Water at the centre of climate resilience: at COP30 and beyond

Launch of policy brief on gender, climate, sanitation and water at the COP30 Race to Resilience Hub, with Kirsty McNichol from the Department Foreign Affairs and Trade
Photo Credit: Race to Resilience/Maria Aguilar

by Juliet Willetts

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With the increasing attention given to adaptation at COP30 in Belem, water is moving from the sidelines to centre stage. 90% of disasters in the last decade were water-related, and with increasing disruption of the hydrological cycle by both climate change and human activity, floods, storms and droughts are increasingly affecting water management, economic development and natural ecosystems. The impacts are worst at the frontlines, in vulnerable, climate-exposed communities, including many in the Indo-Pacific region.

Yet water is more than a sectoral issue, it is a unifying force. It serves and interconnects agendas relating to climate change, nature conservation and economic development, as the Global Commission on the Economics of Water makes clear. Valuing and governing water as a global common good and investing in water-related adaptation efforts can support a healthy water cycle, providing food security, access to basic water, sanitation and hygiene (WASH) services needed for health, changed land-use and biodiversity, a just energy transition and increased circularity.

Sanitation and wastewater, meanwhile, are by no means disassociated with climate change. Quite the contrary. Wastewater contributes 7-10% of global methane emissions, a proportion that will rise as other sectors decarbonise, and instead, managed well, can produce energy, offer nutrients that displace synthetic fertilisers and provide precious re-use water to serve other needs. These qualities have warranted new guidance on climate financing investments in sanitation by the Green Climate Fund. Equally, impacts of climate events on sanitation systems can be devastating and adaptations to infrastructure and services are critical — overflow from combined sewers plague the UK, seeping septic tanks in coastal areas of Florida, Hawaii and the Pacific Islands increasingly destroy recreational waters and reefs, threatening tourism. And in low-lying cities in Indonesia with high groundwater tables, drinking-water sources show increased contamination with increased rainfall.

Water also offers an entry point for equity and inclusion. The basic human rights of access to sanitation and to water are foundational elements of climate resilience. The UNFCCC Global Goal for Adaptation (GGA) recognises this, with water positioned as the first of seven thematic targets, and climate-resilient water and sanitation services identified as key elements. Last week negotiators debated the merits of the proposed GGA indicators and ultimately adopted a reduced list of 60, including nine indicators related to water and sanitation. Meanwhile, UNICEF and WHO have been working ahead of the game. They have been supporting a rigorous process with an academic consortium to develop sound global indicators for climate-resilient sanitation and water services that can drive policy change and influence institutions capable of adaptation, as well as highlight differentiated impacts on users at the individual level. We know that women, in particular, are most impacted when services are disrupted, and yet remain sidelined in decisions and responses. For this reason we, at the University of Technology Sydney, developed a gendered water security framework with the Asian Development Bank last year, that shifts the orientation from a technical to a social focus, cognisant of disparities in voice and agency between affected groups.

To date, Australia has offered leadership in this space. Investment in the Water for Women Fund, focused on climate resilience in its second phase (2023-2025), achieved significant progress in increasing access, with more than 4.4 million direct beneficiaries, strengthened gender transformative practice and shifted implementation practice to address climate risks. With combined research grants alongside practice and implementation, the Fund generated and shared leading knowledge, including on climate integration. The Australian Water Partnership has championed water and climate at numerous COPs, sharing Australian expertise in drought management and basin planning as an adaptation response, as well as producing knowledge resources on climate change and water security risks and the contribution of water to resilience in the Indo-Pacific.

At COP30, the Department of Foreign Affairs and Trade's Kirsty McNichol, Director of the Climate Finance Section, spoke at the launch of our policy brief on gender, climate, sanitation and water that outlines the links, alongside Chile's first female President, Michelle Bachelet, who inspired others with her personal call to earn, defend and renew justice in every generation, including ending the human crisis of climate change that denies so many access to sanitation and to water. We also launched guidance developed with UNICEF and the Global Water Partnership as part of the strategic framework for climate resilient water, sanitation and hygiene, supporting improved monitoring of the contribution of sanitation and water to community resilience to climate change.

There is much more to be done. The recently released World Bank report on the

sanitation crisis and resilience reminds us that some one-third of the urban population globally, more than a billion people, faces a triple burden — of poverty, of exposure to flooding and of limited sanitation access. The result is a vicious cycle of poor health, low economic productivity and reduced water quality. Meanwhile 50% of the world's population already faces high levels of water stress for at least one month every year, reducing water access.

Yet, there remains a $140.8 billion global funding gap in water and sanitation annually, and climate financing so far to sanitation and water services is paltry, unreflective of the lived experience of those without access. The Climate Policy Initiative is reporting it to be as low as 2.6% of global climate financing in 2025. This is despite the United Nations Economic Commission for Europe's analysis that 61% of countries' National Adaptation Plans give high priority to water supply and 37% to sanitation, and recent UNFCCC Least Developed Countries Expert Group analysis demonstrating examples of successful implementation of water and sanitation initiatives as part of national adaptation efforts.

We look ahead to surpassing the 1.5 degree threshold in global warming, and move toward the increasingly unknown territory of tipping points and transgression of multiple planetary boundaries. If we were to take the Intergovernmental Panel for Climate Change's advice on transformative adaptation, we would focus on water as a key pillar to adaptation. We would invest in ensuring basic daily needs for clean water and sanitation are met, we would change the dial on the climate financing allocation to the water sector, for water resources management and WASH services, and we would see increased community resilience flow from this — in improved health, productivity, prosperity, gender equality and ecosystem health.

Disclosures:

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Author/s:

Juliet Willetts
Juliet Willetts is a Professor and Research Director at the Institute for Sustainable Futures, University of Technology Sydney.

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