



17 February 2015 - A ground-breaking report on biodiversity and health, launched today at the 14th World Congress on Public Health, in Kolkata, India, shows the significant contribution of biodiversity and ecosystem services to better human health.

[Connecting Global Priorities: Biodiversity and Human Health](#) , demonstrates that the relationship between biodiversity and human health is extensive and complex. It outlines the ways that conservation and sustainable use of biodiversity can have positive impacts on human health; from impacts on our environment such as water and air quality; to human resilience to non-communicable and infectious diseases and the availability of adequately diverse nutrition and medicines. One of the less intuitive findings is that biodiversity can support the human immune response by providing adequate microbial diversity:

Microbial Diversity and non-communicable diseases

Microorganisms literally share our body space and outnumber our human cells ten to one. The

majority of these microbes provide vital functions for human survival. The report confirms that reduced human contact with the natural environment, and biodiversity loss in the wider environment, leads to reduced diversity in the human microbiota, which itself can lead to immune dysfunction and disease.

Considering microbial diversity as an ecosystem service provider may contribute to bridging the chasm between ecology and medicine/immunology. "This linkage is not being made in policy forums. Hopefully this new report will help shed some light on this critical issue." Said Braulio Ferreira de Souza Dias, Executive Secretary of the [Convention on Biological Diversity](#) , and Assistant Secretary-General of the United Nations.

Biodiversity and the [Sustainable Development Goals](#)

"We hope this joint report will increase awareness and understanding not only of the intrinsic value of biodiversity, but also as a critical foundation for sustainable development, and for human health and well-being," said Dr. Maria Neira, [WHO](#) Director for Public Health, Environmental and Social Determinants of Health.

Extensive scope of positive effects

The report also links biodiversity with improved water and air quality; human health; food production and nutrition; microbial diversity and non-communicable disease prevention; infectious disease prevention; medicines, including traditional medicine; physical, mental and cultural well-being; pharmaceuticals; climate change prevention and disaster risk reduction; and sustainable consumption and production.

Implementation

Implementation of these findings could be a joint responsibility of ministries of health, both general and environmental, and national biodiversity strategies and action plans.

The report features contributions from numerous partners and over 100 experts, including [Biodiversity International](#)

, [COHAB Initiative](#)

, [EcoHealth Alliance](#)

, [Harvard School of Public Health](#)

, [United Nations University](#)

, [Wildlife Conservation Society's Health & Ecosystems: Analysis of Linkages](#)
and many others.

The report builds on the implementation of [UNEP's Strategic Plan for Biodiversity 2011-2020](#)
and contributes to the [UN's Decade on Biodiversity](#)

Information Resource

A "biodiversity commons" is available at [The Biodiversity Heritage Library](#) : a consortium of major natural history, botanical, and research libraries that cooperate to digitize and make accessible the literature of biodiversity held in their collections.