

World Water Day 2011 Coordinated by

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FINAL REPORT

World Water Day 2011: Water and Urbanization

Water for cities: Responding to the urban challenge

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FINAL REPORT WORLD WATER DAY 2011

WATER AND URBANIZATION

22 March 2011
Cape Town, South Africa
Cape Town International Convention Centre
www.worldwaterday.unwater.org

Water for cities:

Responding to the urban challenge





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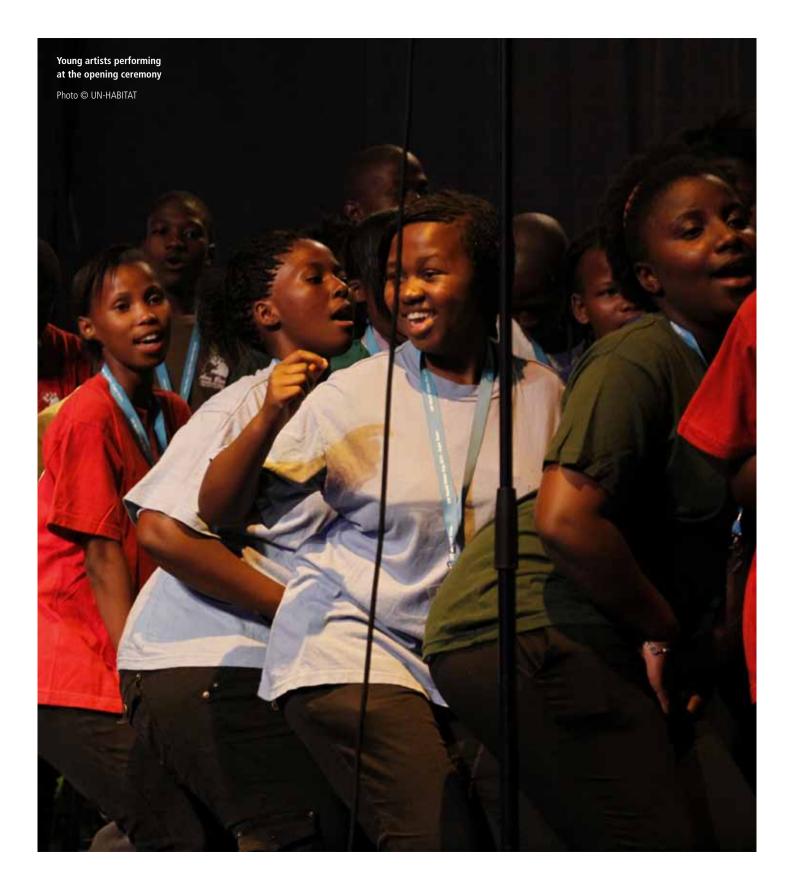




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PARTICIPATING ORGANIZATIONS

































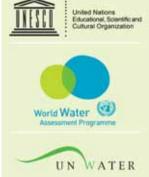




























MESSAGE OF THE UN SECRETARY GENERAL



As the world charts a more sustainable future, the crucial interplay among water, food and energy is one of the most formidable challenges we face. Without water there is no dignity and no escape from poverty. Yet the Millennium Development Goal target for water and sanitation is among those on which many countries lag the most.

In little over a generation, 60 per cent of the global population will be living in towns and cities, with much of the increase taking place in the inner city slums and squatter settlements of the developing world. The theme of this year's observance of World Water Day – "Water for Cities" – highlights some of the main challenges of this increasingly urban future.

Urbanization brings opportunities for more efficient water management and improved access to drinking water and sanitation. At the same time, problems are often magnified in cities, and are currently outpacing our ability to devise solutions.

Over the past decade, the number of urban dwellers who lack access to a water tap in their home or immediate vicinity has risen by an estimated 114 million, and the number of those who lack access to the most basic sanitation facilities has risen by 134 million. This 20 per cent increase has had a hugely detrimental impact on human health and on economic productivity: people are sick and unable to work.

Water challenges go beyond questions of access. In many countries, girls are forced to drop out of school owing to a lack of sanitation facilities, and women are harassed or assaulted when carrying water or visiting a public toilet. Moreover, the poorest and most vulnerable members of society often have little choice but to buy water from informal vendors at prices estimated to be 20 to 100 per cent higher than that of their richer neighbors, who receive piped city water in their homes. This is not just unsustainable; it is unacceptable.

Water problems will figure prominently at the forthcoming UN Conference on Sustainable Development in Rio de Janeiro, in 2012 - Rio + 20. My High-level Panel on Global Sustainability and UN-Water are examining ways in which we can connect the dots among water, energy and food security, with the aim of reducing poverty and inequality, generating jobs, and minimizing the risks of climate change and environmental stress.

On World Water Day, I urge governments to recognize the urban water crisis for what it is – a crisis of governance, weak policies and poor management, rather than one of scarcity. Let us also pledge to reverse the alarming decline in pro poor investment in water and sanitation. And let us reaffirm our commitment to ending the plight of the more than 800 million people who, in a world of plenty, still do not have the safe drinking water or sanitation they need for a life in dignity and good health.

Ban Ki-moon

United Nations Secretary-General





WORLD WATER DAY 2011

In an electric atmosphere of live performances by local and international musicians, the official UN commemoration of World Water Day 2011 was held in Cape Town, South Africa, with more than 1,000 participants in attendance. Hosted by the Government of South Africa, the high-profile event was coordinated by the United Nations Human Settlements Programme (UN-HABITAT) in partnership with UN-Water, the African Ministers' Council on Water (AM-COW), the United Nations Secretary General's Advisory Board on Water and Sanitation (UN-SGAB) and the United Nations Environment Programme (UNEP).

Held over three days, the Cape Town event featured interactive interview sessions, panel debates, thematic sessions, book launches, award ceremonies, advocacy activities and an exhibition and fair. High-level guest speakers included His Royal Highness Willem-Alexander, Prince of Orange and Chair of United Nations Secretary General's Advisory Board on Water and Sanitation (UNSGAB); Hon. Edna Molewa, Minister of Water and Environmental Affairs, South Africa and President of African Ministers Council on Water (AMCOW); Dr. Joan Clos, UN Under-Secretary General and Executive Director of UN-HABITAT, and Mr. Tim Kasten, Deputy Director, Division of Environmental Policy Implementation, UNEP and Vice Chair of UN-Water.

The Cape Town Opera performing at the opening ceremony.

Photo © UN-Water/ Nicoletta Forlano





About World Water Day

22 March 2011 marked the 18th anniversary of World Water Day. The international World Water Day is held annually on this date to focus attention on the importance of fresh water and advocating for the sustainable management of fresh water resources.

An international day to celebrate fresh water was recommended at the 1992 United Nations Conference on Environment and Development (UNCED). The United Nations General Assembly responded by designating 22 March 1993 as the first World Water Day.

Each year, World Water Day highlights a specific aspect of fresh water. UN-Water dedicated this year's event to the theme Water and Urbanization under the slogan Water for Cities: Responding to the Urban Challenge.

This year's World Water Day focused international attention on the impact of rapid urban population growth, industrialization and uncertainties caused by climate change, conflicts and natural disasters on urban water systems. It also encouraged action by governments, organizations, communities, and individuals around the world to engage actively in addressing urban water management challenges.

UN-Water designated UN-HABITAT to coordinate the organization of World Water Day 2011.





PERSPECTIVES OF CONVENORS

In an interactive interview session, Mr. Johan Kuylenstierna engaged the high-level guests on their perspectives on World Water Day 2011. Hon. Edna Molewa started by noting that the International Water Day offers a great opportunity to exchange ideas and find solutions for urban water problems. She emphasized the need for technological innovation, adaptation and practical solutions in the face of climate change and associated water scarcity.

His Royal Highness Willem-Alexander underscored the need for a strong political commitment to deal with urban water and sanitation challenges. He noted that, although statistics indicate that the amount of people with access to safe drinking water is increasing, the distance that many people still have to walk to access water is unacceptable. "We are not even close to what we should accept as human standards," he added. He also decried the neglected field of sanitation and called for actions in support of the Sustainable Sanitation Five-Year Drive to 2015.

HRH Prince Willem-Alexander of the Netherlands, Hon. Edna Molewa and Mr. Tim Kasten at the interview.

Photo © UN-Water/ Nicoletta Forlano



Speaking on behalf of UN-Water, Mr. Tim Kasten, Deputy Director, Division of Environmental Policy Implementation, UNEP and Vice Chair of UN-Water, lauded the UN's role as a facilitator and catalyst in bringing together various actors across sectors and countries to address the growing problem of urban water and sanitation. Mr. Kasten noted that cities should work closer together with their environments since they are not only users but also nurtures of their environments. He added that moving towards Rio +20, focus should shift towards a green economy with a dual role for economic growth and sustainable development. This, he noted, will create green jobs, ensure resource efficiency and a low carbon growth and reduce poverty.



HRH Willem-Alexander of the Netherlands called for actions in support of the Sustainable Sanitation Five-Year Drive to 2015.

Facts and Figures from Cape Town

- More than 1,500 participants from approximately 70 countries
- 25 technical sessions delivered by more than 40 organizations
- 30 local and international exhibitors
- 3 Award Ceremonies
- 5 book launches
- 75 video interviews recorded by the WaterCube Team during the three days in Cape Town
- 30 accredited journalists



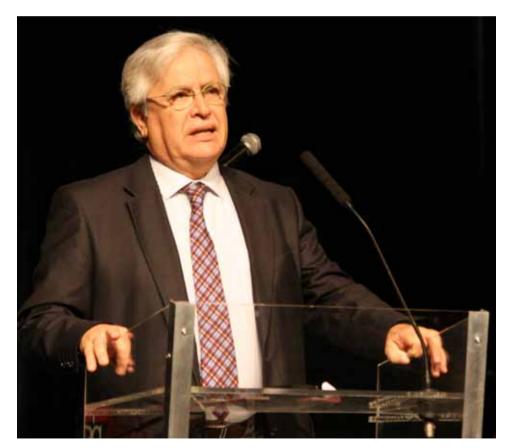


KEYNOTE ADDRESS

In his Keynote address, Dr. Joan Clos, Under-Secretary General and Executive Director, UN-HABITAT, observed that large rural-urban migration flows are taking place without proper urban planning. He added that the urban crisis can only be addressed by developing a new urban policy that takes into account problems of the future, including the influx of people to cities and the future development of the cities.

Dr. Clos recommended a phased approach to urban planning starting with basic streets and basic services so that the city is functional and able to provide goods and services, taking into account all aspects, including mobility, water, and energy.

He emphasized the need to plan dense and diversified urban settlements to limit urban sprawl which often results in increased cost in service delivery. He underscored the need for political commitment and called on local and national Governments in Africa, Asia and Latin America to prioritize planning in middle size cities and small towns where most of the urban growth is taking place.



Dr. Joan Clos, Under-Secretary General and Executive Director, UN-HABITAT delivering keynote address.

> Photo © UN-HABITAT/ Jeanette Elsworth

FEEDBACK SESSION

Mr. Bert Diphoorn, Director, Human Settlements Financing Division, UN-HABITAT, gave an overview of thematic sessions and side events convened two days prior to the official event. He highlighted five issues addressed in the sessions (Figure 1 below): urbanization; urban water and waste management; environment and climate change; leadership and governance in the water sector and investment.

Mr. Diphoorn outlined the key messages and recommendations made. These included increasing the profile of urban water issues; achieving green growth by factoring sustainable water management and the environment into plans for economic growth; putting in place effective governance and stakeholder consultation; supporting water operators to provide sustainable services; developing learning alliances with universities; educating consumers on the value of water; prioritizing urban water investments and support; using the right to water and sanitation to raise political awareness, adaptation to climate change and preparing for disasters.



Mr. Bert Diphoorn, Director, Human Settlements Financing Division, UN-HABITAT presenting the outcome of the thematic sessions.

Photo © UN-Water/ Nicoletta Forlano

Figure 1: Conference Problematic

URBANIZATION

- Urban growth
- Slums and growth of poverty
- Changing cities
- Increasing inequity
- Urban decay

LEADERSHIP + GOVERNANCE

- Weak political leadership on water
- Uneven national policy frame
- Weak city governance/ consumer participation
- Institutional complexity/political interference
- Weak regulation

URBAN WATER/WASTE MANAGEMENT

- Low WSS coverage/poor quality
- Increased water demand
- High unaccounted for water
- Inefficient management/ little capacity
- Little attention to urban sanitation
- Insufficient focus on the poor

Sustainable water and waste management in urban environments

ENVIRONMENT + CLIMATE CHANGE

- Environmental degradation + water resource threats
- Increasing costs of new water
- Climate change
- How to cost urban ecosystems
- Food crisis increases water demand

INVESTMENT

- Under-investment in water infrastructure
- Water underpriced: insufficient revenue for Operation and Maintenance and replacement
- Water infrastructure not bankable
- Energy shortages and increasing energy costs
- Financial crisis increases cost of borrowing

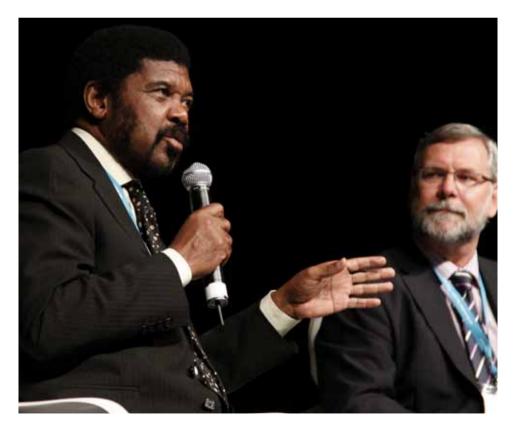


INTERACTIVE PANEL DEBATES

The African Caucus

The panel discussion highlighted a range of opportunities for tackling urban water and sanitation challenges, including policy and investments required to bridge current gaps in urban water and sanitation in Africa. The panelists identified rapid urbanization, poor planning, inadequate investments and overdependence on external resources as the main challenges facing water management in African cities. They stressed the need for increased focus on urban water challenges through partnerships with development banks, the housing sector, local governments and communities.

Mr. Sering Jallow, Manager, OWAS.2, African Development Bank, observed that African countries have mixed results in attempts to meet the Millennium Development Goals (MDGs). He noted that current investments in urban services are not sufficient to cope with the rates of urbanization and called on African countries to mobilize domestic resources and properly manage investments to support the urban water and sanitation sector. On the role of local commercial banks, Mr. Jallow noted that commercial lending remains expensive. He called for better management of African utilities to reduce high operating costs and revenue losses.



Hon. Monyane Moleleki, Minister of Natural Resources, Lesotho addressing the panel. Looking on is Mr. Alderman Clive Justus, Executive Mayoral Committee Member, City of Cape Town.



Mr. Alderman Clive Justus addressing the panel.

Photo © UN-HABITAT

Providing a utility's perspective, Mr. Percy Sechemane, Chief Executive of Rand Water, underlined the importance of investing in water and sanitation infrastructure to enhance level of basic services. He stressed the need for public-private partnerships and proper urban planning backed by good water and sanitation data to meet current and future water demands.

Hon. Monyane Moleleki, Minister of Natural Resources, Lesotho, stressed the need for proper planning and coordination in the management of urban water and sanitation infrastructure. He cited an example of a project in his country for providing water and roads concurrently and said that poor planning and lack of coordination has led to serious delays in its completion.

Mr. Alderman Clive Justus, Executive Mayoral Committee Member, City of Cape Town, emphasized the importance of infrastructure-led development in poverty alleviation. He said that investing in infrastructure enhances economic growth and the level of services. He singled out vision, commitment, proper planning, and sound budgeting as essential ingredients for improvement in service provision. Mr. Justus also highlighted the importance of improving revenue collection.



Mr. Sering Jallow of the African Development Bank contributing to the debate.

Hon. Brian Chituwo, Minister of Local Government and Housing, Republic of Zambia, told the audience that his government has devolved planning to nine regional utility companies. He recommended the need to develop partnerships, create political will and involve local communities in providing water and sanitation services, especially in informal settlements.

Mr. Alioune Badiane, Director, Regional Office for Africa and the Arab States, UN-HABITAT noted that urbanization is not only part of the problem but also part of the solution and said that cities are valuable sources of investment if properly managed. He added that high-density settlements results in cheaper service provision and called on politicians to pay more attention to urban communities. Mr. Badiane highlighted UN-HABITAT's activities in Africa in overcoming the huge backlog in service provision and said that the organization aims to have halved it by 2020.



Hon. Brian Chituwo, Minister of Local Government and Housing, Republic of Zambia at the panel.

Photo © UN-HABITAT

Key recommendations from the African Caucus

- Support inter-ministerial dialogue and coordination at the national level to improve infrastructure development and management
- Encourage collaboration and partnerships through regional economic blocs
- Mobilize domestic resources for basic services by partnering with local commercial banks
- Prioritize infrastructure-led development to enhance economic growth and poverty alleviation in the continent
- Focus more on proper urban planning to meet both current and future infrastructure needs
- Build partnerships with local governments to ensure sustainable provision of urban water and sanitation services

Water and Cities Debate

The session started with Mr. Chan Yoon Kum. Deputy Chief Executive, Public Utilities Board, Singapore, outlining his country's innovative solutions to urban water management. This includes the diversification of its water supply to include highly-purified reclaimed water, often referred to as 'new water', which now accounts for 30 per cent of Singapore's daily needs. He added that Singapore also utilizes desalination to provide an additional 10 per cent of its water requirements. Speaking on the lessons that other cities can draw from Singapore, Mr. Kum stressed the importance of strong political leadership, vision, proper long-term urban planning (Singapore has a master plan running until 2060), demand management, enforcement measures to reduce pollution and getting public buy-in and greater ownership through community engagement as keys to sustainable urban water management.

Prof. Kalanithy Vairavamoorthy, Director, Patel School of Global Sustainability, University of South Florida and Scientific Director of SWITCH, lauded Singapore's success and attributed it to its ability to embrace change. He called for a paradigm shift in mindsets, legislations and institutions, especially in developing countries where there are still opportunities to plan water and sanitation infrastructure in a sustainable manner.



However, he noted the problem is not confined to developing countries as most developed cities have water and sanitation systems which currently functioning well but are not sustainable in the long term. He recommended training future urban leaders to embrace new models, solutions and partnerships and called for a focus on the growing medium-sized cities which can act as models and provide opportunities to showcase innovations.

Mr. Chan Yoon
Kum, Deputy Chief
Executive, Public
Utilities Board,
Singapore addressing
the panel.



Ms. Margaret Pageler, Executive Committee Member, ICLEI – Local Governments for Sustainability addressing the panel. With her is Dr. Ania Grobicki, Executive Secretary, Global Water Partnership.

Photo © UN-HABITAT

Ms. Margaret Catley-Carlson, a member of the United Nations Secretary General's Advisory Board on Water and Sanitation, noted that success in the water sector is not celebrated enough. She cited the examples of universities in China and the United States which recycle grey water to supply up to 80 per cent of their needs. She also gave the example of buses in Rotterdam that are fuelled by Methane from waste water. Ms. Cartley-Carlson blamed corruption and competing priorities for complicating the required changes in the water sector.

Dr. Ania Grobicki, Executive Secretary, Global Water Partnership, highlighted the economic value of water and its role in spurring economic growth. Speaking on innovative models in urban water management, Dr. Grobicki said there are income opportunities for communities in utilizing payment for ecosystem services schemes and 'selling' community water resources, citing the example of the city of New York paying for water from the Catskill Mountains. She said that crosssubsidization can also be a tool to achieve affordability in urban water management. She noted that subsidies and assistance to

poor households can be provided so they can change their toilets and laundry equipment for more water-efficient systems.

Ms. Margaret Pageler, Executive Committee Member, ICLEI-Local Governments for Sustainability , emphasized the importance of local authorities mobilizing citizens to appreciate and value water. Ms. Pageler highlighted the role played by organizations such as ICLEI and the World Water Council in mobilizing local authorities, citing the Istanbul Water Consensus (IWC) as a key instrument in building political will.

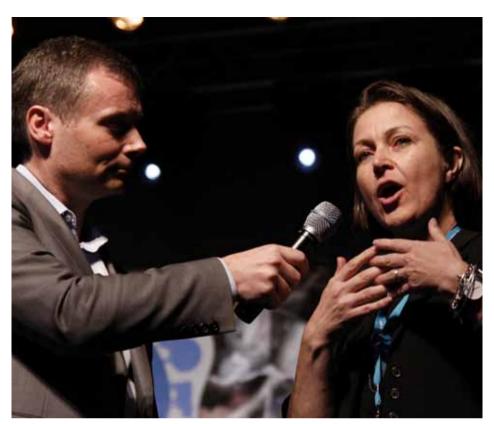
Speaking on the green growth agenda, Mr. Benedito Braga, President of the International Forum Committee for the 6th World Water Forum and Vice-President of the World Water Council, reiterated the need to engage and convince politicians that the green growth agenda is important for their constituencies. He recommended innovative financing of the green growth agenda, citing the example of an innovative programme launched by the National Water Agency of Brazil to allow the increase in sewage treatment in that country. Under this programme, the municipality receives a subsidy from the central government for the full cost of the sewage treatment plant. However, instead of receiving the subsidy upfront, the municipality receives it when the plant is in full operation. If the municipality does not have capital to invest in the project, the receivables guaranteed from the central government allow it to raise the funds in official banks at low interest rates.



Prof. Kalanithy
Vairavamoorthy,
Director, Patel School
of Global Sustainability,
University of SouthFlorida and Scientific
Director of SWITCH
addressing the panel.

Key recommendations from the Water and Cities Debate

- Celebrate successes within the water sector and publicize good practices to make them widely accessible
- · Strong political commitment needed to cope with urban water and sanitation challenges
- Technical skills and innovation are essential in designing integrated systems that produce energy, nutrients and water
- Partnerships with domestic, regional and international development banks are necessary to ensure increased investment in water
- Strengthen the capacity of the media to raise awareness on water and sanitation at the highest political levels
- Building climate-resilient societies requires an increasing focus on managing the water cycle
- Promote and encourage local champions in water and sanitation management
- Work with local authorities to mobilize local citizens to value and appreciate water
- Build partnerships with those who appreciate the 'magic of water', including the private sector
- Support youth partnerships and participation for effective, efficient and sustainable development of urban water and sanitation services









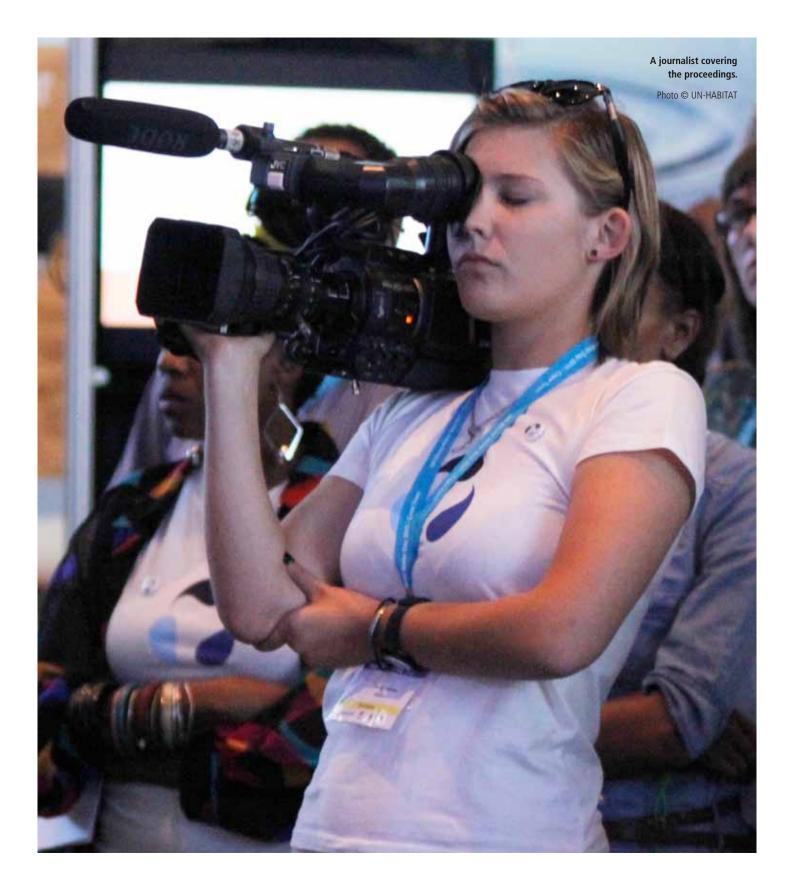






The "Water and Urbanization Debate" continued outside the Auditorium.

Photos © UN-HABITAT and UN-Water



JOURNALISTS TRAINING WORKSHOP

Good reporters are artists- they can entertain, inspire, annoy or educate"

– Mary Ama Kudom

The two-day journalist workshop was convened by the UN-Water Decade Programme on Advocacy and Communication (UNW-DPAC). It provided support for African journalists to report on 'Urban water', the theme of World Water Day 2011. With a focus on professional retraining related to research, preparing reportages and investigative journalism on urban water, the workshop was directed towards experienced African journalists from print, radio, TV, and electronic media who have already reported on this theme.

Ms. Josefina Maestu, Director of UNW-DPAC, provided an introduction. . Ms. Ulrike Kelm, also of UNW-DPAC, introduced United Nations' information system and structure to the participants. Roel Langinin (Philippines) and Ama Kudom-Agyemang (Ghana), two experienced international journalists on investigative journalism in the water sector, provided the training. They addressed the issues and questions, 'What is investigative journalism?', 'How to identify a story', 'How to write a good story' and 'Why write on water?'

During the workshop there were discussions on the challenges related to investigative journalism in Africa. Participants agreed that investigative journalism is difficult, there is lack of funding, there may be physical threats and there are cases of lack of respect for the profession. It is important to build trust between the media and community and a need to adapt to new media, such as online journalism and blogging. It is important for journalists to own the story and not represent institutions or organizations.



Journalists attending a press briefing on World Water Day 2011.



There was also a discussion on opportunities in investigative journalism. Journalists considered that lack of respect and funding can be solved by writing good articles. Investigative journalists can distinguish themselves from other forms of journalism by their profound analytical and professional articles. There are opportunities in new forms of journalism through using multi-media, video, and online reporting as well as access to new sources of information.

Reflections in the workshop included the importance to highlight positive news and avoid always focusing on negative aspects

and, forms of journalism other than investigative reporting can be important and powerful as well. Reporting daily news and doing interviews are also essential for institution-building and enhancing democracy. Personal stories can be powerful, too.

The Journalists recommended that there should be a continuous collaboration between journalists and the UN in between the WWD events. The journalists wish to interact and are committed to collaboration with UN agencies.

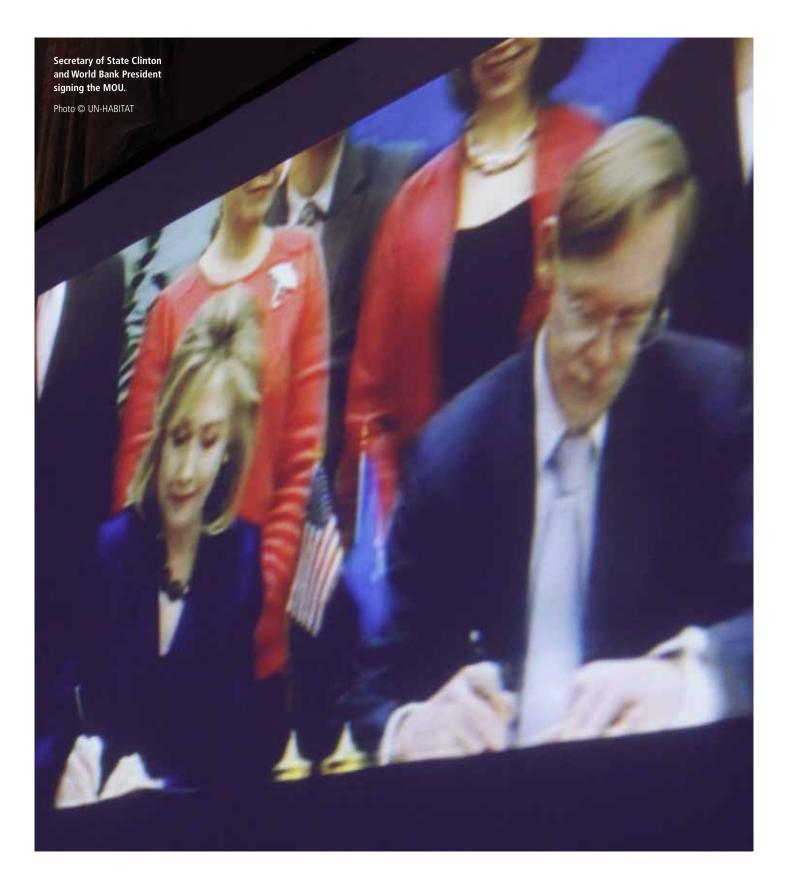
Dr. Hanna Louisa Bisiw, Deputy Minister of Water from Ghana is interviewed about World Water Day 2011.

Mr. Bert Diphoorn briefing the press on World Water Day 2011, he is joined by an official from the Water Affairs Department.

Photo © UN-HABITAT/ Jeanette Elsworth During the field trip, workshop participants had the chance to interview real life stories and Ms Rejoice Mabudafhasi, South Africa's Deputy Water and Environmental Affairs Minister, among other officials. This gave them the chance to learn about the South African model of water management for poor areas.

As one outcome of the workshop, the journalists wrote articles and published stories on the WWD 2011 and the main theme of Urban Water. The workshop participants produced and managed a blog called *Water Journalists Africa* http://waterjournalistsafrica.wordpress.com/ for which they write and comment regularly.





LIVE CONNECTION TO WASHINGTON

The climax of the World Water Day event was the live video link to Washington, USA, where Secretary of State Hillary Clinton and World Bank President Robert Zoellick signed a Memorandum of Understanding (MOU) committing their two organisations to closer collaboration on water-related efforts. The event took place in the World Bank Atrium in Washington, DC.

The live connection featured the speakers presenting the outcome of World Water Day activities in Cape Town. Began with Hon. Edna Molewa reinforcing the determination of the African Ministers' Council on Waterto implement its plan of action through advocacy, lobbying and bothsecuring funds to implement the campaign and providing technologies to improve access to water and sanitation in Africa.

"We will continue to build on the important mitigation aspects of our work and we are determined to move forward to implement the AMCOW Plan of Action," she said.

H.R.H. Prince Willem-Alexander said, "Water and sanitation are like Siamese twins - if we separate them one may die, and we don't know which one". He appealed to the World Bank to feature water and sanitation prominently on their agenda in preparation for the upcoming G20 Summit and underscored the need for more capital investment for infrastructure in these areas.

Hon. Edna Molewa, H.R.H Prince Willem-Alexander of the Netherlands, and Dr. Joan Clos presenting the outcome of the Cape Town event during the live connection

Photo © UN-HABITAT



Dr. Clos noted that rapid urbanization was increasing faster than the capacity of cities to provide infrastructure. He said, "We are in a crisis, with the percentage of urban population with access to water and sanitation decreasing. It is a sad reality and we need to face it." He noted that the number of people with no access to water and sanitation was also increasing.

He added, "The good news is that we can face this by developing urban policies to address urban planning and urban legislation. We need to plan in advance of the problem to mitigate; we need to plan today not tomorrow. We need to plan at the scale of the problem and in line with growth. We must have a basic plan that considers water, sanitation and drainage."

Participants follow discussions during the live connection.

Photo © UN-HABITAT









High-level Guests and participants follow proceedings during the live connection

Photos © UN-HABITAT/UN-Water





OUTCOME OF THE THEMATIC SESSIONS

The main event was preceded by 30 thematic sessions and side events bringing together key stakeholders within the global water and sanitation sector. This section presents the main messages from each session.

SUNDAY 20 MARCH 2011

Seminar on Values-based Water, Sanitation and Hygiene Education

Purpose:

The goal of the seminar was to introduce the concept of human-values based WASH education, share experiences and success stories around it and discuss best practices for promoting both sustainable WASH projects and water and ethics in the urban setting.

Summary:

John Etgen from the Project WET Foundation served as moderator for the event's key speakers. They were Dr. Art-Ong Jumsai from the Water Institute in Thailand, Andre Dzikus from UN-HABITAT, Sagie Naike of the Africa Institute of Sathya SAI Education in Zambia, Julia Nelson from the Project WET Foundation and Teddy Tindamanyire from the Uganda Ministry of Water.

Dr. Jumsai led off the workshop with a discussion on the importance of love and the five human values in water education. His motivational presentation was followed by Andre Dzikus who summarized the background and UN involvements in human values-based water, sanitation and hygiene education (HVBWSHE). Sagie Naiker then shared success stories from Africa using the HVBWSHE methods.

Julia Nelson presented on Project WET's experience in developing and customizing HVBWSHE materials for Latin America. Lastly, Teddy Tindamanyire summarized data on the behavior changes of students in the Uganda HVBWSHE project carried out in collaboration with Project WET.

During one session, the speakers and participants were joined by Rolf Stahlhofen, an internationally-acclaimed German musical artist and a UN-HABITAT 'Messenger of Truth', who shared his vision for the creation of his new song *Water is Life*, which debuted later that day at the Expo. He based the song on the human connection to water and the right to water for all people.

Main Messages:

- Several key findings came out of the discussions and presentations at the HVB-WSHE seminar. Emphasis was placed on incorporating the five human values of peace, love, truth, non-violence and right conduct into educational projects.
- ii. In these human-values based water education projects, focus should be on behavioral changes and incorporate strategies such as:
 - Build into schools' curriculum education in values-based water, sanitation and hygiene education
 - Political buy-in

- Diverse strategies should be employed such as health clubs, text message reminders and locally-customized materials
- iii. Best practices for sustainability are critical and should include monitoring and evaluation, increased ownership from the local community (work with the community and not for the community), local knowledge and traditional practices and enhancement of local skill development.

The HVBWSHE working group was established from participants of this seminar with Project WET Foundation serving as moderator

AMCOW World Water Forum African Caucus

Background

AMCOW was selected as the Regional Coordinator to drive the process for the Africa Region Preparatory Process for the 6th World Water Forum in Marseille, France, scheduled for 2012. The 6th World Water Forum relies on four processes: Thematic, Regional, Political and Grassroots / Citizenship, and requires that a Regional Process (RP) should take place in each of the four major "continental" regions of the world – Africa, Americas, Asia-Pacific, and Europe (at large).

Africa's Preparatory Process 1st Multi Stakeholders Forum, Cape Town, 20th March 2011 Participants share experiences and success stories during the seminar.

Photo © UN-HABITAT





Participants at the AMCOW African Caucus multi stakeholders forum.

Photo © AMCOW/Obiajulu Zikora

As part of the required actions expected of AMCOW, the Secretariat organized the 1st Multi-Stakeholders' Forum for the Africa's Preparatory Process on 20 March 2011 in Cape Town, South Africa. Both the Steering and Coordinating Committees were set up at the forum. The purpose of the forum was to achieve commitments and solutions through defining targets that are SMART (Specific, Measurable, Achievable, Realistic, Time bound). The forum was attended by four AMCOW Ministers representing various regions in the persons of Hon. S.S. Nkomo, AMCOW EXCO Vice-President, Southern Africa / Minister of Water Resources Development and Management, Zimbabwe; Hon. Mamadou Igor Diarra, AMCOW EXCO Vice-President, Western Africa / Minister of Energy and Water, Mali; Régis Immongault, Minister of Energy and Water Resources, Gabon and Kamal Ali Mohamed, Minister of Irrigation and Water Resources for Sudan. Other attendees include Technical Advisory Committee representatives, other governmental delegates as well as delegates from donor agencies and development partners, development banks, the private sector and civil society organisations.

The forum identified the following nine targets and coordinators:

- Develop and implement sanitation and water plans to bring back on track the neglected areas, including post-conflict countries, informal settlements and slums, rural communities and small towns by 2015. Coordinators: UN – Water Africa – UN-HABITAT*, WaterAid and Le Centre Régional pour l'Eau Potable et l'Assainissement à faible coût (CREPA).
- Develop youth and water strategy by 2012 and AMCOW Gender Strategy to be implemented in all countries by 2015.

- Coordinators: Global Water Partnership*. WSP, (African Civil Society Network for Water and Sanitation (ANEW) and Water and Youth International Movement.
- iii) Conduct regional dialogues on the 1997 UN Convention on international water courses and the UN Convention on Transboundary aguifers and compile points of agreement and objections for wider consensus by 2015. Coordinators: CEDARE, UNEP, Global Women Partnership. Establish five sub-regional and ten national Centers / Networks of Excellence by 2015. Coordinators: AfWA, AMCOW, AM-COST, NEPAD, CEDARE. PLEASE SPELL THEM OUT
- iv) Develop and implement in all countries innovative financial mechanisms including taxes, tariffs, and transfers to meet the Goals' financial requirements by 2015. Coordinators: AfDB/WDA, AWF, **AfWA**
- v) Create fully functional water divisions within RECs / AMCOW sub-regional Secretariats/ organizations supported by resource pools by 2015. Coordinators: AUC /AMCOW and CEDARE.
- vi) Develop harmonized national, basin and regional knowledge management and water information mechanisms to support a harmonized methodology of M and E for the water sector in Africa and a pan-African state of the water report by 2015. Coordinators: GIZ/AUC, UN Water Africa, CEDARE.
- vii) All African countries to undertake legal and institutional reforms to ensure accountability, participatory, efficient and sustainable WSS and WRM at national



multi-stakeholder forum. Photo © UN-HABITAT

Mr. Bai Mass Tall, the executive secretary of

AMCOW addressing the

(2015) and basin (2025). Coordinators: IUCN and UNEP.

viii) Integrate water security and climate resilience into country national development plans and African Water sector representation in the negotiation on climate change starting by COP 18 to ensure access to incremental funding by 2015. Coordinators: GWP UN Water Africa.

From now until December, the coordinators will be having consultations and dialogue with their respective stakeholders to come up with solutions to those targets that are to be reported to the 6th Water Forum in Marseille. We hope to have an Africa Focus Day during the period.

Radical Versus incremental change – how to SWITCH urban water systems to meet current and future challenges?

Conveners: SWITCH Consortium, UNESCO-IHE, and ICLEI – Local Governments for Sustainability.

Purpose:

- Explore if and how cities in a developing country context can accelerate the development of their urban water management systems by leapfrogging to more sustainable solutions without replicating the weaknesses of the conventional systems developed and applied in developed countries.
- ii. Create awareness on the upcoming publications of the SWITCH project, in particular the Transitioning Manual, the SWITCH in the City book, the SWITCH Training Kit and the City Water tool.

Summary:

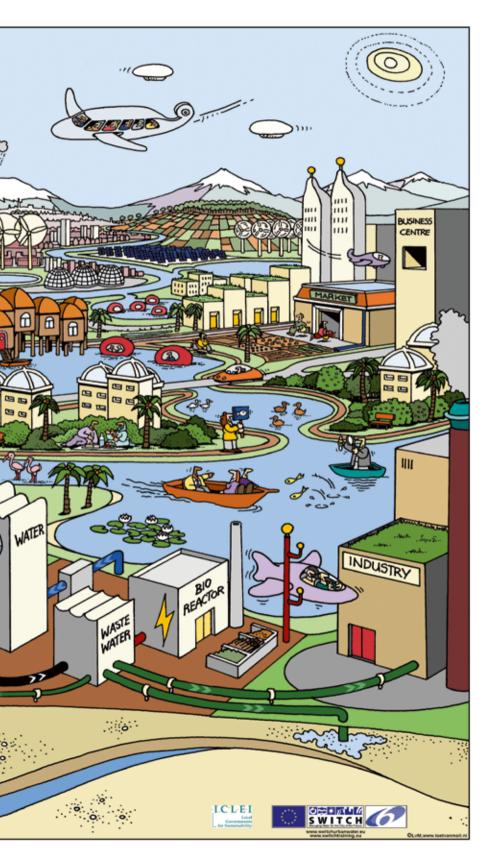
The session started with the introduction of the SWITCH Transitioning Framework that was followed by a panel discussion with SWITCH Learning Alliance facilitators as well as representatives from the State of Sao Paulo, the South African Water Research Commission and the University of Cape Town.

In the second part, insights were given into the project's Learning Alliances, the central approach used for the collaboration of researchers with water stakeholders. Finally, City Water was presented. City Water is a suite of tools to examine the current status of an urban water system and to look into potential impacts of interventions to this system.

Main Messages

- i. The governance system is crucial for the success or failure of transitioning. Transitioning without stakeholder participation is impossible.
- ii. The Learning Alliances approach or stakeholder involvement, more generally – comes with a cost that should not be underestimated. Having an awareness of the nature and scope of existing and emerging problems as well as of the likely benefits of becoming engaged provides incentives to those who are expected to invest time plus human and financial resources into a stakeholder process.
- iii. The collaboration between universities and municipalities can be powerful provided that joint interests and benefits can be identified, a common language found and mutual trust developed.
- iv. Significant progress in better water management can often already be achieved by simple but effective changes to policy and practice.
- The complex message of system innovation has to be broken down for decision-makers into smaller, more digestible information. The key principles are more important than the details.
- vi. Broad awareness on the value of water has to be (re-)created, and this needs to happen through education and a closer involvement of media, but also by making water more visible and enjoyable in the urban landscape.
- vii. The transitioning approach is most promising in smaller cities or in selected smaller areas such as sub-catchments within larger cities.





Water and Green Growth

Conveners: The World Water Council and the Korean Government (Korean Ministry of Land Transport & Maritime Affairs, the Korean Presidential Committee on Green Growth and K-Water).

Purpose:

To publicly launch this joint project (www. waterandgreengrowth.org) and initiate a debate on the role that water plays in green growth from a variety of perspectives.

Summary:

International economic and water experts came together to open the debate and public requests were made for examples of success and failure to integrate water into green growth strategies. The outcomes of the side event will help to determine the scope of research required for Phase 1 of the project, and to identify practical solutions in different areas of key concern for policy makers working towards green growth. Initial findings will be further reported on at other international forums and a report will be published for the 6th World Water Forum (Marseilles – France, March 2012), and Rio+20.

"The Water-Sensitive City of the Future"

The illustration was developed in the context of the project SWITCH - Managing Water for the City of the Future that was part-funded by the European Commission under FP6.

Illustration © Loet van Moll

Main Messages:

- Green growth is not being proposed as a replacement to sustainable development but as a way of operationalizing sustainable development and developing green economies.
- ii. Green growth is a new paradigm for growth. In OECD countries it is being led by economic and finance ministers instead of environmental ministers
- iii. While there has been much talk about green growth in recent times, the question of how water impacts on green growth has not yet been addressed.
- iv. It is thought that water and green growth is a cross-cutting basis for sustainable economic development, and so there will be no one-size-fits-all solution. Rather, a policy framework to guide policy makers will be required.
- There is a need to bring business and industry into this debate with policy makers, as green growth should be marketled with government support.

Main Conclusions and Recommendations

- Collaboration with, and contributions from, external organizations around the world is vital to the success of this project
- Everyone is invited to sign up to support and follow this project at the following website <u>www.waterandgreengrowth.org</u>
- iii. Linking policy talk with lessons learned on the ground is imperative and will be one of the focuses of this project, through the examination of case studies from around the world at local, national and regional levels.

- iv. It is also important to define how to monitor and measure water and green growth through a set of indicators that are yet to be defined. For example, at a macroeconomic level you can account for the benefits of a dam through GDP, but you cannot easily account for the benefits of wetland restoration through GDP.
- v. There are lessons to be learned from countries at every stage of economic development that can be passed on to all other countries. Lessons about water and green growth should not simply flow in one direction from rich to poor countries.
- vi. The development of thinking for our research will be naturally linked with United Nations Conference on Sustainable Development processes, which originated from 1972 Stockholm United Nations Conference Human Environment, 1992 Earth Summit, 2002
- vii. Johannesburg World Summit on Sustainable Development and will be reached to

Participants at the Water and Green Growth event.

Photo © K-water





Speakers at the Water and Green Growth event.

Photo © UN-HABITAT

the Rio +20, 2012 through the Marseille World Water Forum. Environmental, economic as well as social factors have been intermingled and finally green growth became the product of these processes.

Water – The Urban Challenge

Conveners: Global Water Partnership.

Purpose:

- i. Address the growing impacts of an urbanizing population on the water sector.
- Explore opportunities to enhance affordable green growth for all while reducing adverse effects on the disadvantaged and improving the quality of life for people and the environment.

Main messages

- 'Cities as organisms' they use resources and generate wealth and waste. The key is getting the best and reducing the worst impacts.
- ii. Informal settlements are here to stay. They are the engine through human labor that drives the cities and economies. Rather than discriminate, governments at national level and local level need to work with the energy and creativity of people in these settlements to build a better life for themselves and in situ upgrading with service provision is feasible but needs high levels of community involvement.
- iii. Nearly all the speakers emphasized the importance of multi-stakeholder consultation in planning processes at all levels.



Urban water infrastructure has fallen way behind population growth.

Photo © UN-HABITAT

- iv. The potential impacts of climate change need to be taken into account, again at all levels, as trans-boundary river basin projects, major cities and secondary cities are all at risk if these uncertainties of too much or too little water are not assessed.
- v. Youth are the silent majority. They represent 70 per cent of the urban population in Africa and we need to engage them actively as part of the solution.
- vi. Cities are increasingly water scarce and should use grey water, with suitable health precautions, to increase food security and quality of life.
- vii. Engineers need to change their mind sets and devise appropriate solutions to serve the majority of citizens who reside in informal settlements.

- viii. Urban water infrastructure has fallen way behind population growth and critical investment is needed to enable cities to provide services for both social and economic demands.
- ix. Cities cast a shadow on the rural landscape but also provide the market for and source of essential goods and services and polices must reflect a healthy balance to enable maximum benefit for the city's country.
- x. Local authorities and citizens must now reuse, recycle and recharge to enhance water security at all levels. Changes to regulations are necessary to provide effective means and to encourage these efforts.



Stephen Donkor, chair of UN Water Africa presenting on Coastal and Marine zones- impacts and opportunities.

Photo © UN-HABITAT

Fixing the leak in urban areas – The South African experiences

Conveners: Water Research Commission and WRP Consulting Engineers

Background

South Africa is a developing country with a growing population, reflected by the ever-increasing demands for water, particularly in the urban areas which support the majority of the country's near 50 million residents. As a water-scarce country, it is therefore important to ensure that all existing water resources developments are utilized efficiently before new schemes are approved and implemented.

One of the key issues that have been identified by the Government of South Africa relates to the water losses occurring from municipal water supply systems. In some areas,

the losses from the reticulation systems are unacceptably high and, in extreme cases, exceed the water used by the residents. Such losses are unacceptable, leading to a wide variety of interventions designed to reduce wastage and to encourage the efficient use of the available resources.

The issue of water-demand management has been raised by various government organisations as a key issue that must now be addressed throughout South Africa, both from a water and power viewpoint. It is no longer an option in many areas, but rather a critical element of the overall water supply strategy. For example, in Gauteng - regarded as the powerhouse of the South African economy - it will be necessary to implement water demand management on a massive scale as well as develop a new water transfer schemes to keep pace with the growing demands. In



this regard, South Africa is fortunate to have one of the most sophisticated water resource systems in the world to support the water requirements of its growing population. Most of the major metros and municipalities are driving water demand management in their areas of supply with a renewed urgency.

The session included an introduction and overview of water loss management in South Africa and the development of the standard International Water Association (IWA) water-balance model, with a variation of this model which accommodates the component of Free Basic Water being applied in South Africa. It provided progress towards the benchmarking of water loss in South Africa and the

performance of different Municipalities and service providers.

This was followed by introduction to the five pragmatic tools - SANFLOW, PRESMAC, ECONOLEAK, BENCHLEAK and Water Audit Software - which can be used and which are applied by municipalities in managing water losses with examples given of its application in South Africa and the rest of the world. The session highlighted South Africa as a leader in advanced pressure management and which has introduced three of the largest and most successful installations of their type in the world – two of which are in Cape Town. Asset management is a key requirement as it supports good water loss reduc-

Water losses occurring from municipal water supply systems is a key issue in South Africa.

Photo © Richard Franceys

tion. Two risk management modules - VUL-WATER and RISKWATER - were introduced to complement asset management strategies.

Key Messages

- i) A number of pragmatic and innovative tools are available.
- Measuring and benchmarking water losses in a standard and pragmatic approach is important at a national level for developing national strategies and policies.
- iii) The International Water Association's standard water balance has been used as the basis for water auditing in South Africa.
- iv) In many parts of South Africa pressure management is often found to be the most appropriate WDM intervention as the first stage in a comprehensive strategy. The recently-completed Sebokeng

Pressure Management project has been recognized throughout the world as one of the largest and most successful installations of its type. The installation saved in excess of USD20 million over the first five years of its operation and had an effective payback period of two months.

- v) Payback periods can, in some cases, be weeks or a few months, with long-term sustainable gains.
- vi) Asset management and risk profiling of assets is important for effective water loss management.
- vii) South Africa is making significant progress on reducing water losses. One of the key performance objectives of the President is to reduce water losses by 15 per cent over the next three years.

In the South African context, there is no single intervention that can be applied throughout the country. Each area presents its own set of problems, which often require a complex range of WDM interventions. Many other WDM projects have been successfully implemented throughout the country and the momentum is growing to tackle water losses in every major urban centre.

A pressure management installation in Khayelitsha.

Photo © Water Research Commission



MONDAY 21 MARCH 2011

Water and Urbanization for the African Water Caucus

Conveners: United Nations Human Settlement Programme (UN-HABITAT); the African Ministers' Council on Water (AMCOW); the United Nations Environment Programme (UNEP) and WaterAid.

Event Purpose:

During the Africa Water Week III in November 2010 at Addis Ababa, Ethiopia, AMCOW announced its resolve to make efforts to enhance the political prioritization to meet the water and urbanization challenges to trigger investments and develop credible and implementable urban plans. A joint working group by AMCOW and Housing and Urban Development (AMCHUD) was proposed. The purpose of this session was to discuss and make recommendations for consideration by the Africa Caucus Panel on a framework and Terms of Reference of the proposed AMCOW-AMCHUD Joint Working Group.

Summary:

The event explored modalities to harness and scale up the positive progress identified during the 3rd Africa Water Week. Presentations were made on the current state of African cities, reforms for improved governance processes, opportunities for integration of WATSAN in urban planning processes, monitoring and reporting sector performance, as well as opportunities for financial resource mobilization for urban WATSAN services.

Main messages:

- Most of Africa's urban growth is projected to be absorbed by its medium-size cities and smaller settlements with a population of fewer than 500,000 people.
- The high rate of urbanization in Africa has not been matched by the ability of governments to improve basic WATSAN infrastructure development and service delivery.
- iii. The provision for water and sanitation cannot be viewed in isolation and needs to be integrated carefully with urban planning.
- iv. The urbanization process offers opportunities that could be tapped to improve WATSAN access in the areas of governance, available financial resources, quick win interventions and performance monitoring.
- v. In line with the decision made during the 3rd Africa Water Week, the meeting discussed and agreed in principle on a proposed framework for a joint working group of AMCOW and AMCHUD to work closely for effectively addressing the urban water and sanitation challenges.



Mr. Alioune Badiane,
Director, Regional Office for
Africa and the Arab States,
UNHABITAT presenting on
the state of African cities.

Photo © UN-Water

Water and Disaster

Conveners: High-Level Experts Panel on Water and Disaster which included HLEP and UNSGAB (United Nations Secretary-General's Advisory Board on Sanitation), ISDR, WWC, Korea Water Forum, Japan Water Forum and UN-HABITAT.

Purpose:

The side event aims to facilitate focused discussion on three issues: recognizing the devastation of water-related disasters, positioning disaster risk reduction in sustainable development and financing preventive measures, which are critical in advancing water and disasters towards achieving the Goals and beyond. It takes snapshots of those key issues and identifies the next steps. It formu-

lates messages to inspire decision-makers and these massages will be disseminated at key events.

Summary

Speakers identified the regional diversity of water-related disasters and introduced approaches that would be appropriate for local conditions.

Participants of the side event highlighted the importance of disaster risk reduction as sustainable development and green growth cannot be achieved without a society resilient to water-related disasters. They stressed that continuous efforts for preventive rather than reactive measures need to be enhanced.

Main Messages:

- Resilient society is based on disaster risk reduction by reinforcing investments in infrastructure, by maintaining facilities at local levels and by enhancing capacity building - including early warning systems.
- ii. Necessary actions must be taken before disaster strikes at all levels. Governments should have a primary responsibility to proactively promote capacity building and financing. Local authorities and communities should enhance preparedness
- and vulnerability reduction. The international community, such as donors, should support them in this context and all actions should be monitored.
- iii. The public should stay aware of the importance of disaster risk reduction. A strategic approach to keeping this visible should be installed for raising awareness at community levels.

Sustainable development and green growth cannot be achieved without a society resilient to waterrelated disasters.

Photo © Japan Water Forum





H.R.H Willem-Alexander of the Netherlands joined other participants at the Water and Disaster session.

Photo © UN-Water

International Water Quality Standards/Guidelines for Ecosystems

Conveners: UNEP.

Purpose:

- Present the activities of UN-Water and UNEP to develop ecosystem water quality standards/guidelines for freshwater ecosystems.
- ii. Stimulate discussions on the development of these standards/guidelines.
- iii. Agree on a conceptual approach to the development of the standards/guidelines.
- iv. Discuss the scope of the standards/guidelines as well as the process to develop the standards/guidelines.

Main messages:

- Water Pollution is on the rise: 1.1 billion people lack access to a clean water supply and 2.5 billion people are without sanitation.
- ii. Untreated wastewater is entering water-

ways untreated in both Africa and Asia.

- iii. There are water quality standards for thematic areas, human use and receiving waters but not for ecosystems.
- iv. The side event is the launch of a consultative process, looking at what we want to achieve and how to go about it.

Key Recommendations and Conclusions

Conceptual Approach and Principles

- i. We need to question the levels at which we want to work. For example, restoring ecosystems or simply halting the decline? The guiding point should be what water services do we want to get out of ecosystems and what level of functioning does an ecosystem need to have to make these services sustainable for us?
- ii. We may be looking at a scenario-based approach, where different ecosystem standards/guidelines are for different scenarios.
- iii. We do not have a definition of a good



ecological status. This needs more work and should be taken into account when deciding what our baselines might be.

iv. Harmonising the differences between regions and countries to develop standards at the international level will be a challenge.

Conclusion: A framework or matrix approach may be best to allow for differences in scenarios, uses, countries and regions.

Scope

 A key difference that ecosystem standards need to cater for are high vs low income countries and their different sce-

- narios. For example, Europe is looking at emerging issues while most of Africa is looking at traditional standards such as pH and Total Dissolved Solids (TSS).
- The health of ecosystems will need to be assessed, such as distinguishing between naturally-occurring and human-induced impacts.
- iii. The scope of the standards should be applicable to different levels of investment and management.
- iv. A challenge will be to combine or integrate the exercise with other processes and initiatives.

Untreated wastewater is entering waterways in both Africa and Asia.

Photo © Robert Bos, WHO, Geneva, 2006 **Conclusion:** A common but differentiated approach may be needed. However, the scoping study will make recommendations on scope and the process will evolve after it has been published.

Road Map

Conclusion: In the coming months, with the guidance of the scoping study, different types of working groups will be identified which will be populated with the appropriate expertise needed to develop the standards/ guidelines.

A CSIR Perspective on Water in South Africa – 2010: A panel discussion

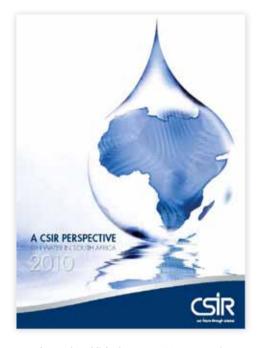
Conveners: The Council for Scientific and Industrial Research (CSIR) with panel members from the Department of Water Affairs (DWA), Water Research Commission, Rand Water and the CSIR.

Purpose:

Presenters unpacked, from a science-based perspective, the current challenges facing the water sector and where research and management efforts should be focused to meet them. A key focus of the discussion was to present expert opinion in a public forum and to promote science-based decision making. The discussion was based on a newly published report: A CSIR Perspective on Water in South Africa – 2010.

Summary and Main Messages:

 The event comprised a panel discussion with questions and comments from delegates. Approximately 30 delegates, including members of the media, attended the session.



The newly published report: A CSIR Perspective on Water in South Africa – 2010.

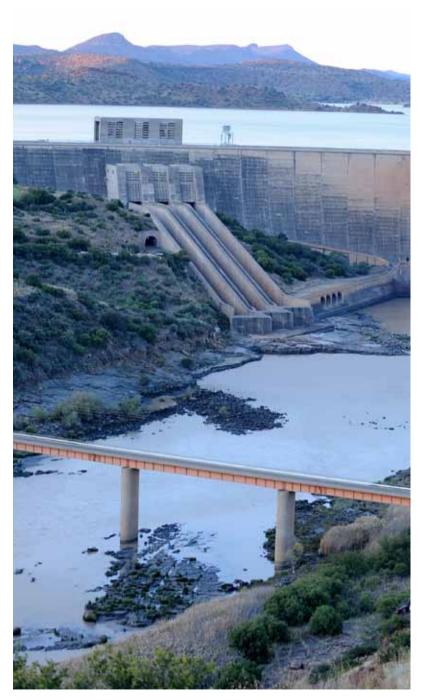
Photo © CSIR

- Mbangiseni Nepfumbada, Acting Director-General: Policy and Regulation from the Department of Water Affairs, South Africadelivered the keynote address.
- iii. After presentations by panel members, led by Dr Deon Nel, there were discussions and the main messages and conclusions resulting from them centred around knowledge uptake:
 - There was a strong sentiment that, although research is extremely important for informed policy and decision making, we cannot research forever.
 We need to start implementing solutions – albeit on a small scale – with the knowledge we have and learn as we go along.

- o We tend to underestimate the end part where research needs to be taken up; there is an expectation that technology will give a 'push-button' solution and that is often not the case all parties must be involved early in a project to ensure the end-users and implementers are on board. More financial and skills investment are needed in this area.
- o We must document and publish successes along the way. People feel overwhelmed by the magnitude of work to be done in the water resource management field but examples of success are a great catalyst for action.
- Research uptake could be failing because of inadequate interpretation of policies (knowledge brokering requirement?).
- o Implementation could fail because of a lack of local understanding and responsive strategies. A delegate mentioned an example of a poor community with new sanitation infrastructure. The infrastructure is already in disrepair because the community cannot afford toilet paper and will not use 'food money' to buy toilet paper. The use of newspaper is clogging up the pipes with the community responding, "Why don't you put in bigger pipes..."

There is an expectation that technology will give a 'pushbutton' solution and that is often not the case.

Photo © CSIR



Right to Water and Sanitation

Conveners: Department of Water Affairs, Republic of South Africa (DWA) and UN-HABITAT

Purpose:

To explore the experiences of the rights-based approach to water and sanitation in South Africa and discussing how the approach can be taken forward in other countries.

Main Massages:

- Financing the universal right to water is achievable for a middle-income country such as South Africa, even with high inherited backlogs.
- A 'rights-based approach' needs to be balanced with adequate attention to how systems are managed and sustained.
- It is especially important that users using

- more than the minimum basic amount pay for the full cost of the service.
- Careful attention needs to be paid to the implications of a rights-based approach for how service providers manage customer debt.
- Involve consumers in service level decisions and this works best if they have a choice. Most will probably be willing to pay for a higher and/or better service.
- Financial viability of water service providers/municipalities needs to be maintained.
- Many of the most sustainable and effective projects around the Right to Water and Sanitation are those undertaken by individuals and communities at the grassroots level.



Many of the most sustainable and effective projects around the Right to Water and Sanitation are those undertaken by individuals and communities at the grassroots level.

Photo © Agha Khan Foundation

- Community-based approaches, ensuring partnership between stakeholders (including rights holders and duty bearers) is an effective way of advancing the Right and is also lower on costs;
- It is necessary to address all aspects of the Right- sufficiency, safety, accessibility, affordability, availability, allocation and sustainability.
- Through local awareness, political will and innovative solutions progress can be made towards achieving the Right.
- Collaboration rather than confrontation between right holders and duty bearers is the most effective way forward.
- Funds are needed but are e often not the major constraint in achieving the Right.
- Overall, pro-poor water and sanitation governance is a corner-stone for realising the Right.

Acting beyond our boundaries to address the challenge of the water-energy-food nexus: A business view on the urban context

Convener: World Business Council for Sustainable Development (WBCSD), AquaFed, the International Water Association (IWA) and the South African National Business Initiative (NBI).

Purpose:

Explore an integrated approach to providing access to water and sanitation in the urban development and climate change context, looking at the urban connection with surrounding ecosystems, agriculture and indus-

trial services and with a specific focus on the role of business.

Key messages and recommendations

- i. Water security is critical, and closely connected to energy and food.
- ii. Providing water services in a rapidly changing and urbanizing world is complex.
- iii. The water and sanitation service backlog continues to grow, especially in cities.
- iv. The need is huge, particularly in developing countries.
- v. The scale and nature of the urban challenge adds complexity.
- vi. Climate change impacts on water, agriculture and cities cannot be ignored.
- vii. As a minimum, cities need to optimize water resources within their operations.
- viii. Leading cities are investing beyond their municipal borders, looking for upstream and downstream solutions.
- ix. Understanding both the urban-rural connection and 'nature as infrastructure' is important.
- x. Pioneering cities are investing in water basins.
- xi. There are both significant opportunities and an important role for business.
- xii. Leading businesses are thinking in innovative ways, and are investing 'outside the factory fence' across the catchment.
- xiii. There are great opportunities for job creation, provided that enabling environments are created.

Photo © WBCSD

- xiv. With the water-energy connection, power utilities can make a big difference.
- xv. Planning for providing energy, water and food should be integrated as early as possible, from top to bottom, and silo thinking must be broken.
- xvi. All parties must learn to speak the same language and commit to sharing information.

On the Road to Rio+20: Managing water under uncertainty and risk

Convener: United Nations World Water Assessment Programme (WWAP) and UNSGAB (United Nations Secretary-General's Advisory Board on Sanitation).

Purpose:

- Address water management under conditions of uncertainty and risks through the perspectives of water allocation, disasters and urbanization.
- ii. Address the need for accurate information and data.



Photo © Mikkel Ostergaard/P

 Highlight the links between water, economic and social development and global processes.

Summary:

Effective planning and management of water resources depends on a good understanding of uncertainties and risks that can affect its uses and management. Uncertainties on water supplies and demand are related to economic and financial processes, social changes and politics. Risks related to water scarcity, quality degradation, loss of ecosystem ser-

vices and extreme climate events further complicate the picture. Objective information on water availability trends is necessary but is generally not available.

While water is a key resource for other sectors and for economic and social development, it is important to inform and engage in decision-making processes in other domains that are related and have an impact on water resources. Water has to be considered in multiple areas climate, food, energy and ecosystem health – and should be explicitly ad-

Cities, industry, other forms of business and agriculture all need to act beyond their own boundaries, to address shared risks and opportunities to optimize urban water and to invest in building more resilient basins. dressed in major global processes such as the Goals, the negotiations on climate change and Rio+20.

Key recommendations and conclusions:

- Uncertainty and risks will increase for water, particularly due to external pressures and demand from other sectors, and we need to understand them better.
- ii. Growing populations and economies, the improvement of the quality of life and the social drive to protect the environment and allocate more water to ecosystems represent the major pressures on this resource.
- iii. In a context of rapid urbanization, systematic approach to urban planning can reduce vulnerability and risks and promote green growth.
- iv. Risks and uncertainties represent threats but also opportunities. However, disaster prevention, for example, is often considered as a cost rather than an investment.
- v. Water-related disasters such as floods, droughts, water-related epidemics, landslides and famines particularly affect Asia and Africa. Risk-reduction measures are investments in economic development. Risk reduction and climate change adaptation should be integral parts of development planning.
- vi. Climate change, though it can be a relatively marginal factor of pressure on water in certain cases, should be considered as an additional risk and included as a parameter in planning with a proper weight when compared with other factors.

- vii. Water should not be considered as a sector but as a resource on which so many sectors depend such as production, energy, health and ecosystems.
- viii. Criteria for water allocation should include social and livelihood aspects and not only economic values, including the Right to water.
- ix. Water is highly relevant to the Goals, Rio+20, green economy and the climate change negotiations and should be explicitly addressed in all those processes.

Water monitoring, assessment and reporting for better decision making, with a focus on Africa

Convener: United Nations World Water Assessment Programme (WWAP) and UN-Water/Africa with the support of AMCOW.

Purpose:

- i. Address the water data and information challenge.
- Assess the state of water monitoring and assessment at national, regional and global scales.
- Present and discuss a roadmap for the production of an African Water Development Report as an instrument to achieve Africa Water Vision.

Summary:

Water resource management is complex and cuts across many development sectors. It is necessary to have reliable data and information on water resources, their use and management at national, sub-regional and regional levels and provide African decisionmakers with an authoritative basis for managing that continent's waters.

Developing and putting in place a harmonized and comprehensive mechanism for long-term periodic water assessment and reporting in Africa serves two main purposes. It contributes to building a collective understanding of water challenges in Africa and strengthens the continent's ability to monitor and manage water. The process is as important as the product.

Key recommendations and conclusions:

- Information and data on water resources, their use and management and investment in this area are insufficient at national, regional and global levels. This is also true in Africa.
- Monitoring and evaluation needs to learn from the past and see what can be used for the future.
- iii. Reliable data is needed more than indicators populate relevant indicators and meet the need of various data users.
- iv. New technologies for data collection,

Information and data on water resources, their use and management and investment in this area are insufficient.

Photo © UN-HABITAT/James Ohayo



measurements and data transmission are important, as shown by the examples of ARGOS satellite in Ghana and the use of Internet-based Information Systems by Southern African Development Community (SADC).

- v. The production of an African Water Development Report (AWDR) is envisaged as a vehicle to achieve the Africa Water Vision
- vi. Its production process should be a combination of top-down and bottom up approaches: a global lead might be necessary but the AWDR should build on national/basin reports and allow the development of capacity at national/basin level as well as utilization of national analysis and decision making to ensure ownership and commitment.
- vii. The production process is as important as the product. It helps to build the understanding of water challenges and strengthen capacity at local, national and regional levels.
- viii. The AWDR should serve the needs of the basins / countries and needs to be re-endorsed by the African Ministers' Council on Water (AMCOW).
- ix. While a medium- to long-term mechanism to produce the African Water Development Report on regular basis is being developed, an Interim Report will be produced under the auspices of the World Water Assessment Programme and launched during the 6th World Water Forum in Marseilles in March 2012.

Non-Revenue Water Reduction: An African Perspective

Conveners: United Nations Human Settlements Programme (UN-HABITAT); UN-Water Decade Programme on Capacity Development (UNWDPC) and African Development Bank.

Background

Non-revenue water is a widespread issue which has significant financial and environmental repercussions. However, awareness regarding the scope of the problem and available solutions is lacking. To address this need, the UNWDPC organized a series of capacity development workshops in Germany, Mexico, Bulgaria and Morocco in partnership with UN-HABITAT. UNW-DPC, together with UN-HABITAT and the African Development Bank used the opportunity of World Water Day to bring together experts from various stakeholders involved in non-revenue water reduction, especially operators and operational staff from Africa.

Representatives from at least 10 African countries participated in the workshop and the discussion. The session included 10 presentations and a panel discussion.

Summary of the Event and Main Messages

- Non-Revenue Water Reduction: Case study of a major water urban utility, FIPAG in Mozambique
 - FIPAG has developed and executed a water service performance contract as a Private Sector Participation (PSP) solution. The experience of four cities was detailed
 - house connections have been tripled,

service hours improved from an average of 10 to 24 hours per day and non-revenue water (NRW) came down from 50 per cent to 20 per cent.

 How to use Geographic Information System (GIS) technology innovation for NRW: Swaziland Water Services Cooperation

The speaker has highlighted the essential importance of appropriate space-related data and information for all utility operations. A Global Positioning System handheld unit to locate and monitor water meters was introduced as a successful tool to build the GIS-based data system not only for revenue collection, but also for mapping of consumption and system planning. Investments were recovered (amortization) within than three years.

3. Economic Aspects of Water Loss Reduction for African Countries

The costs of water loss per cubic meter are far exceeding the tariffs or direct costs for production and distribution of supply water. The economic value of water is much higher. Surplus damages have to be considered such as reducing the technical network lifetime. Therefore, the benefits of water loss reduction are higher than usually estimated.

4. Reducing Non-Revenue Water in Lake Victoria Utilities- Experience from Kisii Town, Kenya

UN HABITAT has supported a Capacity Development Programme (CDP) around NRW reduction in Kisii, Kenya. This example of a successful Performance Improvement Programme (PIP) was described with many interesting details.



5. How a small local utility addresses NRW

The speaker described the efforts of his water utility in Mozambique to deliver water following the rapid increase in demand. Losses could be reduced but the collection rate went down significantly because not all additional customers and additional demand could be served to customer satisfaction. The lessons learned were that the private operators should be involved in the NRW investment and that asset owner and asset operator should share the cost of training.

The costs of water loss per cubic meter are far exceeding the tariffs or direct costs for production and distribution of supply water.

Photo © UN-HABITAT/James Ohayo

Groundwater Management in Urban Areas

Convener: United Nations Educational, Scientific and Cultural Organization (UNESCO).

Purpose:

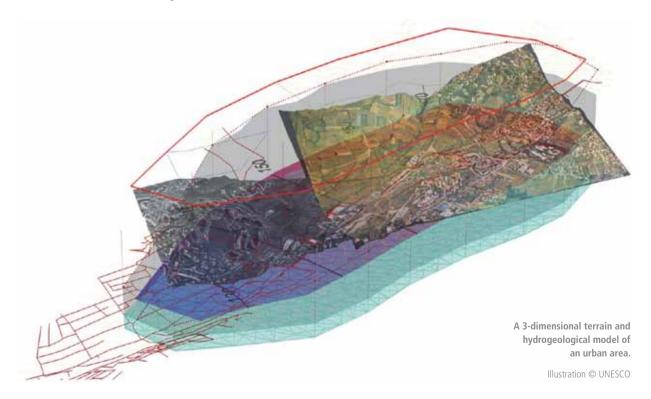
The session drew attention to the 'invisible' dimension of water management in cities and the vital role that groundwater plays in urban areas, which is frequently ignored.

Summary:

The session presentations focused on challenges in urban groundwater management and highlighted its role in the urban water cycle, as an important source of drinking water. It also highlighted the vulnerability of groundwater resources in urban areas to

over-exploitation, pollution and different types of flooding. It focused on the interactions that occur between groundwater and surface water and between groundwater and the components of urban water systems.

The session included a software demonstration. This was conducted by Dr Dubravka Pokrajac — one of the experts who worked on the software development - who presented a detailed step-by-step procedure for making a simulation model with UGROW, a simulation modeling and decision-support tool for urban groundwater management, focusing on groundwater interactions with urban water system elements. The UGROW capabilities were illustrated by presenting two real world simulation cases.



The panel session, with the participation of Prof Ken Howard, University of Toronto at Scarborough (Canada); Prof Cedo Maksimovic, Imperial College of London (United Kingdom); Prof Dubravka Pokrajac, University of Aberdeen (United Kingdom) and Dr J. Alberto Tejada-Guibert of UNESCO and facilitated by Dr Sarantuyaa Zandaryaa, UNESCO, deliberated on the challenges in sustainable groundwater management in an urban context. The panel discussion focused on:

- What are the main barriers in recognizing the importance of groundwater management in urban areas? How to raise the importance of sustainable use and management of groundwater in urban areas?
- Why we do not know much about groundwater and its role in the urban environment? What is missing—knowledge, data, or interest? What are the most efficient ways of raising the public awareness of groundwater management issues in urban areas?
- What are the benefits from enhanced knowledge, data and information on urban groundwater?
- What are examples of sustainable, effective solutions to integrated surface and groundwater management based on principles of integrated water resources management?

Outcomes and key messages:

 Water management in cities should aim at effective integrated surface and groundwater management, given that groundwater is an integral part of the hydrological and urban water cycles.

- ii. Groundwater plays an important role in sustainable water management in cities by providing a vital source of water supply for different uses and sustaining certain types of aquatic and terrestrial ecosystems.
- iii. The lack of data is one of the major obstacles to scientifically sound decision-making for sustainable water management and, in particular, for sustainable use of groundwater, which is a non-renewable, limited resource in some cases. It is also a major obstacle to using advanced modeling tools for integrated urban (ground) water management.
- iv. Decision-support modeling tools such as UGROW can be used to raise knowledge and awareness on urban groundwater management, as the visual output can help to reveal information on the existence of otherwise invisible groundwater levels and to illustrate how urban water mains and sewers recharge or drain the surrounding groundwater. This, in turn, can motivate data gathering and sharing, in addition to providing support for scientifically-sound decision-making for sustainable urban water management.

Transforming Water Utilities into Sustainable Business Enterprises

Convener: Sustainable Water and Sanitation in Africa (SUWASA).

Session Highlights:

<u>Issues:</u> Service providers operating inefficiently mainly due to institutional issues and lack of clear governance strategies.

<u>Insights</u>: Water and sanitation services have a greater likelihood of financial sustainability if they are delivered by service providers with autonomy to make management and budgeting decisions based on customer demands and operational needs, without undue political interference from central, local, or regional governmental bodies.

Decisions:

- Promote Water Operators Partnerships (WOP) approach for implementation of Performance Improvement Plans (PIPs).
- ii. Urge governments to consider implementing reforms that should lead to efficient and effective service provision.
- iii. Partnerships can work as is the example in Nigeria, Ethiopia and South Sudan.

- iv. SUWASA Promotes urban service delivery based on the following principles:
 - place the poor and disadvantaged at the centre of reforms
 - are geared to enhance operators' autonomy in financial and operational management decisions
 - promote accountability for service providers' performance in serving the public
 - provide incentives both at the organizational level to staff, and at the regulatory level to service providers
 - Can be easily replicated across geographical areas with similar socio economic characteristics



Mr. Stefan Kauder, Chief of Party, SUWASA introducing the session.

Photo © UN-HABITAT

Workshop on Sustainable Urban Wastewater Management in Coastal Cities

Convener: UNEP.

Event Purpose:

The session's aim was to communicate the objectives and activities of the UN Water Task Force and to publicise solutions to improve urban wastewater management in coastal towns and cities from global to local perspectives.

Main messages

From Sick Water:

- Urban populations are expected to rise from 3.4 to 6.4 billion by 2050, most of which will happen in cities where wastewater infrastructure is lacking.
- Successful and sustainable management of wastewater requires a cocktail of innovative approaches that engage the public and private sector at local, national and trans-boundary levels.
- iii. Planning is essential and these processes should provide an enabling environment for innovation, including communities but requiring government oversight and public and/or private management.

From Challenges and Opportunities in Sustainable Urban Wastewater Management in Coastal Cities

 Coastal wastewater and storm water management strategies should be tailored to the characteristics, values and uses of the particular receiving environment and based on a determination of how a combination of control measures



can effectively achieve water and sediment quality objectives.

- Greater attention is needed to prevent excess regional enrichment of nitrogen and other nutrients at levels that are harmful to ecosystems.
- Source control of pollutants should be strongly encouraged by incentives and regulation.
- iv. Coastal municipal wastewater treatment requirements should be established through an integrated process on the basis of environmental quality standards such as water and sediment quality rather than by technology-based regulations.
- Management systems should be flexible so that they may be changed as needed to respond to new information about environmental quality and the performance of existing management systems.
- vi. Public health agencies and wastewater treatment agencies should vigorously pursue the development and implementation of techniques appropriate for rou-



Wastewater and storm water management and other protection strategies for coastal urban areas should be developed and implemented within a system of integrated coastal management.

Photo © UN-HABITAT/ James Ohayo

- tine monitoring to measure more directly the presence of pathogens, particularly in marine and estuarine waters.
- vii. Wastewater and storm water management and other protection strategies for coastal urban areas should be developed and implemented within a system of integrated coastal management (ICM) which is an ecologically-based, iterative process for identifying and implementing, at the regional scale, environmental objectives and cost-effective strategies for achieving them.

The ECOSAN Project: Options for Coastal Communities in Rivers State, Nigeria

- The project was a response to identifying wastewater management challenges in Rivers State coastal communities and a demonstration of ECOlogical SANitation toilets and complimentary training.
- ii. Stakeholder interactions have proven to be enlightening for the stakeholders who had never heard about the technology and there is now willingness to set up other demonstration sites.
- iii. Achievements from the project are expected to include improved hygiene and sanitation in public places; the control of marine pollution caused by the use of overhung toilets and incidence of enteric

diseases and a source of fertilizer through resource recovery and economic empowerment.

iv. Challenges include the acceptance of the dry sanitation concept by the local community, where stakeholder engagement is a vital tool for building acceptance; the need to source the toilet moulds locally and the need to train handlers and health workers who would be responsible for the care and maintenance of the facilities.

The Atlantis Water Supply Scheme - an example of integrated infrastructure and water resource management

- Atlantis is a small town in Western Cape, South Africa which needed a reliable, independent and sustainable water supply. The supply of treated surface water was not economically affordable.
- ii. Atlantis's water resources include spring, groundwater and transferred municipal supply, recycled storm water and wastewater. The latter is by 9 detention ponds; Recharge basins (2 for aquifer and 4 for sea water barrierTreated domestic wastewatergoes to the aquifer and treated industrial WW goes to sea water.
- iii. This is a local robust and flexible system developed over time where additional treated water augments recharge and improves water quality.
- iv. A key achievement is the improved coordination between city role players and other stakeholders such as city services, consumers, industry, parastatal bodies and governmental organs.
- v. Key components have included the es-

tablishment of aquifer protection zones such as land use planning as well as community awareness of water as a resource and its vulnerability to pollution. This is a good local example of integrated water supply and wastewater treatment system that is sustainable

Workshop on UN-Water Mapping Exercise on Water Quality

Convener: UNEP

Event purpose:

- Inform about the TPA and the ongoing mapping exercise on water quality related activities of UN-Water members and partners.
- Stimulate discussions among the workshop participants to get their input on the mapping exercise as well as on the work plan of the TPA.

Summary of the event:

Presentations were followed by a discussion among workshop participants, facilitated by Falk Schmidt, which focused on the following key issues related to the mapping exercise:

- What are the expected outcomes?
- Presentation to the public: UNW-AIS and what else?
- Data model: categories to use to approach UN-Water
- Scope of water quality such as saltwater intrusion
- Cross-cutting nature: water quality is often a secondary focus of an activity so should this be mapped as well?

A second round of discussion, facilitated by Mr. Frederik Pischke from UN-Water, focused on the TPA and the expectations from the TPA, the thematic areas the TPA should cover and who the TPA should engage and how.

Key recommendations and conclusions:

i. The workshop provided a good starting point for the consultative process for organizing and carrying out the mapping exercise for the TPA on water quality that aims at providing an overview of water quality-related activities undertaken by UN-Water members and partners. The study will be based on consultations with UN-Water members and partners and its results will feed into a database, the UN-Water Activity Information System, that will accessible to the public. The mapping exercise will be completed by September 2011.

ii. The mapping exercise will serve as a starting point to help to identify priorities for the work of the TPA and, at the same time, will inform the public on what UNWater is doing on water quality. Later, the inclusion of activities of other agencies and institutions could be considered.

The quality of drinking-water is a powerful environmental determinant of health.

Photo © UN-HABITAT/ James Ohayo



iii. Determining the thematic focus of the TPA in support of governments' efforts for addressing water quality challenges may require a separate study. Looking outside of the UN can be useful to get a more client-oriented perspective. Once it is known who needs to be engaged and what they are doing, it will become clear what support the TPA can give on which issues and in terms of which activities and, by this, addressing needs and gaps.

Workshop on Capacity Building for an Ecosystems Approach for Water Resources Management in African Cities

Conveners: *UNEP, UN-HABITAT and Tongji University (China).*

Event purpose:

The side event centred on discussing a concept for a joint effort between UNEP, UNHABITAT and Tongji University to improve the capacity of stakeholders (municipalities,

Water resources are derived from a catchment or river basin ecosystem.

Photo © UN-HABITAT/ James Ohayo



urban authorities, managers of water resources/sanitation/supply and others) to improve water resources management from an ecosystem management approach. The effort will focus on African cities.

Main messages from the session:

- i. There are lots of challenges regarding water resources management in Africa. These include lack of knowledge; weak urban planning; ecosystem degradation; inadequate facilities as well as human and financial capacity; weak monitoring and governance systems; lack of political will and the impact of climate change.
- People, water companies and local authorities are focussed on water sanitation rather than water resources management
- iii. The project's objective, currently at the concept stage, is to assist cities in Africa to do more for water resources management through training, research, technologies, pilots and policy dialogue.
- iv. Results should be cities more engaged in managing 'upstream' water resources; reduced water demand; better data management and sharing; water service providers reducing unaccounted for water and policies which promote water resources management.

Conclusions and Recommendations:

- It was recommended that we keep in mind what kinds of results we would like to see from the capacity building initiative to enhance engagement of African cities in water resources management.
- ii. China and Africa have much to share on tackling water issues such as training and education programmes.
- iii. The proposed outline of capacity building initiatives may have to be redesigned to be more focussed, in particular more from an ecosystem management perspective (intervention areas). Focus areas could be information/knowledge management or governance and ecosystem management/functioning. The latter could also be a cross-cutting theme underpinning the other focus areas of addressing both the built environment and the natural environment.
- iv. A recommendation was to get further input on the proposed capacity building initiative through a second consultative round with African cities, organized by UN-HABITAT, perhaps with the support of AMCOW, but also through getting feedback from GUPES (the Global Universities Partnership on Environment and Sustainability) and other networks.





PARALLEL EVENTS

Global WOPs Congress and GWOPA General Assembly

1st Bi-Annual Global WOPs Congress, Cape Town, 20 - 21 March 2011

The Global Water Operators' Partnerships Alliance (GWOPA) held its 1st Bi-Annual Global WOPs Congress and GWOPA General Assembly on 20-21 March 2011 in Cape Town, South Africa, in conjunction with World Water Day celebrations on 22 March. The Congress brought together water and sanitation operators, GWOPA members and partners from around the world for this major global WOPs event.

The Congress contributed to the growing body of knowledge on WOPs, helped broker new partnerships between operators and generally raised awareness about the practice. The event represented a major opportunity for WOPs practitioners from around the world to exchange experience and expertise on important questions around WOPs. The Congress comprised two plenary sessions and a number of break out thematic sessions.

Plenary session 1: WOPs impacts (day 1)

In the first plenary session, a few successful examples of WOPs from different parts of the world were presented by duos of mentor and recipient operators, including intra-regional South-South partnerships as well as North-South partnerships. The following success factors emerged from a WOP assessment led by GWOPA in Asia:

- An appropriate match between mentor and recipient operators.
- A well-facilitated partnership agreement with clear partner roles.
- Well-defined, but sufficiently flexible, objectives and work plan.



Participants at the plenary of the GWOPA Congress.



Ms. Margaret Catley-Carlson of the UNSGAB chairs a discussion on WOPs impacts.

Photo© UN-HABITAT

- Frequent communication between partners.
- Commitment to the WOP by key personnel and managers.
- Confidence and trust funding for implementation.

Following the duo presentations on WOPs, a panel of experts was convened to reflect on the cases presented and identify lessons that could help increase the scope and impact of WOPs. The panel discussion concluded that there is a need to better understand and help utilities overcome the legal, financial, and technical barriers to notfor-profit international collaboration. Impact must be demonstrated to establish credibility, through knowledge gathered, produced and managed by GWOPA. To scale up WOPs, more resources need to be mobilized and WOPs practitioners have to tap into some

larger funding processes.

Plenary session 2: Regional WOP platforms (day 2)

In the second plenary session Dr. Faraj El-Awar, programme manager of the GWOPA Secretariat, gave an overview of the current status of the regional WOP platforms in Asia, Africa, Latin America and the Caribbean, the Arab region and South-East Europe and highlighted the role played by the GWOPA Secretariat in support of the regional platforms by convening actors, identifying demand, supporting institutional foundations, directing funding for WOPs, and supporting resource mobilization. Dr. El-Awar also outlined the Secretariat's transition from direct support of WOPs implementation within the regional processes to a more guiding role with knowledge management, advocacy and financial guidance for WOPs. Overviews were given by

from national and regional WOPs platforms from regions in which GWOPA is active.

During a panel discussion that followed the regional presentations, it was emphasized that regional development banks and other donors should systematically integrate WOPs as an approach to the capacity-building components of their loans and grants to utilities. WOPs should be used as a means to increase capacity to absorb investment. When development banks are already involved in regional platforms, a scaling-down approach could be used with the development of national platforms which could meet the within-country demand, especially from small- and mid-sized utilities.

Thematic sessions and sideevents

The Complementary Role of WOPs and Training for Capacity Development

This session, co-organized by GWOPA and the International Water Association (IWA), concentrated on how WOPs can play a role in strengthening the institutional capacity of utilities and the way that they are particularly useful in bridging short-term gaps. Examples of WOPs between Chile and Colombia, the Netherlands and Sudan and between South Africa, Kenya, and Ethiopia were presented.

General discussions that followed the case-study presentations showed that WOPs generally include hands-on training, deliv-

Mr. Faraj El-Awar, GWOPA Programme Manager, speaks at the Congress Plenary.



ered by utility staff members and experts, and can contribute greatly to the creation of knowledge networks between different countries/utilities. WOPs have contributed to the establishment of regional training centers integrated within utilities themselves, which are supporting the transfer of knowledge from champion utilities to less well-performing ones. The main recommendations of the session were:

- Capacity building is a pre-requisite for any major or even medium-sized infrastructure investment.
- WOPs can play a role in capacity-building specifically because of the on-the-job and practical training they entail but should be considered as part of a long-term approach.
- Technical capacity and institutional strengthening should be always be combined.

Harnessing the Potential of Civil Society and Trade Unions in Making WOPs Succeed

This thematic session, co-organized by GWOPA and the Transnational Institute, aimed to show through examples how civil society and labor union engagement can improve the outcomes of WOPs. Through the presentations and discussion that followed between panelists and participants, the following points were concluded:

- Good governance (TAP) principles could improve customer service by enabling a customer feedback system. Utilities that engage workers and communities in WOPs tend to be those that already have such mechanisms in place, though WOPs can act to catalyze participatory practices within a utility.
- NGOs can help utilities reach out in twoway dialogue to provide more appropriate services to marginalized people. This



A GWOPA member making a contribution during the Congress.



Participants attending the session on WOPs impact.

Photo © UN-HABITAT

- can include helping to identify their needs and defining alternative service provision arrangements and also helping the utility create awareness and acceptance within communities about ongoing reforms.
- Recipient utilities workers can act as a barrier to WOPs if they see little interest in changing their service delivery practices. Labor unions, by helping to define worker motivations and incentives, can help bring this essential sector on board.

Knowledge Management: what are the Priorities for Increasing WOPs impact?

The purpose of the session was to introduce GWOPA's approach to knowledge management (KM) in WOPs, present the current KM activities of GWOPA and its partners and seek feedback on the knowledge needs of various water operators and Alliance members.

Ms. Julie Perkins of the GWOPA Secretariat presented KM as central to efforts to increase the scale and impact of WOPs happening around the world. Information related to where and how WOPs are happening, and with what effect, tend to be scattered and inaccessible. It is the role of GWOPA to gather, distill and package such information, and make it accessible for WOPs practitioners.

Key initial efforts include creating and maintaining active databases on WOPs globally, drawing lessons and trends from documented practice, providing models and templates to help operators design, implement and monitor WOPs and using social networking tools to facilitate exchange between operators. Ms. Perkins called on all GWOPA members and WOPs practitioners to contribute to, and use, the tools GWOPA was developing. Conclusions of the session discussions included the following points:

- The most urgent knowledge required for WOPs is documentation of active WOPs and analysis of their impacts.
- Establishing a database about WOPs activities is essential for gathering the political and financial support and for learning how to carry out more effective partnerships and also to help ensure that WOPs practitioners are adhering to GWOPA's



guiding principles – a requirement for maintaining stakeholder confidence and support in the practice.

- GWOPA needs to encourage a culture of monitoring and reporting by sharing and promoting the use of monitoring and evaluation tools.
- Participants identified the need for knowledge products to support utilities in proposal writing, as well as tools to help assess WOPs feasibility, taking into consideration internal as well as external factors
- GWOPA should be a repository for knowledge resources related to WOPs.

Making WOPs work for the poor: from efficiency to expanded access

This session aimed to explore the progressive steps from increased utility efficiency to improved service delivery to the poor through WOPs. A model sequence was proposed, starting with WOPs that focused on efficiency improvement, for which the Utility Efficiency Assessment Matrix developed by IWA could be used to identify needs and monitor change. Having achieved greater efficiency, utilities can increase both their internal resources and their creditworthiness.

Utilities also have access to a range of funds and facilities to develop their projects but remain dependent on their respective governments for major infrastructure extension. Increased revenues can allow utilities to redirect some of their resources to improved service delivery to the poor. As utilities often lack experience in this domain, WOPs which focus on pro-poor delivery can be an effective way to develop the needed capacity.

In a panel discussion during the session, it was noted that, although it is important to

Panelists discussing priorities for increasing WOPs impact.



The GWOPA Congress gathered WOPs practitioners from every region.

Photo © UN-HABITAT

improve efficiency to serve the poor, 'there is no systematic linkage' between efficiency and equitable access. There needs to be clear will to ensure efficiency gains translate to pro-poor benefits. Yet, it was concluded, utilities have a lot to gain by providing better services to the poor, since in developing countries, they are often the majority of customers. Both engaging in WOPs and providing services to the poor can set utilities on a virtuous cycle of improvement.

Utilities' Meeting – exploring tools and opportunities for WOPs

This session targeted participants from utilities and utility associations and served to introduce GWOPA's newly-developed webbased tools for facilitating utility networking, WOPs and knowledge exchange. The GWOPA Web platform was presented including its utility, association and WOPs profile pages, social networking system and its linkage to the Geo-referenced Utility Benchmarking System (GRUBS). The suite of tools being introduced supports matchmaking between utilities, in addition to direct online peer support between utility professionals, by facilitating the exchange of ideas and information. The platform also hosts a growing, searchable database that is compiling records on WOPs carried out around the world. Participants were encouraged to engage with, provide feedback on and share the tools with others.



Participants at the GWOPA Development Partners' Meeting.

Photo © UN-HABITAT

Development Partners' Meeting – Making the most of the alliance Approach to support WOPs

GWOPA convened several development partners and stakeholders to this roundtable to discuss the overall coordination role of GWOPA in support of WOPs on the global level, and to map potential respective roles of the partners in the general framework of the Alliance. Representatives of regional development banks, development agencies, civil society organizations, trade unions and water sector professional associations were present. The main recommendations of the discussion were:

 GWOPA and its partners should put more effort into convincing development agencies to include WOPs in their programmes, notably under their capacity development components, as pre-investment activities. Labor and civil society representatives should be more proactively involved in WOPs implementation. Efforts must be made to market WOPs through audience-specific communications materials and GWOPA must play a leading role in inter-regional exchange, rendering local experiences accessible to a large audience and disseminating regional stories at the global level.

1st GWOPA General Assembly, Cape Town, 21 March 2011

GWOPA Progress Report and Work Plan

Dr. Faraj El-Awar gave a presentation entitled GWOPA Plans: Looking Forward in which he explained that GWOPA has invested most of its efforts and resources in the past two years in supporting regional WOP platforms. In response to demand, GWOPA also recently supported the creation of National WOP platforms in Brazil, Mexico, and Pakistan.

Dr. El-Awar said that, since most platforms are now up on their own feet. GWOPA is able to shift its priorities towards its global functions. Instead of providing direct institutional and operational support to specific platforms, GWOPA will redirect its efforts to activities from which all WOP platforms can benefit specifically to matchmaking through electronic tools; benchmarking (GRUBS -Version2); knowledge management such as impact oriented case studies, advocacy, establishing a WOPs database and developing tools and templates; and financial guidance such as supporting regional resource mobilization activities and technical assistance for utilities in financial management.

Results of the GWOPA Steering Committee Selection Process

The new GWOPA Steering Committee (SC) members were selected following the GWO-PA charter and selection guidelines. Participants of each of the SC categories gathered to collectively decide which member(s) would withdraw, and which new member(s) would be selected for membership for the next fourvear term, as needed. As a result of the selection process, 12 new SC members were selected, bringing the total number of GWOPA SC member organizations to 28, including the representatives of the Alliance Partner organizations, which have permanent membership. The list of the new GWOPA Steering Committee membership is available on the GWOPA website.



A participant making a contribution during the selection of the Steering Committee members.



BOOK LAUNCHES

Mr. Alberto Tejada-Guibert, Director a.i., Division of Water Sciences, UNESCO

speaking at the launch of the "Urban Water

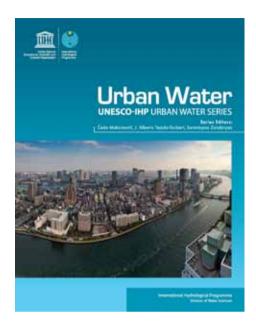
Photo © UN-Water/ Nicoletta Forlano

Series".

Launch of UNESCO-IHP Urban Water Series

UNESCO's International Hydrological Programme (UNESCO-IHP) presented the UNESCO-IHP Urban Water Series, with the participation of series editors and book authors. The launching event took place at the Exhibition and Fair stage of the World Water Day 2011 and was moderated by Johan Kuylenstierna, SEI Stockholm Centre Director and Deputy Director Operations of Stockholm Environment Institute.

The UNESCO-IHP Urban Water Series, copublished by UNESCO and Taylor & Francis/ CRC Group, comprises more than ten books on urban water management, addressing fundamental issues related to the role of wa-





ter in cities and the effects of urbanization on the hydrological cycle and water resources.

This launching event presented the books published in the Series to date, including:

- Urban water cycle processes and interactions
- Data requirements for integrated urban water management
- Aquatic habitats in sustainable urban water management: science, policy and practice
- Urban water security: managing risks
- Integrated urban water management: arid and semi-arid regions
- Integrated urban water management: humid tropics
- Advanced simulation and modeling for urban groundwater management – UGROW.

During the short interview by the moderator Johan Kuylenstierna, the Editors-in-Chief of the Series - namely Prof Cedo Maksimovic, Imperial College of London (United Kingdom); Dr J. Alberto Tejada-Guibert, UNESCO and Dr Sarantuyaa Zandaryaa, UNESCO = outlined that books cover a wide range of topics related to urban water management, including environmental, socio-economic and institutional aspects, and contain technical guidance and interesting case studies for addressing urban water problems. It was emphasized that the books represent the collective efforts of experts with different areas of specialization from different continents.

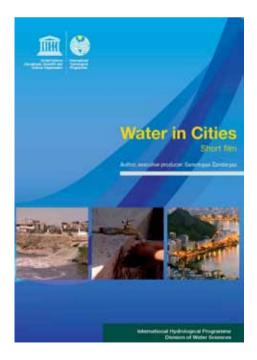
The event included a special presentation of the series' newly-published book Advanced Simulation and Modeling for Urban

Groundwater Management - UGROW. The editors, Dr. Dubravka Pokrajac, University of Aberdeen (United Kingdom) and Prof Ken Howard, University of Toronto at Scarborough (Canada) introduced the book as an effort to promote tools for science-based policy-making such as urban groundwater modeling that UNESCO-IHP considers important.

UNESCO short film "Water in Cities"

The projection of the UNESCO short film Water in Cities, produced by UNESCO's International Hydrological Programme, took place at the World Water Day 2011 Exhibition and Fair stage.

Introducing the film, Dr Sarantuyaa Zandaryaa from UNESCO emphasized that, as



water has become an increasingly crucial issue facing many cities today, the film focuses on raising awareness on present and future challenges in urban water management.

The film illustrated water problems facing cities across the world, which are manifested in different forms and magnitudes in developed and developing countries. It also highlights sustainable and innovative approaches to sustainable urban water management that UNESCO is pursuing to help countries address water problems in fast-growing cities.

The main message of this short film highlighted that Integrated Urban Water Management lies at the core of sustainable solutions and strategies for urban water management.

Launch of the Africa Water Atlas

The UN Water and World Water Day 2011 conference in Cape Town South Africa (20-22 March 2011) provided a unique and opportune moment to launch the UNEP Africa Water Atlas to a new community of users. EIS-Africa, a pan African regional network and collaborating partner of UNEP DEWA assisted in facilitating a special session to launch it.

The Atlas is a visual account of Africa's endowment and use of water resources, revealed through 224 maps and 104 satellite images as well as some 500 graphics and hundreds of compelling photos. The Atlas is more than a collection of static maps and images accompanied by informative facts and figures as its visual elements vividly create a succinct narrative describing and analyzing

Participants picking the Africa Water Atlas.

Photo © UN-Water



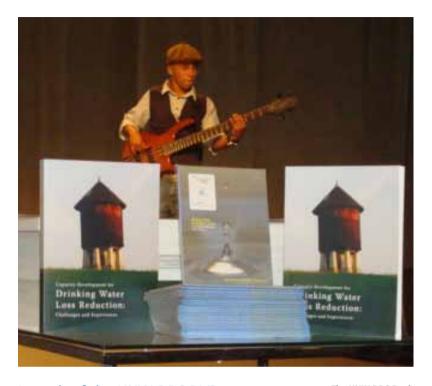
Africa's water issues and illustrating them through the judicious use of case studies.

The Atlas was officially launched by Tim Kasten, Deputy Director of UNEP's Division of Environmental Policy Implementation and Coordinator of the Freshwater and Terrestrial Ecosystems Branch of UNEP, who also currently serves as Vice-Chair of UN-Water.

Launch of the UNW-DPC Book Capacity Development for Drinking Water Loss Reduction: Challenges and Experiences

Water efficiency, and particularly drinking water loss, is a widespread issue which has significant financial and environmental repercussions. However, awareness regarding the scope of the problem and available solutions is lacking. To contribute to addressing this need, the UN-Water Decade Programme on Capacity Development (UNW-DPC) presented a book which is one of the results of three years of collaboration with other partners within UN-Water on this topic, including a series of regional workshops on capacity development for improving water efficiency.

This book outlines the various problems and needs related to water efficiency plus the technical, political and institutional challenges for water loss reduction in specific cases around the world and options for actions and solutions which include a discussion on the capacity development that is essential to achieve greater water efficiency.



Launch of the UNW-DPC DVD on Reducing Water Loss in Cities around the World

In this DVD, water experts discuss the challenges of water loss faced every day and solutions to increase efficiency in urban water supply systems and apply suitable approaches to develop capacities.

The UNW-DPC Book Capacity Development for Drinking Water Loss Reduction: Challenges and Experiences on display.

> Photo © UN-Water/ Nicoletta Forlano

Launch of the *Green Hills, Blue Cities* publication

UNEP and UN-HABITAT jointly launched the publication Green Hills, Blue Cities: An Ecosystems Approach to Water Resources Management for African Cities. It was developed collaboratively by UNEP, UN-HABITAT, AMCOW and Tongji University (China). Green Hills, Blue Cities sheds some light on the linkages between cities and water and how urban areas impact on ecosystems, be it through water over-abstraction or wastewater discharge.

The publication emphasizes that it is time for cities to shift from conventional urban water management focusing on supplying water and sanitation services to a broader water resources management that looks both within and beyond urban boundaries, such as upstream watersheds. These can gener-

GREEN HILLS, BLUE CITIES
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ate multiple benefits including improved biodiversity, food security and flood regulation as well as maintain water and sanitation services in often economically-attractive and sustainable ways.

Mr. Tim Kasten of UNEP hands over the "Green Hills, Blue Cities" publication to Dr. Clos during the launch

Photo © UN-HABITAT/ Jeanette Elsworth







AWARD CEREMONIES

Announcement of the Stockholm Water Prize Laureate

The Stockholm Water Prize is known worldwide as the most prestigious award for water related achievements. For more than 20 years, it has recognized those whose lifework has contributed broadly to the protection of water resources and improved health of people and the planet. The winner is announced in connection with World Water Day. This year, Mr. Anders Berntell, Executive Director of the Stockholm International Water Institute, brought the announcement to the Cape Town audience.

The 2011 Stockholm Water Prize Laureate, Professor Stephen R. Carpenter of the University of Wisconsin-Madison, USA, is one of the world's most influential ecologists.



Mr. Anders Berntell, Executive Director of the Stockholm International Water Institute announcing the 2011 Stockholm Water Prize Laureate.

Photo © UN-HABITAT

He has helped define our current knowledge on the dynamics of freshwater environments and has pioneered our understanding of how the food chain links together in aquatic environments, something which has formed the basis for concrete solutions on how to manage lakes. His research on trophic cascades, for example, has shown how depletion of one specifies of fish or plant can reverberate throughout the entire ecosystem.

The announcement in Cape Town included a short film where Prof. Carpenter shared his reactions on being named the 2011 Stockholm Water Prize Laureate. He will be presented with the Prize from the hands of H.M. King Carl XVI Gustaf of Sweden at a royal award ceremony during the 2011 World Water Week in Stockholm on August 25. For more information, visit: www.siwi. org/SWP2011.

Water for Life Award

On the occasion of the International Decade for Action Water for Life, a yearly award, has been created by the United Nations Office to Support the International Decade for Action "Water for Life" 2005-2015/UN-Water Decade Programme on Advocacy and Communication (UNW-DPAC) and the UN World Water Assessment Programme (WWAP). This year was the first time it has been awarded. During the award ceremony at Cape Town, Olcay Unver, WWAP Coordinator, described the nature of the award and J. Alberto Tejada-Guibert of UNESCO, as President of the Jury, announced the winners of the award.

The Water for Life awards were given in two categories: Best water management practices was awarded to Las Pinas-Zapote River System Rehabilitation Program of the Philippines (Metropolitan Manila Area), and Best participatory, communication, awareness-raising and education practices was awarded to A Participatory and Learning Based Approach to Raising Awareness on Water and Sanitation of South Africa (in Durban, eThekwini Municipality). In parallel, in Zaragoza, Spain, there was a ceremony presided over by the Director of UNW-DPAC to honour the winners. In 2011, special focus was given to the topic Urban Water Management, the main theme of World Water Day.

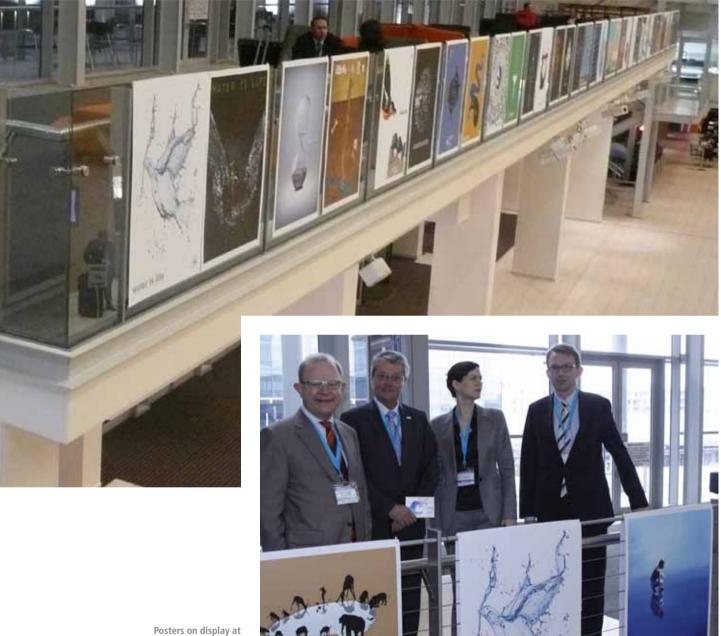
International thematic poster competition for art and design students: 'Water is Life'

More than 5.000 international art and design students took part in the thematic art poster competition "Water is Life". With 130 finalists from around the world the organizers presented the winners at the World Water Day 2011 event in Cape Town during the three day event from 20 to 22 of March, 2011.

The poster competition as active contribution to the United Nations Decade of Action 'Water for Life', 2005-2015, was jointly organized by Berlin University of the Arts (Germany) Nanjing Arts Institute and Normal University, Hangzhou (China) and supported by the German companies Media Consulta International, Ferchau GmbH, Zentralverband Sanitär, Heizung, Klima, Vereinigung Deutscher Sanitärwirtschaft e. V. (VDS) and Gentner Verlag.



The competition provided an opportunity to showcase young creativity from all over the world on a global scale, raising attention to a topic in its wide-range of scope, touching on essential, biological, political and economic aspects of life: Water!



Posters on display at the exhibition hall.

Photos © UN-HABITAT/ UNW-DPAC/Ulrike kelm



Even more photos from your events!

The fourth World Water Day 2011 Photogallery features photos of your events from countries such as Canada, Spain, Colombia, Korea and Mexico. You can stay posted on all event photos in the World Water Day Events Flickr photostream, and don't forget to keep sending us your photos!

You can also download these royalty free photos to help promote World Water Day in Cape Town on your website or blog.















Every day can be World Water Day!

Although World Water Day has passed for another year the celebration continues all year long! Download, logos, brochures, posters, speeches and much much more from the World Water Day 2011 Campaign Materials





million people share their sanitation facilities In 1990 this numbe was 259 million

Join the World Water Day 2011 Social Network!







About World Water Day 2011

MEDIA AND OUTREACH

The World Water Day website and its social media channels

Since 2007, the Rome-based UN-Water/World Water Day communication team creatively addresses each year's theme and developing a fully-dedicated website (worldwaterday.unwater. org). This website is the primary tool for outreach and awareness raising among the general public. The team has created appealing spaces, through which it offers attractive contents to support people in celebrating World Water Day.

The WWD website is the place to find information related to the theme and other useful material for organizing local events and running a WWD campaign. Schools are a primary target and heavily rely on the tools provided on the website. Year after year the website's user base has grown, and 2011 has seen an increase of almost 50 per cent in visits.

Facts and Figures

- More than 700 events were organized worldwide and were published on the worldwaterday website, site through the interactive Google Map (http://www.unwater.org/worldwaterday/events).
- Social media campaigning started with WWD 2011 and reached nearly 6,000 fans on Facebook, more than 1000 followers on Twitter and nearly 2,000 photos were added by people on WWD's Flickr pages.
- The WWD2011 logo was produced in 38 different languages, with the help of local organizations and interactions with Facebook fans.
- During March, the WWD website registered more than 323,000 visitors.
- More than 1,000 emails from interested people and local communities were answered and these allowed the team to organize a selection of Skype interviews.



2011 has also marked the adoption of a variety of social media channels to boost the campaign's diffusion and its activities. Facebook, Twitter, YouTube and Flickr have allowed the UN-Water/WWD team to get closer to the people, while making them prime protagonists. These tools provide a hub that breaks geographic barriers and enables significant sharing activities. Through an enthusiastic and dynamic exchange with the public, the UN-Water/WWD team launched an initiative to use Skype to speak to people organizing local events. These live interviews, from all over the world, were carried out by the WaterCube's colleagues during the Cape Town event, reinforcing the importance of social media as affordable and widely-spread vehicles to link people. They also confirmed the value added by synergies with other players such as the WaterCube team.

Cape Town WaterCube

The WaterCube captured the personalities and debate at the World Water Day event in Cape Town, bringing it online to a worldwide audience. The 75 video interviews recorded during the three days in Cape Town are all online on www.watercube.tv, and are free for anyone to download, link and share.

Exploring Skype-based interviews for the first time, WaterCube also brought the world to Cape Town. Water Cube linked up to World Water Day celebrations worldwide, showing live video interviews with people in Bhutan, Micronesia, the Marshall Islands, Japan and Costa Rica. WaterCube was the leading feed on World Water Day to the UN's dedicated WWD2011 YouTube channel.





The WaterCube is a joint project by Akvo, Stockholm International Water Institute and the International Red Cross and was in Cape Town with the support of UN-HABITAT. The WaterCube lands at key events focused on water or sanitation and is staffed by an independent, constantly-changing team of video reporters. The WaterCube not only documents those who work in water but also wants to help individuals learn how to use online video to bring their own work to global audiences, sharing knowledge and creating unexpected partnerships and opportunities.

World Water Day participants speak on water and urbanization at the Watercube.

Photos © AKVO/Mark Charmer and Luuk Diphoorn





THE WORLD WATER DAY EXHIBITION AND FAIR

During its three days, the World Water Day Exhibition and Fair attracted 30 national and international exhibitors. The Premier of Western Cape, Ms. Helen Zille, was joined by the Hon. Edna Molewa and Dr. Clos to officially open the Exhibition and Fair on 20 March. A large podium featured cultural events, speeches, interviews and worldwide videoconferencing, luncheons and reception parties.

Dr. Clos, Ms. Helen Zille and Hon. Edna Molewa enjoy the Song "Water is Life".























CULTURAL PERFORMANCES

Various local and international artists performed during World Water Day. The UN-HABITAT Messenger of Truth, Rolf Stahlhofen, performed the song Water is Life at both the opening and closing ceremonies. The song premiered at the World Water Day in Cape Town and will be the hymn of the worldwide movement for the enforcement of Water as a Human Right.

In recognition of World Water Day (March 22) and the South African National Water Week (March 21-27), a group of renowned South African and international writers, composers, producers and artists teamed to create an original, anthemic piece of music called For Love Of Water to raise awareness and inspire action on water issues. The song was recently recorded with an impressive line up of South African and international artists who performed the song live to the World Water Day delegates.





Local and international artists performing at the Exhibition and Fair.



WE ARE FOR LOVE OF WATER

The World Water Day celebrations in Cape Town on March 22 coincided with this year's South African Human Rights Day and National Water Week celebrations.

On March 21, Human Rights Day, a walk for love of water started off at the CTICC at 1:30pm to highlight the basic human right of access to fresh water. The walk was attended by members of the United Nations, the South African Government's Department of Water Affairs, local and foreign musicians, members of the corporate sector as well as NGOs and the general public in line with the National Water Week theme working together we can save water. It also brought awareness to the fact that many people have to walk distances to gain access to fresh water in South Africa and throughout the World.





HRH Prince Willem-Alexander of the Netherlands joined the walk.

Photo © UN-HABITAT

HRH Prince Williem Alexander,
Mayor Dan Plato and Ms Rejoice
Mabudafhasi , South Africa's
Deputy Minister of Water and
Environmental Affairs, are making
the FLOW Pledge before the Walk
For Love of Water.













Scenes from the Walk.

Photos © UN-HABITAT/
UN-Water



Home About World Water Day

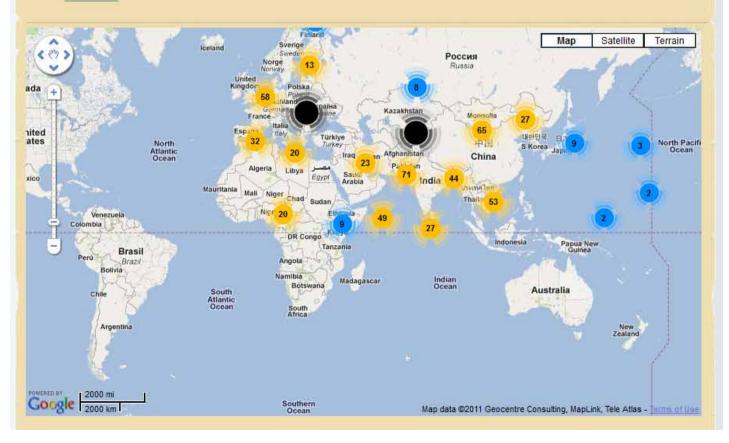
FAQs

Campaign Materials

Worldwide Events

- · Capetown Main Event
- · World map view
- Events list
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Administrators Login



OTHER WATER DAY EVENTS ACROSS THE WORLD

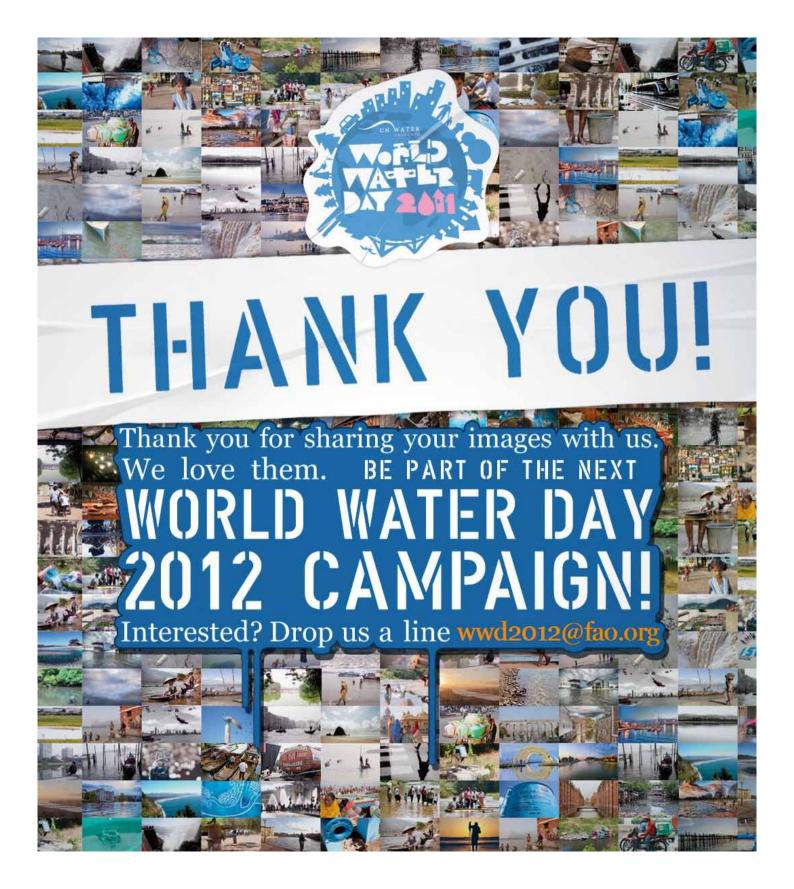
About 700 events were posted by the public on the World Water Day events map available through the official WWD website (http://www.unwater.org/worldwaterday/events/world-map-view/en/). Countries all over the world celebrated the day and organizers posted photos from their local events on the World Water Day Flickr pages, which were created by the UN-Water/WWD team to give further resonance to people's activities (http://www.flickr.com/groups/worldwaterday2011/).





World Water Day 2011 celebrations at the FAO headquarters in Rome.

Photos © FAO/Nicoletta Forlano



THE ROAD AHEAD

The 21st annual World Water Week in Stockholm under the theme Responding to Global Changes: Water in an Urbanizing World will provide a good opportunity to build on the outcome of the World Water Day.

The "Water and Urbanization" messages will also be taken to the following key upcoming events:

- The 3rd African Conference on Sanitation Hygiene (AFRICASAN 3) to be held on July 19-21 2011 in Kigali, Rwanda.
- The 17th session of the UNFCCC Conference of the Parties (COP 17) to be held from November 28 to December 9, in Durban, South Africa.
- The 4th African Water Week (tbc)
- The 6th World Water Forum (WWF), in Marseille, France, in March 2012
- The United Nations Conference on Sustainable Development (Rio+20) to be held in Rio de Janeiro, Brazil, on June 4-6, 2012

City of Stockholm.Photo © Thomas Debray











SCENES FROM CAPE TOWN















Photos © UN-HABITAT / UN-Water