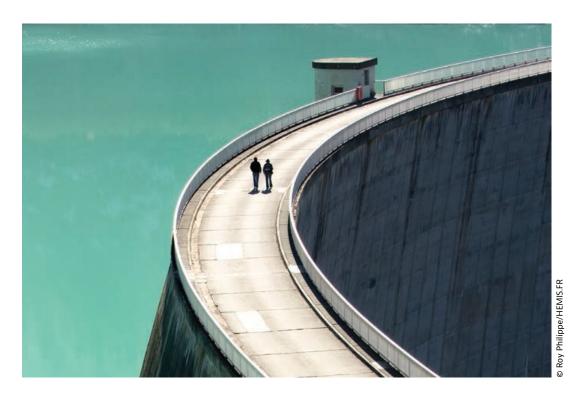
## Water and climate: From risk management to investment opportunity

Written by: Xavier Leflaive, OECD Environment Directorate and Kathleen Dominique, OECD Environment Directorate

Last update: 21 June 2018



In September 2017, the United Nations (UN) adopted a dedicated Sustainable Development Goal (SDG) on water. For years, water had been undervalued, underpriced and too often taken for granted, so Goal 6 on water and sanitation was a momentous recognition of water's crucial policy importance. Though just one of 17 SDGs, this goal also sits at the heart of many of them: water is essential for food security, health, cities, sustainable consumption and production, and terrestrial ecosystems.

But this recognition remains partial and fragile: weeks after SDG 6 was adopted in New York, water was not on the COP21 agenda in Paris. And yet one of the most fundamental impacts of climate change is on the global water cycle and regional weather patterns, which in turn affect access to water resources for food

production, drinking and sanitation, energy, industry and ecosystems. It also increases the risk of floods, droughts and wildfires.

Managing water must now be placed at the heart of successful adaptation strategies and climate resilience. Fortunately, the water community is advancing the policy agenda via other means: in 2017, the UN General Assembly re-ignited a dialogue on global water governance to better

Managing water must now be placed at the heart of successful adaptation strategies and climate resilience

integrate and co-ordinate the work of the UN on water-related SDGs. The COP23 in Bonn in November hosted a Water Day devoted to actions to help implement the Paris Climate Agreement. And last year, the Roundtable on Financing Water (a joint initiative by the government of the Netherlands, the OECD and the World Water Council) was founded to provide a global public-private platform to strengthen the evidence base and spur effective collaboration between the water community and financiers.

Lack of funding is a recurrent theme in global water discussions. And there is a compelling human rights and economic case for investment in water. The Human Right to Water and Sanitation, recognised by the UN General Assembly in 2010, has yet to become a reality for a significant share of the global population. WHO estimates that, as of 2015, 2.1 billion people still lacked access to safely managed drinking water services and 4.5 billion lacked access to sanitation compatible with the SDG 6 objectives. The benefits from strategic investment in water security could exceed hundreds of billions of dollars annually. In developed countries, investments in flood and resilience infrastructure protect valuable assets against flood risks. In developing countries, the benefits would accrue essentially in terms of improved health and productivity gains (especially for women) and ensuring children's (especially girls') ability to go to school.

Yet finance isn't flowing at the scale required. To achieve universal and equitable access to safe and affordable drinking water, and adequate and equitable sanitation and hygiene for all by 2030,the World Bank estimates that capital investment must triple to reach US\$1.7 trillion. In addition, operating and maintenance costs will be higher. The Food and Agriculture Organization of the United Nations (FAO) has projected that an estimated US\$960 billion of capital investment is needed to expand and improve irrigation in 93 developing countries between 2005 and 2050.

## Valuing water for positive return on investment

The current economic climate and abundance of global capital provide a window of opportunity to scale up water-friendly infrastructure investment that contributes to sustainable growth. In many advanced economies, interest rates are close to zero, increasing the fiscal space available to governments to support investments in urban development, irrigation, energy and industry.



Mainstreaming water considerations into development finance portfolios in energy, transport, agriculture and climate would provide additional resources to reduce vulnerability to water risks and enhance resilience and adaptive capacity.

Innovative technologies such as membranes, energy recovery, and digitisation provide further opportunities for investment and business development. New business models can convert investment benefits into revenue streams, thus improving the risk-return profile of water investments. For instance, investments in floodplains or wetlands could be financed by capturing some of the value added that such nature-based infrastructure provide properties in terms of flood protection.

Blended finance which strategically combines development funds and financial instruments to mobilise private investment towards sustainable goals is a promising way to leverage contributions from different sources of finance with different risk appetites to make projects more bankable. Investments in water security can maximise net benefits when portfolios of projects are considered as part of a long-term strategy. Governments have a role to play by putting in place institutions and policies that promote such innovative practices at scale.

The 2030 Development Agenda is now gaining traction and the global community is striving to translate the aims of the Paris Agreement into financing flows and investment. A sizeable share of these investments therefore has the potential to facilitate access to safe water and sanitation, and protect against risks of floods, droughts, or water pollution.

Whether you are a financier or a professional in urban development, agriculture or energy, you have a role to play. The Roundtable on Financing Water provides a platform to accelerate investments in water at scale. Please visit <a href="www.oecd.org/environment/resources/roundtableon financingwater.htm">www.oecd.org/environment/resources/roundtableon financingwater.htm</a> and contribute to ensuring that water can deliver investment-grade opportunities, a condition for other investments to deliver expected outcomes and returns, in both developed and developing countries.

Share article at <a href="http://oe.cd/2bU">http://oe.cd/2bU</a>

## References

Gurría, A. (2017), "Putting water at the centre of the global agenda", Lecture at the Centre for Foreign relations, New York City, 24 April 2017 <a href="http://www.oecd.org/environment/putting-water-at-the-centre-of-the-global-agenda-remarks-a-gurria.htm">http://www.oecd.org/environment/putting-water-at-the-centre-of-the-global-agenda-remarks-a-gurria.htm</a>

Hutton, G., and Varughese M.C. (2016), The Costs of Meeting the 2030 Sustainable Development Goal Targets on Drinking Water, Sanitation, and Hygiene, The World Bank <a href="http://documents.worldbank.org/curated/en/415441467988938343/The-costs-of-meeting-the-2030-sustainable-development-goal-targets-on-drinking-water-sanitation-and-hygiene">http://documents.worldbank.org/curated/en/415441467988938343/The-costs-of-meeting-the-2030-sustainable-development-goal-targets-on-drinking-water-sanitation-and-hygiene</a>



Koohafkan, P. et al. (2011), Investments in Land and Water, SOLAW Background Thematic Report–TR17, Food and Agriculture Organization <a href="http://www.fao.org/fileadmin/templates/solaw/files/thematic\_reports/TR\_17\_web.pdf">http://www.fao.org/fileadmin/templates/solaw/files/thematic\_reports/TR\_17\_web.pdf</a>

OECD (2016), "Water, growth and finance", Policy Perspectives, <a href="https://www.oecd.org/environment/resources/Water-Growth-and-Finance-policyperspectives.pdf">https://www.oecd.org/environment/resources/Water-Growth-and-Finance-policyperspectives.pdf</a>

Water and Climate Change Adaptation <a href="http://dx.doi.org/">http://dx.doi.org/</a>
10.1787/9789264200449-en

Sadoff C. et al. (2015), Securing Water, Sustaining Growth, Report of the GWP/OECD Task Force on water security and sustainable growth, Oxford <a href="https://www.water.ox.ac.uk/wp-content/uploads/2015/04/SCHOOL-OF-GEOGRAPHY-SECURING-WATER-SUSTAINING-GROWTH-DOWNLOADABLE.pdf">https://www.water.ox.ac.uk/wp-content/uploads/2015/04/SCHOOL-OF-GEOGRAPHY-SECURING-WATER-SUSTAINING-GROWTH-DOWNLOADABLE.pdf</a>

WHO-UNICEF (2017), Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines <a href="https://www.unicef.org/publications/">https://www.unicef.org/publications/</a> index 96611.html

Winpenny, J. (2015), Water: Fit to Finance? Catalyzing National Growth through Investment in Water Security, report of the High Level Panel on Financing Infrastructure for a Water-Secure World <a href="http://www.worldwatercouncil.org/sites/default/files/2017-10/WWC\_OECD\_Water-fit-to-finance\_Report.pdf">http://www.worldwatercouncil.org/sites/default/files/2017-10/WWC\_OECD\_Water-fit-to-finance\_Report.pdf</a>

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.

