UN 2023 Water Conference Side Event

Water-Economy-Ecology Nexus in a changing environment: A roadmap from New York to Beijing to Bali

Thursday, March 23rd, 18:30 - 19:45 EST, Room 9 (ID: HQ137)

International Water Resources Association (IWRA); Government of the People's Republic of China, Ministry of Water Resources (MWR); General Institute of Water Resources and Hydropower Planning and Design, China (GIWP); Government of the Republic of Indonesia, Ministry of Public Works and Housing; Government of the Netherlands, Ministry of Foreign Affairs; Government of the Republic of Tajikistan, Ministry of Energy and Water Resources; and, World Water Council (WWC).

Background on the event (one paragraph)

With prominent dynamics of water and sediment discharge, socio-economic development, ecological-environmental condition compounded by global climate change, many countries are facing water security challenges, such as water shortages, higher use, and demand of resources, flooding risks, ecological-environmental degradation, while at the same time experiencing higher requirements for water security standards. The fundamental goal is to balance the water needs both for humans and nature by synergetic development of water-economy-ecology nexus under a changing environment. To ensure water security both globally and locally, multiple aspects of the water sector must be coordinated, as along with the relationships of water with social-economic development (human behaviours) and ecological sustainability (natural dynamics with human influences). Three major topics were addressed in this session: (i) coordination of water strategy, policy, and planning; (ii) resilient water infrastructures; and (iii), water governance and monitoring, as well as the discussion around the water-food-energy nexus with related links to climate resilience and adaptability. The session exchanged on-the-ground practices in the Netherlands, Tajikistan, China, and Indonesia to highlight responses under different contexts of climate, water and land in the context of different development and

state systems to achieve the global water-related SDGs. The countries listed above are respectively the co-hosts of the 2023 UN Water Conference that took take place in New York (22-24 March 2023), the XVIII World Water Congress in Beijing (11-15 September 2023), and the 10th World Water Forum in Bali (18-24 May 2024). All these important international conferences have engaged and will discuss both the water and development agendas under the related themes of this session.

Water Action Agenda (one paragraph, if possible, please include the link to your commitment in the Water Action Agenda database)

IWRA is inaugurating a project with its membership and partners to develop an approach and methodology to make research and scientific knowledge, including the water-economy-ecology nexus, more accessible to and usable by practitioners, policymakers and the public at large. The expert group will investigate the language used, avoiding jargon as much as possible; methodologies for dissemination (online and offline; workshops; connecting with more local NGO/ CSOs and umbrella organisations, usable by and for different target groups and levels of education); mapping successful approaches for getting more relevant information "on-the-ground"; making the information even more interdisciplinary; combining with other sources of knowledge and experience; and, developing capacity development modules. The development process for this project will include specific meetings and sessions at IWRA's World Water Congress (Beijing, 11-15 September 2023) and the 10th World Water Forum (Bali, 18-24 May 2024), and will welcome ideas and commitments for next events. The project is estimated to require two to three years to complete.

Key Issues discussed (5- 8 bullet points)

- **Water is a major component of natural systems, an important element of economic and social development, and a controlling element of ecosystems.** The competition for water in a changing environment is intensifying, and the risks are increasing everywhere around the world.

- **Balancing the Water-Economy-Ecology Nexus is a major issue that the world is currently facing and that will endure for a very long time.** The profound significance of water and its links with economy and ecology have been clearly recognized by delegations and stakeholders in their statements and discussions before and during the UN 2023 Water Conference.

- **Coordinating this nexus effectively and efficiently requires the development of specific targets and a clear vision, as well as considering trade-offs and balances.** Some of the trade-offs and balances include human versus nature needs, pollution load and environment carrying capacity, spatial layout for livelihood, production and ecological spaces, risk aggregation and mitigation, and economic costs and benefits.

- **Many challenges for this nexus presently remain, including how institutions still operate in silos, with lack of appropriate incentives while dealing with increasing uncertainties**. Moreover, conflicting regulations and policies are a major constraint, competing with the energy sector and overlooking key water quality aspects or sacrificing the environment due to competing water needs.

- **China has made great efforts to address the above issues**, committed to pursuing innovative, coordinated, green, open, and shared development, under the four principles of "prioritizing water conservation, balancing development with local water endowment, systematic governance, and building government-market synergy", and around five key areas of work on: the construction of a national water network; improvements in water supply in agriculture; the National Water Saving Action Plan; protection of rivers and lakes; and, river-basin flood control engineering system.

- **Young and early career professional care about water resources management and are aware of national policies and achievements made to progress on this nexus.** However, the impacts of the imbalance in the development, utilization and protection of water resources remain a major concern among them.

Key recommendations for action (5 - 6 bullet points)

- **More exchanges on ideas and discussions on good practices are needed for the Water-Economy-Ecology Nexus**, in particular in Beijing this year, and Bali next year. These exchanges and discussions will contribute to the efforts advancing on the water-related Goals of the 2030 Agenda for Sustainable Development.

- **We must operationalize the Water-Economy-Ecology Nexus.** The rate of progress to achieve universal access to safe water, sanitation, and hygiene, which will boost economic growth and lift more people out of poverty, must quadruple, while effective coordination across sectors and borders through integrated plans to protect and restore freshwater ecosystems must be ensured.

- **Policy and decision makers are required to defend and promote clean access to water and safe sanitation as a human right to everyone**. In addition, they must have a clear strategy for action to implement existing international commitments; modify national and subnational frameworks to consider nature-based solutions; reform water allocation and freshwater resource use rights, laws, and regulations; reform agricultural subsidies; and advance governance and partnerships on open data as well as inclusive decision-making. Ensuring appropriate pricing and financial access for water resources to be used and managed sustainably must be a priority.

- **Integrated river basins management must be pursued cutting across the traditional responsibilities of ministries of water and infrastructure, planning,**

economy, agriculture, environment, etc. The important convenings in New York, Beijing and Bali will further inform how effective and inclusive basin management can work.

- **The development and protection of water resources must be balanced, along with equal access and benefits for all, leaving no one behind**. The time for coordinated action is now.

- **Initiatives and collaboration are most needed from/ among young and early career professionals, and, even children from all around the world.** They are the future and for them we must make real progress. Water dialogues and forums led by young people and children, with water shortage experiences and simulations, or raising online and social media platforms voices, are some examples of how they can contribute. Every drop counts.