



GLOBAL
CENTER ON
ADAPTATION

RESILIENT POLICIES: LEVERAGING WATER FOR NATIONAL CLIMATE PLANNING

A report on the Resilience Hub session – COP 26 4th November 2021

Resilient Policies: Leveraging Water for National Climate Planning

The event was organised on November 04th, 2021, at the Resilience Hub – COP26, by GCA in collaboration with SIWI, OECD, GWP, WMO and IWMI. The Resilience Hub brought together global non-state actors from a range of sectors such as business, finance, civil society, academia, cities and regions, to advance action on adaptation and resilience, and to help provide a strong collective voice on resilience for all those globally who are working to build a more resilient world. The full recording of the session is available [here](#).

Background

The impacts of climate change will mainly be felt in the water cycle, and therefore water needs to take a prominent place in national adaptation policy making. However, such policies often do not translate or mention water. If adaptation is supposed to be mainstreamed across sectors, there is an opportunity to address adaptation by integrating key aspects relating to water, where recommendations have long called for increased integration.

Many countries are putting in place national climate change policies to address the need for mitigation, and adaptation. Many developing countries develop Nationally Determined Contribution (NDC), and the development of a National Adaptation Plan (NAP) as stated by the Paris Agreement, that should address climate change in the country's development policy frameworks.

However, in many cases there is very little mention of water in adaptation policy planning. Another challenge - in terms of countries receiving international donor aid, is that the NAPs are mainly used as shopping list for donors. Instead, they need to reflect the fundamental elements that need to be in place to ensure resilient water policies.

National level policies on water are needed for setting the agenda for how to address and implement water related resilience at local level. Providing a strong national political signal means strengthening the role of water in strategic decision making at the local level relevant for implementing DRR, adaptation and sustainable development.

Against this background, this session was organized to address the following objectives:

- Envisioning and shaping elements of a strategy for resilient water policy
- Identify and address the benefits and challenges with existing tools and approaches to mainstream water resilience
- Build an action agenda for the international community to support national-level water resilience.

Speakers at the session included:

- **Torgny Holmgren**, Executive Director at SIWI (overall facilitator)
- **Peter Glas**, chair of the OECD Water Governance Initiative
- **Dr. Johannes Cullmann**, Director of the Climate and Water Department, WMO
- **Jane Madgwick**, CEO of Wetlands International
- **Dr. Mark Smith**, Director General at IWMI
- **Dr Aditi Mukherji**, Principal Researcher at IWMI
- **Paul Sayers**, founding Partner at Sayers and Partners
- **Kidanemariam Jembere Tiruneh**, Technical Advisor for the Global Water Partnership
- **Dr Lena Blom**, City of Gothenburg, Sweden
- **Imelda Bacudo**, ASEAN Climate Resilience Network

Shaping up a water resilience strategy

Opening the session, **Peter Glas** (OECD) remarked that several important elements of a water resilience strategy are already available, and that future works should further build upon these elements. He referred to the classic OECD principles for sustainable water governance and plead to further operationalize and institutionalize these principles towards supporting a resilient, inclusive and sustainable approach to building water resilience. The prospective water resilience strategy should aim at simultaneously meeting the three reinforcing criteria of effectiveness, efficiency and supporting trusts and engagement. The OECD's Water Governance Initiative – a permanent multistakeholder network of more than 100 members from public, private and civil society domains, would be a suitable platform to support these strategies.

However, capitalizing on available elements would not be enough to devise effective strategies for resilience, especially in the context of increasing risks and changing contexts under global climate change, opined **Dr. Johannes Cullmann** (WMO). He added that we need to do more and embrace new strategic solutions. Firstly, the water resilience strategy must be based on a clear definition of the targeted risks, and its quantification in terms of probability and potential damage. As such, the strategy addresses one important question of what risks we are building resilience to. In concrete terms, Dr. Cullmann suggested to focus on practicing the resilience principles, to make them useful in practice. The principles should translate into clear mandates of who are responsible for what tasks regarding building water resilience. Referring to the OECD water governance principle 5, he suggested to bring together water, weather, and climate information from different sectors. Such information would need to be integrated in a way that allows connecting data to information and to decision-making in a seamless chain across sectors.

To build water resilience, the focus is often made on the link between climate and water. According to **Jane Madgwick** (Wetlands International), we often miss another important link between water and the environment. Ecosystems play an essential role in capturing, regulating, and storing water throughout the landscape. These functions should be addressed in the policy and practice sides for shaping water resilience. Furthermore, water resilience policy should encourage restoration, and creation of these essential ecosystem functions at the landscape level. Referring to the damaging floods in the Rhine River in Germany, Belgium and the Netherlands in July 2021, Jane Madgwick showed that considerable damage could have been reduced, if wetland systems would have been kept intact along the river. Building water resilience should be also based more strongly on shared data and information, thereby creating a strong basis for building consensus and developing shared vision on possible actions. Lastly, Jane suggested to further operationalize the concept of 'systems approach' in water policies. Very often the systems approach is widely used, but with different understanding and notations across sectors. Clarifying and translating this approach into concrete action is important in building water resilience.

Connecting to the systems approach, **Dr. Mark Smith** (IWMI) pointed to an existing framework that should be reintroduced and activated for the water sector. The IWMI framework for building water resilience is a nested one, offering the capacities to create linkages between the key elements of water resilience namely governance, networks, institutions, infrastructures, data, and ecosystem services. For such a framework to deliver structural impacts, the national level policy should acknowledge and support local institutions, from which new ideas and innovations emerge.

Taking a broader perspective of building water resilience, **Dr. Aditi Mukherjee** (IWMI) called for attention to possible consequences of resilience and mitigation measures in the water sector. Recent analyses warned that unplanned and uncoordinated interventions can increase water consumption. In the long run, these interventions could exacerbate water shortage and damage local adaptive capacity. One typical example is the introduction of solar energy for crop irrigation. The relatively low operation costs of this irrigation system pose a real risk of over exploiting groundwater resources, which creates long-term, irreversible consequences.

An action agenda to mainstream water in national policy

Reflecting on the contrast between a strong focus on water in all IPCC reports, and the remarkably less attention on water in the COP26 discussions, **Togny Holmgren** (SIWI) addressed the importance of further mainstreaming water— particularly water resilience— in the national policies. Dr. Johannes Cullmann shared the observation, pointing out that it still takes long before water is adequately mainstreamed in the national policy and international climate dialogues. However, recent changes show signs of stronger attention, for instance the stronger focus on water in COP27. Adding to the mainstream strategy, **Janes Madgwick** suggested that making water more popular would require restraint from treating water as an extra element to the climate debate but making it an integral part of the climate agenda. Additionally, we should clear out the misconception of building resilience as giving up economic development, as it rather secures conditions and resources needed for development and sustainability. **Dr. Mark Smith** further added that we need to pay stronger attention to the institutional setup and underpinning capacities, to make sure that the institutional capacity is sufficient to implement and realize the rather ambitious national water agendas. **Dr. Aditi Mukherjee** is positive that water mainstreaming is taking place, quoting the water pavilion at the COP 26, and the water agenda put forward by the Global Center on Adaptation. The main challenge is to take advantage of these movements and bring water down into the local governance policies, and to institutionalize water at the sub-national level.

Tools and experience for mainstreaming water resilience

Many countries have taken the first steps towards mainstreaming water resilience in the climate policies. However, it remains unclear how, and to what extent these policies will be put in practice and deliver impacts. This section highlighted tools and experiences that can be leveraged for mainstreaming water resilience.

Dr. Lena Blom (City of Gothenburg) suggested to base all strategies and measures on robust cost-benefit analyses. In the context of water sector, societal and ecological values are especially important and should not slip out of the assessment. Currently the city of Gothenburg is focusing on use of modelling tools, and awareness-raising for mainstreaming of water. Furthermore, the city is also capitalizing on a number of policy instruments including the [Swedish Environmental Goals](#), the [Sendai Framework](#) for disaster risk reduction, and the EU [water framework directive](#). To put these instruments into practice, it is important to address the key questions of (1) what is the financing mechanism, and (2) who are responsible for implementation. Ideally, the measures should be underpinned by concrete financial models, where the beneficiaries will contribute financially to the implementation and operation costs.

Presenting the perspective of African nations, **Kidanemariam Jembere Tiruneh (GWP)** highlighted the role of pan-Africa policy and action instruments, such as the [Water and Climate Development Programme](#). Mainstreaming water resilience, according to Kidanemariam, requires first and foremost high-level political commitment. At the African Union level, the key policy instrument is the [Strategic Framework for building climate resilience](#). Such a strategic framework is important to guide and inspire national level policy. Practices in several countries have shown good evidence of effective integration of water security and climate resilience in the national and sector development planning documents. The other tool for mainstreaming water resilience is the national adaptation plan. Here, the key lead is to treat water as a connector of water-sensitive sectors, making sure that the adaptation plans are water-focused. For example, in the case of Zambia, there is a water supplement to the national adaptation plan. This shows the growing attention to water in the national adaptation plans.

Paul Sayers (Sayers and Partners) focused specifically on the flood risk management aspect, and pointed at some key issues to consider when planning adaptation in the water sector. Firstly, adaptation focussing primarily on the conventional risk reduction objective would incur significant costs. Secondly, Paul called for transformative adaptation, rather than incremental adaptation to sufficiently address the increasing climate risks. In this context, an important lead is to combine nature-based and infrastructural solutions. Lastly, it is important to seek synergies and join resources to address multiple management objectives including liveable cities, ecosystem health, and flood resilience. Further details on these strategies are available in [this report](#).

Imelda Bacudo (ASEAN climate resilience network) shares perspectives from the Asian adaptation practices, highlighting multiple tools for water mainstreaming. The ten member countries of the ASEAN are actively sharing good practices and experience through co-developing guidelines for adaptation, with water as a key focal theme. The guidelines focus on specific measures such as [climate-smart agriculture](#), rainwater catchment system, and developing policy guidelines for the state members. The ASEAN is also looking specifically at financing mechanisms as tools for boosting adaptation and scaling up good practices. Multi-country climate adaptation proposals are being shaped up, helping to align resources for adaptation in the ASEAN group.

All in all, several suitable tools are available, and experiences from mainstreaming water in adaptation are building up rapidly across different world regions. Together with partners, the Global Centre on Adaptation, SIWI, OECD, GWP, WMO and IWMI will pick up the outcomes of this session at the Resilience Hub and work further on a strategic framework to enhance water resilience in the national climate policies.