Water - 4<sup>th</sup> UNITED NATIONS DEVELOPMENT REPORT LAUNCH CEREMONY

As a partner of UN Water, IWRA and its members are invited to the launch ceremony of the fourth edition of the United Nations Development Report, “Managing Water under Uncertainty and Risk”.

**This event is sheduled on Monday 12 March at 14:30.**

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## IWRA EXECUTIVE BOARD ELECTIONS

### AGENDA

#### ⇒ To 17 March 2012: **NOMINATIONS PERIOD**

Any IWRA member in good standing is invited to submit nominations, including self-nominations, to the Chair of the IWRA Nominations Committee, Prof. Jun Xia (at: [xiaj@ignrr.ac.cn](mailto:xiaj@ignrr.ac.cn)).

#### ⇒ 23 March 2012

A list of nominees is completed by the Nominations Committee and submitted for review and approval by the Executive Board. The Board shall complete its deliberations, which may be made by e-mail and by simple majority of those casting votes, within 8 days.

#### ⇒ 2 April 2012

Using the Board-approved list of candidates, the Executive Director, acting on behalf of the Secretary-General, mails or e-mails invitation letters to the nominees in specific categories to confirm their acceptance of the nomination and to ask for an updated biographical note or vita from each nominee.

#### ⇒ At least 120 days before the election date: **ANNOUNCEMENT OF CANDIDATES**

The list of candidates is announced on the IWRA homepage and in the IWRA Newsletter, and then in Water International Members are given 60 days after publication of the names of candidates to send in petitions to the Secretary-General to add additional candidates (each requires 50 member signatures with no more than 10 from one country).

#### ⇒ No later than 60 Days before the election date: **MAILING OF ELECTION BALLOTS**

Election ballots are sent out to the membership by the Executive Director. Members have the 60 days to return the ballots by e-mail.

#### ⇒ Late August or early September 2012 (depending on WI publication Schedule): **ELECTION DATE**

All votes are counted under the supervision of the Executive Board and new officers notified. Results are published in the following IWRA Newsletter and Water International.

#### ⇒ 1 January 2013

New IWRA Officers and Directors assume all responsibilities in the Executive Board.

## NEWS news news news news news

### PROF. DAVID BROOKS, HONORIS CAUSA FROM THE UNIVERSITY OF WATERLOO



Prof. David Brooks was awarded by the honorary Doctorate of Environmental Studies honoris causa from the University of Waterloo, Canada for his «contributions to water and energy soft path approaches, and his passionate devotion to furthering a vision of humans living in a sustainable relationship with the planet». He will address the graduating class at the University of Waterloo on 13 June 2012.

### IWRA MEMBER DIRECTORY

Last 6 February, the IWRA Executive Office launched the online member directory on the website. This new service allows members to directly contact each other and present their activities and publications.

From their online member space, members can consult the directory and edit the information to be included.

We encourage all members to include their profiles in the directory.

### IWRA IN THE SOCIAL MEDIA

Join IWRA in social media and access the latest information, events and publications. We are currently involved in:

- **Facebook** at

<http://www.facebook.com/pages/International-Water-Resources-Association-IWRA/166733240066387>

- **Twitter** at

[https://twitter.com/#!/iwra\\_water](https://twitter.com/#!/iwra_water)

- **Four Square** at

[https://fr.foursquare.com/iwra\\_water](https://fr.foursquare.com/iwra_water)

- **Viadeo** at

<http://t.co/Cw8B6IN4>



## VOICE FROM the Chair of the China National Committee

**At the beginning of 2011, the Central Committee of the Chinese Communist Party and the State Council promulgated the "Decision on Acceleration of Water Conservancy Reform and Development" as the N<sup>o</sup>. 1 Document of the Central Committee of the Chinese Communist Party in 2011, which brings a golden opportunity to water conservancy in China.**

*As an important international organisation grounded in China, "how to contribute to China water conservancy and water resources management in the next 10 and more years" becomes a thought-provoking problem of China National Committee of IWRA.*

*Since the establishment in 1982, China National Committee of IWRA has been a water institution for gathering officials from water administration department as Ministry of Water Resources and other relative ministries, academic researchers, engineering technicians and water management personnel. In the coming years, we aim to play a key role in promoting water management practice, strategy study, academic exchanges, and capacity building on sustainable water resources management in China, and in establishing networking of water resources management in China to the world.*

*Last year, The XIV<sup>th</sup> IWRA World Water Congress was held in Porto de Galinhas, Brazil. We successfully organised a China Session as a Featured Event with the topic «Adaptive Water Resources Management Counter-measures under Changing Environment in China», which covered aspects of water resources development and protection, flood control and ecological protection. On this one and only national session, experts and government officials from China introduced main water construction achievements in China, the most stringent water resources management system, integrated river basin management as well as main water policies and measures to support national economic-social development under severe pressure of population, resources and environment. The China Delegation also assimilated advanced international experiences on integrated water resources management, especially on institution, water policy, spreading fundamental knowledge, green economic development and policy on water sustainable supporting capacity.*

*Recently, the China National Committee is in the process of electing new members. This activity will bring new blood and gain stronger ground to the organisation. I encourage all previous and fresh China members to continue contributing to the activities of China National Committee and IWRA. In this way, the China National Committee will be full of energy to play on the world stage in water resources management domains.*

Sincerely yours,

LI Yuanyuan

## UPCOMING EVENTS



### Hydrological Sciences at the 2012 European Geoscience Union

The 2012 European Geosciences Union (EGU) will be organised in Vienna from 22 to 27 April 2012. It will bring together geoscientists from all over the world into one meeting covering all disciplines of the Earth, Planetary and Space Sciences. The EGU appeals to young scientists to present their work and discuss their ideas with experts in all fields of geosciences. <http://meetings.copernicus.org/egu2012/>

The organisers would like to invite participants to attend the session on "Climate change and water infrastructure" co-organised by Dr. Maria Naranjo (Researcher at the Madrid Institute of Advanced Studies on Water, IMDEA-Water, Madrid, Spain); Dr. Cecilia Tortajada (past President of IWRA and Scientific Director of the International Centre on Water and Environment, Zaragoza, Spain); and Ms. Carla Arregoitia, ARRHER-Engineering, Mexico).

The objective of this session is to analyse the impacts on water infrastructure due to changing climatic conditions. Abstracts considering the operation, design and modification of water infrastructure are particularly welcomed.

**For more information, please contact Dr. Maria Naranjo, e-mail: [maria.naranjo@imdea.org](mailto:maria.naranjo@imdea.org)**



### ASIA 2012 Fourth International Conference on Water Resources and Renewable Energy Development in Asia

IWRA President, Jun Xia, on behalf of IWRA, will give a welcome address during the opening session. The Conference will take place on 26 and 27 March, in Chiang Mai, Thailand.

**For more information, please follow this link below:**  
[http://www.hydropower-dams.com/asia-2012.php?c\\_id=89](http://www.hydropower-dams.com/asia-2012.php?c_id=89)

### HydroPredict2012

This event will be 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 is an institutional sponsor of this event and Prof. Viktor Dukhovny, Chair of the Award Committee of the IWRA Executive Board, is a member of the Scientific Advisory Committee of the event, on behalf of IWRA.

<http://web.natur.cuni.cz/hydropredict2012>



## WATER INTERNATIONAL, VOLUME 37, ISSUE 1 (January 2012)

### List of articles

- Hydrochemistry and baseline values of major and trace elements in tropical surface waters of the Terengganu River (Malaysia),

*Khawar Sultan*

- Precipitation variability in the Yangtze River subbasins (this article is in free access for non-members)

*Heike Hartmann, Stefan Becker & Tong Jiang*

- Hydrological balance and application of the MedWater Model on Naxos Island,

*Evangelos Baltas, Maria Mimikou & Aikaterini Fragiskou*

- Development of hydrological tools using extreme rainfall events for Dhaka, Bangladesh,

*Faisal Ahammed & Guna Alankarage Hewa*

- Water productivity responses and adaptation to climate change in the lower Mekong basin,

*Mohammed Mainuddin, Mac Kirby & Chu Thai Hoanh*

- Caesium-137 and potassium-40 in selected oxbow lakes of the border Bug River more than 20 years after the Chernobyl accident,

*Elzbieta Krolak, Grazyna Golub & Katarzyna Barczak*



### PUBLICATIONS RELATED TO THE WORLD WATER DAY 2012

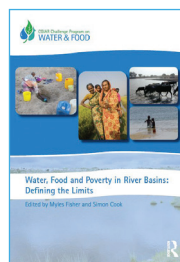
IWRA wishes to dedicate a special focus on the World Water Day 2012. We selected the following books and article references submitted by our members to disseminate information related to “Water and Food Security”, the theme of this year’s World Water Day.

A series of special issues of *Water International* (WI) co-edited with the CGIAR Challenge Program on Water and Food:

- **Water, Food and Poverty in River Basins (Part 1 Volume 35 - Issue 5 and Part 2 Volume 36 - Issue 1),**

- **Water, Food and Livelihoods in River Basins (Volume 34 - Issue 1).**

For more information about the 2012 World Water Day, please visit the official website at:  
<http://www.unwater.org/worldwaterday/>



In relation to these issues, please note that the two special issues of WI has recently been published in a book: “**Water, Food and Poverty in River Basins: Defining the limits**” edited by Myles Fisher and Simon Cook (and published by Taylor&Francis).

In addition, a special issue of Water International co-edited with the International Water Management Institute was published in 2011 about **Wastewater use in Agriculture: Economics, Risks and Opportunities (Volume 36 - Issue 4).**

“**Applying water soft path analysis in an agricultural region of Canada**” by *Sheila Forsyth* and *David B. Brooks*. This article was published in the November Issue of Water International (Volume 36 – Issue 7).

To access this article, please follow this link:

<http://www.tandfonline.com/doi/abs/10.1080/02508060.2011.628568>

“**Human Rights to Water in North Africa and the Middle East: What is New and What is Not; What is Important and What is Not**” by *David B. Brooks*. This article published in the International Journal of Water Resources Development (Volume 23, Issue 2, 2007) deals with water and food security in a different way by asserting that home gardens are a very efficient way to use water and produce food, and that in low-income communities they should be treated as one component of the human right to water.

“**Elevated Carbon Dioxide: Impacts on Soil and Plant Water Relations**” A book by *Prof. Kirkham*, from Kansas State University, dealing with the effects of elevated levels of carbon dioxide on soil and plant water relations. Is also cover how carbon dioxide increases yield:

For more information and to purchase this book, please follow this link: <http://www.crcpress.com/product/isbn/9781439855041>

“**A segurança alimentar em Africa. Novas soluções baseadas em filosofias e ferramentas de gestão ambiental para a sustentabilidade.**” By Ferreira AJD e Ferreira CMD – CERNAS.

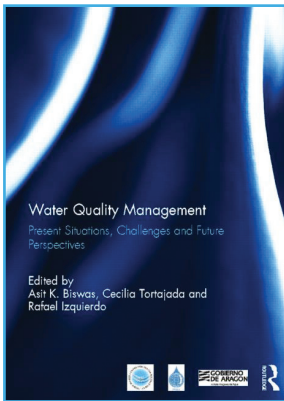
You can download this article in portuguese at:  
<https://sites.google.com/site/aulubango/aferreira>

“**Água, ética, segurança alimentar e sustentabilidade ambiental**” by *Demetrios Christofidis*.

This article in portuguese is available at:

<http://www.bvsde.paho.org/bvsacd/cd17/ageticsegu.pdf>

## OTHER PUBLICATIONS



**Water Quality Management: Present Situations, Challenges and Future Perspectives**, edited by Asit K. Biswas, Cecilia Tortajada and Rafael Izquierdo, Routledge, Abingdon and New York, 2012, 281 p.

This book is based on a workshop that was held in Zaragoza and co-sponsored by IWRA. The book is edited by Prof. Asit Biswas and

Prof. Cecilia Tortajada, IWRA former Presidents and Rafael Izquierdo, Director of the IWRA Executive Board.

The global attention in recent years has focused primarily on water quantity and allocation issues. Water quality has received significantly less attention than water quantity. Commendable progress has been made by the developed world to control point sources of pollution, but commensurate progress in reducing non-point sources has not been made. In the third world countries both point and non-point sources of pollution are becoming increasingly a serious concern. Already, nearly all water bodies in such countries near and around urban centres have been severely polluted, with very high health and environmental costs.

The book assesses the current status of water quality management in both developed and developing worlds, as well as analysing the effectiveness of economic instruments and legal and institutional frameworks to control water contamination. It outlines the importance of building up social and political awareness to reverse the trend of continuing water quality deterioration, which is likely to be a most challenging task in the coming years.

The book contains 16 authoritative papers by well-recognised international experts from different parts of the world. It covers water quality management from multi-disciplinary and multi-sectoral viewpoints, and includes assessments and case studies from different OECD countries as well as China, India, South Africa and Latin America. It also considers how water quality management could be financed. This must read book would be of direct interest to anyone working on water quality management anywhere in the world.

**Purchase this book at:**

<http://www.routledge.com/books/details/9780415688857/>

## MEMBER PERSPECTIVE

### 5 QUESTIONS WITH BENEDITO BRAGA

**IWRA takes a few moments to speak with the President of the International Forum Committee of the 6<sup>th</sup> World Water Forum.**

**What are the main differences between the World Water Forum compared to other international water events such as the IWRA's own World Water Congress?**

**B.B.:** *The IWRA World Water Congress is a gathering of highly qualified professionals from different backgrounds to discuss various technical aspects of water policy and management. Papers are presented and poster sessions are organized in such way that professionals exchange their experiences and new models to solve our most pressing water problems. Hence, the Congress is an event where professionals talk to professionals to advance science and technology for better water management. The World Water Forum is an initiative of the World Water Council to bring together the professional and the political classes together. IWRA was the leading organisation supporting the creation of the World Water Council and consequently creating the World Water Forums. The World Water Forums take place every three years and are organized around three preparatory processes: thematic, regional and political. In the thematic process, the issues to be discussed at the forum are produced through an open and transparent consultation within the professional community. IWRA was very active in this process during the preparation for the 6<sup>th</sup> World Water Forum. The regional process brings to the Forum the multifaceted perspectives of different regions of the world. This process allows the Forum to focus on solutions for regions with more demand for improvement in their water situation. Finally, the political process brings to the forum those involved in the decision-making process. We have three components inside this process: ministerial, parliamentary and local authorities. Each one of these segments has its own dynamics. For example, the Ministerial process, coordinated by the Foreign Affairs ministry of the host country and the WWC, involves preparatory meetings to discuss a Ministerial Declaration that is signed during the Forum. In this 6<sup>th</sup> Forum in Marseille, a fourth process was created: grassroots and citizenship process to mobilize the general public of the region for the importance of water and of the Forum. As a result a more inclusive Forum is expected and more awareness should be raised around the cause of water.*

**The Forum has put a focus on a “time for solutions”, what does this mean and how will the solutions and commitments identified during this World Water Forum be continued into concrete results?**

**B.B.:** *Time for solutions means that, we have already worked a lot in the past 15 years doing diagnoses of the water situation in the world. Now, we need to find concrete solutions for the water problems and to present them to the political class to make com-*

mitments to implement these solutions. The preparatory thematic process of this Forum engaged a large community and was able to establish 12 priorities for action and 3 conditions for successfully addressing them. Among these priorities we have, for example, "Guarantee access to water services for all and the Right to Water". Targets have been established for each of these priorities on a global and regional level. For example, one target associated to the priority mentioned above is: "By 2015 more than half of countries in each continent have set up financial mechanisms that suit the needs of local authorities and local operators." Solutions are presented to achieve these targets. In the example I gave, one possible solution that has been proposed is the "Acquafund from the Interamerican Development Bank", which is a funding mechanism that is promoting access to water and sanitation in the Americas. Solutions are not limited to existing mechanisms and we are receiving innovative proposals that will be considered during the Forum. An IT platform was created and is available on the Forum website to receive solutions from those that are not directly involved in the thematic and regional processes. In this way, this Forum becomes more inclusive than the previous ones and to date we have registered more than 1,000 solutions from all over the world. Commitments made during the Forum will have to be followed up. The World Water Council will be in charge of maintaining this platform after the 6<sup>th</sup> Forum. It will be responsible for developing it further until the next Forum to be held in Daegu, South Korea in 2015.

#### **IWRA members represent a scientific, knowledge based community, what are the challenges for science to influence water policy and management at the World Water Forum?**

**B.B.:** Science and technology play a definite role in providing the basis for sound water policy and management. That is why in our Forum we established the acronym SMART for our targets. SMART means that targets should be: Specific, Measurable, Achievable, Realistic and Time bound. In order to define SMART targets you need science and technology to make sure that they are measurable and applicable from a technical point of view. If we want to solve the water problems we face today, the first question we have to ask is if the solutions proposed are technically feasible. And this answer can only be provided by the scientific and knowledge based community. The challenge for this community is to recognise the importance of the social, economic and political issues involved in the decision-making process in the water sector. The challenge for the scientific community and I included myself in this group, is to understand that we face a multi-objective decision-making process and that the scientific community can bring models to help improving it.

#### **How can IWRA members contribute to the 6<sup>th</sup> World Water Forum in Marseilles or other Forums in the Future?**

**B.B.:** IWRA is already contributing a lot for the success of this Forum and will certainly be more and more involved in the future ones. President Xia has played a key role in bringing members of the scientific community to provide solutions for different priorities. In particular, under condition for success "Enabling Environment", he is in charge of the multi-stakeholder panel session "Science and Technology for a sustainable water future" in which members of other scientific organizations related to water will discuss their role in helping formulate solutions to our water problems. I am more and more convinced that IWRA should participate in the works of the World Water Council actively. As a member of the Board of Governors, IWRA has made significant contributions in the last 2 years and it should intensify its participation in the future. In doing so, we are able to strengthen the role of water professional associations in the organization of future water Forums.

#### **What is next after the Forum is held?**

**B.B.:** The day after is really important... A lot of important solutions will be presented in Marseille and we expect that a lot of commitments can be announced by the actors present including national governments, local governments, parliamentarians, mayors, NGOs, public agencies, private sector, youth community, academia and professional associations. These commitments need to be monitored and their progress checked in the next Forum in Daegu, South Korea. In the past, we had operational difficulties to follow-up on eventual commitments or the implementation of innovative proposals presented in our past forums. Now, with the advances of Information Technology it is easier to make this follow-up. The platform of Solutions will continue to be operated by the World Water Council and it should implement concomitantly an automated follow-up system to report in the next Forum advances and eventual retrocessions that occurred in the next three years to come.



#### **BENEDITO BRAGA**

**Prof. Benedito Braga is the President of the International Forum Committee of the 6<sup>th</sup> World Water Forum. He is Professor of civil and environmental engineering at the Polytechnic School of the São Paulo University, Brazil. He served as IWRA President from 1998 to 2000 and was awarded with the IWRA Crystal Drop Award in 2002.**