

Water in the green economy in practice: towards Rio+20

Resume for 3 October 2011

The conference takes place at the headquarters of the Ebro River Basin Authority in Zaragoza and has been organised by the UN Office to Support the International Decade for Action 'Water for Life' 2005-2015. The focus of the conference is water and the green economy. The green economy will be one of the two key themes for the United Nations Conference on Sustainable Development 'Rio+20'. A green economy is one that promotes human well-being and social equity, while significantly reducing environmental risk and ecological scarcities. For water, this means managing water in a way that catalyses social and economic development, whilst also safeguarding freshwater ecosystems.

The conference brings together experts, UN professionals, stakeholders and journalists from five continents to discuss and share experiences of best practice in water management, and water and sanitation services provision. The cases demonstrate the types of innovative policies, projects and initiatives that generate the economic, social and environmental benefits that the green economy should deliver. Moving from theory to practice, the conference will illustrate how water can be a building block in the transition to a green economy, and will provide input to the preparations for Rio+20.

The structure of the three day conference is based around 'tools' which can be used to generate change and support the transition to a green economy. Day 1 will focus on economic incentives in water management, reforms for green jobs and sustainable financing.

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The conference commences with welcome words from Rafael Romeo García, Chair of Ebro River Basin Authority and host of the event, followed by Rafael Izquierdo Aviñó (the Director of the Water Institute of Aragon) and Jerónimo Blasco Jaúregui (Zaragoza City Council). They highlight innovative water initiatives being adopted in Zaragoza, such as the financing of a water treatment plan and the Urban Water cluster.

Following the welcome word, the opening session will set the context for the conference. Amongst the speakers are Zafar Adeel (Chair of UN-Water) who introduces the objectives, themes and expected outcomes of the conference; and Kenza Robinson from UN-DESA who outlines the Rio+20 preparatory process and reflects on what role water might have in the agenda. Franz Marré (Government of Germany) and Karin Krchnack (World Water Council) speak about two forthcoming water events which will also be important milestones on the roadmap to Rio.

The first plenary session on economic incentives in water management is convened by Gerald Bonnis of OECD. He provides an overview of the types of incentives – such as subsidies, charges and trading – which can be used as tools to facilitate change in the way water is used. The session proceeds with a discussion with four panellists representing cases from Israel, South Africa and Australia:

- Israel provides an example of the successful use of water pricing to manage water demand in a water-scarce country. A 40% increase in water prices in agriculture earlier this year has

both reduced water use and encouraged the use of recycled and desalinated water sources for irrigation.

- In the Murray-Darling Basin, Australia, an expanding market for the trading of water use rights has enabled water to be allocated efficiently amongst users under conditions of water scarcity, securing water for human consumption, irrigated agriculture and the environment.
- In South Africa subsidies for water infrastructures have unlocked water's potential to be a catalyst for economic growth. In a country with limited and highly variable water resources, infrastructure development has allowed for the storing of water during the wet season for use during the dry season, and the transport of water to those areas most in need.

In Session 2 of the conference, Carlos Carrión-Crespo from the International Labour Organization turns to the topic of green jobs. Transitioning to the green economy may affect employment in many ways – both positively and negatively. Reforms and policies are needed to ensure that people have the knowledge and the skills required in the new labour market; and to ensure that social objectives and the needs of the most vulnerable are met. A discussion with representatives from the Philippines and Panama examines the role of stakeholder participation in enhancing labour relations and advancing a sustainable water supply model:

- In the Maynilad water district in the Philippines, the water utility and workers unions engage in dialogue to resolve work-related problems and conflict. The management, unions and workers have successfully worked together to combat the high rates of water loss in the distribution networks, reaping social, economic and environmental benefits.
- The case from Panama demonstrates how indigenous rural communities have been empowered to be partners rather than beneficiaries in the management of water supply. Social dialogue, capacity building to promote entrepreneurship and community participation in design and construction were all critical elements for success.

The third and final session of the day is convened by Maria Angelica Sotomayor of the World Bank. The session addresses the critical issue of water cost recovery and financing. Mobilising the funds to invest in water and sanitation is critical for delivering sustainable development and alleviating poverty. In developing countries there are thousands of opportunities to invest in hydropower plants, irrigation schemes, and water supply systems, but access to finance is often lacking. Insights from the World Bank highlight some innovative cost recovery and financing mechanisms for addressing the challenge, followed by a discussion with representatives from Morocco and India:

- In India, a partnership between an NGO, a private technology provider and communities is delivering low cost drinking water treatment and provision to poor rural households. The community-driven and performance-based approach requires that tariffs paid by users cover the costs of operation and maintenance of a water purification plant. Donor subsidies to help with capital costs are provided when there proof that water services being delivered.
- In the poor suburbs of major cities in Morocco, water operators are investing in the much needed expansion of water supply services in these areas. Infrastructure costs are subsidised, not through advanced payments or loans, but on the basis of evidence that users have been connected and are receiving quality services six months later.

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The second day of the Zaragoza conference continues with the discussion of tools which can enhance water management and support the transition to a green economy. The day starts with Session 5, which unpacks the 'green' in green economy, reflecting on the role of biodiversity and ecosystems in economic and social development. Elisa Tonda from UNEP provides an overview of how investments and fiscal measures for biodiversity protection can catalyse green growth. Maintaining healthy and functioning freshwater ecosystems is essential for securing the flow of services that societies and economies depend on. Panelists from Kenya and Ecuador illustrate by discussing their experiences with successful payment for ecosystem services schemes:

- In Lake Naivasha basin, Kenya, the local water resources users association compensates small-scale landowners for managing their land to provide good quality water to downstream users. The scheme has reduced environmental threats as well as providing income and livelihood improvement for participating communities.
- The Fund for the Protection of Water in Ecuador is a private trust fund that provides a stable long-term financial mechanism using revenues (interest and investments) derived from its equity to co-finance activities aimed conserving the basins that supply the water to Quito city and the surrounding area.

Session 6 is convened by the UN-Water Programme on Capacity Development and focuses on how water technology can contribute to job creation and economic development. Karl Ulrich Rudolph synthesises the issue, revealing how innovative water technologies can increase efficiencies, reduce pollution and close the increasing gap between supply and demand. The key challenge is in gaining access to and implementing these tools. He questions representatives from Burkina Faso, Egypt and India to see what lessons they have learnt from implementing technological approaches:

- In Quagadougou, Burkina Faso, an intelligent GIS-based computerised system has enabled significant reductions in water losses within the distribution of a municipal utility.
- A web-based system for interdisciplinary water and environmental studies initiated by a partnership of institutions from Germany and Egypt demonstrates how specially designed eLearning tools and knowledge transfer can support an evolving market for green jobs.
- In India, a combination of technological initiatives has dramatically enhanced the management of water resources in Gujarat State, reversing environmental degradation and resulting in a tremendous growth in agricultural production. Approaches adopted include a state-wide water distribution grid, an inter-basin transfer and the promotion of small-scale rainwater harvesting for irrigation.

When sharing success stories, understanding the context is crucial. There are no one-size-fits-all solutions and different social, economic and geographic conditions demand different approaches. Session 7 of the conference will take a closer look at the water challenges specific to the Western Asia region, and the tools that are proving successful there in advancing towards a green economy. Mohamed Al-Hamdi from the UN Economic and Social Commission for Western Asia discusses how progress towards the MDG targets related to water supply and sanitation can contribute to fostering a green economy. This is realised through efforts to improve the technical and financial capacity of

water utilities to deliver accessible and reliable water services for domestic use. Discussions around two case studies from Yemen and the Arab region provide examples of achievements in this field.

- In Yemen, the ongoing reform of the urban water and sanitation sector has shifted power away from a central authority to local agencies, resulting in better customer services, greater financial stability and better protection of the least advantaged users.
- The Arab region is the most water scarce region in the world and suffers chronic problems including weak environmental policies, lack of investment and regional conflicts over water. The Arab Countries Water Utilities Association is facilitating the exchange of knowledge and best practice, developing capacity and improving the performance of water supply and wastewater utilities in the regions.

The second day of the Zaragoza conference concludes with a three-hour Market Place session where 26 people from five continents will present their cases. These cases bring water and the green economy to life by providing examples of successful implementation of the tools and approaches discussed in the conference.

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The third day of the conference commences with the second regional session (Session 7), focusing on Latin America and the Caribbean and convened by Caridad Canales from the Economic Commission for Latin America and the Caribbean. Although the region possesses abundant water resources, availability varies greatly and inadequate governance is a major challenge. A number of instruments and tools are highlighted which have demonstrated success in tackling the region's water problems. A discussion with panellists from Peru and Guatemala highlight some of the key ingredients for success:

- In Peru, the economic regulator of the water sector has proactively implemented an array of economic and policy instruments which boost efficiencies in services provision, promote environmental protection, and support poverty alleviation. These include water footprinting, the economic valuation of environmental costs of water utilities and a sustainable water tariff initiative.
- A case from Guatemala showcases the comprehensive national 'Multi-annual Sectoral Plan for Water and the Environment', which provides a strategic path for the management of the country's water resources and natural assets.

Session 8 presents the water planning as a powerful social tool for identifying the best way to use water resources to meet the competing needs of different users, and maximising water's potential to facilitate green growth. Planning is essential for aligning water use with development, and for coping with environmental challenges such as water scarcity, pollution, and climate change. The Chair of the Ebro River Basin Authority, Rafael Romeo García provides an overview of the critical issues around planning and poses questions to representatives of cases from Laos PDR, Korea and Peru:

- River basin planning in Laos PDR has been a key instrument for addressing pressures on water resources. The planning framework focuses on participatory planning and involves cooperation between neighbouring countries that share the Mekong River Basin. The implementation of well devised plans has led to improvements in water quality and the reduction in flood risk.
- In Korea, multiple ministries have joined efforts to design and implement a comprehensive river restoration plan for four major rivers in the country. The plan has multiple objectives, including tackling water scarcity, providing flood control, restoring ecosystems, and fostering regional development through cultural and historical tourism.

The conference closes with an plenary wrap-up session, with key UN figures reflecting on the key messages and lessons learnt over the course of the three days, and the steps ahead on the roadmap to Rio+20. There will be contributions from Adeel Zafar (Chair of UN-Water), Ambassador Sirodjidin Aslov (Permanent Mission of Tajikistan to the United Nations), Tariq Banuri (former Director of the Division for Sustainable Development, UNDESA), Bert Diphooorn (UN-Habitat) and Alexander Otte (UNESCO).