Forthcoming CBD-WHO flagship publication

The Convention on Biological Diversity (CBD) and the World Health Organization (WHO) embarked on this ambitious project in October 2012, following a decision adopted at the eleventh Conference of the Parties to the CBD calling for the establishment of a joint work programme on biodiversity and human health jointly led by these two UN agencies. The CBD and WHO have since been working with experts from Bioversity International, COHAB Initiative, DIVERSITAS, Ecohealth Alliance, the Food and Agriculture Organization of the United Nations (FAO), FIOCRUZ, Harvard School of Public Health, IUCN, United Nations University (UNU), Wildlife Conservation Society Health and Ecosystems: Analysis of Linkages (WCS-HEAL), and many other organizations and experts to prepare a state of knowledge review on biodiversity and human health.

This collaborative effort, involving over 100 leading scientists, medical practitioners, social scientists, and indigenous and local community representatives, will culminate in the first flagship publication on biodiversity and human health under the CBD-WHO joint work programme.
**Vision**

This project is aimed at policy-makers, practitioners and researchers working in the fields of biodiversity conservation, public health, development, agriculture and many other relevant sectors. The contributions of biodiversity to human health and well-being are varied, complex and far-reaching. While it is not possible to cover the full breadth of these critical linkages in detail within the scope of one volume, attention is given to key thematic areas shaping the biodiversity-health nexus. Harnessing the knowledge it contains will contribute to the implementation of the Strategic Plan for Biodiversity 2011-2020, in particular its Target 14, and more broadly, to the development and implementation of the Sustainable Development Goals of the United Nations, and a corresponding Post-2015 Development Agenda. The guidance contained in this document also seeks to inform public health policy focused on preventive management rather than curative medicine.

**Conceptual Frameworks**

[Diagram showing the relationship between biodiversity, ecosystem goods and services, health impacts, and social determinants of health.]

*Multi-disciplinary approaches and research provides valuable insights on the drivers of diseases, ecosystem degradation, global trends and anthropogenic activities that have both negative and positive repercussions on biodiversity and public health.*
Biodiversity not only plays a critical role in ecosystem functioning, it can also yield direct and indirect benefits (or ecosystem services) that support human and societal needs, including good health, food and nutrition security, energy provision, and freshwater. The complex interactions at the junction of biodiversity and human health are influenced by prevailing governance structures, policies, institutions and dynamics of global development and these changes in turn influence broader ecological processes.

Although these links are fundamental, they are often diffused in space and time and there are a number of actors and processes that moderate and mediate the critical underlying relationships. While One Health, Ecohealth and similar approaches have begun to garner greater international acceptance, the primary focus of interventions in the public health sector continue to tend toward curative interventions rather than preventive interventions, which also consider the social and environmental determinants of health. A powerful argument can be made for the critical need to incorporate these dimensions to improve public health outcomes.

Book structure and contents

<table>
<thead>
<tr>
<th>Part I</th>
<th>Part II</th>
<th>Part III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapters 1-2</td>
<td>Chapters 3-11</td>
<td>Chapters 12-15</td>
</tr>
</tbody>
</table>

**Concepts, themes and directions**
- Introductory concepts
- Conceptual frameworks

**Thematic Areas in Biodiversity & Health**
- Water quality
- Air quality
- Agricultural biodiversity & food security
- Nutrition & NCDs
- Infectious diseases
- Microbial biodiversity
- Health care & pharmaceuticals
- Traditional medicine
- Physical & mental health & cultural ecosystems services

**Cross-Cutting Issues, Tools & Ways Forward**
- Climate change
- Disaster risk
- Bioindicators
- SDGs & Post-2015 Development Agenda
Part One defines key concepts and provides a broad overview of the different ways in which biodiversity and health are linked. It also considers common drivers of change that impact on both global public health and biodiversity, and calls for the systematic use of comprehensive approaches such as the “One Health”, “Ecohealth” and the ecosystem approach that attempt to unite different fields. Part Two examines how biodiversity is related to specific thematic areas at the biodiversity-health nexus. Part Three discusses critical cross-cutting themes, examines other complementary tools, such as bioindicators; and discusses how a better understanding of health-biodiversity linkages are necessary prerequisites for biodiversity conservation goals and truly sustainable development as we transition from the MDGs toward the SDGs and the post-2015 development agenda.

**Final consultation at IUCN World Parks Congress and launch**

Each of the book chapters and the emerging key messages have undergone separate global peer review processes open to 193 Parties to the CBD, as well as relevant organizations and indigenous and local community members. The final consultation for the book will take place during the IUCN World Parks Congress in Sydney, Australia in November 2014 and it will be launched at the 14th World Congress on Public Health in Kolkata, India in February 2015.

**Accessing the volume and key messages**

The advanced draft of each of the book chapters and of emerging key messages can be accessed at: [www.cbd.int/en/health/stateofknowledge](http://www.cbd.int/en/health/stateofknowledge)

Upon its official launch, this comprehensive volume will also be made freely available on the CBD and WHO websites. A summary for decision-makers will also be made available.