

International Conference

# Sustainability in the Water-Energy-Food Nexus

19-20 May 2014 in Bonn, Germany



# Conference Report

**Main Issues Discussed**  
during the first part of the Conference

# Summary **Part I**



Over 250 participants of the International Conference on the Sustainability of the Water-Energy-Food Nexus, meeting on 19/20 May 2014 in Bonn, could choose from more than 15 parallel sessions on the first Day; these covered a broad range of topics from the very notion of the nexus, to on-the-ground issues such as energy and water subsidies in the Middle East, biofuels production in Brazil, and groundwater depletion in India.

In a welcome note, Anik Bhaduri, GWSP Executive Officer of the Global Water System Project (GWSP) framed the conference as an international consultation process for a “research-for-action” initiative, with the goal of informing, influencing and catalysing action from the local level, to the global Sustainable Development Goals.

## **So what does it take to catalyse action?**

Imme Scholz, Deputy Director of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE), noted that policy coordination across sectors and levels doesn't come naturally, but if it is seen as really adding value, it will be more welcome. It also helps to have champions for a nexus approach, Scholz said – “courageous” people willing to lead the way.

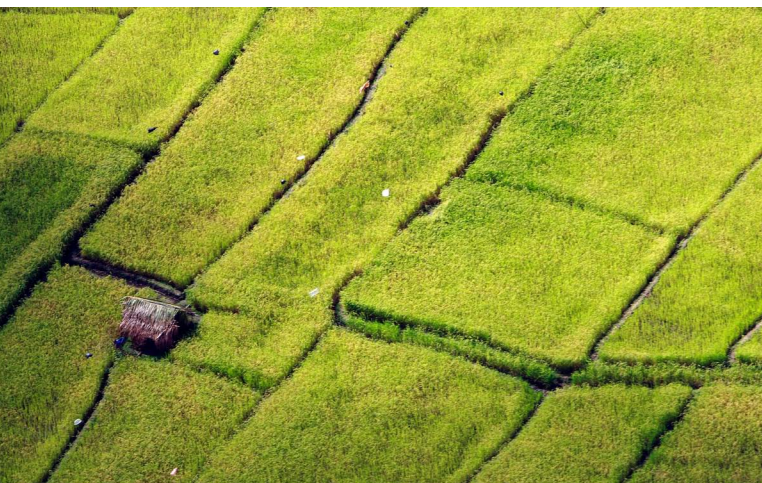
One of the parallel sessions, was on hydropower in shared river basins and offered several examples of a particularly substantial coordination challenge: governance of trans-

boundary river basins, including the Mekong in Southeast Asia, the Euphrates-Tigris in Turkey, Syria, Iraq, Iran and Kuwait, and the Çoruh in Turkey and Georgia. Hydropower development can be transformative, speakers noted, providing energy not only for domestic development but sometimes also for export. Dams can support irrigation for agricultural development. However, if resource use is not carefully coordinated, downstream users and environmental systems can suffer. Thus, speakers argued, good trans-boundary governance should be based on transparent information-sharing and negotiations, and be highly participatory.

The focus of a session on implementing the nexus in the Middle East and North Africa (MENA) region focused on identifying entry points for bringing nexus analyses into policy debates. Several examples showed how closely intertwined water, energy and food security can be: from the solar pump that has enabled Ras Baalbek, Lebanon, to extract more groundwater, to the oil and water subsidies that make costly desalinated water cheaper for Saudi consumers than a typical mobile-phone bill. The good news, several speakers said, is that policy-makers in the MENA region are increasingly aware of the need for change, and there is a growing body of research and data to support cross-sectoral collaborations. The goal now, the session organizers said, is to build critical mass by linking scientists and policy-makers across the region on an ongoing basis to share insights and experiences. All presenters of a session on Earth

Observations, Monitoring and Modelling for Sustainable Implementation of the Nexus Approach clearly stressed the need for an integrated (water-energy-food nexus) research approach as well as the need to train future scientists in Nexus thinking. Speakers called for enhancing the connection between the water-energy-food nexus and Earth Observations.

A session on sustainability as a hidden dimension of the nexus highlighted two key themes at the conference: the importance of ecosystems in nexus analyses, and the role of stakeholder engagement in ensuring that studies and resulting policy recommendations are seen as relevant and realistic on the ground. Dr. Eline Boelee, whose presentation focused on the United Nations Environment Programme approach to the nexus, said UNEP has prioritized ecosystem services and the value they provide, clearly linking human and natural systems. Louise Karlberg, of the Stockholm Environment Institute, meanwhile, stressed the need to embed nexus studies in existing policy and planning processes. She described ongoing work in the Blue Nile/Lake Tana region of Ethiopia that is using integrated water and energy models (WEAP and LEAP) and participatory scenario-building to examine the implications of the country's ambitious energy and agricultural development plans, which has revealed potential problems such as reduced hydropower production if irrigation plans are implemented. Some of the liveliest discussions of the day



occurred at the afternoon plenary, on the science-policy link. Noting the many discussions about governance of nexus issues, Fritz Holzwarth, former Deputy Director-General of the German Federal Ministry for the Environment, said scientists should avoid trying to invent new governance structures, but rather work with existing institutions. Similarly, Torkil Jøneh Clausen, chair of the Scientific Programme for Stockholm World Water Week, said the nexus should not eclipse Integrated Water Resources Management (IWRM), which has been adopted by numerous governments. “They’re two sides of the same coin,” Clausen said; the value of the nexus is to draw links to other issues.

Asked about nexus concerns with biofuels, Geraldo Martha, of Embrapa, the Brazilian Agricultural Research Corporation, argued that productivity gains could allow Brazil to greatly expand biofuel production without imperiling food production or expanding the agricultural front. Dinesh Kumar, director of the Institute for Resource Analysis and Policy, spoke more critically of his own country, India; groundwater overuse is underreported in government statistics, he said, and electricity price subsidies are encouraging excessive pumping. Many argue that farmers can’t afford higher prices, he added, but in reality, where they have been raised, farmers have also increased the efficiency of their water use, and also its economic productivity.

The discussion extended passed the conference venue and was taken up on twitter

#WEFNexusConference

<https://twitter.com/hashtag/WEFNexusConference?src=hash>



<http://wef-conference.gwsp.org>

**Imprint**

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RESEARCH PROGRAM ON  
 Water, Land and  
 Ecosystems



Federal Ministry  
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