20/5 World Water Week Overarching conclusions





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Wrapping up and looking ahead!

Dear friends of water! We are summing up what has, again, been a very successful World Water Week. With 3,300 participants from 130 countries, participants from an ever-widening range of communities, and the presence of several heads of state and government, our water meeting is cementing its position as the world's most important annual conference about water and water-related issues.

This year's theme, Water for Development, showed yet again how water is what links all aspects of development. Affecting our daily lives in a way no other resource does, it is a measure of how well or poorly a society fares.

In over 200 sessions and events at the World Water Week venue in downtown Stockholm, current issues such as the Sustainable Development Goals, climate change, sanitation, transboundary waters and urbanization were discussed and debated.

Our teams of hard-working rapporteurs together attended all the sessions, and their take-home messages have been distilled into three very interesting articles, starting on page 8. The chairman of World Water Weeks's Scientific Programme Committee has summarized the eight workshops held during the Week. Read it on page 7.

From all over the world, thousands of others joined the discussion via social media channels. As an example, the

#WWWeek hashtag was used more than 34,000 times, and retweeted some 900,000 times during the Week. This means as many as 326.1 million people could potentially have heard about the Week, just through Twitter. Read more about our digital reach, and our successful campaigns, on page 14.

As we wrap up the work with the 2015 World Water Week, we are already planning the 2016 Week, which will be themed "Water for Sustainable Growth". We hope to directly and indirectly contribute to the SDG 8 to "promote sustained, inclusive and sustainable growth, full and productive employment and decent work for all". Hence, the theme will address sustainable growth for all by focusing on inclusiveness in terms of the human, societal and environmental dimensions in all regions of the world.

But first, here are the Overarching Conclusions of the 2015 World Water Week. Enjoy!



Joyn Halmyre

Torgny Holmgren, Executive Director Stockholm International Water Institute

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Prizes and awards

Global water re-use advocate received Stockholm Industry

Water Award

The Stockholm Industry Water Award was awarded to CH₂M, a global service and engineering company, for developing and advancing methods to clean water, and increasing public acceptance of recycled water. CH₂M accepted the award at a ceremony on 23 August.

The Award Committee stated that "in a rapidly urbanizing world where the vast majority of sewage spills untreated out into the environment, the transformative technologies and strategic communication of this year's Stockholm Industry Water Award winner has provided a significant step towards future water security of cities".

Stockholm Industry Water Award honours business sector contributions to wise use and management of water. Nominate for next year's Stockholm Industry Water Award before November 15, 2015.



Read more at www.siwi.org/prizes/stockholmindustrywateraward

American student won **Stockholm Junior Water Prize** for removing electronic waste from water

Perry Alagappan from the United States received the 2015 Stockholm Junior Water Prize for inventing a filter through which toxic heavy metals from electronic waste can be removed from water.

H.R.H. Crown Princess Victoria of Sweden presented the prize at the award ceremony during the World Water Week in Stockholm. Upon receiving the prize, Perry told of how he got the idea for his project three years ago, during a visit to his grandparents' village in rural India.

A Diploma of Excellence was awarded to Katherine Araya and Katya Urqueta from Chile, for improving water-use efficiency in agriculture.

Stockholm Junior Water Prize gathers the world's brightest young minds for an outstanding competition in the capital of Sweden. National teams from 29 countries took part in this year's international final.

at the award eceiving the prize, or,

Photos: Jonas Borg

Read more at www.siwi.org/prizes/stockholmjuniorwaterprize

Best Poster Award

Patrick Thomson from the University of Oxford was awarded the 2015 Best Poster Award for his poster named Distributed Monitoring of Shallow Aquifer Level using Community Hand pumps. The Jury praised Thomson's work for its simplicity and innovative thinking, and said that "we are convinced that the research results could be scaled up to significantly enhance the evidence base for the shallow groundwater resources".

The World Water Week poster exhibition showcases a number of selected abstracts from each workshop. In the exhibition, conference visitors can learn more about the projects behind the posters. The most informative, innovative and well-designed poster is awarded with the Best Poster Award.



Photos: Mikael Ullér

Stockholm Water Prize awarded to the "Water man of India"



Rajendra Singh of India received the 2015 Stockholm Water Prize for his innovative water restoration efforts, improving water security in rural India, and for showing extraordinary courage and determination in his quest to improve the living conditions for those most in need.

No one is left untouched after hearing Rajendra Singh speak, which he did at numerous events at the week. He repeatedly underlined the importance of "showing love, respect and affection to water". Together with Rajendra, SIWI gathered the World Water Week delegates for a "Water Walk", to raise awareness of water as a source of peace and life. On Wednesday 26 August, H. M. King Carl XVI Gustaf of Sweden awarded the prize to Rajendra Singh at the Royal Ceremony at Stockholm's City Hall.

Stockholm Water Prize is the world's most prestigious water prize and is awarded annually to women, men and organizations who have made outstanding contributions to wise management of the world's water resources and improving the health of people and ecosystems.

Read more at www.siwi.org/prizes/stockholmwaterprize



Photo: Thomas Henrikson

Overarching conclusions

Raising the value of water is crucial for development

As always, this World Water Week, themed Water for Development, offered new insights, inspiring exchange of ideas, and in-depth discussions. As a start, we know that water is absolutely fundamental for all development: for human health, sustainable growth, social progress and sound ecosystems. It must therefore be considered in decision-making at all levels and in most sectors. It is near impossible to come away with one, or only a few conclusions from the Week. However, there are some topics that stand out from the rest, demanding our immediate attention and resolute action. They include increasing water demand and how we decide to deal with the growing scarcity of water; climate change, mainly manifesting through water; cross-border cooperation to manage shared water resources; and of course, how to best implement and monitor the upcoming Sustainable Development Goals.

Increasing water demand will fundamentally change the way societies develop and function, the way we as global citizens view our future and go about our daily activities. A growing realization of increased water scarcity will force us all into a new way of thinking and acting. Urban areas have to take accessible and increasingly variable water supply into account for their future growth. Good water management is accordingly becoming a competitive advantage for attracting investments and job opportunities. Residents of increasingly waterscarce regions may consider moving to areas with a wealth of safe water. Industries that were built around the presumption that there will always be a sufficient amount of water for their production, will need to invest in more water-efficient equipment and sustainable water use or maybe even move to regions with better access to water.

To begin with, we have to start treating water as the scarce commodity it is. Otherwise we will continue to overuse water. We must enter into a common understanding about the need to raise the value of water. How can we best combine instruments like regulations, tariffs, pricing, licensing as well as tax and transfer systems to optimize the future use of water? Whichever way we go, and it will differ from country to country, it is time to dive deep into the details of how to solve the water valuation paradoxes.

Sharing water resources under increasing demand between neighbouring countries will continue to influence the relationships between nations. Growing populations and increased income levels combined with less reliable water creates challenges that often seem overwhelming. Identifying and developing forms of cooperation over shared waters is therefore crucial. Furthermore, the political aspects of trans-

boundary cooperation cannot be neglected if real progress is to be made. Water diplomacy, a mechanism for achieving water cooperation and equitable distribution of benefits of and from water, is growing in both extent and importance, reflected in the large participation, during World Water Week, by representatives of foreign services.

As we know, *climate change* is manifested trough water, in the forms of prolonged droughts (little water), floods (too much water) and other extreme weather events. Water scarcity and variability pose significant risks to all economic activity: food and energy production, manufacturing, and infrastructure development. Water is also of critical for adaptation to as well as mitigation of climate change. Renewable energy production depends to a large extent on water. Therefore, everyone – private and public actors – will need to invest heavily, both attention and resources, to maintain and improve water resilience.

Based on discussions during World Water Week, SIWI urges governments to consider the following in the run-up to COP21:

- Water is a cross-cutting resource and underpins all development.
- Water resilience is key for successfully addressing climate change.
- Given its key role for climate adaptation and mitigation, water needs to be addressed and integrated into the global climate policy and financing architecture.
 The COP21/Paris agreement should provide entry points for facilitating this.
- SIWI supports, and will engage in the "Lima Paris Action Agenda", helping to drive climate action forward, and accelerate the growing engagement of all parts of society in climate action.
- According to UNFCCC, all countries are obliged to put forth Nationally-Determined Contributions (NDCs).
 Water is vital for an effective NDC and must be considered by countries when they decide about types of mitigation (e.g. hydropower, emissions reductions in production or land-use sectors) and adaptation (e.g. resilient infrastructure, water harvesting and storage) actions.
- Beyond COP21, SIWI advocates for a function through which water-related actions on climate will be coordinated. In the same way a dedicated SDG on water is needed, a coordinating function for water under the UNFCCC will be important to the future global climate architecture. Water is essential for both adaptation and mitigation, and serves as a connector between the two.

When we commence the implementation of the *Sustainable* Development Goals in 2016, we need to broaden our horizon, and not only focus on Goal 6, the water goal. Water is of central importance to the achievement of a large number of all other goals like poverty, health, food, energy, climate,

infrastructure etc. Think away water, and many of the SDGs will never be reached. SIWI aims to provide fora for evaluating progress of water across the SDGs, starting with the World Water Week in 2016.



A brief summary of the eight SIWI workshops

The eight SIWI Workshops were co-convened by 21 organizations, and featured 26 keynote presentations, along with 52 presentations and 33 posters from competitively selected papers, (more than 400 abstracts were submitted). Roundtable discussions, high-level panels, games, field trips and more ensured active participation - in full rooms - of participants throughout the Week.

The workshops covered SDG implementation of the post-2015 development agenda for sustainable development, with particular focus on poverty reduction and management of change, ecosystem and sustainable cities. Discussions included important aspects such as financing and green growth, innovation and information technologies, and how to re-think governance post-2015.

The future implementation of the Sustainable Development Goals (SDGs) calls for effective and innovative monitoring -"we cannot manage what we cannot measure". From MDGs to SDGs, focus is shifting from global to national, and the need for new indicators to prompt action. SDG goals and targets are interconnected - we cannot achieve one without the other. Indicator development and measurement requires attention of synergies and subsidiarity. In this endeavour,

capacity development in monitoring, data analysis and reporting are crucial at all levels. We must educate and empower decision-makers, from local actors to national governments, starting with youth.

We must target investment programmes that benefit the poor, not disempower them. Public and private sector initiatives, and water being considered a human right need not be contradictory. With proper attention to a pro-poor perspective, they go hand in hand. Water is "political", and we need to understand how water is used - and misused - as a result of prevailing power structures in society. We need to be aware of how instruments and incentives are formulated, and by whom, to strengthen and empower the less powerful. This is imperative for equity and gender equality.

We must integrate social, technical and financial aspects to strengthen resilience to climate change and disaster risks, from both local and regional perspectives. Informed decisionmaking by local actors, relevant sectors and scientists in an all-inclusive policy making process is crucial to successfully implement resilience building. A true paradigm shift is underway through processes grounded in innovative collaboration. We must act now, but processes are slow.

We have the capacity to successfully manage *sustainable ecosystems*, but this will not be possible without maintaining a diversity of natural capital. We cannot live on ecosystem services alone, nor can we live without them. The solution lies in combining and valuing natural and built capital appropriately. The social costs of unsustainable water use due to impacts on freshwater ecosystems often exceed the benefits. This calls for holistic, comprehensive and fair evaluations of plans, strategies and investments.

We need overarching *financing frameworks* in a green economy that account for natural capital, water for economic development, stakeholder participation, social priorities and values, a proper institutional environment etc. However, overly uniform, top-down approaches risk failure: "one-size does not fit all". Transparency and sharing are integral to trust building, which in turn is key for long-term cooperation over resources. Policy interventions require flexibility to adapt to changes. However, there is a need to choose boundaries and rules, and agree upon them. Inequity creates inefficiencies and lost opportunities in investment, along with reduced innovation and diffusion of information. We must take different risk profiles of different users into account – across users, territories, and social groups.

In our *fast growing cities*, we need to match water quantity and quality to intended use, and find innovative ways of extracting as many benefits from the used water stream as possible, including energy and nutrients. Sustainable cities need to view urban water through the lense of integration, taking a systems perspective and looking at the entire urban water cycle as one. "All water is good water" – surface water,

groundwater, storm-water, used water etc. One person's waste is another's feedstock, leading to potential mutually beneficial transactions, thus calling for all relevant stakeholders - both public and private – to be involved. Urban sustainability requires political leadership and early integration in urban planning with a multisectoral approach. We need to identify clear pathways from the status-quo to our desired future, fostering an organizational culture for innovation and change.

Information and communication technologies (ICT) can help improve utility operations by increasing efficiency and reducing costs, especially energy. ICT can also ensure inclusion and participation of the most vulnerable in decision-making. However, ICT tools and systems are not an end in themselves. A clear purpose is key, and data collection should aggregate information to support efficient decision-making. Stakeholders — and not least end users — must be involved and educated in the processes. The data revolution is setting a new stage. ICT will be crucial for the monitoring of the SDGs using mobile phone data, citizen online monitoring data, remote sensing etc. We simply cannot afford to ignore these innovations.

Good governance is about management of both resource and user services, including public, private and civil society actors, in both formal and informal systems. Financing is necessary to support accountability – top down and bottom up – to allow space for innovation in governance processes. Failures occur when external forces impose governance reforms while ignoring local conditions, especially in fragile or post-conflict societies.

Economic development – implementation for change

Lead Rapporteurs

Prof Guillermo Donoso, Agricultural and Natural Resource Economist specializing in Water Economics, is a Full Professor of the Water Law and Management Center of the Pontificia Universidad Católica de Chile, Chile. **Ms Dawn McGregor**, Manager of China Water Risk's network and publications, as well as researcher of water risk, China Water Risk, Hong Kong.

Junior Rapporteurs

Mr Vivien Deloge, Consultant on Water, Environment and Human Rights, France

Mr Daniel Ddiba, KTH Royal Institute of Technology, Sweden/Uganda

Ms Isla Duporge, ICRAF, Kenya

Ms Hanna Eggestrand, KTH Royal Institute of Technology,

Ms Niak Sian Koh, Malaysia



oto: iStock

Bridging funding gaps | The upcoming UN summit to define the Sustainable Development Goals (SDGs) – aimed at sustainably integrating social, economic, and

environmental development – dominated this year's World Water Week, and was a primary focus for discussions related to economic development. Sustainable water management is

The financing gap in water is not about insufficient finance but about insufficiently well packaged financing opportunities: water remains in one silo and finance in another"

not only a goal in its own right, but because it cuts across so many other development spheres, it is also necessary to achieve other goals. Quite simply, water is the critical enabling factor for economic prosperity, population growth and environmental protection.

However, significant funding gaps faced by national governments hinder the implementation of key objectives. Neither public nor private financing alone is likely to keep pace with SDG implementation requirements, increasing global demands, and growing populations. It remains unclear how much funding is required, or from where it will be sourced, to meet water-specific SDG number six: "Ensure availability and sustainable management of water and sanitation for all".

Although funding and financing approaches have remained broadly unchanged, several speakers at World Water Week stressed that business as usual is no longer an effective option. World Water Week recognized that a number of innovative collaborative financing sources and mechanisms exist, providing an alternative to conventional public and donor approaches.

Financing solutions: making a clear business case for water | How can public finance be engaged in such a way as to attract additional funding such as micro credit, multilateral banks, private sector and non-profit donor funds?

A key message from 2015 World Water Week in this respect was the importance of learning from other sectors, such as the energy sector, to make a robust business case to generate interest from private investors. The financing gap in water is not about insufficient finance but about insufficiently well packaged financing opportunities: water remains in one silo and finance in another. Finance sector participants at World Water Week said that investors need clear and understandable data before investing in water — as they would before investing in any other sector.

Contradictory calls on data and monitoring | Contradictory calls on data and monitoring were made during the Week. Some say that there is too much monitoring and that it needs to be simplified. Others, that there is a lack of an evaluative culture – i.e. data and monitoring should be expanded. Such contradictions will complicate efforts to secure funding and investment.

Further discussion on data and monitoring focused on midto long-term monitoring to ensure that funds are available throughout the lifetime of a project. In many cases there is a considerable initial monetary injection, which is subsequently exhausted.

Monitoring was also an issue for meeting the SDGs, with some participants expressing concern at the large number of indicators. What was required, they argued, was a strategic approach that provided relevant data for specific stakeholders. "What we cannot measure, we cannot manage," was a key takeaway from one session. In addition to reporting results, authors of implementation and action plans were urged to consider impact assessment. However, since water can be a local issue, indicators should also be developed as to be relevant to specific local conditions.

What is the true value of water? The failure of water users to fully consider the intrinsic value of water, and the impact this has on water policies, was identified as a major source of water management problems. This undermines the development of effective strategies to combat water scarcity. Without improved indicators of the true value of water — incorporating scarcity, pollution, access and users — sustainable economic development will be hampered and ecosystems risk being permanently damaged.

The role of water markets in quantifying the true value of water received wide attention throughout 2015 World Water Week. Speakers showed how water markets incentivize efficiency, improve economic productivity and enable restoration of de-watered ecosystems.

However, growing interest in water markets has yet to translate policy: only a small number of countries have introduced water markets to date. A major takeaway of 2015 World Water Week was the recognition that while institutional replication of successful water markets seems to be an effective way to leapfrog institutional development, the contextual uniqueness of each country makes the establishment of universal replication rules difficult: "one size does not fit all." Replication requires consideration of local and basin characteristics, as well as the potential externalities associated with water trading. Furthermore, the water market model should not be entirely based upon that of carbon.

Climate change was one of the key topics during the Week. Finance is being mobilized for climate initiatives, more so than water, yet water is a major factor in climate. It was argued, therefore, that water-related projects should have access to such funds. Green bonds, natural capital accounting and other financial mechanisms were, however, only lightly touched upon during the Week.

Looking ahead: the post-2015 agenda | There are critical differences between the Millennium Development Goals (MDGs) and the SDGs. The MDGs led to a silo methodology, but the SDGs require an integral approach with greater co-operation. At this year's World Water Week, there was evidence of increased co-operation in discussions but much still remains to be done.

Discussions throughout the Week suggested that all stake-holders – public, private, NGOs, and individuals – may be stuck in sets of assumptions and paradigms that are deeply rooted but rarely acknowledged. These assumptions may prevent us from absorbing the full importance of what we have heard, from imagining a different future for people and the planet, where access to water is a right that is

universally honoured and the benefits of globalisation are shared more equitably.

Regardless of the sector, all operations and business models need to be "sustainable" – here for the mid- to long-term. Water is a risk to the global economy and human development. Trade-offs loom in the not too distant future as demand and competition for water continue to rise.

2016 World Water Week will be an opportunity to exchange and learn from both success and failures of initial cooperative actions, allowing the water community to advance towards the SDGs. We encourage these efforts and urge more innovative thinking at next year's World Water Week.

Environmental development – planetary boundaries

Lead Rapporteurs

Mr Alex Martinez, The Rockefeller Foundation, USA. Alex works on issues of water resource management and conservation finance as a Program Associate at The Rockefeller Foundation.

Dr Gunilla Björklund, GeWa Consulting, Sweden. Gunilla is a specialist in the policy aspect of the interphase water/climate change/land degradation.

Junior Rapporteurs

Mr Elwuin E. Fiallos Lopez, Zamorano Pan American School of Agriculture, Honduras

Ms Karin Nilsson, Sweden

Ms Lilly Seidevall Byström, Sweden

Ms Mejs Hasan, USA

Mr Kamal Ahmed, University Technology Malaysia (UTM), Malaysia/Pakistan

Ms Angelica Lidén, Sydvatten AB/Lund University, Sweden



hoto: iStoc

Where we are now: an ecosystem perspective | Never

before has so much scientific data on current and projected environmental risk been available to decision-makers and the general public. A widespread consensus holds that the Earth has entered a new geological epoch, the Anthropocene, where human activity is fundamentally modifying the planet's natural processes – such as those linked to climate, the water cycle and biodiversity. As a result, steps need to be taken to prevent further irreversible change.

Population growth, combined with economic development, has considerable impact on freshwater ecosystems. Climate change is expected to increase the variability of rainfall, leading to an increase in water related extremes such as flood and drought. Numerous sessions during 2015 World Water Week emphasized that unrestrained competition for water among

multiple sectors, such as for urban areas, energy, and agriculture, is leading to dramatic over-use of freshwater resources in locations all over the world. Furthermore, fragile ecosystems and communities tend to be the first to lose access to freshwater when it becomes scarce.

Unless all ecosystems (freshwater, marine and terrestrial), are regarded as key factors to water security, and are incorporated into decision-making as such, it is difficult to envision how human development can have anything but negative impacts on ecosystems. Because human, economic, and social development are closely interconnected with water, it seems likely that our use of fresh water in the short term will jeopardize possibilities of satisfying water needs in the long term for food, drinking water, sanitation, and energy.

The water-food-energy nexus | Energy, food production and human health all depend on water services provided by natural ecosystems. Numerous sessions during the Week stressed that the social costs of water use – impacts on the (freshwater) ecosystems, and associated reductions in the reliability and quality of water flows – often exceed the benefits derived from that water use.

Water policy has traditionally focused on preserving economic productivity, and has tended to ignore the costs of overdrawing water from rivers, lakes, streams and wetlands, or of disrupting natural flow patterns with dams and other infrastructure. Many rivers no longer reach the sea, and those that do have changed to such an extent that remaining water contained in them is unsuitable for drinking or agricultural use. As more people use more water, less becomes available for remaining ecosystems. Sustaining and restoring ecosystems will require limits on water withdrawals and unsustainable use in many river basins.

The 'Source to Sea' initiative demonstrated different stages in the water's flow from the young, upstream stage at the sources to the mature, downstream stage where the water reaches the sea, applying a shifting ecosystems approach. Social and economic development impacts in areas downstream resulting from interventions demonstrate a cumulative effect of all upstream activities. This needs to be taken into account when planning urban development, agriculture etc. in river basins.

There was consensus among speakers and attendees alike that investment in the environment, (natural capital and ecosystem services), is critical for building resilience to chronic stresses, such as population growth, and acute shocks, such as floods and droughts; and, therefore, instrumental in Disaster Risk Reduction.

Recommendations for the post-2015 agenda Recognizing opportunities to invest in the natural environment requires a shift in how decisions are currently made. To date, water policy has, to a large extent, focused on optimizing the extraction and use of fresh water, while occasionally

managing the impacts of infrastructure on ecosystems, but for the most part ignoring (green) water use and the contributions ecosystems make to the water cycle. When the water needs of ecosystems are ignored they are less able to help maintain regular flows of sufficient quantity and quality. In sessions throughout the Week, it emerged that real opportunities lie in combining natural and man-made capital with policy that limits overuse of water to the detriment of ecosystems.

Substantial investment is required – in the shortest timeframe possible – to build water resilience in anticipation of climate variability and population growth. This entails investing in systems and practices that protect the environment, as well as the least well off. The upcoming UN General Assembly Session on the Sustainable Development Goals (SDGs) and the Framework Convention on Climate Change/21st Conference of the Parties (FCCC/COP 21) offer opportunities to secure commitments and financing for investment to improve environmental resilience.

It is clear that healthy freshwater ecosystems underpin our economic and social development objectives. The value of freshwater ecosystems and the services they provide extends beyond mere economic value. Decision-makers need to avoid framing water security issues in terms of trade-offs between human benefit and environmental benefit – the two are interdependent. In the long term, degrading freshwater ecosystems could prove to be more costly than making the suggested investments and agreeing on policies to protect them in the short term. To meet development requirements for 'Water for Sustainable Growth', (next year's World Water Week theme), and to build resilience, we must promote safe thresholds on water use at the local level while keeping global human impact on the environment within planetary boundaries.

Investment in the environment, (natural capital and ecosystem services), is critical for building resilience to chronic stresses, such as population growth, and acute shocks, such as floods and droughts"

Social development - fair water management

Lead Rapporteurs

Mr Timeyin Uwejamomere, WaterAid, UK. Timeyin provides strategic thought leadership and quality programming oversight for WaterAid's global urban water and sanitation agenda.

Ms Paula Hanasz, The Australian National University, Australia. Paula is completing a PhD on transboundary water governance in the Ganges-Brahmaputra-Meghna basin.

Junior Rapporteurs

Ms Hannah Moosa, University of Toronto, Canada/ South Africa

Mr Khaled Alhafez, Stockholm University, Sweden/Syria

Ms Katrin Eitrem Holmgren, WSP, Sweden

Ms Linn Järnberg, Stockholm Resilience Centre, Sweden

Ms Karolin Andersson, University of Copenhagen, Denmark

Mr Isaac Yaw Barnes, Global Water Partnership, Ghana



oto: iStock

The human face of water Water is an environmental resource with economic drivers, but it also has a human face. Not only the face of an individual, but the faces of family members lacking adequate sanitation, of people crowded into rapidly growing cities, of those eking out a living in a downstream country, a drought-prone region or even inhabitants of a sinking country – and of the nine billion people who will populate the planet by 2050.

As individuals, we all have a right to clean drinking water and effective sanitation. But there is also a responsibility to use water responsibly, whether we are a community WASH provider, an urban planner, or a negotiator of transboundary water sharing agreements.

All stakeholders need to be responsible for what the preamble to the Sustainable Development Goals calls the five 'Ps': People, Planet, Prosperity, Peace and Partnerships. By focusing on these intrinsically interrelated factors, water can be managed in ways that are fair and inclusive, and that guarantee that "no one is left behind".

Governance: transparency, accountability and participation | A challenge for fair and inclusive water management is cross-border governance – not only in the form of political boundaries and state borders, but also the

silos that divide sectors. Interlinkages and synergies, especially between water, food, energy, and the environment, must be more widely recognized and broken down. This requires greater diplomacy and dialogue between states, donor agencies, individuals, investors and civil society, as well as between water, agriculture, education, health, housing, land, and energy sectors.

Harmonizing data indicators, collection, reporting and sharing techniques is important for bridging those gaps and building partnerships. The collection of relevant data, and the ability to communicate this information to targeted stakeholders, is critical. How data is used is also important. Is it used to allocate water equitably, or to balance power between stakeholders? Transparency, accountability and participation are therefore critical to fair and inclusive water management, as well as to achieving universal water access. Parallel to this, the equitable distribution of finite water resources needs to be ensured in ways that underpin basic living standards without straining ecosystems. This entails thinking of water as a shared resource – and valuing it accordingly.

Another key point on governance issues discussed during the Week was the importance of external actors taking local conditions into consideration. Imposing reforms or

Transparency, accountability and participation are therefore critical to fair and inclusive water management, as well as to achieving universal water access"

programmes without consulting local people, respecting local customs or existing structures greatly undermines chances of success. This is especially true in fragile or post-conflict societies.

Water as a human right | The right to water and sanitation is a fundamental human right, even though its provision is increasingly coupled to forms of pricing. Herein lies a role for strong regulators to ensure that water pricing reflects social and environmental costs, as well as economic factors, while protecting the rights of the most vulnerable users.

However, equitable distribution is not just about quantity, but also the quality and accessibility for marginalized groups – women, elderly people, children, the disabled and those living in remote areas. Here, the importance of water for drinking and sanitation cannot be understated. Indeed, the importance of WASH to human development was a strong theme at this year's World Water Week.

When considering WASH, there has been a tendency to focus on rural settings. However, as the rate of urbanization continues to gather pace worldwide, WASH is increasingly an issue in the urban context. The cost-effective provision of onsite sanitation, and citywide services, is becoming a focus for not only municipal authorities but also for the private sector.

While it was acknowledged that the public sector will continue to play a critical role in funding infrastructure for the foreseeable future, several speakers argued for the further development of inclusive financing approaches. Public Private Partnerships (PPPs) may present a viable approach in some cases.

Infrastructure is one part of the solution, but it must be supported by behavioural and attitudinal change. Installing eco-san toilets, for example, makes little difference if people do not use them, as is the construction of reservoirs or desalination plants without accompanying reductions in non-revenue water or managing water demand.

Climate change: from crisis management to sustainable development | During the Week, it was widely recognized that water is especially vulnerable to the risks of climate change. Furthermore, that climate change often manifests itself in the form of water – storms, rising sea levels, drought, and flooding. Indeed, water is at the core of all adaption and resilience initiatives.

The issue remains, however, of how to move from crisis management to sustainable development. Early warning systems have an important role to play, as does addressing climate change induced migration.

Calls were made throughout the Week to better involve marginalized and vulnerable groups in climate change mitigation and adaptation strategies, and throughout the water sector – be it WASH, agriculture, PPPs or water diplomacy. It was noted that women, youth, indigenous peoples, and the disabled are frequently left out of planning processes, resulting in their needs and rights remaining unaddressed.

Cross-cutting thinking, and the desire to break out of established silos, suggests that the water community is beginning to think more creatively and laterally about water. Decision makers are also increasingly returning to traditional knowledge and local solutions to address contemporary water challenges resulting in improved outcomes in many cases.

The Week also highlighted the growing engagement of young people in water issues. Once again, the Stockholm Junior Water Prize proved to be a showcase of innovative solutions to pressing water issues. Separately, several sessions this year were devoted to how digital and Information Communication Technologies, (ICT), are enabling the young – and others – to get involved in the sector, build engagement and effect change. Used effectively, ICT could improve the inclusion and participation of some of the most vulnerable groups in water issues, and support more efficient decision-making. ICT also opens up considerable opportunities in terms of SDG monitoring and data collection and progress monitoring by citizens.

Re-thinking governance post-2015 Looking ahead, governance should be thought of as including public, private and civil society actors, in both formal and informal systems. Failures occur when external actors impose reforms while ignoring local conditions.

For more information and summaries from each of the events and workshops, please visit our online programme at **programme.worldwaterweek.org**

Outreach

World Water Week in the media

Media has always been an important group represented at the World Water Week. This year close to a hundred reporters were present on site and thousands followed from a distance. This resulted in over 3,500 articles, blogs, radio and TV features being published – an increase of 19 per cent compared to last year. Stories were published in 80 countries, with most coming from USA, followed by China, Sweden, Germany/Japan, UK and India.

The media's contribution to World Water Week cannot be underestimated. By reporting on events and discussions, journalists ensure that conversations reach outside the water and development sectors. Analysis of the articles indicates that some of this year's key topics were: climate change negotiations that will be held in Paris in December, sustainable development, sanitation and the achievements of Stockholm Water Prize Laureate Rajendra Singh, as well as the winner of Stockholm Junior Water Prize Perry Alagappan.

Development communications in a digital age

Social media has given individuals and organizations, from different cultures and sectors, new ways to tackle shared challenges – to collaborate, to coordinate, to learn, to share experiences, to help, to ask for help, to have an opinion, to have an informed opinion.

World Water Week is an opportunity for SIWI to bring together some of the greatest minds in water, to discuss

solutions to our world's most critical challenges. Social media allows us to give anyone with access to the internet, the opportunity to sit in the front row, to ask questions – at no cost. Not everyone has access to the internet, owns a computer, or uses social media, but the global population has never been more connected than it is today, and the connectivity is increasing, with immense speed.

Global #voiceofwater reaches new volume this #WWWeek!

SIWI has seen a dramatic increase in social media users at World Water Week, just in the last year. Beyond participants on site, a large part of our community is located in other parts of the world. By integrating digital communications into the Week – recording sessions, hosting podcasts and promoting content online through various channels, we are able to engage with more people – at various levels, ages, sectors and professions.

By helping to connect people who share our vision, and inviting people into our water world, by exchanging ideas and experiences, we have greater capacity than ever to build a water wise world.

While some 3,300 people attended the Week, millions more were able to help amplify the voice of water through our shared global networks. Whether connecting and sharing through Twitter or Facebook, promoting recorded content via the SIWI media hub, or digital story-telling, World Water Week's digital voice has never been louder.

During the Week, participants tweeted using the #WWWeek hashtag more than 34,000 times, and were retweeted some 900,000 times during the Week. This means more than 326 million people potentially heard about the Week just through Twitter! Hundreds of articles and news items were also posted and shared online by organizations that attended or supported the Week.









The WaterFront Daily

Once again, the coveted WaterFront Magazine's World Water Week Daily hit the stands each morning offering news reports,

interviews and the latest buzz from the Week. If you missed any of the issues: worldwaterweek.org/daily

New initiatives

With more than half of participants being active on social media during the Week, SIWI initiated new ways to facilitate discussion and ultimately amplify the global #voiceofwater.

A Twitter Q&A during the Opening Plenary, a video competition, and interviews with interesting and inspiring people during the Week were all part of the mix. You may have also seen:

Daily Splash

A World Water Week podcast, junior rapporteurs and guests sat down with SIWI for around 30 minutes each morning to discuss their insights and favourite moments from the day before, and look to the day ahead. Replay:

worldwaterweek.org/dailysplash

#SIWISofa

A cross between a speakers' corner and an outdoor interview studio, journalists conducted interviews and facilitated discussions between experts on a variety of water-related issues.

SIWI**SOFA** Ms Hanneke Willenborg, Unilever, interviewed by Eric Paglia

Interviewees included high-level speakers, representatives from water and development organizations, the private sector, and SIWI. Replay: www.siwi.org/siwi-sofa

Silver Jubilee campaigns

2015 was a jubilee year, with World Water Week being held, and Stockholm Water Prize being awarded, for the 25^{th} time.

In addition to the Water Heroes and Best Water Ideas campaigns celebrating the jubilee, the exhibition during World Water Week was opened to the public for the first time. Nearly 400 Swedish students visited the jubilee area to learn about water. Most of them also visited the full exhibition.



siwi.org/stockholm-water-front-no-3-2015

#WaterHeroes

As part of our 25th jubilee for water and positive change.

#BestWaterIdeas

During our Best Water Ideas campaign we collected over 150 water ideas from people all over the world. In the lead-up, and during the Week, close to 3,000 people voted for their favourite. The winner... GOING VEGAN! worldwaterweek.org/bestwaterideas



World Water Week Journalist Grant

Five journalists from as many countries were awarded this year's World Water Week Journalist Grant and travelled to Stockholm to report from the conference.

The World Water Week Journalist Grant is administrated by SIWI, and aims to build capacity, enable knowledge-sharing, and foster networks among journalists focusing on water and development issues worldwide.

The 2015 grant winners all share a passion for reporting on water, but through different perspectives.

This year's grantees faced tough competition from over 100 qualified applicants – more than double the number compared to 2014.

At World Water Week, the journalists networked with experts, leaders and practitioners, and reported on critical issues relating to this year's theme on water and development.

The 2016 World Water Week Journalist Grant will open for applications in March 2016.



2015 World Water Week Journalist Grantees



Seun Akioye works for *The Nation* in Nigeria, where for the past years he has

dedicated his reporting to water, sanitation and hygiene (WASH) issues, striving to bring positive change towards reaching an acceptable standard of WASH policies in the country.



Coming from one of the world's most natural disaster-prone countries,

the Philippines, Rhaydz Barcia focuses her reporting on climate change and disaster risk reduction. She currently works as correspondent for the Manila Times and as a stringer for Reuters and other news outlets.



Ramesh Bhushal works for one of the leading environmental news sites in South Asia, Third Pole,

where he covers the Himalaya region. Often referred to as the "water tower of Asia", the region boasts some of the world's largest rivers, but with fierce competition over water, millions still struggle with insufficient water supply.



Selay Marius Kouassi is an investigative journalist from Côte D'Ivoire, a country that has

among the lowest rate of access to clean water and adequate sanitation in West Africa. Selay works for multiple outlets such as Abidjan Live News, BBC Afrique and Radio Netherlands.



Applying a gender lens to her reporting, Stella Paul from the waterscarce Andra

Pradesh state in India has shed light on the link between drought and sex-trafficking of women. Stella works for global news outlets such as IPS and Thomson Reuters

Read the stories from the five grant winners: www.siwi.org/media/ world-water-weekjournalist-grant

Convening organizations

While World Water Week is organised by the Stockholm International Water Institute, the programme of the events are planned by the convening organizations of the conference. In order to build partnerships and bring a diversity of perspectives to the World Water Week, SIWI promotes cooperation and encourages organizations to co-convene at the conference. The organizations that convened events or workshops at 2015 World Water Week are:

A, **B**, **C**, **D**

- @qua
- 100 Resilient Cities
- 2030 Water Resources Group
- 7th World Water Forum Secretariat
- Action contre la faim (ACF)
- Action Platform on Source to Sea Management
- Adaptation to Climate Change in the Water Sector in the MENA Region (ACCWaM)
- · adelphi
- African Development Bank (AfDB)
- African Ministers' Council On Water (AMCOW)
- African Water Journalists Network
- Aguaconsult
- Akvo Foundation
- Alliance for Global Water Adaptation (AGWA)
- Alliance for Water Stewardship(AWS)
- Antenna Technlogies Foundation
- Aqua for All (A4A)
- AquaFed
- Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD)
- ARUP
- Asia Pacific Water Forum (APWF)
- Asian Development Bank (ADB)
- Association of Regulators of Water and Sanitation of the Americas (ADERASA)
- AU/NEPAD Southern African Network for Water Centres of Excellence (SANWATCE)
- Australian Government
- Bild & Mening
- Bill & Melinda Gates Foundation
- BRAC
- Bremen Overseas Research & Development Association (BORDA)
- Cap-Net UNDP
- Carbon Disclosure Project (CDP)
- Caritas
- CBI
- Centre for International Forestry Research (CIFOR)
- Centre for Science and Environment (CSE)

- Centrum Balticum Foundation
- Ceres
- Cewas
- CGIAR Research Program on Climate Change, Agriculture and Food Security (CGIAR-CCAFS)
- CGIAR Research Program on Water, Land and Ecosystems Led by IWMI (WLE)
- CH2M
- China Water Risk
- · City of Helsinki
- · City of Stockholm
- · City of Turku
- · Columbia University
- Concern Worldwide
- Conservation International (CI)
- CSD Engineers
- Deltares
- Department for International Development, UK (DFID)
- Department of Water Affairs, Botswana
- Department of Water and Sanitation in Developing Countries at the Swiss Federal Institute of Aquatic Science and Technology
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- Development Bank of Latin America (CAF)
- DHI
- Duke University

E, F, G, H

- Earthwatch
- Eawag
- Eco Games
- Economic Commission for Latin America and the Caribbean (ECLAC)
- Emory University
- Environmental Law Institute (ELI)
- Ericsson
- European Commission (EC)
- European Commission Directorate General for Humanitarian Aid and Civil Protection
- European Space Agency (ESA)

- FF2\M
- Federal Department for Environment, Switzerland
- Federal Department of Foreign Affairs, Germany
- Federal Department of Foreign Affairs, Switzerland
- Federal Foreign Office, Germany
- Federal Institute for Geosciences and Natural Resources, Germany (BGR)
- Federal Ministry for Economic Cooperation and Development, Germany (BMZ)
- FEMSA Foundation
- FINISH
- Finnish Water Forum
- First Climate Markets AG
- Focali, the Forest, Climate and Livelihoods Reserach network
- Food and Agriculture Organization of the United Nations (FAO)
- Forest Stewardship Council
- ForestTrends
- Fortum
- Forum Syd
- French Water Partnership (FWP)
- FreshWater Watch
- Fundación Chile
- Förbunder Unga Forskare
- · GAP Inc.
- GDF SUF7
- Gender and Water Alliance (GWA)
- German Toilet Organization (GTO)
- German WASH Network
- Global Environment Facility (GEF)
- Global Environment Facility-International Waters (GEF-IW)
- Global Environment Facility-International Waters: Learning Exchange and Resource Network (GEF IW:Learn)
- Global Expanded Monitoring Initiative
- Global Partnership on Output-Based Aid (GPOBA)
- Global Water Development Partners
- Global Water Initiative (GWI)
- Global Water Operators' Partnerships Alliance at UN-Habitat (GWOPA)

- Global Water Partnership (GWP)
- Global Water Partnership China
- Global Water Partnership-Mediterranean (GWP-Med)
- Government of Burundi
- Government of Niger
- · Government of Serbia
- Government of South Sudan
- Government of Switzerland
- Government of the Netherlands
- Grand Challenges Canada
- Green Cross International
- Growing Blue
- Grundfos
- GSM Association (GSMA)
- Guardian Development Professionals Network (GPDN)
- H&M
- HELVETAS Swiss Intercooperation
- High Level Panel of Experts for Food Security and Nutrition (HLPE)
- High-level Experts and Leaders Panel on Water and Disasters (HELP)
- HSBC

I, J, K, L

- Inclusive Business Sweden
- Initiativet Hållbara Hav
- Institute for Advanced Sustainability Studies (IASS)
- Institute of Water Policy
- Inter-American Development Bank (IADB)
- International Centre for Integrated Mountain Development (ICIMOD)
- International Centre for Water Cooperation (ICWC)
- International Centre for Water Management Services (cewas)
- International Coalition for Trachoma Control (ICTC)
- International Development Enterprises (iDE)
- International Federation of Red Cross and Red Crescent Societies (IFRC)
- International Hydropower Association (IHA)
- International IDEA
- International Institute for Applied Systems Analysis (IIASA)
- International Institute for Environment and Development (IIED)
- International Labour Organization (ILO)
- International Renewable Energy Agency (IRENA)
- International Union for Conservation of Nature (IUCN)

- International Water Association (IWA)
- International Water Centre (IWC)
- International Water Management Institute (IWMI)
- International Work Group for Indigenous Affairs (IWGIA)
- IPIECA
- IRC
- ISET-International
- Jain Irrigation Systems Ltd (Jain Irrigation)
- Jordan Water and Wastewater Reuse Organization
- K-water
- Kenya Water and Sanitation CSOs Network (KEWASNET)
- KfW Development Bank (KfW)
- Kohler
- Korea Water Resources Corporation (K-water)
- Latin American Association of Water and Sanitation Utilities (ALOAS)
- LEAD
- League of Arab States
- Lee Kuan Yew School of Public Policy
- Levi Strauss & Co
- London School of Hygiene and Tropical Medicine
- London School of Hygiene and Tropical Medicine/SHARE Research Consortium (LSHTM/SHARE)
- · Luc Hoffman Institute-WWF
- Lund University Open Innovation Center

M, N, O, P

- Millennium Water Alliance
- Ministry for Foreign Affairs, Finland (MFA)
- Ministry of Agriculture and Forestry, Finland
- Ministry of Foreign Affairs, The Netherlands (BuZa)
- Ministry of Infrastructure and the Environment, The Netherlands (lenM)
- Ministry of the Environment, Finland
- Murray-Darling Basin Authority (MDBA)
- Murray-Darling Wetlands Working Group
- mWater
- National Association of Water and Sanitation Utilities of Mexico
- National University of Singapore
- National Water Commission, Mexico (CONAGUA)
- Nestlé
- Netafim

- Network of Women Ministers and Leaders for the Environment (NWMLE)
- Nicholas School of the Environment
- Nile Basin Capacity Building Network (NBCBN)
- One Drop
- Organisation for Economic Cooperation and Development (OECD)
- Organization for Security and Co-operation in Europe (OSCE)
- Oxfam
- Oxford Policy Management
- PepsiCo
- PeePoople
- Plan International
- · Procter and Gamble
- PSI Population Services International (PSI)

Q, R, S, T

- Regional Environmental Center for Central and Eastern Europe (REC)
- RFL Plastics
- Robert B. Daugherty Water for Food Institute at the University of Nebraska
- Royal Institute of Technology (KTH)
- Royal Swedish Academy of Science (KVA)
- · Safe Water Network
- Sandec
- Sanitation and Water for All (SWA)
- Secretariat of the Convention on Wetlands of International Importance (Ramsar Secretariat)
- Sesame Street
- SLU Global
- Sightsavers
- SNV
- Society for the Promotion of Participatory Ecosystem Management
- Spanish Agency for International Development Cooperation (AECID)
- SP-Technical Research Institute of Sweden
- SSC Forestry
- Stockholm Environment Institute (SEI)
- Stockholm International Water Institute
 (SIWI)
- Stockholm Resilience Centre (SRC)
- Stockholm Vatten
- Sustainable Sanitation Alliance (SuSanA)
- Sveaskog
- Sweden Textile Water Initiative (STWI)
- Swedish Agency for Marine and Water Management (SwAM)
- Swedish Armed Forces (Försvarsmakten)
- Swedish Civil Contingencies Agency (MSB, Myndigheten för samhällsskydd och beredskap)

- Swedish Defence Research Agency (FOI, Totalförsvarets forskningsinstitut)
- Swedish International Agricultural Network Initiative
- Swedish Forestry Agency
- Swedish International Development Cooperation Agency (Sida)
- Swedish Meteorological and Hydrological Institute (SMHI)
- Swedish Ministry for Innovation and Enterprise
- Swedish University of Agricultural Sciences (SLU)
- Swiss Agency for Development and Cooperation (SDC)
- Swiss Water Partnership (SWP)
- swisstopo
- Tebtebba Foundation, Philippines
- Texas A&M University (TAMU)
- The Coca-Cola Company
- · The Fred Hollows Foundation
- The Freshwater Trust
- The Gold Standard Foundation (GSF)
- The Hague Institute for Global Justice (THIGI)
- The Nature Conservancy (TNC)
- The Rockefeller Foundation
- The Sustainable Fashion Academy (SFA)
- The Water Institute at University of North Carolina (UNC)
- The World Bank Group (WB)
- Thomson Reuters Foundation
- Toro Micro-Irrigation
- Transparency International Bangladesh
- Trémolet Consulting

U, **V**, **W**, **X**

- UN World Water Assessment Programme (WWAP)
- UNDP Water Governance Facility at SIWI (WGF)
- UNEP Division of Environmental Policy Implementation (UNEP DEPI)
- UNEP-DHI Centre for Water and Environment (UNEP-DHI)
- UNESCO Institute for Water Education (UNESCO-IHE)
- UNESCO International Hydrological Programme (UNESCO-IHP)
- UNESCO-IHE Institute for Water Education/UNESCO-PCCP (IHP/WWAP)
- Unilever
- United Nations Children's Fund (UNICEF)
- United Nations Department of Economic and Social Affairs (UN DESA)

- United Nations Development Programme (UNDP)
- United Nations Economic and Social Commission for Western Asia (UN-ESCWA)
- United Nations Economic Commission for Europe (UNECE)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- United Nations Environment Programme (UNEP)
- United Nations Global Compact CEO Water Mandate (UNGC CEO Water Mandate)
- United Nations Office for Disaster Risk Reduction (UNISDR)
- United Nations Office for Sustainable Development (UNOSD)
- United Nations Secretary General's Advisory Board on Water and Sanitation (UNSGAB)
- United Nations University Institute for Integrated Management of Material Fluxes and of Resources (UNU-FLORES)
- United Nations University-Institute for Water, Environment and Heath (UNU-INWEH)
- United States Agency for International Development (USAID)
- University of Leeds (UoL)
- University of Oklahoma
- · University of Oxford
- University of Strathclyde
- University of Technology Sydney
- UN-Water
- Valuing Nature
- WASH Journalists Network for West Africa
- Water and Sanitation for the Urban Poor (WSUP)
- Water and Sanitation Program (WSP)
- Water Center for Latin America and the Caribbean (CAALCA)
- Water Footprint Network (WFN)
- Water For People
- Water Global Practice of the World Bank Group
- Water Integrity Network (WIN)
- Water Reserach Commission (WRC)
- Water Supply and Sanitation Collaborative Council (WSSCC)
- Water Youth Network (WYN)
- Water, Engineering and Development Centre of Loughborough University (WEDC)
- Water.org
- WaterAid
- WaterLex

- WaterTap
- We Effect
- Veolia
- Vetenskapens Hus
- Wetlandsforum.net
- Vitens Evides International (VEI)
- Women for Water Partnership (WfW)
- Women in Europe for a Common Future (WECF)
- World Business Council for Sustainable Development (WBCSD)
- World Health Organization (WHO)
- World Health Organization/United Nations Children's Fund Joint Monitoring Programme (JMP)
- World Meteorological Organization (WMO)
- World Resources Institute (WRI)
- World Water Council (WWC)
- World Wide Fund for Nature (WWF)
- World Vision
- World Youth Parliament for Water (WYPW)
- Xylem

2016 World Water Week dates

IANUARY

Deadline for submission of abstracts and event proposals.

FEBRUARY-APRIL

Notification of acceptance of abstracts and event proposals.

APRIL-MAY

Registration opens and the Programme is released. All information of the events can be found at programme.worldwaterweek.org.

JUNE

Discounted registration (Early Bird) ends.

28 AUGUST-2 SEPTEMBER

2016 World Water Week in Stockholm – Water for sustainable growth.

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