



BELGIAN COMMUNITY OF PRACTICE  
ON BIODIVERSITY AND HEALTH

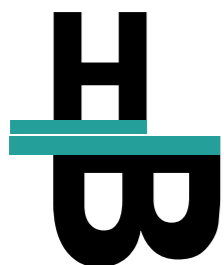
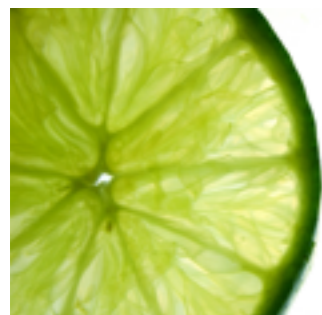
# THE NEED FOR ENHANCED CAPACITY BUILDING IN BELGIUM ON BIODIVERSITY & HEALTH SCIENCE AND POLICY



This research brief aims to inform about the importance of enhanced capacity building in Belgium on Biodiversity & Health science and policy.



This includes the concepts of One World, One Health and conservation medicine, and initiatives such as the EcoHealth Alliance and Co-operation on Health and Biodiversity.



## GROWING INTERNATIONAL AND NATIONAL RECOGNITION OF THE IMPORTANCE OF THE BIODIVERSITY & HEALTH CONNECTION

The linkages between the biosphere and human health and well-being have become of increasing importance in international science and policy in the past two decades, with new inter-disciplinary and “transdisciplinary” fields emerging to address the gaps in knowledge and action based on ecosystem approaches to health (or ecohealth)<sup>1</sup>.

These approaches build on the concept of the ecosystem approach to biodiversity conservation promoted by the UN Convention on Biological Diversity (CBD), which aims to account for the interactions between various levels of biological complexity and recognises that “humans, with their cultural diversity, are an integral component of ecosystems”<sup>2</sup>.

As such, ecosystem approaches to health are systemic approaches to population health that recognise

links between health of the biosphere and health of human communities & incorporate perspectives of ecology, human and veterinary medicine, agriculture, economics, sociology, as well as aspects of risk assessment, engineering, and conflict resolution.

To date much of this work has been led by the environment and conservation biology disciplines, fronted by environmental research institutes and NGOs, and intergovernmental environmental agencies, frequently building on the findings of the Millennium Ecosystem Assessment (MA)<sup>3</sup> and related processes.

However, as the science on these issues has progressed, so too has the understanding within the medical science and healthcare community of

In recent years there have been some significant developments in international policy and in local, regional and global responses towards the integration of biodiversity and human health. In 2010, the 10<sup>th</sup> Conference of the Parties (COP)

to the CBD adopted a decision mandating direct interaction between the Secretariat of the Convention and the World Health Organisation (WHO), committing for the first time to forging a partnership with the WHO. Also, in outlining a new strategy for the period 2011-2020, the COP urged that National Biodiversity Strategies and Action Plans should work to enhance the contribution of biodiversity to human health and well-being. Further decisions to build upon this action were taken at the 11<sup>th</sup> CBD COP

meeting in 2012. That year also saw the links between health and biodiversity recognised at the Rio +20

\* how major public health issues and emerging health threats may be associated with global environmental change

\* how interactions with ecological systems affect disease risks, health outcomes and the efficacy of public health management strategies<sup>4</sup>.

U.N. Conference on Sustainable Development, where a discussion document titled *Our Planet, Our Health, Our Future* (jointly prepared by WHO and the secretariats of the three Rio Conventions - the CBD, the U.N. Convention to Combat Desertification and the U.N. Framework Convention on Climate Change) was presented by the WHO Director General Margaret Chan, highlighting links between global environmental agreements and global health concerns<sup>5</sup>. Another main outcome of the Rio+20 Confer-



ence was the agreement by member States to launch a process to develop a set of Sustainable Development Goals (SDGs)<sup>6</sup>, which will build upon the Millennium Development

Goals and converge with the post 2015 development agenda. Within this process, in the *Technical Support Team Issues Brief on Health and Sustainable Development*, human health is stated to rely on ecosystem health<sup>7</sup>. Also in 2012, the UN-mandated Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) was launched, with a specific remit of strengthening the science of biodiversity and ecosystem services and their importance to human well-being, including health, in order to facilitate informed decision making in environmental, economic and social policy. And in 2011 the European Commission - DG Environment published a brief<sup>8</sup> on the importance of biodiversity and health linkages.

This research brief is an initiative of the Belgian Community of Practice (CoP)<sup>11</sup> Biodiversity & Health<sup>12</sup>. This CoP was established as a follow-up of the 2011 Belgian Biodiversity & Health conference. Its members represent a diversity of backgrounds: scientists (universities and governmental scientific institutes; health-, ecological- and social science), policy representatives (Federal, regions, provinces, cities; health-, environmental-, nature- and land planning policy), consultants (policy advice, eco-therapy, education) and persons involved in NGOs (nature protection, landscape development, ecological life and gardening, media). The 2011 conference also resulted in an international peer reviewed scientific publication<sup>13</sup>. Furthermore in 2012 a survey was launched to make an inventory of research needs and ideas in order to get a clearer view of relevant research topics and the potential for collaboration<sup>10</sup>. The report of the survey was referred to in the 2013 Belgian Science Policy BRAIN call on Ecosystems, biodiversity and evolution<sup>14</sup>.

In Belgium, the importance of attention for the Biodiversity & Health connection is recognised. In a survey organised by the Belgian Community of Practice Biodiversity & Health by the end of 2012<sup>9</sup>, a diversity of Belgian policy representatives expressed a need for increased knowledge in a diversity of topical areas: a general interest in integrated data assessment that couples ecological and public health developments, as well as a general interest in the relations among green space/nature, the living environment, and public health.



Some specific research topics include nature related health risks or health benefits, or both. More specific thematic foci include links between biodiversity and dietary health, medicines and medical research, and emerging disease threats. Regarding the connections between green space and public health, specific topics include the social, mental and physical health benefits of green space and other contact with nature, their accessibility for residents, and the relation between ecosystem services and non-communicable disease such as cancer and diabetes.

## THE NEED FOR ENHANCED CAPACITY BUILDING IN BELGIUM SCIENCE AND POLICY

The first Belgian Biodiversity & Health conference held in 2011<sup>10</sup> was an opportunity to discuss hindrances to the mainstream-

ing of ecosystem approaches to human health, and to identify some key areas for action:



1/ The evidence base on links between biodiversity and health in the context of urbanisation must be further developed so that areas of overlap between various fields of research, policy and practice can be better identified.

→ Research is needed to facilitate a better understanding of the connections, and to support informed decision making and long term assessment and monitoring.

2/ Bridges must be built between different professional communities working within the biodiversity-health-urban planning sphere, and at all levels of policy, research and practice.<sup>15</sup>



3/ There is a need for a practical framework for on-going communication and collaboration, to enable exchange of ideas and experience and to support capacity building.



4/ There is the need for better communication of the science of biodiversity and health linkages to policy makers, and to the general public.



## REFERENCES

1. Lebel J., (2003), Health: An Ecosystem Approach. International Development Research Centre, Ottawa, Canada; de Plaen R., Kilelu C (2004) From multiple voices to a common language: ecosystem approaches to human health as an emerging paradigm. *EcoHealth* 1(Supplement 2); 8-15.
2. CBD COP Decision V/6 <https://www.cbd.int/decision/cop/?id=7148>
3. MA (2005). *Ecosystems and Human Well-Being: Synthesis*. Island Press, Washington, DC; Hales S, Butler C, Woodward A, Corvalan C (2004) Health Aspects of the Millennium Ecosystem Assessment. *EcoHealth* 1; 134-128; Hales S, Corvalan C (2006) Public Health emergency on Planet Earth: Insights from the Millennium Ecosystem Assessment. *EcoHealth* 3; 130-135.
4. Dobson A., Carper R. (1993), Climate and Health: Biodiversity. *Lancet* 342(8879) - 1096; Soskolne CL, Bertollini R (2002) Global ecological integrity, global change and public health. In: Aguirre AA, Ostfeld RS, Tabor GM, House C, Pearl MC (eds), *Conservation Medicine: Ecological Health in Practice*. New York: Oxford University Press, pp 372-382; WHO (2005) *Ecosystems and Human Well-being: Health Synthesis. A report of the Millennium Ecosystem Assessment*. WHO, Geneva, Switzerland; Chivian E and Bernstein A.(eds) (2008) *Sustaining Life - How Human Health Depends on Biodiversity*. Cambridge University Press, UK.
5. WHO (2011). *Our Planet, Our Health, Our Future: Human health and the Rio Conventions*. WHO, Geneva, Switzerland
6. Sustainable Development Goals <http://sustainabledevelopment.un.org/index.php?menu=1300>
7. Technical Support Team Issues Brief on Health and Sustainable Development <http://sustainabledevelopment.un.org/content/documents/18300406tstissueshealth.pdf>
8. European Commission - DG Environment (2011), *Biodiversity and Health, Science for Environment Policy Future Briefs*, Issue number 2, Univ. West of England (UWE), Bristol, UK, [http://ec.europa.eu/environment/integration/research/newsalert/future\\_briefs.htm](http://ec.europa.eu/environment/integration/research/newsalert/future_briefs.htm)
9. Keune H. et al (2012), Overview results of the inventory of scientific research needs and ideas Biodiversity - Public Health, Belgian Community of Practice Biodiversity - Public Health, Belgian Biodiversity Platform, Brussels <http://www.biodiversity.be/1996>
10. Keune H. et al (2012), Report of the 2011 Belgian Biodiversity - Public Health Conference, Belgian Biodiversity Platform, Brussels, <http://www.biodiversity.be/files/1/4/3/1433.pdf>
11. A Community of Practice (CoP) is a network made up of individuals and organizations that share an interest and practice, who come together to address a specific challenge, and further each other's goals and objectives in a specific topic area.
12. Belgian Community of Practice Biodiversity & Health <http://www.biodiversity.be/health>
13. Keune H. et al. (2013), Science-policy challenges for biodiversity, public health and urbanization: examples from Belgium, In: *Environmental Research Letters*, special issue "Biodiversity, Human Health and Well-Being", <http://iopscience.iop.org/1748-9326/8/2/025015/>
14. 2013 Belgian Science Policy BRAIN call on Ecosystems, biodiversity and evolution [http://www.belspo.be/belspo/brain-be/themes\\_1\\_EcoBioHisto\\_en.stm](http://www.belspo.be/belspo/brain-be/themes_1_EcoBioHisto_en.stm)
15. During the first Belgian Biodiversity & Health conference held in 2011, the 'ecosystem services community' mainly highlighted the benefits of biodiversity to human health, whereas the 'infectious disease community' to a large extent focused on the public health risks of human contact with nature. Both communities focused on the same human-nature interactions, but from different perspectives based on different methodologies, different realms of knowledge, widely divergent scales of operation and different practical objectives. The integration of the Biodiversity & Health concept and the ecosystem services concept is a challenge due to the historical, cultural and methodological differences between these communities. The current dominance of economic valuation methods in the field of ecosystem services may cause reluctance of experts involved in the Biodiversity & Health initiatives to join the ecosystem services concept.

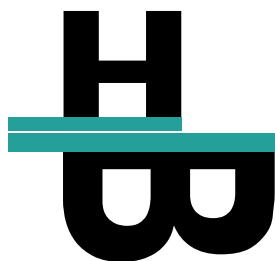


For more information, consult the Community of Practice website:  
[www.biodiversity.be/health](http://www.biodiversity.be/health)  
or send an e-mail to Dr Hans Keune: [h.keune@biodiversity.be](mailto:h.keune@biodiversity.be)



The Belgian Community of Practice on Biodiversity & Health is supported and coordinated by the Belgian Biodiversity Platform: [www.biodiversity.be](http://www.biodiversity.be)





Belgian Community of Practice on Biodiversity & Health:

[www.biodiversity.be/health](http://www.biodiversity.be/health)

Contact: Dr Hans Keune: [h.keune@biodiversity.be](mailto:h.keune@biodiversity.be)



**Biodiversity.be**

The Belgian Biodiversity Platform  
supports and coordinates the Belgian Community of  
Practice on Biodiversity & Health:  
[www.biodiversity.be](http://www.biodiversity.be)