



**MESSAGE OF THE EXECUTIVE SECRETARY
OF THE
CONVENTION ON BIOLOGICAL DIVERSITY
BRAULIO FERREIRA DE SOUZA DIAS
on the occasion of
WORLD WATER DAY
22 March 2014**

“Water and Energy”

Water and energy are closely linked and interdependent. Water supply requires energy and energy production requires water. About 8% of the global energy generation is used for pumping, treating and transporting water to consumers.

Less well-known, is that the conservation and sustainable use of biodiversity is a key factor both for managing water use and energy production. We are glad that the world is paying more attention to the water-energy nexus.

Much of the historical discussion regarding biodiversity and water and energy has been negative, focusing, for example, on the impacts of hydropower dams on biodiversity. But there are important and more positive dimensions to the topic. The amount of water available, and its quality, is heavily influenced by ecosystem functions that are underpinned by biodiversity. Natural ecosystems are increasingly recognized as “natural water infrastructure” because of the way they can deliver water management services similar to those of built or physical infrastructure.

Examples include using the water storage abilities of wetlands to help regulate flows, using forested catchments to reduce erosion risks and improving vegetation. Natural infrastructure approaches also deliver significant collateral benefits, such as better landscapes for food security.

There are good examples of the role of this natural infrastructure in improving efficiency and sustainability at the water-energy nexus. For example, improved biodiversity management in the catchment of one of the world’s largest hydropower projects, the Itaipu Dam, located between Brazil and Paraguay, has increased the facility’s life expectancy several fold by reducing sedimentation in the reservoir. This also improved the surrounding area’s land productivity and biodiversity. In farming systems, restoring soil biodiversity and land cover to improve soil functions and water cycling is an important strategy to increase the sustainability of bio-energy crops.

The role of biodiversity in underpinning the carbon cycle is yet another important link with water and energy. For example, conserving or restoring carbon in forests, wetlands and soils plays an important role



**Convention on
Biological Diversity**

Secretariat of the Convention on Biological Diversity
United Nations Environment Programme
413 Saint-Jacques Street, Suite 800, Montreal, QC, H2Y 1N9, Canada
Tel : +1 514 288 2220 Fax : +1 514 288 6588
secretariat@cbd.int www.cbd.int



in mitigating green-house gas emissions from energy while simultaneously contributing to more sustainable water resource management.

These contributions from biodiversity and ecosystems are frequently overlooked when considering the water-energy nexus. The Strategic Plan for Biodiversity 2011 – 2020 and the Aichi Biodiversity Targets, especially Target 14 (“By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities and the poor and vulnerable”), was specifically developed to address these kinds of linkages and opportunities. Water and energy managers and users increasingly recognize that implementation of the Convention on Biological Diversity and the Strategic Plan for Biodiversity is indeed relevant to them and their needs.

As the world community works to address the growing need for water and energy, and develops an integrated framework of Sustainable Development Goals, let us work together and ensure that water, biodiversity and energy are used sustainably, to help us build the future we want.
