

Climate change is water change

Water and climate practice should meet the most vulnerable parties' priorities. United Nations Framework Convention on Climate Change (UNFCCC) policies and institutions should facilitate and promote cooperation between all stakeholders, ensuring that trust prevails and that the priorities of the most vulnerable groups are taken into consideration. Local and regional expertise from vulnerable parties such as the Alliance of Small Island Developing States (AOSIS) and the Least Developed Countries (LDCs) should be given high priority.

The Paris agreement was adopted at the UNFCCC 21st Conference of the Parties (COP 21). Given water's key role for mitigation and adaptation, and as a key factor for reaching most of the goals in the 2030 Agenda, in undertaking and supervising the implementation phase of the Paris agreement, the climate policy architecture and its subsidiary bodies should relate to water, where relevant.

Given the high occurrence of water elements in the Nationally Determined Contributions (NDCs), water knowledge should inform the domestic preparations for countries climate actions following the Paris agreement. The majority of the NDCs that include adaptation mention water. It's therefore important to consider hydro-climate resilience in the adaptation planning processes and the National Adaptation Plans (NAPs).

The National Adaptation Plans (NAPs) are important vehicles for operationalizing adaptation elements of the Paris agreement as well as for prioritization of funding. In addition to already existing sectoral guidelines and technical guidelines, further guidance should be developed on how to include communities' voices for adequate appropriation and how to promote integrated approaches for the NAPs, building on integrated water resources management experiences, acknowledging the crosssectoral nature of water. Plans and actions must include vulnerable community's voices and be robust against uncertainties.

Sustainable water management is an inherent part of disaster risk reduction and for securing climate resilience. Given the gravity of water hazards, sustainable water management should be central in the work plan of the Warsaw International Mechanism for Loss and Damage. Further, linkages to the Sendai Framework for Disaster Risk Reduction should be identified and referred to.

Land Use, Land-Use Change and Forestry (LULUCF) and Reducing emissions from Deforestation and forest Degradation (REDD) are important mechanisms to incentivize the reduction of emissions from deforestation and forest degradation and to promote conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

LULUCF and REDD-plus relates to freshwater. Water is a critical component in ecosystems ability to store and sequester carbon. Understanding water's role for conservation, sustainable management of forests and enhancement of forest carbon stocks can provide cost-efficiency and multi-sector non-carbon benefits.

The REDD+ Safeguards framework with procedures and approaches to offset emissions and curb deforestation should consider the interface between forests and freshwater, building on the principles of sustainable forest management. When developing standards, principles and criteria which effectively define social and environmental objectives, water resource management is a key element to refer to. It can also enable strong interlinkages, especially at regional, national and local levels, between the three multilateral environmental conventions.

Climate funding needs to address water resources. Implementing the Paris agreement, including the NDCs will mean knowledge reinforcing, access to new investments, technology transfer and capacity building. Funding channels such as the Green Climate Fund, the Adaptation Fund, the Least Developed Countries Fund and the Clean Development Mechanism will need to provide new and additional funding, in a coherent approach to ensure that investments are complementary and sufficiently allocated to address water challenges related to climate change effects. .

In addition, **new innovative sources of funding** are increasingly important, such as "Green bonds". The recent development of standards for Green bonds reflects how private sector finance can meaningfully address the integration of climate mitigation and adaptation and the special needs of sustainable water knowledge for investments in energy, manufacturing, ecological restoration, and water supply and sanitation that include water management components.



The new Sustainable Development Goals aim to chart a path toward universal access to essential services and sustainable development; however, efforts made to achieve these goals may well be undermined by climate change. The impacts of climate change are most dramatically felt through changes in water, changes that will severely affect humans, society and the environment. (IPCC 2013, 2014). The people most affected by the impacts of climate change are, and will continue to be, among the world's most vulnerable populations, particularly those living in the least developed countries and fragile states. 1.8 billion* people currently lack access to safe water.

Hydro-climate disasters account for nearly 95 per cent of all people affected by disasters, and have caused over 60 per cent of all damage incurred worldwide (UNISDR 2012). Extreme weather events such as floods and droughts, rising sea levels, changes in precipitation patterns, tropical cyclone strength and frequency, melting snow, ice and permafrost, and receding coastlines all relate to water, and exacerbate social and economic inequalities. Hydro-climate disasters impact infrastructure, cities, agriculture, and ecosystems, and in turn, contribute to forced migration.

Water is critical for successful climate change mitigation, as many efforts to reduce greenhouse gas emissions depend on reliable access to water resources. Most energy investments are long-lived infrastructure, with an operational lifetime spanning many decades. Those that require reliable access to water resources will therefore be affected by future changes in water availability, shifting social and economic needs, and ecological needs.

Ecosystems require freshwater and play an essential role in improving water quality, storage, and flood and drought control. For example, forests purify water, reduce flash flooding,

replenish freshwater and together with aquifers and wetlands store vast quantities of water. However, climate change alters these relationships and puts stress on ecosystems and deteriorates ecosystem services.

Water is a connector, not a sector — and it offers solutions.

According to the OECD Environmental Outlook, the global demand for freshwater will increase by 55 per cent between 2000 and 2050 (OECD, 2014). Given the pronounced global water scarcity, it is necessary to balance between competing water users while reducing greenhouse gas emissions. Integrating water practice in national mitigation and adaptation strategies, will allow for coherence. For instance, addressing sustainable water resources management in the NAMAs would support the viability of sustainable energy provision, supporting emission reduction targets. Furthermore, sound water management policies and programs can contribute to increasing by 6% the GDP of a country (World Bank 2016).

2018 will be an important year to take stock and underpin water's key role in addressing the SDG and Climate agenda and targets. For most Parties, water will be one of the key adaptation challenges of climate change. The majority of the NDCs that include adaptation programs mention water, especially in relation to drinking water and sanitation, disaster risk management, agriculture and Integrated Water Resources Management. Non state actors can also contribute greatly to multistakeholder mobilisation and implementation of efficient water-climate strategies and programs. **The Global Climate Action Agenda** can become an important vehicle for this support and the development of new partnerships in order to build a more resilient and sustainable future for all that will protect the most vulnerable.

Contact:
SIWI for the AGWA Policy group and #ClimateIsWater campaign

Karin Léxen, Director of World Water week and International policies at SIWI : Karin.Lexen@siwi.org
 Maggie White, SIWI associate : maggiwhite13@gmail.com ; + 33 6 77 25 00 55

Reference : Progress on Drinking Water and Sanitation, 2014 Report, WHO/UNICEF Joint Monitoring Program

