Panel 2 on Climate, Conflict and Cooperation

Presenters:

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Respondents:

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Key messages:

Water that crosses boundaries – be they legal, political, cultural or economic – can set the stage of disputes between different users trying to safeguard their respective interests in a vital source. Yet, water also provides ample incentives for stakeholders at all governance levels to come together and jointly manage shared resources for the benefit of all. Water science, diplomacy and law can help prevent or mitigate the risks of dispute and foster water's potential for cooperation and peacebuilding. In order for this to happen, water science, diplomacy and law need to be strengthened and better linked to each other, contributing to science-based policies and regulations that ensure the sustainable and peaceful management of this precious resource, for the benefit of people, ecosystems, and humankind as a whole.

A. **Countries have different interests:** there are 313 international basins, which comprise 50% of the world's land surface and more than 40% of its population. In addition, more than 600 aquifers are shared by two or more riparian states. States sharing such transboundary water resources often have different interest in the use, development or protection of those waters. At the national and sub-national level, interests also vary – between different sectors (agriculture, energy, urban water supply) and actors (urban and rural population, different ethnic groups).

B. **Cooperation prevails over conflict:** prevailing wisdom –disseminated often in media or through public discourse – suggests that water scarcity and other water-related risks lead to conflict and that conflict is widespread, inevitable, intractable and violent. Additionally, climate change will only exacerbate this trend.

Evidence from around the world, however, shows a different picture, namely, that cooperation by far prevails over conflict. The vast majority of all interactions over internationally shared basins is cooperative; if conflict occurs, it is mostly verbal and remains below the threshold of violence or even war.

It is thus only some transboundary basins that face acute or latent conflict. Often, other factors – from political instability and a history of war and instability or fragility to economic development challenges – play a role at least as important as water itself. In most basins, however, cooperation prevails.

It nonetheless remains challenging to monitor the institutional capacity for cooperation over shared water resources, especially at the sub-national level. Additional efforts are thus needed to better understand where, how and why conflicts risk occur and escalate, which mechanisms and tools can be employed to mitigate such risks, and thus harvest the inherent cooperation potential of water.

C. **Factors of conflicts:** it should be noted, however, that conflicts are increasing in frequency and intensity, especially since the 2000s. In addition, where cooperation prevails, it does not always and automatically lead to sustainable and equitable water resources use, development or protection.

   Likewise, at the national and sub-national level, water is far more often the source of cooperation and joint management – through formal and informal water governance mechanisms. However, tensions between different water users, e.g. farmers and herders or urban residents and rural populations, are much more common than at the transboundary level and have escalated already in many places.

   As climate change is likely to exacerbate conflict risks, more effort needs to be placed into preventing and mitigating water conflict risks – and in resolving them once and if they occur.

   Weak governance and weak institutions are a key impediment to sustainable and cooperative governance of shared water resources. Legal and institutional mechanisms for preventing, mitigating and resolving conflicts need to be strengthened around the world at all governance levels. More support thus needs to be provided to basin organizations, water management agencies as well as more informal water user association and other local institutions.

D. **Institutional framework to prevent conflicts:** while conflicts depend on many factors (hydrological, environmental, socioeconomic, political, etc.), the legal and institutional framework available for preventing, mitigating or resolving conflicts is key.

Water-related research from the earth sciences has advanced rapidly over the last quarter century to define the changing state of global water resources. Human-dimension research has proven that institutions can deal with change that otherwise can escalate into conflict and turn this conflict potential into cooperation potential.

International treaties and basin organizations have proven to be important platforms for joint/coordinated work and mediation. However, not all basins have such institutionalized mechanisms in place. And those that exist are often not sufficiently functional and effective.

Likewise, at the national and sub-national level, well-functioning governance mechanisms are key and in many places successfully mitigate conflict. However, weak governance in general and over water in particular increases conflict risks.

Understanding where, how and why conflict happens and how it can be turned into cooperation is crucial for the 2030 Agenda, the Water Action Agenda and many other global commitments. Many advances have been made towards better monitoring or even forecasting water-related conflicts but also cooperation potential. Investments in scientific research will yield better hydrological, environmental, climatic but also socioeconomic and demographic insights. In turn, the research will motivate improved observations of the state-of-the-resource, which is a key to effective water management and cooperation.

E. Recommendations: Water therefore holds an inherent potential for cooperation and peace that surpasses the conflict risks relating to water, and can serve as a means of dialogue to eased tensions among neighbors. This cooperation potential can be developed around the world and at all governance levels.

In order to design effective policy responses, better monitoring and understanding is required of where, how and why conflict occurs and which factors determine whether a risk leads to conflict or can be turned into a cooperation opportunity. Research in this domain represents a key investment opportunity for nation states to avoid conflict and promote cooperation.

The international community should therefore strengthen its efforts to monitor not only the water situation at global, basin, national and local level (and under climate change), but also the availability and the effectiveness of institutionalized cooperation mechanisms to address the conflict potential arising from changes of the state of the world's water resources (including in the context of SDG 6.5.2).

The international community could develop a *Global Collaboratory for Water Science and Diplomacy*, linking UN member states and agencies, water scientists, policymakers, and practitioners, and thereby creating a much-needed knowledge hub and network for improved water and climate diplomacy that features advanced monitoring, analysis, and forecasting.

Responses to the questions posed:

1. ***Can the panel provide more clarification regarding the map showing prospect of conflicts in the Black Sea?***

The mapping of potential water conflicts is documented fully in a paper accompanying these responses (published in the *Hungarian Journal of Hydrology*). In summary, the map represents an attempt to capture some of the key determinants of conflict, place them into a geospatial context, and present visual depictions of the result. The resulting geography arises from the conjunction of two major factors:

- The first is biogeophysical and captures the fundamental characteristics of the water resource—its abundance, scarcity, and quality—as determined by the conjunction of climate, geography, and human management.

- The second major factor is defined by human institutions and the capacity to govern the resource.

Both these factors, and their subsidiary elements, interact within a spatial complex that defines upstream-downstream relationships within watersheds. These include the condition of the resource provisioning areas, control of the waters, and downstream populations and their water demands. This study forwarded an important conflict-relevant perspective, namely the capacity to identify upstream-downstream asymmetries in water availability and management as a potential source of water conflict or cooperation. Predicted patterns showed good agreement with water conflicts and disputes as documented in the independent, peer-reviewed literature.

2. ***How do climate and water securitization help solve regional problems? Discussing water in the context of conflict could dilute the attention on water problems as such.***

Water security discourse suggests a shift from bipolar debate over conflict or cooperation to a more nuanced understanding of interactions over water through a multi-level, multi-centred and multi-actor approach linking various schools of thought and disciplines. Essentially, climate and water securitization helps to move these issues to the top of the agenda in order to generate the political will needed to address the challenge. It is true, however, that among the key risks involved in the securitization of water is the likelihood of taking the water issues (given their exceptional importance) away from water professionals to politicians, thereby contracting the multi-perspective framework that has been shown essential to nurturing cooperation around water.

3. ***Institutions are essential for water cooperation. How can local dispute settlement mechanisms better enforce that?***

Many local dispute resolution mechanisms are well-rooted in community practice, and often have proven records dating back centuries or even millennia. They very often are based on

dialogue and consensus building, in contrast to common western legal models where one side can be found entirely right and the other entirely wrong. This latter approach has spread throughout the world, especially at the national scale and commonly at subnational levels as well. We are now entering a period where the problems we face fall precisely between these two scales, and between the conflicting models we have to resolve resulting conflicts. The International Development Law Organization has a rich record of helping to promote the values expressed through local practice at the national scale, including processes that promote consensus, transparency, representation, local ownership and, importantly for the topic of the panel, sustainability. Only by unifying these values and approaches can we collectively address global water challenges to achieve justice, equity, and peace building.

4. ***How does the panel see water-related issues, especially those emanating from rising sea level, destruction of critical infrastructure, including possible spill-over effect on the humanitarian field? Is this adequately addressed by the UN system in synergy with science?***

Although not part of the briefing (focused on freshwater), it is important to acknowledge that climate change will affect critical infrastructure as the sea level rises, especially in low-lying coastal areas in countries and regions with huge infrastructure investments. While the UN and the international community more generally are addressing this, e.g., through the UNFCCC regime and the Paris Agreement, aiming at limiting climate change, it is our opinion that not enough is being done to address this issue and more damage will occur to critical infrastructure--and all sectors depending on it--if the sea level continues to rise.

5. ***What opportunities does the panel see in strengthening the development-peace nexus?***

In the context of a changing climate, water disputes and conflicts are likely to increase, especially in water scarce regions or already conflict-prone areas. Building resilience of the most vulnerable communities can be done by enhancing capacity building and providing technical assistance to developing countries, to allow better adaptation to water-related issues. Assistance in development of infrastructure, training of experts, education and incorporation of scientists into policymaking will contribute to improved water management and reduced risk of conflicts.

Strengthening synergies within the humanitarian-development-peace nexus will provide local communities with greater security, but also greater resilience when it comes to various threats (both natural and human-induced) related to climate change, contributing towards achieving SDG16, which concerns peace, justice and strong institutions. Some previous experiences like in the context of the Senegal river basin have shown that investments (from key developed partner countries, international financial institutions and regional development banks) in the development of joint water projects and infrastructure can efficiently prevent conflicts and ensure effective water diplomacy. Development is thus a sine qua non of peace and healthy cooperation within in a transboundary water context.

6. ***Is there a scientific mechanism to determine what states must do to rightfully share water in the context of water diplomacy?***

The law provides a framework to determine what states must do to rightfully share their waters. Water-related treaty bodies are helpful to further clarify and detail relevant obligations. The most extensive repertoire of guidelines and handbooks are developed under the UNECE Water Convention (https://unece.org/publications/environment-policy/water), starting from its *Guide to Implementing the Water Convention* to the most recent publications on *Water Allocation in a Transboundary Context* https://unece.org/info/publications/pub/363010) and *Practical Guide for the Development of Agreements or Other Arrangements for Transboundary Water Cooperation* (https://unece.org/info/Environment-Policy/Water/pub/361821).

Legal scholars also developed a number of guidelines that might be useful for states in these endeavours. For example, you may refer to *Sharing transboundary waters: an integrated assessment of equitable entitlement, the Legal Assessment Model https://unesdoc.unesco.org/ark:/48223/pf0000139794*. Thus, there are several guideposts for crafting collaborative water sharing agreements.

7. ***Women are key players in climate and water related challenges. How could they be fully integrated in all policies?***

Women are indeed key players in water cooperation and diplomacy. Research has shown that in all negotiation and peace processes, the inclusion of women tends to lead to better and, in particular, more long-lasting results. In practice, the involvement of women in water diplomacy is still insufficient. However, important initiatives are under way to support this, e.g. the Women in Water Diplomacy Network: https://www.un-ihe.org/world-water-week-rising-tide-womens-leadership-transboundary-cooperation, launched last year at the *World Water Week* (https://worldwaterweek.org/event/10314-a-rising-tide-shared-vision-for-women-in-water-diplomacy), which also focuses specifically on some basins, such as the Nile https://siwi.org/swp-women-in-water-diplomacy-network/#:~:text=The%20Women%20and%20Water%20Diplomacy,and%20development%20in%20the%20region.

8. ***How to do more on preventing water-related conflicts and challenges, while avoiding the securitization of water?***

The best way to prevent water-related conflicts and challenges, while avoiding the over-securitization of water, is to practice rule-based water diplomacy. This means—among other things—fostering practical instruments of cooperation such as information exchange, coordinated monitoring and assessments, joint projects, integrated modelling, long-term planning and capacity building. All these and many other cooperative practices will enable continuous interactions at the professional level to produce shared knowledge and understanding, build durable relationships and a habit of cooperation. Politics and formal

negotiations certainly matter, but without continuous interactions among professionals, confidence, trust, and respect will not be nourished.