Business contribution to managing water scarcity: tools and lessons

Session report, 16 January 2015

Session Structure

The session began with an overview presentation by John Mathews, AGWA, the session convener together with Paul Reig, WRI, introducing the main practical challenges, cases, tools and lessons learnt by the business community. The succeeding panel discussion took place around the questions prepared by the convener. The panellists included: Hayley Zipp, ICMM, Michael Spencer, Alliance for Water Stewardship, Australia, Arturo Buenaventura, Abengoa, Spain and Justine Leigh-Bell, Climate Bonds, UK. In answering, the panellists made reference to their case study and highlighted those tools related to finance and economic instruments, capacity development, technology, and governance that are innovative/valuable for the SDGs implementation.

1. Implementation challenges for managing water scarcity

Scarcity is a significant risk for users

For the majority of water users, water scarcity represents the most significant risk imaginable — to businesses, whole economies, and the ecosystems that provide the natural capital for those economies. The danger inherent in scarcity is that water cannot be replaced, and although many water scarcity events evolve and develop over weeks, months, or even years, their impacts strain systems and institutions, including their relationships, regulatory frameworks, and supply chains.

Efforts to increase efficiency may be confounded by governance

Efforts to increase efficiency may be confounded by governance and allocation mechanisms designed during or better suited to non-scarce conditions, including economic or financial instruments that do not account for the incentives that may exacerbate or even induce scarce conditions.

Stakeholders and decision makers must make difficult decisions under highly imperfect conditions

While modern frameworks such as the EU's Water Framework Directive represent a significant improvement in how to cope with crisis or new conditions, in most cases stakeholders and decision makers must make difficult decisions under highly imperfect conditions. Worse, non-stationary processes such as demographic change, climate shifts,

and economic transformation (such as the transition from an agricultural to a manufacturing economy) can reveal previously unseen vulnerabilities. Even in developed regions with complex and robust governance systems such as Australia's Murray-Darling basin or North America's Colorado River basin, the difficulty in the resolution of the stressors around water scarcity show that anticipation, coping, and ultimately the negotiation involved in reallocating is a universal challenge.

2. Addressing the challenges: Developing and using tools

There are different tools, guidelines and other resources used by the business community which may be useful to address implementation challenges above and help ensure water availability for all users (and the environment) in the river basins where they operate.

Cases discussed

Capacity Development: Hayley Zipp, ICMM

The International Council on Mining and Metals (ICMM) presented the new guidelines to be published in 2015 in order to enhance water management in the mining and metals sector. This 'Practical guidance for catchment-based water management for the mining and metals industry' goes beyond the operational fence and provides a framework for a transparent and accountable disclosure aimed at identifying, evaluating and responding to catchment-scale water risks.

Governance: Michael Spencer, Alliance for Water Stewardship, Australia

This case study focused on the AWS's International Water Stewardship Standard application for analysing supply chains of major retailers in Africa and Latin America and food producers in Australia. This tool measures the performance and assesses the water use in a multistakeholder frame. Water stewardship requires collaboration between business and industry, farmers, communities, governments (and their various agencies) and, civil society organizations. All stakeholders began to think on basin-wide scale of their operations.

Technology: Arturo Buenaventura, Abengoa, Spain

This case presented four experiences developed under the framework of Abengoa initiatives in seawater membrane desalination in developing countries to meet drinking water needs. The membrane desalination is a water technology to generate alternative resources that provide drinking water at an affordable cost. Public-Private Partnerships (PPP) using Project Finance techniques were carried out in Algeria, Ghana, Morocco and India, where access to finance sources is not easy.

Financing: Justine Leigh-Bell, Climate Bonds, UK

Green bonds have emerged in recent years as a new financial mechanism that offers investors an opportunity to support climate friendly investments. Water is expected to be a key investment area for green bonds as the market grows. The Climate Bonds Initiative and World Resources Institute, Ceres, and CDP are developing credible a standard for green water bonds. A robust framework for issuing bonds provides confidence in credible climate change solutions.

Capacity Development: John Mathews, AGWA

The Alliance for Global Water Adaptation (AGWA) presented its Decision Support System (DSS) that integrates emerging insights into long-term sustainable water management guidelines. This system supports the management of water infrastructure over long timescales. It presents four major components: 1) 'Bottom-up' approaches to vulnerability assessments, 2) Flexible decision pathways, 3) Incorporating engineering and ecological approaches to resilience, and 4) Developing governance systems that work with shifting needs and conditions.

3. Lessons learnt from implementing the tools

During the panel discussion, participants from the business community shared Lessons from their experience in utilizing available tools and guidelines that can help ensure water availability for all users (and the environment) under complex, shifting conditions and for the implementation of the post-2015 agenda for water. The panellists answered the following questions:

- How do we mobilize the business community for sustainable development when water scarcity is a major risk?
- What have we learnt?
- How do we get the messages out?
- How do we get the messages in?

Hayley Zipp, ICMM, mentioned the relevance of understanding the need for **collective action** to deal with water scarcity in the future. Guidance is needed for transparent and accountable management outside the operational fence.

Michael Spencer, AWS, highlighted the water stewardship standard as one of the tools that can help in meeting the SDGs. The water stewardship programs are moving the action and impact outside the own premises, often requiring alignment with other value chain actors. A multi-stakeholder governance system is at the heart of corporate water stewardship. For engaging the private sector, one of the lessons is the importance of developing a strong and compelling business case for corporate water stewardship. We need a combination of tools approached in an integrated way to achieve the SDGs.

Arturo Buenaventura, Abengoa, pointed out the private sector role as **technology provider**, both for the physical equipment (eg. water treatment plant, seawater desalination technology, etc.) as well as bringing competitive solutions through **public and private partnerships** (eg. investment and financing). PPPs offer alternatives for efficiency enhancement or overcome the lack of capital.

Justine Leigh-Bell, Climate Bonds, explained the importance of taking a broad multistakeholder approach to developing the Standard. This is to ensure all **credibility and robustness**. The Standard should be robust, operational, easily used and evaluated with low transaction costs. The business community is an essential voice in the discussions but it is counterbalanced with the latest scientific research carried out by global academics, NGOs and industry agencies that can give a comprehensive view of the key issues and potential paths forward. The **evidence based** research that feeds into the development of the standard looks to uncover the misconceptions around investments that may look green on the outside but may not always equate to being truly green in their performance. **Educated investors** are more likely to make educated investment decisions.

4. Issues highlighted during the open discussion

Building a culture of sharing

Cate Lamb, CDP, reflected on the guidance and framework created for the mining and metals sector, highlighting that it is not only important to make the guidance relevant per sector, but also to develop **cross industry information sharing**. A proper culture of sharing within and between various stakeholders in the water community will make an important step in **building trust**, enhancing confidence and delivering value for all.

What possible future for water bonds?

Gavin Power, UN Global Compact, pointed out that the green bonds and climate bonds have an environmental dimension. Why not **water bonds**? Water is not just an environmental issue but also a social issue.

Justine Leigh-Bell, Climate Bonds, clarified that the 'blue bonds' are coming, yet to be defined. The market has created multiple bonds: ESG bonds (environmental, social and governance), sustainability bonds, etc. The main focus is on environmental aspect, but this does not mean there is no social aspect. There is still a lot of work to be done about disclosure. Accounting for the social, economic and environmental dimension is key. Natural capital accounting or greening accounts are an important part, with a need to get an understanding of the impact of water resources.

5. Conclusions: Advancing with successful knowledge exchanges

The process of finding appropriate business solutions for scarcity is worth careful consideration. Successful knowledge exchanges can occur through transparency, ownership, water stewardship, collective action, communication and commitments, in order to build confidence amongst all actors but particularly between business, civil society and government. AGWA reflected on the fact that a solution may be the development of:

- Peer to peer transfers, such as through like-minded business networks and alliances
- Ambassadors between business sectors (eg., energy and agriculture)
- Translators between social sectors, such as academia, civil society, and business.

However, novel challenges — from the possible emergence of new faces for water scarcity, not yet widely experienced as of yet — present more difficulty, as they call businesses to learn in advance of the problem. Many businesses realize that they do not have the internal capacity necessary for tackling those issues within river basins. As a solution, they are developing relationships with local NGOs, governments and civil society in collective action efforts.

Session Photos



John Mathews, AGWA, delivering the overview presentation.



Michael Spencer presents the AWS's International Water Stewardship Standard.



Panel discussion, from left to right: John Mathews, Justine Leigh-Bell, Michael Spencer, Hayley Zipp and Arturo Buenaventura.