

The United Nations World Water Development Report 2018

NATURE-BASED SOLUTIONS FOR WATER





















NATURE-BASED SOLUTIONS FOR WATER

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FOREWORD

by Audrey Azoulay, Director-General of UNESCO

We need new solutions to managing water resources to offset the rising challenges to water security from population growth and climate change. This report proposes an innovative response that has, in fact, been around for thousands of years: nature-based solutions.

Today, more than ever, we must work with nature, instead of against it. Demand for water is set to increase in all sectors. The challenge we must all face is meeting this demand in a way that does not exacerbate negative impacts on ecosystems.

The stakes are high. Current trends suggest that around two thirds of forests and wetlands have been lost or degraded since the beginning of the 20th century. Soil is eroding and deteriorating in quality. Since the 1990s, water pollution has worsened in almost all rivers in Africa, Asia and Latin America.

These trends pose broader challenges from the increased risk of floods and droughts, which, in turn, has an impact on our ability to adapt to climate change. We know also that water scarcity can lead to civil unrest, mass migration, and even to conflict within and between countries.

Goal 6 of the 2030 Agenda for Sustainable Development recognises the importance of ensuring the availability and sustainable management of water and sanitation. Nature-based solutions are essential to meet this goal.

Their impact can be significant: from the small-scale water harvesting structures in Rajasthan, India that brought water back to 1,000 drought-stricken villages, to the revival of traditional 'hima' land management practices in Jordan's Zarqa River basin that yield higher quality spring water by not over-exploiting the soil.

These solutions can also contribute to other aspects of sustainable development: from ensuring food security and reducing disaster risk to building sustainable urban settlements and boosting decent work. Ensuring the sustainable use of the planet's resources is vital for ensuring long-term peace and prosperity.

This World Water Development Report does not argue that nature-based solutions are a panacea, but our conclusion is clear -- they are one of many important tools to shift to a more holistic approach to water management.

In this spirit, I want to thank the Government of Italy and the Umbria Region for supporting UNESCO's World Water Assessment Programme. Coordinated by WWAP, with help from the International Hydrological Programme, this report is the fruit of continued cooperation by members and partners of UN-Water. I wish to thank all those involved for their input and their commitment to promoting sustainable water security, which balances human needs with the future of our planet.

Audrey Azoulay

FOREWORD

by Gilbert F. Houngbo, Chair of UN-Water and President of the International Fund for Agricultural Development

More than 2 billion people lack access to safe drinking water and more than double that number lack access to safe sanitation. With a rapidly growing global population, demand for water is expected to increase by nearly one-third by 2050. In the face of accelerated consumption, increasing environmental degradation and the multi-faceted impacts of climate change, we clearly need new ways to manage competing demands on our precious freshwater resources.

The 2018 edition of the UN World Water Development Report (WWDR2018) suggests that solutions may be closer than we think.

Since its first edition in 2003, the WWDR has presented the broad perspective of the UN system on water supply and sanitation issues. Each Report harmonizes up-to-date knowledge and science-based content with balanced policy messages. This year's Report, which marks 15 years of UN-Water's formal existence, looks both forwards and backwards.

For too long, the world has turned first to human-built, or "grey", infrastructure to improve water management. In so doing, it has often brushed aside traditional and Indigenous knowledge that embraces greener approaches. Three years into the 2030 Agenda for Sustainable Development, it is time for us to re-examine nature-based solutions (NBS) to help achieve water management objectives.

The WWDR2018 illustrates that working with nature, rather than against it, would enhance natural capital and support a resource-efficient and competitive circular economy. NBS can be cost-effective, and simultaneously provide environmental, social and economic benefits. These interwoven benefits, which are the essence of sustainable development, are central to achieving Agenda 2030.

This flagship publication represents UN-Water's most substantial contribution to the 'Nature for Water' campaign that will begin on 22 March 2018, World Water Day. As the new Chair of UN-Water, I would like to thank my colleagues for their invaluable contributions. I am also grateful to UNESCO and its World Water Assessment Programme for their critical role in production.

I am confident this Report will inspire discussions and spur actions at all relevant levels to move towards a more sustainable management of water resources.

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