

FROM INTEGRATION TO NEXUS – WATER
PIONEERING FOR SUSTAINABLE DEVELOPMENT

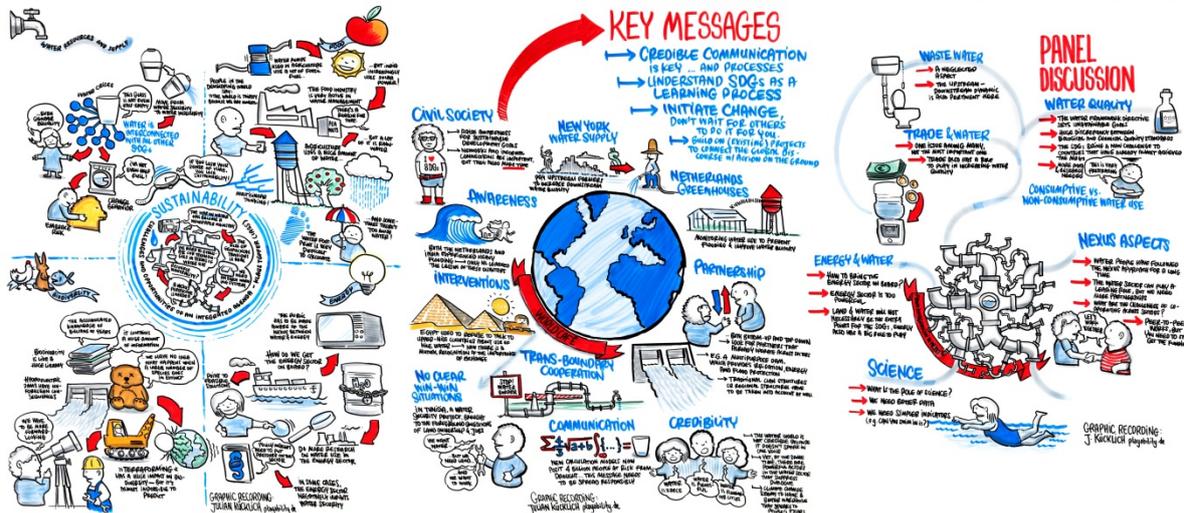


Figure 1: Graphic recording by Julian Kücklich

DIALOGUE FORUM VIII | Summary FROM INTEGRATION TO NEXUS - WATER PIONEERING FOR SUSTAINABLE DEVELOPMENT

RAPPORTEURS

Falk Schmidt, IASS

HOSTS

Institute for Advanced Sustainability Studies (IASS)

INTRODUCTION

Report highlights from the ENB Coverage of the session. Full coverage can be found here: <http://www.iisd.ca/sdgs/jump-starting-germany/>

Stressing that water is crucial for implementing many SDGs, facilitator Falk Schmidt, IASS, asked which actions are necessary to implement SDGs in a coherent manner and whether the focus on natural resources fosters cross-sectoral thinking and action.

Klaus Töpfer (IASS) presented challenges and opportunities of an integrated agenda for sustainability. He discussed how globally increasing water needs should be addressed through wiser resource management, and highlighted the nexus approach to understand, *inter alia*, the relationship between energy generation, such as nuclear and coal power sources, and water consumption. He said: a nexus approach to energy, water and natural resources is key; SDGs are “the nexus of the nexus”; and transformation requires institutional and governance responses.

Rudolph Cleveringa (GWP) highlighted linkages between water and: food production; biodiversity; inclusion; and gender. He added that over 90% of countries’ nationally determined contributions

(NDCs) on climate change are water dependent. To enhance water sustainability he suggested: reaching out to diverse partners, particularly to people who don't have a voice in relevant processes; embracing risk and innovation, including stakeholders from up and downstream; and engaging in new partnerships.

Charlotte de Fraiture (UN Educational, Scientific and Cultural Organization-Institute for Hydraulic Engineering, UNESCO-IHE) said agriculture has one of the biggest environmental footprints, representing 70% of the water and 40% of the land used globally. Exemplifying the nexus approach, she said in India electricity needed to pump water amounts to 4-6 % of national greenhouse gas emissions. She said the introduction of solar panels could provide farmers with free energy and decrease emissions. However, she explained that this measure could lead to increased water pumping and groundwater exhaustion. De Fraiture noted that additional measures to incentivize farmers to sell back solar electricity to the public grid could reduce these risks. She concluded that there is a need to combine objectives in different sectors to avoid the situation in which one's solution becomes the other's problem.

Klement Tockner (Leibniz-Institute of Freshwater Ecology and Inland Fisheries, IGB) spoke on the nexus between water and biodiversity, mining and infrastructure, respectively. Highlighting an emerging "terraforming" trend in the construction of megaprojects, including 4000 major dams, he cautioned that overconfidence regarding technological progress, underestimation of risks and overestimation of benefits, risk perpetuating the use of inappropriate solutions, compromising options for the future.

Speaking on water and energy, **Sybille Röhrkasten** (IASS) said the nexus concept is only helpful if it contributes to adequately reflect the energy sector's priorities, and suggested concrete ways to make it relevant. She supported: raising awareness on the increasing importance of water for energy security by, *inter alia*, pointing to water-induced cuts in power generation and examples of interdependence; indicating feasible solutions and incremental improvements, including by incorporating water scarcity into energy system models for public-policy planning; and increasing political and public pressure to tackle negative externalities of the energy sector.

KEY OUTCOMES & MESSAGES:

- 1) In the discussion and reflections of the speeches given, participants noted that goals and ambitions of the SDGs represent a step-change to water governance compared with the Millennium Development Goal (MDG) on water supply and sanitation. For example, it was said that countries with good MDG performance could perform worse under the SDGs, if water governance is not adapted to the new requirements put forward by the 2030 Agenda. It was underlined that the SDGs provide a good framework to take cross-sectoral linkages (nexus) into account. The **necessity to "think out of the box"** was understood early on by the water community, **as key drivers for water and (any other natural resources management) lay often outside the water sector** such as water demand of agriculture or energy production.
- 2) It was noted that the SDGs address the challenge to manage natural resources sustainability in a complex and largely holistic or systemic manner. This is a necessary, yet not sufficient condition. Hence, exchanges delved, *inter alia*, into the trade-offs between issue-specific policies focusing on concrete actions on a (sector specific) goal and holistic approaches that require comprehensive and often long-term processes to be implemented. It was said that **a focus on natural resources such as water or soils as well as biodiversity more generally could be a promising entry point for an integrated implementation of the SDGs**. It was concluded that **the SDGs should both steer concrete action for achieving the different goals and targets and they should be seen as a learning process** where policy coherence and adjustments to local (or national) needs will be as much the results of implementing this agenda as they are meant to be ex ante fixes, wherever possible, for its successful implementation.

- 3) In a next round of digging deeper into the subject matter, participants urged all who are interested in an agenda as comprehensive and ambitious such as the SDGs **to build on ongoing work on the ground, concrete examples and lessons learned**. This could be related to payments for environmental services, which already operate with a nexus perspective. The example of combining agricultural production and flood protection in paddy fields was introduced and briefly discussed, as well as the New York City case where upstream ecosystems provide better water quality for the City – and hence have created a strong incentive to manage them wisely. Another example briefly discussed was solar PV groundwater pumping in India, including the possibility – given that enabling environments are in place – that selling electricity to the grid could provide alternative sources of income and in return may reduce the pressure on farmers for over-pumping in already heavily water stressed regions.
- 4) Overall, much attention was given to underline the **importance of establishing credibility and trust among actors and within processes**. Also in this regard it was said that it should be built, as much as possible, on (lessons learned of) successful partnerships. While the ambition of the 2030 Agenda is unprecedented, much knowledge for implementing such an agenda is already in place, as effective natural resource management has been dealing with these challenges since a couple of decades. Furthermore, from a nexus perspective **new modes of communication and/or different messaging** might be necessary, as facts, narratives and emotions conveyed successfully to one audience are often not much more than “noise” to others – “others” who might still be key for implementing a given agenda. However, it was clearly said that linking different sectors, agendas and stakeholder groups per se does not guarantee success. Again, building a more collaborative mode for implementing the 2030 Agenda across established domains, power constellations and interest groups is as much a precondition for success as it will be an overarching result of a successful implementation itself. In order to soften the hard facts of such a catch-22 situation, it may be important to focus more strongly on “nexus institutions and/or stakeholders” – such as partnerships – which could “translate” in between established domains.
- 5) Finally, **a nexus approach as called for by an integrative agenda such as the SDGs does not mean that any sector and resp. goals and targets could wait for others to start first**. Instead, the group welcomed the idea by the German Government to **investigate more systematically the link between water and other natural resources and the goal on food security**. It is such concrete priority areas that help implementing a nexus perspective in concrete terms addressing concrete challenges. Furthermore, as the 2030 Agenda was developed and should also be implemented in a highly participatory manner, national SDG strategies or plans should provide ample room for people asking themselves: **what would be my first step in implementing the SDGs?** Participants stated that this is key for any successful implementation of a nexus perspective: we should stop talking about how others should change. Instead we should ask how we can change. This is even more important as the universal nature of the SDGs targets every country in the world as a country in development and calls on every one of us to start moving towards sustainability.



Photos by Piero Chiussi

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