



MESSAGE OF THE EXECUTIVE SECRETARY OF THE  
CONVENTION ON BIOLOGICAL DIVERSITY

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on the occasion of

WORLD WATER DAY

22 March 2018

*“Nature for Water”*

Many of the solutions to our global water challenges can be found in nature.

Planting trees to replenish forests, reconnecting rivers to floodplains, and restoring wetlands are just some of the ways nature-based solutions can provide sustainable and cost-effective solutions to rebalance the water cycle, help mitigate the effects of climate change and improve human health and livelihoods.

Nature-based solutions use or mimic natural processes to enhance water availability and reduce risks associated with water-related disasters and climate change and can help us move beyond the business-as-usual approaches to tackle many of the planet’s water challenges, while simultaneously delivering additional benefits vital to all aspects of sustainable development.

The benefits of nature-based solutions include increasing the resilience of countries to climate risks, including droughts, floods and erosions, playing a role in biodiversity and soils protection, ecological rehabilitation and meeting other development challenges such as access to safe drinking water, food security and human health, land degradation neutrality, sustainable cities as well as tourism.

Natural ecosystems and biodiversity are fundamental to sustainability. For example, wetlands function as natural sponges that trap and slowly release surface water, rain, snowmelt, ground water and flood waters, thus helping to slow down the movement of water to surrounding areas. And while nature-based solutions are not a panacea for all of our issues, it is clear that we need to make better use of the solutions already found in nature.



Time is of the essence. Since 1992, according to UN Water, floods, droughts and storms have affected 4.2 billion people, causing \$1.3 trillion of damage worldwide. The average global economic loss from floods and droughts is over \$40 billion per year across all economic sectors. In addition, today some 1.9 billion people live in potentially severely water-scarce areas. By 2050, this could increase to around 3 billion people.

According to the 2018 edition of the *United Nations World Water Development Report*, released on 19 March 2018, and its theme, 'Nature-based Solutions for Water', water management currently remains focused on human-built infrastructure, also referred to as "grey" infrastructure, while the enormous potential of nature-based solutions, or "green" infrastructure, remain underused. In fact, investment in green infrastructure appears to comprise only a fraction of total investment in water resources management.

We need to take advantage of green infrastructure. We know that green infrastructure can substitute, augment or work in parallel with grey infrastructure in a cost-effective way. Thus the key going forward is to find that balance between grey and green investments in order to maximise benefits and system efficiency while minimising the costs and trade-offs. There are answers, but we have to be willing to find ways to apply them.

One example of a natural solution for long-term environmental sustainability is conservation agriculture. Conservation agriculture aims to achieve sustainable and profitable agriculture through the application of minimal soil disturbance, permanent soil cover and crop rotations. Eliminating or minimizing tilling or ploughing avoids disturbing and breaking up the topsoil structure, as well as reduces emissions from farm machinery. This results in more stable soil, increased drainage and drastically reduced pollution of nearby water sources.

Let us also not forget that water is an ecosystem service, with biodiversity critical to the maintenance of both the quality and quantity of water supplies. Water moves around the planet in the water cycle, which is influenced heavily by ecosystems and the life associated with them. Forests, grasslands, soils, wetlands all influence water. Vegetated land cover regulates water movement across land and water infiltration into soils. Biodiversity supports water and nutrient cycling in soils and therefore plants, including all food crops.

We need to work with nature, and not against it, by mixing our own technological innovations with nature's innovations. Nature, after all, has succeeded over hundreds of millions of years in delivering the key services that help to sustain all life on Earth. And while we still have a lot to learn, by applying what we know today, we can make a difference. By accounting for nature's services and investing wisely, nature can be a source of solutions for many of our water-related issues.

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