Workshop 7 - Tuesday August 25: Information Technologies for a Smarter Water Future

Co-conveners: @aqua, Akvo Foundation, DHI and SIWI

Part of the solution to help meet the post-2015 development agenda is to harness information technologies for more sustainable solutions. Smart solutions can contribute significantly to a reduction in water, energy and resource consumption in the production of food and other commodities. On the ground, the rise of smart phones and internet access will lead to an explosion of data sharing both within and outside existing governance structures, empowering many, from farmers to local utility workers, from local government staff to citizens and civil society groups. Innovative information technologies will also lead to advanced system-wide solutions and smart water use and reuse, treatment and delivery infrastructure. Advanced new decision support systems are emerging, building on the latest data acquisition, analytics, DNA libraries of microbial pathogens, modeling, real-time operation systems and communication technologies. This will assist decision makers, improve targeted interaction with relevant stakeholder groups, and thus contribute to equitable access.

The workshop will provide strategies and examples of how information technologies can be harnessed for a sustainable future: increasing water and energy efficiency in the value chain; building smart solutions at all levels; reaching out to farmers, consumers and other civil-society groups; reaching out to stakeholders through social media; and ensuring informed decision-making and communication with the public.

Session 1: More effective decision making by use of smart water IT

| 09:00 – 10:30 NL357 | Keynotes | [Cost savings through smart real-time operation] – Mr. Morten Rungø / DHI [Nile Basin Decision Support System] – Dr Abdulkarim-H. Seid / Nile Basin Initiative |
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| | Abstracts | Lessons from implementing ICT application in the African water sector Mr. David Schaub-Jones / SeeSaw, South Africa Real-time optimal operation computerized system for large-scale water supply networks Mr. Ram Aviram / BIT-Consultancy, Israel Online assessment system for water and sanitation services in India Ms. Jaladhi Vavaliva / CEPT University, India |
| | Posters | GIS/GPS based Customer Enumeration, a tool for improving Water Utility's efficiency Mr. Babatope Babalobi / Bread of Life Development Foundation, Nigeria Harnessing ICT-enabled Citizen Observatories for Water Governance Dr. Uta When / UNESCO-IHE, Netherlands |

Panel-audience Q&A and discussion. Moderated by: Mr. Will Sarni / Deloitte

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| 10:30 – 11:00 | Coffee break with visit to the poster area | | |
| 11:00 – 12:30 NL357 | Session 2: Data acquisition and analytics through mobile phone technologies | | |
| | Keynote | [The Data Revolution, in 2020] - Mr. Thomas Bjelkeman-Pettersson / Akvo Foundation | |
| | Abstracts | Assessing the Effectiveness of Malawi's Water Policy Using Mobile Technology Mr. Muthi Nhlema / Water for People, Malawi | |
| | | Mobile Money Technology, convenient for water bills payment in Uganda Ms. Agnes Namuli / Mitukula Women Development Association, Uganda | |
| | | • Fresh Water Watch: A Citizen Scientist Platform to Monitor Global Water Quality Dr. Neil Bailey / Earthwatch Institute, UK | |
| | | Mobile platform for water quality data management in Senegal Dr. Emily Kumpel / Aquaya Institute, Kenya | |
| | Posters | Developing new application "WaterCheck24" used to increase water efficiency Mrs. Rewad Ashour / Palestinian Territories | |
| | | Distributed Monitoring of Shallow Aquifer Level using Community Handpumps Mr. Patrick Thomson / University of Oxford | |
| | | • DOWSER: A New Android App for Dissemination of Groundwater Information Mr. Ranjan Ray / Ministry of Water Resources, Govt. of India | |
| | Panel-audience Q&A and discussion. Moderator: Mr. Will Sarni / Deloitte | | |
| 12:30 - 14:00 | Lunch break | | |
| 14:00 – 15:30 FH Little theatre | Session 3: Looking forward - Can ICT help us achieve water SDG's? | | |
| | Keynote | [Smart Water Management realization through Technology Standardization] – Dr Teasanf Ryu / KWater | |
| | Roundtable Discussions | • Beyond Big Data / Where are the Big Data in water? And how do we use it? | |
| | | Empowering rural communities through ICT - mobile devices as a game changer? | |
| | | Scaling up "Smart Water" watershed, utilities and rural applications? | |
| | Closing panel | Workshop participants reporting from the roundtable discussions and final conclusions | |
| | Panel-audience Q&A and discussion | | |
| 15:30 – 18:00 | Field Visit to E | ricsson studios | |
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