IPU Science for Peace Parliamentary Meeting

Water security and insecurity: Rebuilding peaceful coexistence with science

Quy Nhon, Viet Nam, 11–13 September 2023

CONCLUSIONS AND RECOMMENDATIONS

The 2023 Science for Peace Parliamentary Meeting was organized jointly by the IPU Science for Peace Schools programme and the International Centre for Interdisciplinary Science and Education (ICISE) in Quy Nhon (Viet Nam). This Parliamentary Meeting follows the first edition of the IPU Science for Peace Schools meeting held in Geneva in December 2022 which was launched jointly by the IPU and the European Organization for Nuclear Research (CERN). The theme of the first meeting was *Dealing with water scarcity: an opportunity to rebuild peace with Science*, and it focused on water management and the exploration of new sources of water to increase the availability of this precious resource, which was so often a source of conflict.

The 2023 Parliamentary Meeting brought together parliamentarians, parliamentary staff, scientists, water experts, researchers and stakeholders from various sectors, as well as the UN Water Convention Secretariat staff. Participants engaged in constructive dialogue, knowledge sharing and partnership building with a view to developing effective strategies and policies to guarantee water security. They acknowledged the mounting crises occurring throughout the world, water insecurity being one of them. In that context, they highlighted the importance of regional and international cooperation to address the imminent risk of a global water crisis which directly affected global food security.

To optimize opportunities for their citizens, mitigate risks associated with conflicts over water resources and promote sustainable management of this invaluable resource, parliamentarians must have the necessary essential tools and there must be a unified approach towards water security. To that end, for future parliamentary work, participants formulated the four recommendations given below which synthesize the main conclusions of the 2023 Parliamentary Meeting. The aim of the recommendations is to empower members of parliament, parliamentary committees on water worldwide and the broader scientific and expert community in their efforts to achieve a resilient and sustainable water future.

Conclusions and recommendations

<u>Recommendation 1: Evidence based decision making on water and sanitation</u>

Decision-making to strengthen policies and legislation on water and sanitation must be evidence-based. This can be achieved through cooperation with relevant researchers and experts, and by prioritizing formal and informal dialogue between the legislative and inter-disciplinary scientific communities. Focus must also be on facilitating the creation of, and access to comprehensive and transparent data on key issues, including on:

- River and stream flow management, such as the control, regulation, and manipulation of the water flow within rivers and streams. The aim is to enhance effective resource allocation, flood prediction and prevention, aquatic ecosystems preservation, adequate infrastructure planning for dams and irrigation projects, as well as to develop climate-change adaptive strategies.
- Water volumes allocated for direct human consumption, agriculture, industry and hydro-electricity generation. The aim is to enhance sustainable and equitable resource management, food production and industrial development, to develop reliable and resilient hydroelectric

projects, and implement policies that promote cooperation and sustainable water use, to prevent and resolve water-related conflicts.

Data must be made public, be transparent and in an open-source format. This will foster trust, empower scientific communities, foster collaboration with policymakers and facilitate holistic solutions to promote equity and inclusivity in decision-making processes.

Recommendation 2: Community engagement

In addition to data accessibility, there is an utmost need to advocate for broader community participation and inclusion, such as citizen science – the voluntary participation of the public in scientific research activities and data collection. By involving citizens in scientific endeavours, citizen science can provide valuable data, contribute to raising awareness and to fostering a sense of ownership and responsibility for the challenges addressed by the Sustainable Development Goals (SDGs), in particular SDG 6, set to “Ensure availability and sustainable management of water and sanitation for all”.

It is therefore essential to engage with the community to obtain the buy-in and trust of citizens to ensure the implementation of SDG 6 and cater to the needs of vulnerable communities with regards to the achievement of this goal. Employing citizen science promotes a collaborative approach to problem-solving, and complements traditional scientific research and monitoring efforts by addressing gaps in publicly available data. Drawing on the case study of Ireland, citizen science can serve as a catalyst for transforming water management into a more inclusive, equitable and sustainable process. By leveraging the collective efforts of communities and integrating their knowledge into regional and global initiatives, citizen science contributes to building resilient water management systems in regions undergoing development. Moreover, prioritizing knowledge management and transfers within the framework of citizen science is important to ensure that information flows seamlessly between different stakeholders, thus not only empowering local communities but also strengthening the collective capacity to address water management challenges and implement sustainable solutions.

Recommendation 3: UN Water Convention

The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UN Water Convention) promotes cooperation on transboundary surface and ground waters, and strengthens their protection and sustainable management. The management of groundwater presents a unique dilemma due to its concealed nature, posing challenges in monitoring and sustainable utilization, and requiring coordinated efforts and considerations among neighbouring nations sharing the same groundwater resources.

Considering the pivotal role that parliaments play in advocating for effective water governance, parliamentarians and relevant stakeholders, including scientists and experts, should urge their governments to:

- Accede to the UN Water Convention if they have not already so.
- Actively implement the Convention’s provisions in tangible actions, including robust monitoring, thorough assessment, as well as integrate these provisions in overseas development aid initiatives to foster international collaboration in addressing water-related issues.
- Encourage neighbouring parliaments to accede to the UN Water Convention.

Recommendation 4: Establish a global parliamentary expert community on water

There is a need to establish a global parliamentary expert community on water to serve as a collaborative platform where parliamentary representatives and water experts from diverse regions can share knowledge, good practices and innovative solutions. Such a community would serve as a hub for exchanging insights, fostering interdisciplinary dialogue and developing informed policies to tackle the complex and interconnected issues surrounding water scarcity, quality and management. By promoting international cooperation and leveraging the collective expertise of parliamentarians and water scientists and experts, this initiative seeks to enhance the effectiveness of global efforts in mitigating the threats posed by the global water-related crises.

It is to be noted that in this regard, the UN Water Convention stands ready to provide valuable inputs, publications and presentations to support the global parliamentary expert community, and to invite its members to participate in the regular meetings of the Convention, particularly the Meeting of the Parties, which is the main body of the Convention.