WATER DIALOGUES FOR RESULTS

Accelerating cross-sectoral SDG 6 implementation | BONN 2021

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Outcome Document for the Expert Roundtable on Innovation

Turning the tide on *Innovation* –

How can we achieve a quantum leap on SDG 6 & beyond?

Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

SIWI

unicef
for every child

Innovation as accelerator for cross-sectoral SDG 6 implementation

Disparities in access to WASH services between poor and rich populations, urban and rural communities, and more broadly between developed and least developed countries are glaring. The UN estimates that acceleration of four times the current rate of progress is needed to meet our global targets. The World Economic Forum estimates that $260 billion is lost globally every year due to lack of access to WASH, while water risks connected to pollution, over-extraction, and climate change will amount to $301 billion in losses. There is an urgent need to better manage our water resources for societal, environmental, and economic needs.

A crucial component to achieve such acceleration is innovation – in science, ICT, and emerging technologies, as well as in governance, business models, and our ways of working. Such innovations are needed to protect, restore, and reuse our water resources in a more sustainable and circular manner. At the same time, challenges remain for the water community in operationalizing innovations that already exist, or have been in use in other parts of the world, in the areas where vulnerable people are most in need, especially those heavily impacted by climate change. In this context, recognizing traditional knowledge and practices is especially important, as is utilising nature-based solutions. New governance structures and ways of working togethers across sectors and involving all stakeholders is also crucial.

Participants of the Expert Roundtable

This outcome document has been prepared based on active participation of:

- Marlies Batterink, Aqua for All
- David Berger, Indigenous Navigator
- Luc De Meester, IGB
- Ernenek Duran, ONE DROP Foundation
- Janet Hering, Eawag
- Hans Komakech, Nelson Mandela African Institution of Science and Technology
- John Matthews, AGWA
- Toon Segeren, Deltares
- Kathrin Wessendorf, IWGIA
- Katharine Cross, Water Cities (representing IWA)
- Angelika Sturny, MR Foundation
- Niall Boot, UNICEF
- Irene Pohl, Rebel Group

The roundtable was co-chaired by Maggie White, SIWI and Kelly Anne Naylor, UNICEF

Main findings of the Expert Roundtable

Overall, the Expert Roundtable expressed support for the Innovation Chapter of the political key messages and its action-oriented recommendations, which was described as well-formulated and relevant as the document itself and the set-up of recommendations. It was noted that there were strong connections across themes, for example between finance and innovation, and that these cross-references should be made where relevant. Several participants were grateful for the recognition of indigenous peoples' traditional knowledge as an innovative approach to addressing the challenges and solutions. Still, some

areas of improvement were pointed out, where the messages could be strengthened further and give a fuller picture of innovation as an accelerator for cross-sectoral implementation of SDG 6.

One such area was water quality. Currently, the messages are strongly focused on water quantity, but the issue of water quality is also important and should be included. One aspect of this could be linked to diversifying sources of water, as using different water qualities for different uses, e.g. irrigation, could be one way of diversifying, or reducing demand for high-quality water. Somewhat related, it was also suggested that the concept of circular economy be clarified in the document, with regards to e.g. resource recovery, which links to both water quantity and quality.

Another key area was that of nature-based solutions (NbS) and ecosystem-based approaches for climate change adaptation (EbA). As many think of innovation mainly as technological innovation, it is good to strongly include NbS and EbA as important areas of innovation. At the same time, these areas come with their own caveats and limitations. NBS may not be sufficient to solve all problems, and while they should be included as one set of solutions, traditional (grey) infrastructure, as well as hybrid infrastructure, will still be needed as well. We must also take care so that expansion of NbS or green-grey infrastructure does not come at the expense of nature conservation – for example, with the adoption of more hybrid solutions, the area impacted by urbanization will be dramatically increased, which threatens currently safe ecosystems and landscapes. This is also relevant in connection to diversification of water sources, which risks leading to more systems being impacted by human activity, which needs to be done in a way that does not jeopardize the health of those systems. This may be especially important when considering small waterbodies, which are rarely mentioned in international documents and discussions but make up a larger total area of water than e.g. transboundary basins, and have tremendous impact on our water sources and ecosystems.

It was strongly emphasised that innovation is not only needed in technology, or even NbS and EbA, but also in the social and governance spheres. New conceptual frameworks, pragmatic approaches, cross-sectoral linkages and conversations beyond disciplinary silos are all important parts of this. The shaping of markets for WASH-solutions and how such markets are established and made operational can also be seen as an area of innovation. As important is the connection to local communities and ensuring bottom-up approaches that brings in different stakeholders, as buy-in and understanding from the community affected by new innovative approaches is crucial for their success. New forms of communication, such as social art, that connects to the emotions of people and go beyond traditional, informational awareness-raising, is also part of this. It is also essential to consider cultural values of water. For example, in the Maya culture, flushed toilets do not work because their belief is that water is sacred, meaning it should not be mixed with faecal products, instead requiring using dry toilets or grey water.

Governance innovations can also contribute to creating an enabling environment that allows innovation to take place, be implemented, and scaled. An aspect of such an enabling environment already identified in the messages are perverse subsidies and incentives, but legal frameworks should also be valuable. For example, in many countries the collection of faecal sludge is part of the informal economy, which complicates innovations in re-use and circular approaches to its use. This requires the involvement of regulators and the regulatory environment in the conversation. Again, the connection and communication with local communities is also crucial, as a lot of innovation takes place locally and depend on the local context, which makes scaling difficult if it takes place in an isolated manner. A common platform for industries and businesses where innovations and good practices can be shared would be beneficial, as it

could allow aggregation of complementing approaches that together can achieve real systemic transformation, rather than being fragmented activities that cannot be scaled.

One thing highlighted as missing was the importance of leaving no one behind. For example, the needs of vulnerable populations in emergencies, such as conflict or climate change impacts, may benefit greatly from innovation and innovative solutions, while the very situation poses great and specific challenges to the development and implementation of such solutions. The needs of both rural communities and populations of emerging cities – small towns facing quick urbanisation – was specifically raised. Overall, the language on inclusion and leaving no one behind could be strengthened, for example by expanding the title to specify the need to reach the poorest and most vulnerable populations, or to close the gaps on inequalities.

Lastly, the inclusion of traditional knowledge was greatly appreciated, but it was noted that the discussion should be broadened to also include the cultural value of water and the need to take it into consideration, and that thinking about the cultural value of water can generate innovative ways of managing water by taking into account how different people interact with and access water. Additionally, it was emphasized that the discussion on traditional knowledge should also address safeguarding and respecting indigenous peoples' right to that knowledge. The terminology was also addressed, and it was suggested that the phrasing should be changed to talking about indigenous peoples' knowledge rather than traditional knowledge to avoid the perception that it is something static that does not evolve over time.

Recommendations towards the policy message on Innovation

It was recommended that the policy messages on innovation:

- include reference to vulnerable populations or closing inequalities;
- address the need to take the cultural value of water into account;
- include safeguarding of indigenous peoples' knowledge;
- also includes water quality concerns in addition to the current focus on water quantity;
- emphasizes social and governance innovations, especially in creating an enabling environment for innovation;
- clarify the concept of circularity and how it relates to innovation and innovative approaches;
- and addresses the limitations and caveats in connection to nature-based solutions and ecosystem-based adaptation.