# 2013 Overarching Conclusions







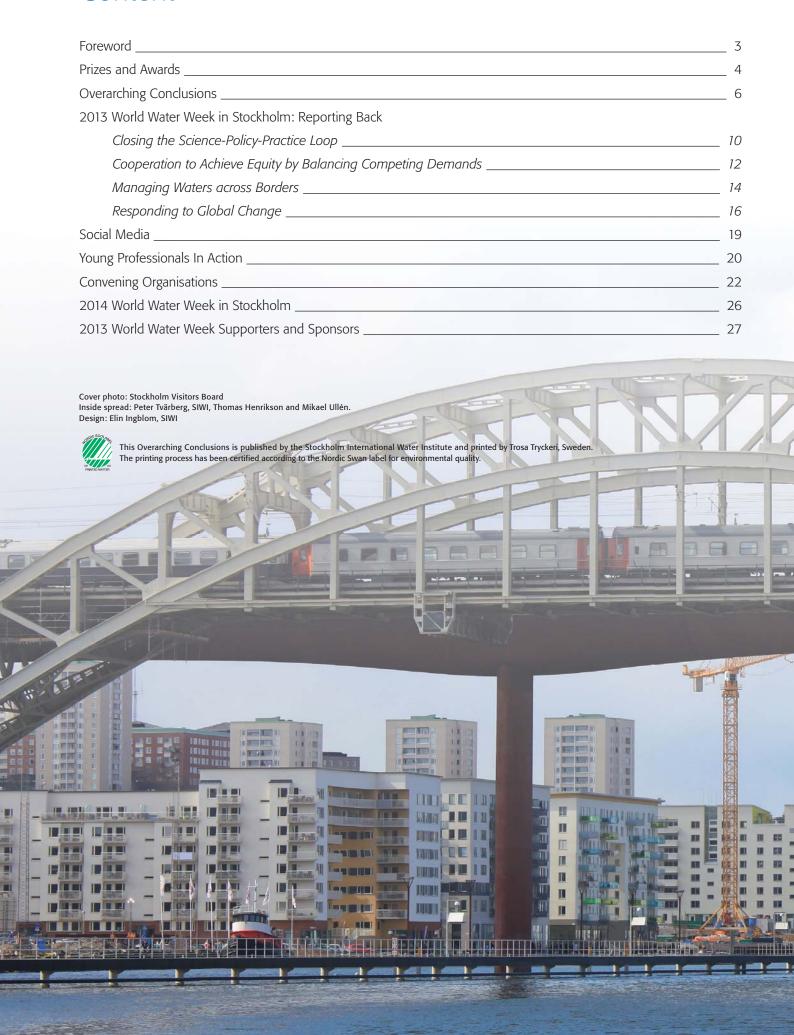




www.worldwaterweek.org



### Content



### Cooperation – An Art and a Necessity

The theme of the 2013 World Water Week – Water Cooperation: Building Partnerships – came with the risk of being less focused than last year's theme on food security and water. However, as the conference gained pace cooperation proved to be a highly current topic branching out to a multitude of interesting sessions and intense discussions.

To quote Professor Malin Falkenmark, SIWI's Senior Scientific Advisor, "water is the bloodstream of the biosphere". Cooperating around this resource which supports all life and development is absolutely fundamental for building a sustainable future.

Our key collaborating partners this year, Global Water Partnership (GWP), World Wide Fund for Nature (WWF) and World Business Council for Sustainable Development (WBCSD) are representative of the wide range of actors involved in the discussion on water. Their considerable influence has been and remains essential for making sure that the week's messages reach a wider audience.

All workshops, seminars, sessions and events during the week showed how broad the role of water is for mankind, from access to safe drinking water and sanitation, to its fundamental role for food and energy production, and economic development at large. Indeed, water seeps into every aspect of human life and activity, demanding the involvement and engagement of stakeholders from all areas of society, from civil society organisations to policy-makers and the private sector.

We also learned, if not before, that water is a true global issue. People face water-related challenges irrespective of whether they live in a high-income or low-income country, in mid-western USA, northern China or in a dry sub-Saharan country. The challenges and dependency on water are often quite similar, although the technical solutions to meet the challenges may differ.

The increased demand for water – expected to grow by some 55 per cent by 2050 according to the Organisation for Economic Cooperation and Development (OECD) – will by necessity be a key driver to a more efficient use of water. The main water users in the agriculture, energy and manufacturing sectors, will be important actors for such change. More sophisticated valuation of water, including differentiated pricing mechanisms, will predictably form part of the adaptation to a situation of ever-growing water scarcity.

Water plays a fundamental role for global sustainable development. Therefore, SIWI argues for a dedicated Sustainable Development Goal on water as the UN member states will negotiate the Post-2015 development agenda. To make this come true there is a need for solid and committed cooperation among all proponents of a water goal, as well as reaching out to other sectors where water plays an essential role.

In this publication, you will find the main conclusions and messages from the 2013 World Water Week. Four teams of rapporteurs covered well over a hundred sessions to be able to bring you these Overarching Conclusions.

The focus for World Water Week in 2014 will be water and energy. We have already started to engage more actively with the energy sector in preparation of what we believe will be a most exciting week. Welcome back to Stockholm during the week of August 31 to 5 September next year. Your presence and input is what makes World Water Week the world's most important arena for setting the future agenda on water. I look forward to meeting all of you again.

Torgny Holmgren
Executive Director
Stockholm International Water Institute

### PRIZES AND AWARDS

#### STOCKHOLM WATER PRIZE

The 2013 Stockholm Water Prize Laureate Dr. Peter Morgan, awarded for his outstanding work to protect the health and lives of millions of people, took an active part in the week. When he wasn't giving lectures on how to increase access to sanitation by empowering local people, Dr. Morgan was busy engaging with the wide range of journalists who wanted to hear his story and discuss sanitation challenges with this highly accomplished scientist. During the Opening Plenary, Dr. Peter Morgan gave valuable input to the 2013 theme through an inspiring lecture on how collaborative initiatives benefit rural water supply and sanitation. H.M. Carl XVI Gustaf of Sweden handed the prize to Dr. Peter Morgan at a ceremony in the Stockholm City Hall on Thursday September 5. The ceremony was broadcasted live on SIWI's video hub, enabling viewers from around the world to join in. The webcast is available at www.siwi.org/video.

#### STOCKHOLM JUNIOR WATER PRIZE

The 2013 Stockholm Junior Water Prize went to Ms. Naomi Estay and Ms. Omayra Toro from Chile. The Chilean team managed to identify a dozen bacterial strains with the potential to clean up oil spills, by metabolising it in extremely low temperatures. Part of their work was carried out in Antarctica, and the winners said they were greatly inspired by the white continent. National teams from 29 countries competed in this year's Stockholm Junior Water Prize international finals. All finalists' project posters were displayed at the venue throughout the week. The winning team was presented with the prize from the hands of H.R.H. Crown Princess Victoria of Sweden at a ceremony on Wednesday, September 4. The Diploma of Excellence went to Mr. Yeari Vigder and Mr. Noam Arye Nassi from Israel.

#### STOCKHOLM INDUSTRY WATER AWARD

The 2013 winner of the Stockholm Industry Water Award, Netafim, was presented with the award at a ceremony on Tuesday, September 3. Netafim received the award for their world leading drip- and micro-irrigation solutions and water-saving technologies. Beyond innovating technical systems, Netafim provides training, capacity building, and knowledge transfer to help farmers in developing countries maximise yields with existing resources. The jury was impressed by Netafim's remarkable inventions, stating that "by helping farmers across the world to 'grow more with less', Netafim is directly contributing to a more water and food secure world." Mr. Igal Aisenberg, President and CEO of Netafim, engaged actively in the World Water Week and spoke to numerous media outlets about Netafim's achievements.

#### **BEST POSTER AWARD**

The winner of the Best Poster Award 2013 was announced during the Closing Plenary. Ms. Francesca Greco of King's College London, UK was awarded the 2013 Best Poster Award for her poster entitled Virtual Water Rivers and Transboundary Cooperation Interactions. The poster caught the jury's attention because of its "clearly defined research question and well formulated recommendations that add value to our perceptions of virtual water and our options to negotiate transboundary cooperation." The jury further emphasised that the poster displayed high relevance to the World Water Week theme on water cooperation, and used the new technology for poster presentation very well.



2013 Stockholm Water Prize: Dr. Peter Morgan, Zimbabwe



2013 Stockholm Industry Water Award: Netafim,



2013 Stockholm Junior Water Prize: Ms. Naomi Estay and Ms. Omayra Toro, Chile



2013 Best Poster Award: Ms. Francesca Greco, King's College London, UK



#### STOCKHOLM WATER PRIZE

Stockholm Water Prize is the world's most prestigious prize that honours outstanding achievements in water-related activities. The prize is awarded annually to visionary individuals and organisations whose accomplishments contribute to conserving and protecting the world's water resources, improving the health of inhabitants and ecosystems. H.M. King Carl XVI Gustaf of Sweden is the Patron of the Stockholm Water Prize. The nomination period for the 2014 Stockholm Water Prize has ended.

Welcome back in April 2014 to submit nominations for the 2015 Stockholm Water Prize at **www.siwi.org/prizes/stockholmwaterprize** 

#### STOCKHOLM JUNIOR WATER PRIZE

Stockholm Junior Water Prize is open to students aged between 15 and 20 years who have conducted water-related projects. Each year, thousands of students from all over the globe enter national competitions in the hope of making it to the international final in Stockholm. H.R.H. Crown Princess Victoria of Sweden is the Patron of the Stockholm Junior Water Prize.

Stockholm Junior Water Prize organises national competitions in over 30 countries. Find out if your country is competing at www.siwi.org/prizes/stockholmjuniorwaterprize

#### **STOCKHOLM INDUSTRY WATER AWARD**

Stockholm Industry Water Award honours business sector contributions to wise use and management of water. An international award committee selects the winner from among companies or business organisations that demonstrate devoted water stewardship through exceptional achievements. The award encourages business activities that improve the world's water situation and prepare for increased sustainability.

The nomination period for the 2014 Stockholm Industry Water Award has ended. Welcome back in September 2014 to submit nominations for the 2015 Stockholm Industry Water Award at www.siwi.org/prizes/stockholmindustrywateraward

#### **BEST POSTER AWARD**

An important part of the World Water Week workshops is the digital poster exhibition. Abstracts, accepted by the Scientific Programme Committee, are presented as posters on digital screens in the exhibition area. The most informative, innovative and well-designed poster is honoured with the "Best Poster Award".

# OVERARCHING CONCLUSIONS ON WATER COOPERA

The time has come for discussion and work on water to break out of the water box and be treated as the connector it is. 2013 World Water Week, held under the theme "Water Cooperation – Building Partnerships" opened the floor for vital discussions on how to build on existing partnerships, create new ones, and tackle current and future challenges to water management, across borders and across sectors.

#### Water is not a sector - but a connector

"Climate change has made us realise that water is in fact the very centre of the life support system of our planet: water is simply the bloodstream of the biosphere," said Professor Malin Falkenmark of the Stockholm International Water Institute in her summing up of 2013 World Water Week in Stockholm.

With this, Prof. Falkenmark put her finger on the issue that is central to all discussions about water yet very difficult to concretise. Water is everywhere, vital for life, development and prosperity in all sectors. In her own words; "Water is a cross-sectoral phenomenon with so many different functions in parallel while passing through the landscape. Domestic water supply is just one of all these functions. Humans make use of water while passing by also for business, economic development and energy production, for food production, and as habitats of aquatic ecosystems. During use, users pollute the water by introducing waste products."

In spite of this obvious connectivity, water is still seen by many as a sector, thereby creating unnecessary barriers in discussions about water. With so many different actors; users, managers, lawmakers, financers, engineers, ecologists, meteorologists, chemists and hydrologists having a say in how we manage our waters, close cooperation and working partnerships are absolutely fundamental if we are to sustainably manage water in the future.

#### The art of cooperation

Most people believe that they understand what cooperation is, and that they themselves are able to cooperate. However,

at a concrete level, cooperation demands commitment and hard work, as was shown and discussed in numerous sessions during World Water Week.

Cross-sectoral cooperation is necessary if water is to be a driver of economic and social development.

Cooperation between stakeholders is necessary for, realising the human right to safe drinking water among other issues. In this area, the private sector is an increasingly important actor. It is essential to more powerfully engage this large, diverse, and thirsty stakeholder group in the discussion and management of water as the world faces growing water scarcity.

Linking the various water management communities, those working on freshwater, drinking water and sanitation, wastewater and coastal waters, is another challenge to water cooperation where progress was made during the week.

One particular challenge, discussed further by this year's Rapporteurs, is the urgent need to close the science-policy-implementation gap. Several sessions in Stockholm pressed on the need for an informed dialogue and making science relevant to both policymakers and practitioners.

Additionally; for cooperation to be meaningful and achieve tangible results, it is crucial that people from various sectors, groups and fields get to meet and deepen their cooperation. It may sound self-evident, however research has shown that if partners meet more, cooperation grows stronger and more is achieved. Therefore, increasing the number of meeting places and platforms for interaction will help cooperation and partnerships develop and thrive.

#### Cooperating on sanitation - the forgotten issue

"Sanitation is not so culturally friendly. It is mundane", said the 2013 Stockholm Water Prize Laureate Dr. Peter Morgan at World Water Week, when asked why he thought donor funding for sanitation is lacking.

While the water target of the Millennium Development Goals was met in 2010, the sanitation target is still lagging far behind. One billion people, one in seven people in this world, still practice open defecation. United Nations Deputy Secretary-

"The big elephant in the room is that we don't have a partnership with nature... If we don't accept that water secures life, then we have nothing to talk about. Water does not come from the tap, it comes from nature."

Ms. Yolanda Kakabadse, President, World Wide Fund for Nature "Planet earth is screaming at us through a language called water... If there is any stress in the world, it can be related back to water. We need to develop the risk language across all sectors."

Mr. Peter Bakker, President, World Business Council for Sustainable Development

# ATION - BUILDING PARTNERSHIPS



General Jan Eliasson spoke passionately about the need to gather forces to be able to meet the sanitation target by 2015. He bluntly stated that "We need to break taboos and say exactly what it is we want to achieve: toilets for all."

Dr. Morgan spoke about the need to cooperate with nature, and to focus on localised solutions. He called the sanitation problem so "devastatingly grave" that there is no universal solution to it. Instead, the answer lays in a variety of approaches and solutions, not only including hardware. He argued that educational methods can be crucial in reaching better sanitation levels.

Another challenge, linking back to the World Water Week theme of 2011 and looking ahead to 2014, is urban sanitation systems, which have been seen as linear but need to be dealt with in a more cyclic fashion, connecting the city's waste water with its needs for agricultural produce.

Although the purely moral aspect of providing adequate sanitation for all is hugely important, one must not ignore the economic case for investing in sanitation. Recent studies have shown that some countries lose as much as seven percent of their GDP

due to poor sanitation. Sanitation and hygiene is a proven cost-effective investment that will reduce health budget spending and increases economic productivity and education levels.

#### Cooperation across borders remains a challenge

Water sees no boundaries, judicial, sectoral or other. Those boundaries have been created by us and therefore it is our responsibility to create successful ways of cooperating over them.

While improved transboundary water management can bring many benefits for people living within shared basins, one cannot ignore the fact that more people will have to share an already scarce resource. In regions where a challenging water situation is exacerbated by an unstable political context, cooperation and fine-tuned water diplomacy is essential for tomorrow's water management. The importance of hydro diplomacy was strongly emphasised during the week, and solid institutional support has finally been given by not only one but two conventions.

It was noted in World Water Week sessions that the UN Watercourses Convention (2014), and UNECE Helsinki

# OVERARCHING CONCLUSIONS ON WATER COOP



Convention amendment (2013), are making real impact, and that there is an increase in referring to international norms. The roles of civil society and the private sector in collaboration over transboundary waters were also noted.

Despite the challenges of managing water across and between river basins, the opportunities for utilisation and efficiency gain are great if we are willing to share both the risks and benefits.

Other borders to consider are the ones between land, river and oceans as well as between rural and urban uses. Cooperation on these issues deserve even more attention in future World Water Weeks.

#### Putting a price on water

The issue of water pricing is an emerging issue that will demand our attention for many years to come. We cannot shy away from thorough discussion.

To manage the global rise in demand for water and to increasewaterproductivity, incentives for using less water in better ways will be necessary. Water pricing is increasingly seen as an acceptable tool for governments to handle the water crisis.

In 2010, the UN recognised the right to safe drinking water.

While this human right does not prohibit a price on water, it does oblige states to ensure that all have access to affordable water.

The CEO of Netafim, the Israeli irrigation company that was awarded the 2013 Stockholm Industry Water Award told the Founders Business Seminar that the economics of water challenge conventional wisdom.

"All scarce resources have economic value and in the absence of regulation their pricing is determined by demand and supply. Water could be considered a commodity, and as such it could be priced uniformly based on the cost of catching and delivering it. But the economic value of water differs substantially based on use, time and location", Mr. Igal Aisenberg told the audience. He argued that water pricing is a tool that can help optimise water allocation, but without regulation, the economic value of water can distort the basic needs of society.

With that, he pointed to a fact that we cannot afford to ignore: Access to clean water is a moral imperative that has little to do with economic value. Human beings die as a result of poor sanitation and diseases caused by contaminated water. This must be taken into consideration as water pricing models are developed. The human right to safe drinking water must be

# ERATION - BUILDING PARTNERSHIPS

built into any model, making the equitable distribution of water a priority.

#### The Post-2015 development agenda

A mere two years remain until the deadline of the Millennium Development Goals. While several targets have been met or will be met by 2015, progress in some areas, such as sanitation, is insufficient.

As a final push is made to reach the MDGs, work on the Post-2015 Development Agenda is gaining pace. As input to the UN General Assembly in September, SIWI presented the Stockholm Statement during the closing session of World Water Week. The Statement was a result of an open and inclusive consultation process before and during the Week, and calls for a dedicated goal on water as the world body considers the Post-2015 global development agenda.

Mr. Torgny Holmgren, Executive Director of SIWI, called the Stockholm Statement "A forward-looking document on the role we believe water must have in shaping the future development agenda for our globe."

The Stockholm Statement says that water, given its centrality to individuals, ecosystems and economic development, sits at the very core of sustainable global development. Therefore, "a dedicated goal on water is necessary for a world where all people can live in safety and dignity". By the year 2030 the world must have achieved a doubling of global water productivity, a realisation of the human right to safe drinking water and sanitation, and increased resilience to water-related disasters.

To achieve a Sustainable Development Goal on Water, the entire water community and its friends need to come together, agree on one message, and speak with one voice.

#### **Looking beyond 2013 World Water Week**

Discussions on cooperation in water issues do not end with 2013 World Water Week. The week set out to be a catalyst for increased awareness about the crucial need for cooperation over water resources both inside and outside the water community

"Mother Nature has worked out things pretty well and it pays to draw on her wisdom, design and elegance in her works."

Dr. Peter Morgan, 2013 Stockholm Water Prize Laureate and Director of Aquamor

and to be a platform where best practices on how to build, maintain and improve partnerships in order to spur implementation are shared.

Looking ahead, World Water Week will continue to be the platform for new thinking, open-minded debate and the forging of essential, though not always conventional, partnerships. To achieve a water wise world, we will continue to support inter-generational and inter-regional dialogue. We encourage the work on creating methods for failure analysis. We will work hard to help close the science-policy-practice loop.

"The Week brings together world leaders, government representatives, scientists, members of the private sector and civil society. Every single one of them contributes to the work toward a water wise world. The high level of discussions and debate on theory, policy and concrete solutions reinforces the position of the World Water Week as the main global meeting place on water and development, where the future agenda on water related challenges is set," said Ms. Karin Lexén, Director of World Water Week and Prizes at SIWI, as the 2103 Week was closing.

In 2014, the overall focus of our meeting in Stockholm will be energy. The aim is to provide a platform for fruitful and future-minded discussions between members of the interdependent water and energy sectors.

Dr. Kandeh Yumkella, Special Representative of the Secretary General of the United Nations and CEO of the Sustainable Energy for All Initiative set the scene for the 2014 deliberations by telling delegates during the closing session that energy is inseparable from sustainable development.

"Between 1990 and 2011, over 2.1 billion people gained access to improved drinking water sources and a billion people gained access to improved sanitation so we pat ourselves on the back for thirty seconds and move on... Huge challenges remain. About 2,000 children die every day because of the lack of access to quality water and this is a brutal reality check."

Mr. Angel Gurría, Secretary-General, Organisation for Economic Cooperation and Development

### CLOSING THE SCIENCE-POLICY-PRACTICE LOOP

#### **LEAD RAPPORTEURS**

- ► Dr. David Garman, University of Wisconsin Milwaukee
- ▶ Mr. Alastair Morrison, 2030 Water Resources Group

#### **JUNIOR RAPPORTEURS**

- ▶ Ms. Pauline Cherunya
- ► Mr. Ankur Gupta
- Ms. Taina Hanhikoski
- ► Mr. Jakub Kocanda
- Mr. Jonas Torrens



The gaps in the science-policy-practice loop are still very real, creating avoidable problems when interpreting data and adopting and implementing policy. If concerned parties were to cooperate, a closing of the loop would become significantly more realistic. This report includes interesting cases and evidence of specific ideas and measures that could help enhance integration of science, policy and practice and that have delivered results on the ground.

#### Cooperation: For what and by whom?

Policy is by its nature a synthesis of ideas and inputs to achieve a desired outcome. The role of science is to provide the evidence base for sound policy either in form of traditional data collection and analysis or through models and their applications.

Science in this context is taken in the broadest sense to include all forms of analysis and investigation across all forms of natural and social sciences and the humanities.

The issue has been stated in a number of ways but can be summarised as follows. There is still a major gap between the science used to identify issues and problems, the policy formulation and adoption and the detailed science used for research, analysis and investigation at the practice level. Between these different levels, the communication and interpretation of the data, its context and application to policy can be distorted by vested interests and practical and political aspects of implementation. Cooperation between interested parties would be a major advance in achieving improved policy development, adoption and implementation.

#### **Cooperation: Roadblocks and bridges**

There have been no major innovations in closing this science policy gap identified during World Water Week but a clear set of trends has emerged.

Science is one of many inputs into policy but it should be communicated better to influence key decision makers or policy formulators, both as inputs and as analysis and review. There appears to be a trend in the papers presented for improved science communication in development and implementation of policy, and many practical examples of new technologies and social media being used in this way.

There was a notable shift from the promotion of best practice to failure analysis as a better learning tool as well as grounds for policy change. This was perceived as a better basis for long term improved outcomes with all parties learning the fallibilities of existing best practice.

The challenge however is for failures to be reported and acknowledged in the first place, so that lessons can then be learnt and corrections made.

Many papers illustrated the greater use of Information and Communication Tools (ICT) for communication of science to policy makers and the community. These included the use of games, scenarios, visualisation, film and communication media not usually used in the sciences.

There was a move from presenting uncertainty in science to risk management as part of influencing policy and development of tools for translating models into policy development and adoption.

The increased use of the internet is improving communication and identifying science and data gaps. It is making data deficiencies – quality and quantity – more transparent and providing insights into the lack of data in key areas. This is particularly true in some water-stressed regions where, for example, there have been insufficient investigations of groundwater. The lack of data itself is made more apparent to policy makers.

Decentralisation of research to local levels appears to have increased – with better communication of issues and influencing of local policy. The empowerment of local researchers to undertake research appears to have provided not only local technical capacity but also allows for the co-development of the research agendas and ensures a longer term commitment and follow up.

Successful policy change in developing countries does not emerge in a vacuum. It requires a complex enabling environment. This will be grounded in long-term and close collaboration between different participants generating trust, genuine understanding of the cultural context and robust monitoring systems owned by the local communities with multi-level capacity development. Hence decentralisation of research activities is an encouraging change.

The role of business in policy development appears to be better accepted. There appeared to be an increasing number of examples of the private sector providing support for policy positions based on scientific data. Acknowledging that the private sector is a significant player in development and cooperation and that they have significant influence over policy outcomes is a positive indication that the science policy gap is closing. This has its own challenges, with further development of communication channels being needed to achieve the best possible outcomes.

#### **Cooperation: The way forward**

A number of key strategies emerge from these presentations and observations.

Communication methods must be part of the initial project design and incorporated at the preliminary stages of project implementation. They should not be regarded as an add-on to the final report. The earlier the processes and results are communicated in ways that are meaningful for all involved in policy formulation the more effective the outcomes will be.

Longer term project funding is required in a number of cases with consistent deliverables and better feedback mechanisms. Scientific process reviews need to be incorporated at multiple places and stages in projects, not only for natural science data analysis but also for the social sciences and the humanities.

Sustainability checks should be included at all stages of project design and data should be made available for analysis at an early stage in project implementation. This may require a re-think of the project-policy cycle to incorporate more flexibility for feedback.

Project life cycles usually mean that results are not fully appraised at the end of a project and longer-term implications of technology selection, social impacts and sustainability are lost from the reporting cycle. In an ideal world, longer term monitoring and analysis would provide improved policy evaluations and help to close the policy-practice-science gap.

Improved communication with business that is able to influence policy should be a key requirement in all projects at all levels. The presentations clearly indicated that the private sector is capable of understanding science and its implications and consequently of influencing policy in a number of positive ways.

Working with the private sector is not a traditional communication route for scientists. The increased trust apparent from a number of business partners at all levels in the water cycle suggests that policy makers and the water community should interact more closely with other sectors to achieve the best outcomes.

#### **Recommendations and reflections**

So communications are a key part of the way science can close the gaps both ways between policy and practice and bring research into policy development and implementation aspects. Communication and feedback mechanisms should be part of the initial project design and be present in all stages of the project life cycle and not as an add-on or after-thought. New communication methods including games, scenario presentation and visualisation and performance should become of project deliverables.

The private sector is a major influencer of policy. It also has a major capacity to assimilate and understand science. So businesses should be targets for science communication.

Of the many issues and observations, four key matters related to our brief emerged:

- Transparency in data availability and scientific analysis will improve trust and have greater influence on policy changes
- New technologies are increasing the ways, means and speed with which information is transmitted to affect new policies, and increasing accountability
- Further decentralisation of research activities with increased institutional cooperation should be a continuing goal; and
- Science communication with small and large businesses would help to influence policy especially at a local level.

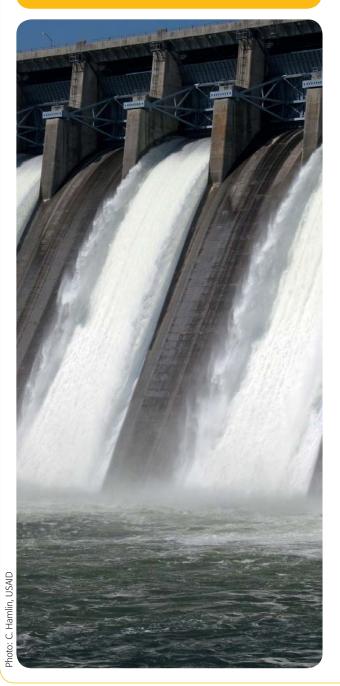
### COOPERATION TO ACHIEVE EQUITY BY BALANCING CON

#### **LEAD RAPPORTEURS**

- ► Ms. Natalia Alexeeva, Global Water Partnership
- ▶ Ms. Anna Delgado, World Bank

#### **JUNIOR RAPPORTEURS**

- ▶ Ms. Duone Ekane
- Mr. Mubarek Nesru
- ► Mr. Max Rosendahl
- ► Ms. Anneli Sundin
- Mr. Abenezer Zeleke



As the world experiences rapid population growth along with improving living conditions, there will be an everincreasing need for water, food and energy. However, as these sectors are already under considerable stress, they must all be addressed in a holistic way, as the optimal solution for one can have negative impacts on others. Cooperation is and will be key to achieving security, efficiency and sustainability in these vital and interdependent areas.

#### Cooperation: For what and by whom?

Water is not an isolated sector, but a connector

An issue that repeatedly echoed during World Water Week and in the closing plenary session is that we have to stop thinking of water as a sector. Water crosses sectors and borders and is vital for most human activities. Thus, this connectivity should be clearly expressed and assessed — also taking into account the "nexus" approach so popular among World Water Week speakers and sessions. Practical implementation of the nexus is focused on finding new ways to reinforce cooperation among sectors and evaluate costs and benefits of such cooperation. Given the confusion around the "nexus" wording and terminology, it was suggested that water is the nexus that links everything together.

#### **Cooperation: Roadblocks and bridges**

Water community still fails to successfully engage other sectors

The water community no longer exists in a box; rather it swims in an aquarium, able to see the other sectors, but not effectively reaching and interacting with them. The analogy was offered at the conference to convey that although we are aware of other sectors, we are still not properly engaging and addressing them. The good news is that many cross-sectoral initiatives and powerful partnerships have been created. However, the majority are still led by the water community although we do not always have the power or the capacities to influence developments and policies in other sectors. In order to increase water-positive impacts, the water community needs to reach across sectors more effectively, to raise awareness and involve them in discussions and cooperation.

Tools are important to visualise and understand the problem but... not enough.

Several new tools were presented during the conference, on the Water-Energy-Food (WEF) nexus, transboundary waters and on data visualisation, among other areas. These tools are powerful when used to translate science to policy makers and to visualise and understand the problem. But many of them are costly to maintain and update, which makes them unsuitable for most developing countries. We must remember that tools are not enough; often the most difficult step is implementing them. Though it is important to academically develop a tool, it is much more relevant to ensure that tools are appropriate and realistic, and that they are indeed used in the decision-making processes. To do so, capacity building on different levels and for different interest groups on tools and approaches is crucial.

### MPETING DEMANDS

#### New approaches

In several sessions there seemed to be a shift towards thinking about the role for markets to deliver sustainable water and sanitation services to the poor. The monetary value of water and the social, environmental and economic costs of lacking water and sanitation services were the focus of some seminars, while other sessions raised the need to shift to a risk-based water security approach. "Water security" may be understood as increasing waters productive power and minimising its destructive force. A water secure world means ending fragmented responsibility for water and integrating water resources management across all sectors. Water security can no longer be defined as just sufficient access to a water source. Risk management needs to be included in the equation.

While the concepts of humanitarian emergency response, development and green growth differ, crisis response should serve as an entry point for continued development and improved resilience and hence, risk reduction.

Using costs as a motivator for taking decisions on water could be an effective way of involving the private sector and policy makers. Additionally assessing (all types of) costs for lacking synergies may generate better understanding of cooperation needs and drivers.

Natural infrastructure designed to complement, augment and replace traditional "hard" infrastructure provides opportunities in view of water management for collaboration across sectors such as WASH, conservation and agriculture. There is a win-win rationale due to the nature of the benefits of water management, since water is crucial for all forms of life and ecosystems. Natural infrastructure is not primarily in need of bigger investments but rather smarter investments, whereas sectoral isolation is inefficient due to possible competition for the same funding.

#### **Cooperation: Way forward**

#### Reaching out of the water box/aquarium

In order to cooperate we need to break silos. We need to reach out of the water community and involve other sectors in the discussion. This can be done by focusing on synergies and winwin solutions, by measuring the financial costs and risks for other sectors, and by fully understanding their perspective and their needs. Partnerships happen when all sectors and players benefit from it.

# Post-2015: A call for putting water at the centre of development by 2030

Many practitioners at World Water Week agreed that the Post-2015 development goals should include a dedicated water goal covering water management, WASH and wastewater, but also that water should be considered and integrated into all relevant areas, such as energy and food security. Dr. Kandeh Yumkella, CEO of Sustainable Energy for All, gave a remarkable speech and asked the water community to give him a good water indicator that he could push for to be added in a potential Sustainable Development Goal for Energy. As water practitioners we should develop such indicators and targets to be owned, understood and rolled out by other sectors.

#### Focus on the action and localised solutions

We know what the problems are. It is time to focus on the implementation of identified tools, technological advancements, and new approaches. We need to evaluate and document what works and what doesn't to be able to meet rising demands before it is too late.

Talking about global trends and global issues is essential for understanding the magnitude of the problem. However, at the end of the day, the nexus problems and solutions are very local. There is a need to move from the global analysis to localised and contextualised solutions that involve local partners. One solution definitely does not fit all. During the past years there has been positive progress in awareness, knowledge and tools development but there is a need to improve policy coherence and sectoral planning.

#### **Recommendations and reflections**

Balancing competing demands for the same resources seems to be handled in the best way via integration and cooperation. Though integrated projects have their constraints, "it is more difficult to work across sectors", it is clear that integration and cooperation are necessary and inevitable. The question is not 'if' but 'how' and the challenge thus to develop suitable approaches and successfully implement them.

The growing number of coalitions, networks and partnerships are inspiring. However, they still need to find the way to reach out to non-conventional partners and look into new forms of collaboration to increase their impact and visibility.

### MANAGING WATERS ACROSS BORDERS

#### **LEAD RAPPORTEURS**

- ▶ Mr. Gidon Bromberg, Friends of the Earth Middle East
- ▶ Ms. Flavia Rocha Loures, World Wide Fund for Nature

#### **JUNIOR RAPPORTEURS**

- Ms. Sofia Helander
- Mr. Hussam Hussein
- Ms. Marie Le Texier
- Ms. Kata Molnar
- Mr. Stefan Partelow



The water crisis has been recognised as fundamentally a challenge of governance, and this is true when it comes to managing water across borders. In this context, roadblocks to cooperation often arise from conflicting interests among the several actors concerned, as well as power imbalances among riparian countries or water users.

In order to ensure a water-secure world and reduce barriers all relevant stakeholders must be involved in the water management process, and clear dispute prevention and resolution mechanisms must be in place to avoid a race to the bottom leading to the degradation of the resource and the loss of precious ecosystem services. Moreover, solid institutions, operating at various levels on the basis of the rule of law, are crucial tools for enabling and sustaining water cooperation in the long term. In this regard, the UN Convention on the Law of the Non-Navigational Uses of International Watercourses and the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes were highlighted repeatedly as key tools for transboundary water cooperation throughout World Water Week.

Underlying those barriers and preventing the more effective use of those solutions is a false dichotomy between development and conservation that still persists. This is despite the reiterated calls for sustainable development over the last four decades, and the scientific recognition that healthy freshwater ecosystems, in addition to having an intrinsic value, generate various goods and services that are essential for human survival, welfare and security. That false dichotomy largely operates within the current paradigm of our great acceleration into the anthropocene. Overcoming these deeply embedded ideologies calls for a paradigm shift, in which water ethics, education and better water governance should all play a strong role.

#### **Cooperation: For what and by whom?**

Transboundary waters: Transboundary waters are complex systems, where cooperation should be facilitated at all relevant levels and among all the stakeholders concerned - all the way from border communities and local authorities, to water users and gender groups, to river basin organisations and national governments, and the international community at large for purposes of global coordination and exchange.

This process relies on a multi-level governance system, formed by mutually supportive and complementary legal and institutional frameworks. In shaping and progressively improving this system, the goal should be to create integration, resilience and political stability across the entire watershed, while enabling its sustainable development and use, and protecting the ecosystems within or dependent on transboundary waters.

Land-water divide: Basin authorities, along with the impacting stakeholders, should seek associated risk reductions, resilience, and collaborative benefits. With the common interest of water within a shared ecosystem, these stakeholders should consider how to benefit from their special, cultural, political and economic interactions, as

a means towards promoting integrated approaches to the management of water and related natural resources.

Key links to be explored include how water users, such as cities situated downstream in a basin, can contribute to the protection and sustainability of their resource by compensating its stewards, e.g., farmers located upstream. What are the common drivers for action between these two areas? With water as a connector, strong ties exist between rural and urban areas and from the mountains to the sea, such as in agriculture (food, income source), wetland conservation (filtration, nutrient cycling), and sustainable river flows (sediment transport to maintain coastal ecosystems) as collaboration topics for beginning stakeholder dialogue.

#### **Cooperation: Roadblocks and bridges**

Transboundary waters: The main roadblocks for transboundary water management are linked to the narrow self-interests of riparian states, the lack of mutual trust, and power asymmetries. States tend to pursue short-term goals to advance national interests instead of aiming at a long term vision that would benefit the entire community of riparian countries. Elections seem to play an important role in driving governments towards short term plans.

Several tools exist to counterbalance those roadblocks, such as scientific and academic exchanges, joint research and learning, engagement of border communities, and capacity building. Yet, fundamentally, what brings states together is when the benefits from cooperation become apparent. In order for that to happen, cooperation regimes, formal or informal, are important, so that states are engaged in a long-term process of dialogue, information exchange and benefit- and risk-sharing. International law is one of many building blocks of good transboundary water governance. In particular, the imminent entry into force of the UNWC, at the same time that the UNECE Water Convention is going global, represents a unique opportunity for improving the way transboundary waters are governed and managed. States should thus consider joining these Conventions, with a view to benefiting fully from the many ways in which they supplement and reinforce each other. At the same time, greater attention must be paid to transboundary aquifers, most of which still lack any governance mechanisms.

Land-water divide: Stakeholder empowerment is crucial for working towards a new operational paradigm and overcoming self-interests and power asymmetries among stakeholders. Other important tools in this context include risk assessment analysis, ecosystems valuation, Payment for Ecosystem Services (PES), environmental flows assessments, and spatial planning, all of which should be planned and implemented through participatory approaches. All of these tools are already being tested, there is a strong need for results to be disseminated and solutions to be scaled-up.

A call for strong regulatory frameworks has also been made, not the least surprisingly by some private sector firms. Clear rules of the games indeed help to secure their licenses to operate in a given watershed. Further efforts should be made in drawing up adaptive frameworks, given the pace of climate change impacts on water resources. Important advancements have been made in urban water management, with interesting implications for the rural-urban interface. Urban systems are increasingly evolving from being linear to becoming cyclic. At the rural-urban interface, this will help develop virtuous circles whereby urban wastewater ends-up being used for irrigation purposes in nearby agricultural areas. Further research is still needed in peri-urban areas.

#### **Cooperation: Way forward**

As an overarching message, the way forward requires a paradigm shift from narrow self-interests to a systems approach of horizontal and vertical scales.

Transboundary waters: States should consider joining these Conventions, with a view to benefiting fully from the many ways in which they supplement and reinforce each other. All those members of the international community at large should support states in their efforts to ratify and implement these conventions and relevant watercourse, lake and aquifer agreements.

Land-Water Divide: Outlooks and planning will move from productivity enhancement towards efforts to increase resilience and reduce collective risk. Resilience can take form in the sense of conflict avoidance, resource and economic stability, and constructive social organisation. These realities can be met with a paradigm shift towards integrating our systems into a nexus. This paradigm shift implies a need to bring distinct scientific communities to work together, from within and outside the water box, and to bridge the management divides between drinking water and sanitation management; freshwater resources management; wastewater management and coastal zones management. Clear goals with long and short term incentives need to be established and monitored.

#### **Recommendations and reflections**

To create the nexus, and integrate our systems and ways of thinking, we need to 'Keep our feet in the mud and head in the clouds.' Efforts need to be made that connect our existing governance, economic and environmental systems in the area between policy and practice. This is where top-down meets bottom-up. In the case of transboundary waters, this translates into a multilevel governance system, which could be greatly strengthened trough the widespread ratification and effective implementation of the UNWC and the UNECE Water Convention.

All in all, and following Malin Falkenmark's overarching conclusions of the week, achieving cooperation across borders entails the need for the numerous water-related actors to reach a common language of understanding, for a dialogue to become possible. Building bridges across the different water 'spheres of mastery' requires important social and ethical learning efforts. This also includes inter-generational dialogues, which are at the core of sustainable development. The four lenses thinking – physical, emotional, knowledge and spiritual – may be a key step in achieving this 'water esperanto'.

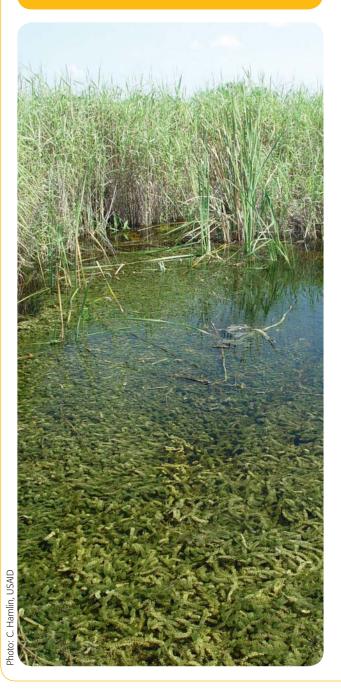
### RESPONDING TO GLOBAL CHANGE

#### **LEAD RAPPORTEURS**

- ► Ms. Sonja Koeppel, UNECE Water Convention
- ► Ms. Karin Krchnak, World Wide Fund for Nature

#### JUNIOR RAPPORTEURS

- ► Ms. Giedré Ašmonaité
- ► Ms. Rafaela Flach
- ► Mr. Luis Andrés Guillén
- ▶ Ms. Olga Horn
- Ms. Josefin Klein



Global change can have severe impacts on water security, affecting the most vulnerable communities and instilling enormous costs on governments. The planetary-scale changes that Earth is undergoing emphasises the need to learn from experience and reduce current vulnerability, while planning and taking into account future challenges.

#### Cooperation: For what and by whom?

As shown by the recently published report of Working Group I of the IPCC Fifth Assessment Report, climate change is progressing and water is the medium through which most climate change impacts are felt. Water stress is expected to increase in many parts of the world and extreme events are increasing in frequency with enormous costs on livelihoods.

Climate change impacts on water resources are still highly uncertain. However, economic development and growth, including rapid urbanisation, pose concrete new challenges for water resources. Water is at the heart of both climate change adaptation and mitigation. Water cooperation helps to overcome uncertainty, to identify synergies between policies and reduce trade-offs, to overcome new challenges, and reconcile mitigation and adaptation.

New approaches and methods are needed for addressing these challenges, including a new perspective on "working with nature". Emerging concepts such as eflows, ecological sanitation, ecosystem restoration and ecosystem-based adaptation measures provide concrete examples for implementing this perspective.

At the same time, political will is crucial for addressing these new trends and making necessary policy changes. The ongoing discussions on the Post-2015 development agenda provide an opportunity to raise awareness on the importance of sustainable water management for overall development. It is crucial that water gets a dedicated Sustainable Development Goal, focused not only on water supply and sanitation, but also on water resources management, governance and ecosystems.

Cooperation is much needed to reach the sanitation target of the Millennium Development Goals (MDGs), which lags so far behind. The economic, social and environmental benefits of achieving universal access to WASH, improving water resources management and wastewater treatment are clear. Wastewater treatment is one of the main challenges – about 80 per cent of all wastewater is still discharged without any treatment. In order to reach the sanitation target by 2015, special consideration should be given to innovative measures such as the reuse of wastewater and the implementation of ecosan technologies. In addition, the importance of water and sanitation for health, environment, and education needs to be highlighted by governments, the private sector, civil society and communities.

There is a need to move beyond WASH; the provision of potable water, sanitation and hygiene is not possible without sustainably managed water resources. The maintenance of healthy ecosystems needs to be better incorporated into the Post-2015 discussions.

#### **Cooperation: Roadblocks and bridges**

As the deadline for the MDGs quickly approaching, the work of formulating a Post-2015 development agenda is gaining pace. Cooperation and inputs from all sides is essential to make a compelling case for a dedicated water goal that encompasses WASH, water resources management at basin level and wastewater treatment. The importance of water for energy, food, health and development needs to be emphasised. There were increasingly convergent calls for the water community to follow a two-track approach: promoting a dedicated water goal while also suggesting a mainstreaming of water into other goals.

While numerous actors are currently working to develop position papers and statements on water in the Post-2015 framework as well as suggestions on how to formulate a water goal, it is crucial that the water community speaks with one voice and does not develop countless, possibly even contradictory proposals for a water goal.

Cooperation is thus needed to collectively work together to propose the targets and determine the indicators. More specifically, targets need to appeal to politicians and their constituents. They should be aspirational, universal and communicable. Indicators need to be SMART, i.e. Specific, Measurable, Achievable, Realistic and Timely – a prerequisite to monitor whether goals are met.

An SDG on water needs to build on each of the three pillars of sustainability and should serve to positively affect the social, economic and environmental aspects associated with water. Foremost, a stronger focus needs to be put on the maintenance of healthy ecosystems.

To be able to cooperate in ensuring ecosystem resilience, common understanding of their importance in the long term is needed. Valuation and understanding of ecosystem services are essential for addressing trade-offs in the nexus and to develop adaptive management practices. Cross-sectoral communication is needed to establish collaboration that allows for an integrated approach on the safeguarding of ecosystem services. For instance, enhanced interaction between water and forestry communities could set the ground for better understanding of ecosystem services and implementation of ecosystem-based practices. Improved collaboration between the research community and policy-makers is required for sound water management that serves both humans and ecosystems. A science-policy dialogue could be facilitated by further development of networks and platforms for sharing knowledge and experiences. Science-policy cooperation could provide evidence-based solutions to address governance challenges. Partnerships between NGOs and businesses can reduce shared risks in river basins and enhance valuation of ecosystems. NGOs and science collaboration can be useful to address emerging environmental problems in the governmental agenda and provide practical solutions.

Climate change can be a powerful driver of cooperation in different contexts and scales. To face the challenges posed in the efforts to mitigate and adapt to climate change, collaboration among scientists, policymakers, civil society and business is fundamental.

Addressing climate change requires cooperation across sectors and borders. In transboundary basins, noncooperative adaptation policies of neighboring countries might lead to maladaptation and contradictory policies. Harmonising, as much as possible, methodologies for climate change modeling and vulnerability assessments as well as joint assessments of problems and solutions are needed for successful transboundary cooperation, as well as for the comparison of the results obtained in different regions. Countries need to work together to share data, develop common scenarios and develop joint adaptation and mitigation plans. Cooperation among scientists, water managers and authorities from all riparian countries is also needed. In this way, more efficient and cost-effective solutions will be developed and implemented. River basin organisations can play an important role in this regard.

Cooperation is also essential in dealing with extreme weather events and vulnerability and risk assessment. In order to increase efficiency, data should be jointly collected, shared and compared. Joint efforts are needed for data recovery in order to prevent irreversible loss of climate and hydrological data. They provide a basis for vulnerability assessments and adaptation strategies, which need to be developed linking different scales (local, regional, national and transboundary). Cooperation among sectors, countries, regions, scientists, politicians is therefore required.

#### **Cooperation: Way forward**

In order to effectively respond to global changes and deal with the complexities of water management, we must first address current challenges to fruitful collaboration. Inconsistent definitions often prolong discussions and extend the decision-making process. Definitions are important for setting the basis for a common language and understanding. As an example, different stakeholders still struggle to agree on a definition of water security, which hinders progress. Another remissive aspect for cooperation is the gap between scenario developers and actual users. Participatory planning, development of knowledge sharing networks, decision support tools and funding platforms which are crucial to bridge this loop, need improvement.

The knowledge of the hydrological and geological characteristics of the aquifers that contain our planet's underground water is less developed than for surface waters, and is also more expensive and challenging to obtain. As sustainable groundwater management is fundamental for water supply

# RESPONDING TO GLOBAL CHANGE

of many communities and cities, capacity-building and awareness-raising related to groundwater protection are key to resilience, water security and climate change adaptation.

In order to preserve and protect healthy ecosystems, pollution should be prevented to the highest extent possible. Implementation of a precautionary approach for pollution prevention is essential and alternatives to the common end-of-pipe solutions need to be developed and implemented. Environmental problems have to be solved at the source, not allowing the transportation/allocation of pollution to different environmental compartments. The cost of building ecosystem friendly systems from the beginning needs to be compared to the cost of restoring systems. Research that aims at quantifying these costs is just emerging and could potentially be of great value for future policyand decision-makers. Overall focus regarding pollution should be on existing and emerging chemicals (nano materials, micro plastics, endocrine disrupting chemicals).

In this ever-changing world it is necessary to adopt modern concepts to create more feasible integrated management practices for ecosystem services. The environmental flows approach is an innovative solution for sustainable water management to maintain ecosystem health and the provision of their services to people. However, it has not reached its potential. There are still gaps regarding adequate accounting for community values, the involvement of different stakeholders and implementation at transboundary scales. Environmental compartments could be considered as vital infrastructure elements with a monetary (economic) value. This would facilitate the implementation of environmental consideration in both the private and the governmental sector. The way forward also needs to include the development of qualitative indicators since they are essential for monitoring targets. This should include measures of biological diversity as it reflects water quality and is useful for cumulative impact assessments.

Although it is still necessary to continue improving climate science to reduce uncertainties, action to address climate change impacts is needed now, for example by reducing current vulnerability. It requires building adaptive institutions and policies, resilient and robust management and infrastructure, as well as sharing experience and knowledge for the implementation of low-risk and noregret measures. A paradigm shift towards managing risks is needed, recognising that there will always be uncertainty. This requires designing and applying adaptation measures compatible to uncertainties, incorporating uncertainty in projects and building adaptive governance.

Vulnerability assessment and risk management should be based on both top-down and bottom-up approaches. As vulnerability and risks are expressed in different levels, a multilevel approach should be applied both for research and adaptation policies. Mitigation and adaptation strategies and measures need to be coordinated, across scales and sectors, increasing synergies and reducing tradeoffs such as increased water use due to biofuel plantations in water-scarce areas or increased energy consumption due to desalinisation of water. Communities should be more closely involved in the management of their water resources, their monitoring as well as in adapting water use to climate change.

#### **Recommendations and reflections**

Looking back 50 years, the world is a vastly different place today. It will be even more different 50 years from now, in ways that we may not be able to predict at this point. World Water Week has shown once again the need to learn from experience and the need to reduce current vulnerability, while planning and taking into account the new challenges that will arise in the future. Ultimately, the best way to overcome the numerous uncertainties posed by

way to overcome the numerous uncertainties posed by global change is to work together, in a coordinated way, towards a common vision of water security for all in an inclusive society.

As governments come together to design the Sustainable Development Goals, they must place water front and centre – for the sake of our economic, social and environmental health and sustainability.

# **SOCIAL MEDIA**

#### **Digital Media for a Water Wise World**

Information and communication technology for development and digital communication platforms are constantly evolving, both in their use and their impact on societies across the world.

At this year's World Water Week, participants were invited to engage in the Week's social media channels to share thoughts and stimulate virtual conversations on topics discussed at workshops and seminars.

The level of social media activity was electric, and far greater than in previous years. This was due to greater integration in World Water Week event content planning and to the healthy interest and activity of participants, collaborating partners and media outlets who energetically shared information digitally as well as via traditional channels.

The dialogue between SIWI, World Water Week and our more than 6,000 Facebook friends meant that messages and comments on topics and events at World Water Week reached the Facebook newsfeeds of over 97,000 people.

Twitter was also alight with activity. World Water Week participants engaged with other users across the world to send over 15,000 #wwweek related tweets during the five days of the event. Boiled down, this means that in every hour of the conference, over 300 tweets were written, posted and shared. These virtual interactions pushed forward questions, statements and ideas about water, development and cooperation.

But the digital content didn't stop there, the newly developed SIWI Video hub, complete with download and social media sharing options meant that revisiting workshops and on-demand viewing was possible. Photos from the World Water Week's official photographers were available for download from Flickr meaning that more material than ever before was accessible to participants online.

Our aim at World Water Week is to help broaden opportunities for discussion and expand the reach of messages from participants and conveners. SIWI believe it is important to stimulate virtual conversations on the topics discussed in Sockholm and enhance knowledge about the various topics debated. It is also critical to reach out to as many people as possible, outside of the venue walls.

We look forward to developing our social media activities and digital offering with you, in order to continue in the tradition of sharing information in the pursuit of a water wise world.

@www\_team @SIWI\_Media www.siwi.org/video www.facebook.com/WorldWaterWeekInStockholm www.facebook.com/SIWImedia

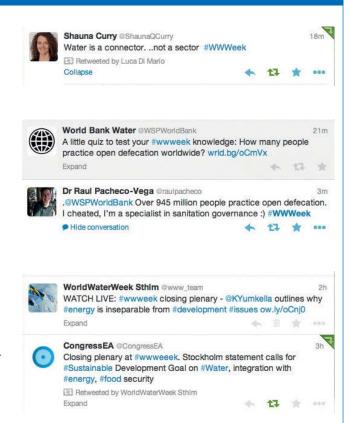


























# THE YOUNG PROFESSIONALS IN ACTION

# How do We Build Cooperation to Create a Sustainable World by 2050?

In 2012, a group of young professionals developed a Vision for a Water and Food Secure World by 2050 at World Water Week. This Vision provided a framework for understanding water, sanitation, and sustainable development challenges and provided recommendations for steps that are needed to achieve 'A sustainable world in 2050'.

This year, the Young Professionals, motivated by the need for concrete actions, decided to translate the Vision into an Action Plan. The Action Plan seeks to be a tool for: a) engaging with peers (young professionals), national and international actors, and other key stakeholders in their efforts to provide leadership and b) offering solutions to water challenges, and therefore, guaranteeing that the Vision becomes an instrument for change.

Building upon the inspiring Vision 2050, the Action Plan focuses on proposing and promoting innovative and integrated water-related solutions for water, energy, food, climate change and health. These solutions have the potential of being adaptable to diverse environments and promote inter-generational cooperation as a tool for knowledge transfer. These elements are all necessary for addressing the many uncertainties and complexities ahead.

#### Other activities

This year's World Water Week included young professionals and youth as crucial stakeholders; made evident by the space dedicated to Young Professionals including the Stockholm Junior Water Prize and the Young Professionals' Day. Other activities included: CV clinic (a session dedicated to enhancing CV quality) and the exhibition space tour (an opportunity to meet companies and institutions working in the water sector). Additionally, Young Professionals will share a draft of the Action Plan with their peers and incorporate the feedback and comments in the final document.

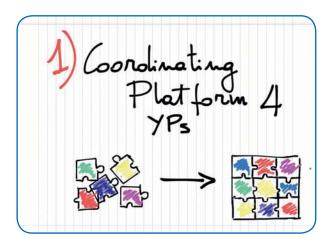
Young professionals' activities and ideas are gaining momentum, demonstrating that a young generation of professionals is ready to act on water challenges.

#### Twitter hashtags

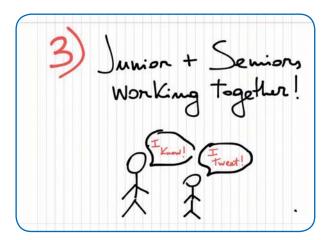
#gen2050 #adaptiveidealists

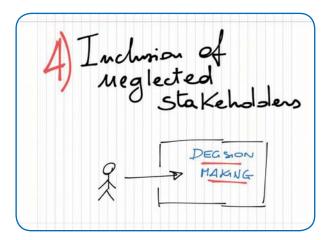


hoto: Thomas Henrikson









#### **ACTION PLAN**

The Action Plan will be completed in 2014. However, some major actions were launched at this year's World Water Week opening session. These actions are:

### 1. Online coordinating platform for Young Professionals

There are many water events throughout the year and Young Professionals events are becoming more common. Often, the outcomes of these events remain confined in a silo and do not reach other professionals. An online platform could bridge major Young Professionals events across international conferences and become a place where outcomes and ideas are shared. This idea was discussed with other Young Professionals Organisations during a seminar at World Water Week.

#### 2. Establishment of the "Learning from Failure Prize"

The international community has an abundance of experience sharing successes. However, organisations often neglect to analyse what did not work as expected or failures in projects. The establishment of a dedicated session and competition e.g. "Learning from Failure Prize" in international conferences could be a starting point for learning from failure experiences.

### 3. Mainstreaming mentoring programmes for Young Professionals

Junior and senior professionals, when brought together, have an enormous potential to find innovative solutions to address complex problems. When promoting collaboration between junior professionals' new skills and ideas, with senior professionals' expertise, they are able to synergise their skills and develop groundbreaking solutions. This would be crucial not only to enhance problem solving, but to guarantee that intergenerational knowledge transfer takes place.

### 4. Bridging the gap between traditional and neglected stakeholders

In 2012, we advocated for inclusivity of 'neglected stakeholders' such as professionals that are working in the field and do not have the opportunity to participate in decision-making processes. In this regard we admit that we do not have a solution, but we need to keep asking: Who is missing? Why? How can we bring them in? The Young Professional Team is currently looking into opportunities for bringing some of these professionals to 2014 World Water Week.

#### 5. Inter-generational panel discussion

Another important outcome from the Young Professionals activities during 2013 World Water Week was the "Inter-generational Panel". Young professionals were able to discuss their perspectives on key issues on sustainability and the nexus approach with senior professionals.

The panel included senior water experts such as Ms. Sunita Narain and Dr. Roberto Lenton, and young professionals such as Ms. Sarah Brikke and Ms. Preshanthie Naicker.

Learn about some key moments from the debate by following tweets at #gen2050 and #adaptiveidealists or reading the meeting report by the Water Youth Network.

# **CONVENING ORGANISATIONS**

WITH ACRONYMS		CI	Conservation International
2030 WRG	2030 Water Resources Group	CKNet	Colaborative Knowledge Network Indonesia
3GF	Global Green Growth Forum	Clingendael	
Secretariat	0.00 0.000.0000.0000.0000	Cilligendaei	Relations Clingendael
Secretariat	Secretariat	CLOCSAS	Confederación Latinoamericana de
A, B, C, D		CLUCSAS	
А, В, С, В		_	Organizaciones Comunitarias de
	Fadaral Faraira Office Commons	CODIA	Servicios de Agua y Saneamiento Conferencia de Directores
AA	Federal Foreign Office, Germany	CODIA	
ACCWaM	Adaptation to Climate Change in	CONTACTIA	Iberoamericanos del Agua
	the Water Sector in the MENA	CONAGUA	National Water Commission, Mexico
16615	Region	CPWF	CGIAR Challenge Programme on
ACSAD	Arab Center for the Studies of Arid	CDC	Water and Food
0.634.410	Zones and Dry Lands	CRS	Catholic Relief Services
ACWUA	Arab Countries Water Utilities	CUAHSI	Consortium of Universities for the
400	Association	DEID	Advancement of Hydrologic Science, Inc.
ADB	Asian Development Bank	DFID	Department for International
ADC	Austrian Development Cooperation	DIE	Development, UK
AFD AfDB	Agence Française de Développement	DIE	Deutsches Institut für Entwicklungs-
ATUB AGWA	African Development Bank	BIZII	politik
	Alliance for Global Water Adaptation	DKU	German-Kazakh University
AIDA	International Association for Water	DSE	Delhi School of Economics
ALOAC	Law Asociación Latinoamericana de	DWA	German Association for Water, Wastewater and Waste
ALOAS			Wastewater and Waste
AMCOW	Operadores de Agua y Saneamiento African Ministers' Council On Water	E, F, G, H	
ANA	Agencia Nacional de Aguas, Brazil	<u> </u>	
ANEAS	Asociación Nacional de Empresas de	EC	European Commission
AITEAS	Agua y Saneamiento	eFlowNet	Global Environmental Flows Network
ANEAS	National Association of Water and	EIB	European Investment Bank
71112713	Sanitation Utilities of Mexico	ELI	Environmental Law Institute
APWF	Asia Pacific Water Forum	ENSPY	Ecole Nationale Supérieure Poly-
Aquafed	International Federation of Private		technique de Yaoundé
•	Water Operators	ETH Zürich	Swiss Federal Institute of Technology,
AUC	African Union Commission		Zurich
AWF	African Water Facility	EUREAU	European Federation of National
AWS	Alliance for Water Stewardship		Associations of Water Services
BGR	Federal Institute for Geosciences and	<b>EUWI-AWG</b>	EU Water Initiative – The Africa
	Natural Resources, Germany		Working Group
BMU	Federal Ministry for the Environment	FAO	Food and Agriculture Organization of
	Nature Protection and Nuclear Safety,		the United Nations
	Germany	FARN	Fundación Ambiente y Recursos
BMZ	Federal Ministry for Economic		Naturales
	Development and Cooperation,	FoEME	Friends of the Earth – Middle East
	Germany	FWP	French Water Partnership
BPD	Building Partnerships for	GFZ	German Research Centre for
	Development in Water and Sanitation		Geosciences
CBD	Secretariat of the Convention on	GGGI	Global Green Growth Institute
Secretariat	Biological Diversity	GIZ	Deutsche Gesellschaft für Inter-
CDE	Centre for Development and	CLEC	nationale Zusammenarbeit
CDD	Environment	GLFC	Great Lakes Fishery Commission
CDP	Carbon Disclosure Project – Water Disclosure	GLSLCI	Great Lakes & St. Lawrence Cities Initiative
CEMAC	International Centre for Water	CDD	
CEWAS		GRP GU	Great Rivers Partnership
CGIAR	Management Services	GWC	Gothenburg University Global Water Challenge
CUIAR	Challenge Programme on Water and Food (CPWF)	GWI	Global Water Initiative
CGLG	Council of Great Lakes Governors	GWOPA	Global Water Operators' Partnerships
CGLI	Council of Great Lakes Industries	JIVIA	Alliance at UN-Habitat
ChomSoc	International Chemical Secretariat	CWD	Clobal Water Partnership

**GWP** 

Global Water Partnership

ChemSec

**International Chemical Secretariat** 

GWSP	Global Water System Project	MDBA	Murray-Darling Basin Authority
HGBF	Howard G. Buffett Foundation	MDG-F	Spanish Millennium Development
HidroEx	International Center for Education,		Goals Achievement Fund
	Capacity-Building and Applied	MENA	Middle East and North Africa Net-
	Research in Water Foundation	NWC	work of Water Centers of Excellence
		— MEP/	Foreign Economic Cooperation Office
I, J, K, L		FECO	at Ministry of Environmental
140.4	1		Protection, China
ICBA	International Center for Biosaline	MOLIT	Ministry of Land, Infrastructure and
	Agriculture		Transport, Korea
ICIMOD	International Centre for	MRC	Mekong River Comission for
ICDDD	Integrated Mountain Development	AACD.	Sustainable Development
ICPDR	International Commission for the	MSB	Swedish Civil Contingencies Agency
IFFD	Protection of the Danube River	NAI	Nordic Africa Institute
IEEP	Institute for European Environmental	Nairobi	Nairobi City Water and Sewerage
IEDDI	Policy	Water	Company
IFPRI	International Food Policy Research	NASA	National Aeronautics and Space
ICDAC	Institute	NDCDN	Administration
IGRAC	International Groundwater Resources	NBCBN	Nile Basin Capacity Building Network
1110	Assessment Centre	NBI	Nile Basin Initiative
IHA	International Hydro-Power	NM-AIST	Nelson Mandela African Institute of
IIACA	Association	OFCD	Science Technology
IIASA	International Institute for Applied	OECD	Organization for Economic
UED	Systems Analysis International Institute for Environ-	ONERGO	Cooperation and Development
IIED		ONEMA	The French National Agency for Water
11.6	ment and Development International Land Coalition	ODACECOM	and Aquatic Environment
ILC ILO		ORASECOM	Orange-Senqu River Commission
	International Labour Organization International Network of Basin	$\cap$ PST	
INBO		Q, R, S, T	
IDIFCA	Organizations	OUNO	Overland Heitard National Office
IPIECA	International Petroleum Industry Environmental Conservation	QUNO Ramsar	Quaker United Nations Office Secretariat of the Convention on
	Association	_	
IRC	International Water and	Secretariat RICE	Wetlands of International Importance Research Institute for Compassionate
IKC	Sanitation Centre	RICE	Economics
IRF	International RiverFoundation	RWSN	Rural Water Supply Network
IUCN	International Union for Conservation	Sandec	Department of Water and Sanitation
IOCIN	of Nature	Sandec	in Developing Countries at the Swiss
IWA	International Water Association		Federal Institute of Aquatic Science
KCL	King's College London		and Technology
KfW	KfW Development Bank	SDC	Swiss Agency for Development and
KVA	Royal Swedish Academy of Science	300	Cooperation
K-Water	Korea Water Resources Corporation	SEI	Stockholm Environment Institute
LAS	League of Arab States	SHARE	Sanitation and Hygiene Applied
LA3 LA-WETnet	Latin America Water, Education and	JIIAKL	Research for Equity
-A WEITIGE	Training Networt	Sida	Swedish International Development
LSHTM/	London School of Hygiene and	Jidd	Cooperation Agency
SHARE	Tropical Medicine/SHARE Research	SIWI	Stockholm International Water
	Consortium	3.111	Institute
LSRCA	Lake Simcoe Regional Conservation	SLU	Swedish University of Agricultural
	Authority	J10	Sciences
LTAW	Let's Talk About Water	SMHI	Swedish Meteorological and Hydro-
LIAW	London Water Research Group	3141111	logical Institute
LWKG	London Water Nesearch Gloup	SRC	Stockholm Resilience Center
		— STWI	Swedish Textile Water Initiative
M, N, O, P		— SIWI SWA	Sanitation and Water for All
			Swedish National Commission for
M'Rianá	M'Riguá Ciudadanía v lucticia	— Svenska Unesco-	UNESCO
M'Biguá	M'Biguá Ciudadanía y Justicia Ambiental	rådet	UNESCO
	Allibertal	rauet	

MAEE

Ministère des Affaires Étrangères, France

SWAR	Sustainable Water Resources	USAID	United States Agency for International	
	Management for the Textile Industry		Development	
	in India	USWP	US Water Partnership	
SWH	Swedish Water House	UT	University of Texas at Austin	
SWP	Swiss Water Partnership	UU	Uppsala University	
SWWA	Swedish Water & Wastewater	WB	World Bank	
	Association	WBCSD	World Business Council for	
THIGJ	The Hague Institute for Global Justice		Sustainable Development	
TNC	The Nature Conservancy	WEDC	Water, Engineering and Development	
TRRT	Thames River Restoration Trust		Centre	
		WFN	Water Footprint Network	
U, V, W, X,	Y, Z	WFP	Water Futures Partnership	
		WGC	Water Governance Centre	
UCI	University of California-Irvine	WGF	UNDP Water Governance Facility at SIWI	
UEA	University of East Anglia	WHO	World Health Organization	
UEM	Eduardo Mondlane University	WI	Wetlands International	
UFZ	Helmholtz Centre for Environmental	WIN	Water Integrity Network	
	Research	WLE	CGIAR Research Program on Water,	
UNDP	United Nations Development		Land and Ecosystems Led by IWMI	
	Programme	WMO	World Meteorological Organization	
UNECE	Convention of the Protection and	WRI	World Resources Institute	
	Use of Transboundary Watercourses and International Lakes	WSA	Water and Sanitation for Africa	
UNEP	United Nations Environment	WSP WSSCC	Water and Sanitation Program	
UNEP	Programme	WSSCC	Water Supply and Sanitation Collaborative Council	
UNEP-DHI	UNEP-DHI Centre for Water and	WSUP	Water and Sanitation for the Urban Poor	
ONEP-DHI	Environment	WWAP	UN World Water Assessment Programme	
UNEP-TEEB	UNEP – Economics of Ecosystems	WWAP	World Water Assessment Programme	
Office	and Biodiversity Office	wwc	World Water Council	
UNESCO	United Nations Educational, Scientific	WWF	World Wide Fund for Nature	
	and Cultural Organization	WYPW	World Youth Parliament for Water	
UNESCO-IHE	UNESCO – Institute for Water Education	ZEU	Zentrum für internationale Entwicklungs-	
	UNESCO International Hydrological		und Umweltforschung	
	Programme			
<b>UN-ESCWA</b>	United Nations Economic and Social	WITHOUT	ACRONYMS	
	Commission for Western Asia			
<b>UN-Habitat</b>	United Nations Human Settlements	7th World V	Vater Forum Planning Office	
	Programme		trict Assembly, Ghana	
UNICEF	United Nations Children's Fund	Akvo Found		
UNIDO	United Nations Industrial	Aquaconsu		
	Development Organization	Borealis & E		
UNISDR	United Nations Office for Disaster	Both ENDS		
	Risk Reduction	Botín Foundation Water Observatory		
UNSGAB	United Nations Secretary General's		Calouste Gulbenkian Foundation	
UNU	Advisory Board on Water and Sanitation	Cap-Net	+iI	
UNU-EHS	United Nation University United Nations University Institute for	CARE International Connecting People for Change		
UNU-EN3	Environment and Human Security	Cordaid	reopie for Change	
IINII_INWEL	United Nations University-Institute		ropolitan City, Korea	
ONO-INVEI	for Water, Environment and Heath		nsulting LLP	
UNW-DPAC	UN-Water Decade Programme on	Delta Allian	•	
J.III DIAC	Advocacy and Communication	DHI		
UNW-DPC	UN-Water Decade Programme on		es Etudes et de l'Information	
J DI C	Capacity Development	sur l'Eau, B		
UNZA	University of Zambia	Dundee Un		
UPEACE	UPEACE Centre The Hague	Elsevier		
The Hague		Engility		
UPTW	The Universities Partnership for	FEMSA Fou	ndation	
	Transboundary Waters	Fundación /		
	,			

German WASH Network German Water Partnership Government of Finland Green Cross International Grundfos

Grundfos H&M

**HELVETAS Swiss Intercooperation** 

**IKEA** 

International Alert

Isle Utilities

Kabarole Ditsrict, Uganda

Mandate of the Special Rapporteur on the Human Right to

Safe Drinking Water and Sanitation

Ministry of Energy and Water Resources, Sierra Leone

Municipality of Tiraque, Bolivia

Pacific Institute
Plan International

Province of Gyeongsangbuk-do, Korea

**RAIN Foundation** 

Robert B. Daugherty Water for Food Institute at

the University of Nebraska

SABMiller SaciWATERs Safe Water Network

Shell Oil

Skoll Global Threats Fund

Stratus

Tecnológico de Monterrey, Mexico

The Coca-Cola Company
The RUAF Foundation

Unilever

United Nations CEO Water Mandate

United States Department of State

University of Surrey

**UN-Water** 

**WASH Advocates** 

**WASTE Foundation** 

Water Center for Latin America and the Caribbean

Water For People

Water Youth Network

WaterAid

WaterLex

WaterNet

Vitens Evides International

**World Vision** 

**Xiamen University** 



#### **CONVENING ORGANISATIONS**

The World Water Week is organised by SIWI but the programme of seminars and side events that are part of the Week are planned by the different convening and co-convening organisations.

By hosting an event, the convening organisations engage a wide range of stakeholders in discussions and debate around a specific issue of their choice. In order to build partnerships and bringing a diversity of perspectives to the World Water Week, SIWI encourages and promotes cooperation amongst organisations.

#### **How to become a 2014 Convenor**

If you are interested in hosting an event during the 2014 World Water Week, you will need to submit an event proposal for review by SIWI.

Keep an eye out for the Call for Abstracts and Event Proposals that will be released in November 2013.

For more information, please contact Mr. Adrian Puigarnau at: adrian.puigarnau@siwi.org

# **2013 WORLD WATER WEEK SPONSORS AND SUPPORTERS**

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#### **CONTACT**

Ms. Helene Brinkenfeldt, Manager, Business Relations EMAIL helene.brinkenfeldt@siwi.org | PHONE +46 720 506 053

# 2014 WORLD WATER WEEK IN STOCKHOLM ON WATER AND ENERGY

2014 is the year when the United Nations, including World Water Day celebrations and the launch of the World Water Development Report, focuses on the theme "Water and Energy". Recognising the importance of the issue, and trying to contribute to the global water debate in 2014, the World Water Week in Stockholm in 2014 will address the same theme.

Water and energy are inextricably linked. We need "water for energy" for cooling, storage, biofuels, hydropower, etc., and we need "energy for water" to pump, treat and desalinate. Without water and energy we cannot satisfy basic human needs, produce food for a rapidly growing population and achieve economic growth.

When addressing the "Water and Energy" theme in Stockholm we shall take an overall systems view of how to develop and manage water and energy for the good of society and healthy ecosystems – at local, national, regional and global

levels – avoiding unintended consequences of narrow sectoral approaches, and through a shift towards renewable energy striving towards a greener world. In the process, the "water, energy and food security nexus", underpinning the green growth approach, will need to still be on the agenda.

The water and energy theme will be addressed from two overall perspectives in Stockholm: the societal opportunities and challenges, and the cross-cutting issues. For the former the Week will focus on the demography and economy driving water and energy demands; the balancing of societal uses of water and energy; and water and energy in a vulnerable and changing environment. For the latter the Week will focus on the coordination of water and energy policies and governance; the environmental, economic and financial aspects of water and energy; the development of information and decision support systems for water and energy; and the bridging of the science-policy-people interface for water and energy.

#### **2014: 19 JANUARY**

Deadline for submission of abstracts and event proposals.

Submit abstracts and proposals online at www.worldwaterweek.org.

#### **2014: FEBRUARY-APRIL**

Notification of acceptance of abstracts and event proposals. Nominations for 2015 Stockholm Water Prize open.

#### **2014: APRIL-MAY**

**Registration opens and the Programme** is released, providing an overview of 2014 World Water Week as well as information on how to register.

#### **2014: JUNE 30**

Discounted registration (Early Bird) ends.

#### 2014: AUGUST 30-SEPTEMBER 5

2014 World Water Week in Stockholm - Water and Energy.

JANUARY

FEB-MARCH

**APRIL-MAY** 

# 2013 Overarching Conclusions





STOCKHOLM INTERNATIONAL WATER INSTITUTE, SIWI
DROTTNINGGATAN 33, SE-111 51 STOCKHOLM, SWEDEN
PHONE +46 8 121 360 00 + FAX +46 8 121 360 01 + siwi@siwi.org + www.siwi.org