



Biodiversity: Science and Governance Bulletin

A Daily Report of the International Scientific Conference "Biodiversity: Science and Governance"
Published by the International Institute for Sustainable Development (IISD)

DAILY REPORTS AND WEB COVERAGE AT [HTTP://WWW.IISD.CA/SD/ICB/](http://www.iisd.ca/sd/icb/)
VOLUME 100, No. 1, TUESDAY, 25 JANUARY 2005



HIGHLIGHTS OF THE INTERNATIONAL CONFERENCE "BIODIVERSITY: SCIENCE AND GOVERNANCE": MONDAY, 24 JANUARY 2005

The International Biodiversity Conference, organized by the French Ministry of Research, opened Monday at the headquarters of the UN Educational, Scientific and Cultural Organization (UNESCO) on the theme "Biodiversity: Science and Governance." Participants heard opening statements in the morning, and convened in Plenary in the afternoon to consider challenges regarding biodiversity, science and governance.

OPENING SESSION

François d'Aubert, French Minister Delegate for Research, opened the Conference, and welcomed participants.

Noting the outcomes of the World Conference on Disaster Reduction, held prior to the Conference, Koïchiro Matsuura, UNESCO Director-General, highlighted the potential of healthy ecosystems in disaster reduction, and called for improved earth observation systems. He expressed hope that the UN Decade for Education for Sustainable Development will help connecting science and society. Advocating an ongoing dialogue between scientists and decision makers, he called for: additional research; involvement of the private sector and civil society, including local and indigenous communities; capacity building; and conflict prevention.

Klaus Toepfer, Executive Director of the UN Environment Programme (UNEP), stressed the impact of biodiversity loss on humankind, and said preserving healthy ecosystems is crucial for achieving the Millennium Development Goals and implementing sustainable strategies for land use, industry and tourism. He stressed the interlinkages between climate change, desertification and biodiversity loss, and called for investments in capacity building and in coherent, coordinated and policy-relevant science.

Hamdallah Zedan, Executive Secretary of the Convention on Biological Diversity (CBD), noted that despite increased recognition of biodiversity's value, knowledge about biodiversity loss is limited. He highlighted the challenge faced by the international community to achieve the 2010 target to significantly reduce the current rate of biodiversity loss, and called for stronger international cooperation and effective communication on biodiversity loss and its effects.

Mohammed Valli Moosa, President of the World Conservation Union – IUCN, stressed direct links between biodiversity loss and human activities, warning that more than 15,000 species are threatened with extinction according to the IUCN Red List. He suggested a framework to put biodiversity at the center stage of human activities on the basis of four key elements: people around the world; science; regulations and laws at all levels; and the market force.

Bertrand Collomb, Chairman of Lafarge and the World Business Council for Sustainable Development, said the business sector has

recognized the importance of sustainability and nature conservation and that biodiversity-related projects can improve a company's public image. He stressed the need for partnerships, determination and consistency of actions, as well as the role of governments in setting appropriate frameworks for action.

Noting that good politics should be based on good science, Stavros Dimas, European Commissioner for the Environment, said the EU will continue to work on integrating environmental concerns into its policies and support funding for environment programmes, and stressed the need for increased action to achieve the 2010 target, prioritization and mobilizing support as well as building scientific capacity and better communicating scientific issues regarding biodiversity.

Nicolas Hulot, President of the Nicolas Hulot Foundation, said the Conference should aim at ensuring coherence among policies and actions rather than raising awareness. He noted that there is no conflict between various interests involved in biodiversity, and stressed the need for cooperation, placing society at the heart of concerns and actions, and new forms of solidarity.

Matsuura, on behalf of UN Secretary-General Kofi Annan, stressed that biodiversity is essential to life, and called upon countries which have not already done so, to ratify the CBD. He said biodiversity conservation is not only the responsibility of governments, but also of non-governmental organizations, the private sector and all the Earth's inhabitants.

Edward Wilson, Harvard University, said there is overwhelming scientific evidence of man's adverse impact on biodiversity, much of which is still unknown to science. He reasoned that exploration and conservation are not only crucial, but also cost-effective and technically possible, and called for fact-based and ethical decision making. He stressed that poverty inhibits conservation, and cited that "man is defined not by what he creates, but by what he chooses not to destroy."

Wangari Maathai, Assistant Minister for Environment and Natural Resources of Kenya, Nobel Peace Prize Laureate, reviewed lessons learned from two mountain ecosystems in Kenya with regard to biodiversity loss and its impacts on human societies, while emphasizing the success of rehabilitation through reforestation under governmental guidance. She said political will is the key in taking actions to conserve biodiversity.

Stating the importance of balancing economic development and conservation of natural resources, Abdullah Badawi, Prime Minister of Malaysia, highlighted crucial issues regarding biodiversity conservation, including: capacity building; a dialogue on biodiversity governance; negotiations of an access and benefit-sharing regime under the CBD; intellectual property rights; and implementation of the Cartagena Protocol on Biosafety.

Marc Ravalomanana, President of the Republic of Madagascar, highlighted the importance of the Conference's topics to his country, noting its biodiversity wealth. He stressed the need to reconcile the needs of rapid economic growth with those of preserving outstanding biological wealth, arguing that sustainable



development, the protection of nature and good governance are interlinked. He noted gaps between North and South regarding scientific expertise.

Jacques Chirac, President of the French Republic, stressed that the human fate is bound to that of other species, and proposed creating an intergovernmental panel to assess trends in biodiversity and developing a worldwide network of experts. He noted that France has incorporated an Environment Charter in its Constitution, highlighted France's biodiversity-related policies, and proposed hosting in Paris a high-level seminar on intellectual property rights as they relate to biodiversity. He stressed the need for urgent measures to achieve the 2010 target.

PLENARY

The first plenary session, chaired by Peter Raven, Missouri Botanical Garden, addressed challenges faced by science and governance with regard to biodiversity. The session included a roundtable.

Chair Raven noted that more is known about the moon than about the Earth's rainforests, and called for more research and decisive steps, actions and strategies based on individual responsibility.

Jacques Blondel, French National Centre for Scientific Research, stressed that preserving biodiversity today will guarantee its evolutionary potential, and that the loss of biodiversity is irreversible. Noting that the Earth is currently experiencing a period of mass extinction, he said the challenge lies in determining how the loss of species affects their ecosystems, and in predicting how ecosystem functions and services will be affected by future extinctions. Noting that some irreversible thresholds have already been passed, he expressed hope that these predictions will positively influence decision making. Blondel said conserving biodiversity is an ethical question, and called for an integration of natural and human sciences. Stressing that economic development can only be sustainable in a well-functioning ecosystem, and that development cannot be sustainable when it is not shared, he concluded that we need to radically revise our way of life.

Michel Loreau, Chair of the Scientific Committee of the Conference, spoke on challenges regarding biodiversity. Addressing the question "why does biodiversity matter?" he explained that humankind depends on biodiversity as a source of goods for direct use, ecosystem services, as well as natural heritage, aesthetic, spiritual, cultural and recreational values. He said scientific challenges include assessing: how much biodiversity there is on Earth; how and why biodiversity is changing; the ecological consequences of changes in biodiversity; and how we can best manage and protect biodiversity. Loreau explained that challenges for governance include: recognizing the importance of biodiversity as a global environmental issue; educating and informing citizens; developing coordinated research and supporting funding agencies; using available knowledge to take immediate action; integrating biodiversity conservation and sustainable use in social and economic development; and establishing an intergovernmental mechanism to synthesize scientific knowledge. He said a draft "Paris Appeal of Scientists in Favour of Biodiversity" will be circulated and finalized during the Conference.

Speaking about globalization of the economy and current biodiversity changes, Claude Martin, Director-General of WWF International, quoted a WWF report using the living planet index and humanity's ecological footprint over the past 40 years to show that globalization has tremendous impacts on biodiversity. He underscored that, to address this challenge, governments need to set up long-term goals integrating environmental concerns into the development process. Martin also highlighted the need for a fundamental change in thinking. Regarding genetically modified organisms (GMOs), he said while GMOs might increase food

production, without internationally established standards, they often pose risks to biodiversity. He commended a statement on the need for returning benefits to local and indigenous communities where scientific research results are generated.

Cristian Samper, National Museum of Natural History, Smithsonian Institution, said our knowledge of biodiversity has greatly expanded, but biodiversity is still declining. He noted that while most of the world's biodiversity is found in developing countries, developed countries benefit most from it and have the knowledge and capacity to prevent biodiversity's decline. He noted the challenge in using scientific knowledge regarding biodiversity's response to change to recover species from the brink of extinction and prevent further degradation of ecosystems. He called for synergies between biodiversity-related conventions, and advocated increased attention to: coherence between global and national policies; effective monitoring and indicators; implementation and compliance; and access and benefit sharing. He called for clear rules for access, traceability and transparency, but cautioned against policies that become a barrier to biodiversity research. Regarding an intergovernmental panel for biodiversity, Samper proposed other ways to strengthen scientific input into the decision-making process, including: building bridges within the scientific community; seeking interlinkages with other topics; building national and regional capacity; investing in basic and policy-relevant science; and strengthening existing mechanisms, such as the Millennium Ecosystem Assessment. Highlighting the amount of information gathered in natural history museums worldwide, he said museums' responsibilities include: mobilizing information contained in collections and literature through mechanisms such as the Global Biodiversity Information Facility; generating new knowledge through research; developing education and outreach; and building capacity and collaboration for biodiversity with an emphasis on countries of origin.

Roundtable Chair Robert Watson, World Bank, invited panelists to focus on the greatest challenge to a sustainable use of biodiversity, whether biodiversity conservation can be reconciled with rapid economic growth, and reasons for discrepancies between civil society's care about nature and destruction of it.

Jean-François Dehecq, President of Sanofi-Aventis, outlined steps and issues associated with discovering and exploiting natural compounds for developing drugs, noting that therapeutic progress may be undermined by the fact that patenting of biodiversity still remains unresolved at the international level.

Maathai said the greatest challenge is to convince decision makers and society that biodiversity is a priority, stressing that in spite of the fact that humans are better informed than 30 years ago, they continue destroying species with the prospect of their own destruction. She recalled that the consequences of current destruction will be experienced by future generations.

Russell Mittermeier, President of Conservation International, noted that France has the world's largest number of hotspots. He said megadiverse countries and biodiversity hotspots should be priorities for action to achieve the 2010 target, and stressed the role of protected areas in conserving biodiversity.

Harison Randriarimanana, Minister of Agriculture, Livestock and Fisheries of Madagascar, stated that it is possible to reconcile biodiversity conservation with rapid economic growth and poverty alleviation in countries like Madagascar. However, he said this will not happen unless people living in poverty, decision makers and scientists are brought together for action.

Wilson stressed the role of education in bridging the gap between science, policy and the public for biodiversity conservation, and said lack of an ethical code and moral standards for human activities are one of the reasons why human actions tend to compromise nature.