



**STATEMENT OF THE EXECUTIVE SECRETARY  
OF THE CONVENTION ON BIOLOGICAL DIVERSITY  
BRAULIO FERREIRA DE SOUZA DIAS**

**on the occasion of**

**WORLD HEALTH DAY**

**7 April 2014**

***“Small Bite, Big Threat”***

As we celebrate the 2014 World Health Day, the relationship between human health and biodiversity conservation should not escape our range of concerns. Biodiversity can be seen as the foundation for human health, as it underpins the functioning of the ecosystems upon which we depend for many aspects of our health. The Secretariat of the Convention on Biological Diversity (CBD) is pleased that the theme of this year’s World Health Day, the prevention and control of vector-borne diseases, casts additional light on the significance of biodiversity, ecosystems and ecosystem services to human health. Science continues to enhance our understanding of the vital role biodiversity, and biodiversity loss, plays in the regulation and prevention of vector-borne diseases.

It is increasingly recognized that the proportion of the global infectious disease burden caused by vector-borne diseases is closely tied to the social, demographic and environmental changes of the past half-century. The remarkable growth in human population and economic activity has been accompanied by the transformation of once natural landscapes into intensive agricultural zones and urban and peri-urban habitats. While increased travel, trade and migration contribute to the spread of infectious disease, biodiversity loss, including habitat alteration and reductions in natural genetic diversity, also increases our vulnerability to environmental disturbances.

For example, along with inadequate irrigation and water systems and unsanitary living conditions, deforestation and biodiversity loss have been found to contribute to some of the most common vector-borne diseases, including dengue, malaria and leishmaniasis. In fact, the World Health Organization (WHO) estimates that dengue is presently the “most important mosquito-borne viral disease with epidemic potential in the world”, with a 30-fold increase in cases during the past 50 years. Dengue and many other insect vector-borne pathogens often emerge from the tropics, where there has been substantial disturbance of biodiverse rain forests, woodland savannas and riverine forest ecosystems. Similarly, cholera and other water-borne diseases often thrive in degraded coastal and estuarine ecosystems. Biodiversity loss is a part of the epidemiological puzzle that confronts our efforts to stem the tide of infectious disease.



**Convention on  
Biological Diversity**

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It follows that collaborative efforts between branches of modern science, including epidemiology, medicine, ecology and biology, are essential if we wish to achieve a better understanding of the relationship between infectious disease, wildlife and biodiversity, and to develop long-term, sustainable policies to reduce related threats to human life and community development. We must ensure, however, that solutions do not compound the problem. Potentially valuable strategies for vector-borne disease control, such as integrated vector-management, recognize the value of multi-sectoral approaches and reinforce linkages between health and the environment, optimizing benefits to both. Such strategies are designed to maximize disease control in a cost-effective manner, while minimizing both negative impacts on ecosystems and adverse side-effects on public health from the excessive use of chemicals in vector control.

The CBD Secretariat is committed to contribute to the advancement of science and policy development addressing the health-biodiversity nexus, including the complex links between conservation and infectious disease prevention and control. We are currently pursuing unprecedented levels of collaboration with the WHO and have jointly held regional workshops to further mainstream biodiversity and public health concerns in national and regional policy agendas. This is an innovative aspect of the CBD's 2011-2020 Strategic Plan for Biodiversity, and it will doubtlessly be part of our contribution to the pursuit of the emerging post-2015 development agenda and Sustainable Development Goals.

It is estimated that more than half of the global population is at risk from vector-borne disease; climate change and habitat alteration may continue to increase the range of these threats to human health. It is, therefore, essential that we build a more sustainable relationship between human communities and the biodiversity that supports them. World Health Day 2014 is an important step along the path towards increased public awareness, scientific investigation and policy development.

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