



# Trondheim Conference on Biodiversity Bulletin

## A summary report of the Fifth Trondheim Conference on Biodiversity

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### SUMMARY REPORT OF THE FIFTH TRONDHEIM CONFERENCE ON BIODIVERSITY: 29 OCTOBER - 2 NOVEMBER 2007

The fifth Trondheim Conference on Biodiversity, hosted by the Norwegian Government in collaboration with the UN Environment Programme (UNEP), convened in Trondheim, Norway, from 29 October to 2 November 2007.

Under the theme *Ecosystems and people – biodiversity for development – the road to 2010 and beyond*, the Conference brought together some 230 participants from 80 countries, representing governments, intergovernmental and non-governmental organizations (NGOs), and scientific and academic institutions.

Through scientific studies, policy presentations and practical case studies, participants discussed why biodiversity is an important component of sustainable development and how it contributes to poverty alleviation – two strategic issues that will be on the agenda of the ninth Conference of the Parties (COP-9) to the Convention on Biological Diversity (CBD), to be held in Bonn, Germany, in May 2008. Participants also addressed progress in the implementation of the CBD's Strategic Plan and follow-up on progress towards the 2010 target on significantly reducing the rate of biodiversity loss and relevant Millennium Development Goals (MDGs).

The Trondheim Conference produced a set of conclusions and recommendations, as well as a Call for Interaction, to be included in the discussions of the UN Framework Convention on Climate Change (UNFCCC) meetings, to be held in Bali, Indonesia, in December 2007. The conclusions and recommendations, as well as the full proceedings of the Conference, will also be submitted as information documents to the thirteenth meeting of CBD's Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-13), to be held in Rome, Italy, in February 2008.

#### A BRIEF HISTORY OF THE TRONDHEIM CONFERENCES

The Trondheim Conferences on Biodiversity seek to enhance cross-sectoral dialogue on biodiversity research and management, and to establish the best possible scientific basis for policy and management decisions in relation to CBD implementation.

The first Trondheim Conference, held in May 1993, provided scientific input to the first meeting of the Intergovernmental Committee of signatories to the CBD. The second Conference, held in July 1996, focused on alien invasive species, and contributed to SBSTTA-2 and the development of the Global Invasive Species Programme. The

third Conference, held in September 1999, discussed the ecosystem approach for the sustainable use of biodiversity, and provided input to SBSTTA-5 and to the discussions leading to the adoption of the Principles for the Ecosystem Approach, adopted at CBD COP-6 in April 2002. The fourth Conference, held in June 2003, focused on technology transfer and capacity building. It provided input to SBSTTA-9 and to UNEP and its intergovernmental strategic plan for technology support and capacity building to developing countries.

#### REPORT OF THE CONFERENCE

##### OPENING SESSION

On Monday, Conference Chair Peter Schei, Fridtjof Nansen Institute, Norway, opened the meeting.

Rita Ottervik, Mayor of Trondheim, welcomed participants to the conference and to Trondheim. Highlighting the important role of ecosystems in human health and economic prosperity, she called for increased efforts to value ecosystem goods and services to allow policymakers to make informed decisions and invest in sustainable actions.

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L-R: Jeffrey McNeely, IUCN, and Rita Ottervik, Mayor of Trondheim

On behalf of the City of Trondheim, Ottervik signed the Countdown 2010 Declaration on Significantly Reducing Biodiversity Loss, with Jeffrey McNeely, the World Conservation Union (IUCN).

Heidi Sørensen, Norway's State Secretary of Environment, drew parallels between the CBD's target to significantly reduce the loss of biodiversity by 2010 (the 2010 biodiversity target) and the MDG of halving global poverty by 2015. Calling for urgent action to avoid dramatic and irreversible consequences of population growth and increasing consumption, she stressed the importance of: improved knowledge and easily accessible information; sector integration; and increased cooperation between the CBD and UNFCCC. She expressed support for the creation of a scientific panel on biodiversity and the fair and equitable sharing of benefits arising from genetic resources.

Marina Silva, Brazil's Minister of the Environment, underlined the ethical responsibility towards future generations in the implementation of the CBD's three objectives: conservation of biological diversity; sustainable use of its components; and fair and equitable sharing of benefits arising out of the utilization of genetic resources. Expressing concern on the recent CBD access and benefit-sharing (ABS) and Article 8(j) (traditional knowledge) meetings in Montreal, which did not produce tangible outcomes, she underscored the importance of establishing an international ABS regime. Recalling the Trondheim Conference theme, Minister Silva highlighted the role of biodiversity in poverty alleviation and noted Brazil's efforts in this regard. She called for concrete action and further cooperation between the biodiversity-related conventions and governments at all levels, and linkages with the private sector. She noted biofuels as an emerging issue to be considered in relation to its social dimension, without compromising food security. She underscored ten steps towards achieving the 2010 target, including the elaboration of: ABS and traditional knowledge protection systems; financial resource mechanisms for CBD implementation; and consolidated and financed protected area networks.

Bakary Kante, Director of UNEP's Division of Environmental Law and Conventions, stressed the links between ABS,



Bakary Kante, UNEP

ecosystem services and poverty alleviation, noting that the challenge lies in ensuring that the benefits of conservation and sustainable use are tangible and visible in terms of greater human progress and well-being, without undermining the integrity of ecosystems. Highlighting the unprecedented worldwide attention to climate change, he stressed the need to educate the media, institutions, politicians and the public about the consequences of biodiversity loss.

Ahmed Djoghlaif, CBD Executive Secretary said that more international attention needs to be given to biodiversity issues, particularly biodiversity loss. He emphasized that the poor suffer the most from biodiversity loss, and that biodiversity loss occurs everywhere and that many countries, including Norway, count entries on the IUCN Red List of Threatened Species. Underscoring the many initiatives drawing attention to climate change, he stressed that climate change and biodiversity are interlinked.

Kristian Øyen, member of the UNEP TUNZA Programme's Junior Board, said the aim of the Programme is to engage young people in environmental activities and in the work of UNEP, and that everyone should take part in environmental work, children and adults alike. He added that the world "TUNZA" means "to treat with care or affection" in Kiswahili.

### SETTING THE STAGE

This session, held on Monday morning, was chaired by Conference Chair Schei.

Frits Hesselink, HECT Consultancy, the Netherlands, presented on communicating environmental issues, arguing that more attention should be paid to the way biodiversity issues are communicated. He noted that people, especially the youth, are increasingly disconnected from nature, and urged for communication activities to consider different perspectives, tailoring outputs to defined target audiences in different sectors. He noted that, to be more credible and to instigate change in others, people need to "walk the talk." He underscored that knowledge does not automatically translate into change and suggested using metaphors to make biodiversity loss more comprehensible and resonate with emotional values.



Frits Hesselink, HECT Consultancy, the Netherlands

In the ensuing discussion, participants addressed the importance of using suitable language in communication, notably between scientists and policymakers. They agreed on the need for communication to focus on: the concrete consequences of biodiversity loss; cooperation with other sectors; and existing knowledge, rather than knowledge gaps.

Doris Capistrano, Center for International Forestry Research (CIFOR), discussed the 33 sub-regional assessments of the Millennium Ecosystem Assessment (MA), an international effort to inventory global ecosystems. She said general findings include: many ecosystem services are in fair to poor condition and are deteriorating, but their underlying dynamics vary; land use change is a key driver of loss of ecosystem services, while additional drivers include pollution, alien invasive species, trade, market forces and globalization; there are trade-offs across different ecosystem services in terms of space and time,

while costs and burdens are not equally distributed among them; and adequate interventions can mitigate these effects. Describing case studies from various regions, she noted that conclusions on the state and trends of ecosystems may depend on the methodology and scale of analysis, and stressed that where there are no social safety nets, there is a greater reliance on ecosystem services.

### **LOOKING TOWARDS 2010 AND BEYOND**

This session, held on Monday afternoon, was chaired by John Hutton, Director of UNEP's World Conservation Monitoring Centre (WCMC).

Mark Schauer, Federal Environment Ministry, Germany, presented on the economic consequences of biodiversity loss. Schauer explained the challenges related to putting a price tag on nature and ecosystem goods and services. He underscored the impact of the Stern Review on the economics of climate change and described the process that led to a similar biodiversity review being elaborated by Germany. He noted that the final study would not be presented as planned at CBD COP-9, but that a methodology and preliminary studies would. He explained the strengths of such a biodiversity study, expressing hope it would become an ongoing process with regular publications, and called for broad participation. In response to a comment from the floor that much economic data had already been gathered for the MA and the World Summit on Sustainable Development (WSSD), he stressed that one year is not sufficient to complete a report that can withstand critique and that further studies are needed.

Charles McNeill, UN Development Programme (UNDP), presented on the role of biodiversity in reaching the MDGs, focusing on trade-offs with other interests and on how to "win more and lose less." He noted progress made on attaining the different goals, underscoring that some of the poorer countries are on track to reaching several of them. Future progress, he said, would be based on: leadership from the top; clear plans, policies and strategies; and the prioritization of the MDGs in the allocation of domestic and external resources. He defined trade-offs as being temporal, spatial and linked to beneficiaries, and noted four areas where investments are needed: valuation and improved access to information; mainstreaming biodiversity issues; tapping into environmental markets; and strengthening the rights of local communities. He also identified initiatives that support poverty alleviation, discussed environmental markets and how to harness carbon finances, and charted the way forward, underscoring the need to link up with the climate change community. In response to a comment from the floor on the difficulties of drawing the attention of the Intergovernmental Panel on Climate Change to biodiversity issues, McNeill urged participants to suggest solutions to put ecosystem services in the limelight, while Chair Schei noted that species loss is also caused by other factors.



Charles McNeill, UNDP

Neville Ash, UNEP-WCMC, discussed progress on achieving a significant reduction in the rate of biodiversity loss. Stating that measuring the variability of different components of biodiversity is not sufficient to assess ecosystem functioning and services, he highlighted the CBD Indicator Framework, which addresses:

biodiversity components; sustainable use; threats to biodiversity; ecosystem integrity, goods and services; traditional knowledge; ABS; and transfer of financial and technological resources.

Noting the difficulties surrounding the interpretation of "a significant loss," he pointed out that many trends are non-linear and vary across regions. He noted, however, that overall trends in declining biodiversity are continuing despite an increase in the number and total surface area of protected areas. This is because the intensity of drivers, including climate change and deforestation, has increased. Ash said additional challenges include a lack of knowledge and monitoring, insufficient data across the range of indicators, and lack of resources. He highlighted current indicator initiatives at the national, regional and global levels, including the 2010 Biodiversity Indicators Partnership. Charting the way forward, he stressed the need for longer-term targets beyond 2010, action to address the drivers of change and more robust monitoring networks.

During the ensuing discussion, participants noted: progress towards an International Mechanism of Scientific Expertise on Biodiversity (IMoSEB) and the need to: develop a wider range of indicators; counter not just species loss but also the loss of ecosystems and genetic diversity; and define ways to improve data and address outstanding issues.

### **BIODIVERSITY AND POVERTY: OBSTACLES AND OPPORTUNITIES**

This session was held on Tuesday morning and was chaired by Charles McNeill, UNDP.

Balakrishna Pisupati, UNEP, presented on ecosystem services for rural poverty reduction. He explained the divergent perspectives of different audiences in considering ecosystems and their services, and their contribution to poverty reduction. He defined decision-making challenges as well as emerging opportunities, and considered payment options for ecosystem services. Pisupati noted weaknesses in sustainable development indicators where natural resources are not accounted for and provided some thoughts on furthering understanding of the role of ecosystems among policymakers and negotiators. In response to a comment from the floor, he agreed that local income-generating activities need to be considered and noted the differences between additional income generation and alternative livelihoods.



Neville Ash, UNEP-WCMC



Balakrishna Pisupati, UNEP

Maria Berlekom, Swedish International Biodiversity Programme (SwedBio), presented a view from the North on the importance of biodiversity in the development agenda. She identified challenges relating to monitoring funding for biodiversity, including a lack of reporting and a need to define “biodiversity-related.” Berlekom also stated that people often: perceive biodiversity conservation as conflicting with development; fail to make the connection between healthy ecosystems and economic prosperity; and do not consider long-term aspects of biodiversity conservation. She noted that biodiversity issues are often badly communicated. Among opportunities for change, she cited: addressing the linkages between climate change, ecosystem services, livelihoods and security; using and building on the MA; improving cooperation between different sectors; addressing drivers and root causes of biodiversity loss; aligning financial incentives for conservation; and promoting good governance and improved accountability.



Maria Berlekom, Swedish International Biodiversity Programme (SwedBio)

Adriana Ramos, Instituto Socioambiental, Brazil, presented a view from the South on the importance of biodiversity in the development agenda. She focused on the Amazon and denoted the socio-environmental challenges that people in the region face. Noting that the Amazon is the biggest continuous area of tropical forest in the world, but not a pristine environment as it houses some 20 million people, she underscored problems related to deforestation and its impacts on livelihoods. Ramos called for the consideration of indigenous and traditional peoples’ perspective in the development agenda through the implementation of tools such as CBD Article 8(j) and the International Labor Organization Convention No. 169. She also presented on the Deforestation Reduction Pact, a proposal to reduce deforestation.

Walter Lusigi, Global Environment Facility (GEF) / World Bank, addressed the role of dryland management in poverty alleviation, noting that dryland inhabitants are among the poorest in the world. He said problems such as biodiversity degradation and erosion relate



Walter Lusigi, Global Environment Facility (GEF) / World Bank

to discrepancies between political boundaries on one side, and ecological units, pastoral nomadism and traditional land ownership on the other. Describing the loss of traditional social structures and pastoral systems, he highlighted ongoing efforts to combine wildlife conservation, subsistence hunting and cattle farming, and called for community-based, integrated approaches to natural resource management.

Participants discussed ways to unite traditional pastoralism with modern systems of governance, and suggested sharing success stories regarding dryland ecosystem management. They also addressed challenges posed by urbanization and the increasing demand for biofuels.

Peter Furu, World Health Organization (WHO) Collaborating Centre for Health and Environment in Sustainable Development, presented on biodiversity, traditional medicine and health. He pinpointed biodiversity as an important health determinant, arguing its crucial contribution to primary health care. He provided examples of how ecosystem services positively influence health, particularly when treating malaria, pneumonia and malnutrition. He cautioned against over-harvesting and called for control mechanisms to protect ecosystems. Noting that 80% of the world’s population in developing countries relies mainly on traditional medicine, he presented the WHO strategy for traditional medicine. He concluded that human health is not only the responsibility of the health sector, and noted that primary health care should go hand in hand with primary environmental care for poverty reduction.

Addressing the topic of biodiversity, grassroots innovations and poverty alleviation, Anil Gupta, Indian Institute of Management, introduced the Society for Research and Initiatives for Sustainable Technologies and Institutions, a voluntary developmental organization set up to strengthen the network of grassroots innovation initiatives. He highlighted the food sector’s vulnerability due to the “narrow base of the food basket,” explaining that only 30 crop species provide an estimated 90% of the world population’s nutritional requirements. He said consumers should create a demand for diverse products, arguing that such a market is needed to conserve traditional knowledge and diverse food sources. Describing the relationships between enterprises, investments, innovations and traditional knowledge, he advocated the development of horizontal markets to allow micro-finance groups to move towards micro-ventures. He concluded that “creativity counts, knowledge matters, innovations transform and incentives inspire.”

#### **LOCAL GOVERNANCE IN BIODIVERSITY MANAGEMENT**

Maria Berlekom, SwedBio, chaired this session on Tuesday afternoon.

Lucy Mullenkei, African Indigenous Women’s Network, Kenya, presented on culture, rights and biodiversity, backing her presentation with a series of photos of indigenous women. She recalled the recent CBD ABS and Article 8(j) meetings, noting their outcomes were not encouraging. She questioned the definition of poverty and progress towards eradicating it, noting that poor communities may not be aware that they live on less than one dollar a day. She said that local communities protect biodiversity because it provides food, shelter and a place to pray. She also underscored the role of women and drew attention to the UN Declaration on the Rights of Indigenous



Lucy Mullenkei, African Indigenous Women’s Network, Kenya

People. Mullenkei urged participants to: involve indigenous and local communities in planning the use of resources; protect traditional knowledge; and ensure the fair and equitable sharing of benefits arising from its use. She also noted the need to reach out to local and indigenous communities to offer them opportunities while securing their right to live in a traditional way.

James Murombedzi, IUCN Regional Office for Southern Africa, presented on policies to support local management. He



James Murombedzi, IUCN Regional Office for Southern Africa

said conservation initiatives historically entrenched poverty in southern Africa and post-colonial economic policies have compounded environmental and social problems. He noted that while southern Africa is richly endowed with natural resources, it has limited capacity to transform these into goods and services. He identified several root causes of this discrepancy, including population growth, agricultural expansion,

declining agricultural productivity, and inequitable patterns of resource distribution. Murombedzi noted that: southern Africa has a higher average population growth rate than the rest of Africa; half the region's energy consumption is met by fuel wood; water distribution is spatially and temporally uneven; and while decision-making power is devolved to local communities, they lack the proper institutional capacity to undertake resource management and participate directly in policy processes. He emphasized that institutional design for local management should be undertaken with the participation of local communities.

Participants discussed: the shift from "parks without people" towards participatory management; the importance of sharing success stories involving public-private partnerships and community initiatives; and communities living in voluntary isolation.

Hazell Shokellu Thompson, BirdLife International, presented on local communities and biodiversity management in Africa, drawing attention to a recent publication by the International Institute for Environment and Development entitled "Local action, global aspirations – the role of community conservation in achieving international goals for environment and development." He reviewed the status of species in Africa, noting increases both in the land area protected and in the level of threats to biodiversity. He stressed the role of communities and called for their full and effective participation in decision making. He elaborated on BirdLife International's approach to conservation, which involves people on the ground in activities such as monitoring, site advocacy and awareness raising, and called for conservation and sustainable resource management to take center stage on the political agenda.

#### **CLIMATE CHANGE, ENERGY AND BIODIVERSITY**

This session, held on Tuesday afternoon, was chaired by Reidar Andersen, Norwegian University of Science and Technology.

Thomas Elmqvist, Stockholm University, Sweden, addressed climate change, biodiversity and the resilience of socio-ecological systems. He defined resilience as the capacity: to buffer disturbances; to learn and adapt; and for renewal and reorganization. On handling uncertainties in ecosystem dynamics, Elmqvist said the main questions are: to what extent can ecosystems absorb increasing frequencies and intensities of disturbances and continue to generate ecosystem services; which are the important ecosystem components and how can we avoid eroding them; how can we assess how far we are from a critical threshold; if a regime shift occurs, to what extent is it reversible; and which management measures are needed to counter adverse trends. He said policy and management should assume that critical thresholds and multiple ecosystem states exist unless proven otherwise, and apply "resilience thinking," notably by maintaining diversity and building adaptive governance.

The ensuing discussion focused on resilience in relation to the ecosystem approach and various vulnerable systems, including Small Island Developing States.

Juliane Zeidler, Natuye – Institute for the Environment, Namibia, presented on climate change, land degradation and biodiversity in Africa. She provided an overview of how



Juliane Zeidler, Natuye - Institute for the Environment, Namibia

environmental conventions are integrated into development planning, using examples from Namibia. She illustrated the effects of prolonged droughts on grazing systems, noting impacts on water, food, health, income and land degradation, and discussed Africa's delivery on multilateral environmental agreements, saying significant progress in some areas but an overall decline

in investments. She drew attention to the Paris Declaration on Aid Effectiveness and Namibia's national and regional development plans and participatory poverty assessments. As areas of improvement, she noted implementation, delivery mechanisms and a strengthened connection between the CBD, the GEF and other implementing agencies.

Per Ove Eikeland, Fridtjof Nansen Institute, Norway, presented on opportunities and challenges in relation to biofuels. He pointed out that biofuels currently constitute only 1% of the global market share, but that this share tripled between 2002 and 2005 as a result of policy changes. He said estimates of global technical and economic potentials for biofuels vary greatly, and underscored that biofuels entail environmental and social risks as well as potential economic opportunities. He clarified that biofuels may constitute a climate problem when fossil fuels are used in their cultivation, harvesting, transportation and refining, and when biofuel feedstock cultivation replaces major carbon stores, such as forests. He also said that biofuel cultivation can destroy habitats and biodiversity, with tropical deforestation as an example, and that some biofuel feedstocks are classified as invasive species. Among potential social problems, he mentioned: competition for land use, resulting in increased



L-R: Peter Prokosch, UNEP/Global Resource Information Database (GRID) Arendal, and Ahmed Djoghlaif, CBD, signed a Memorandum of Understanding between their organizations.

food prices; sub-standard working conditions on plantations; and a lack of benefits for local communities. He urged the development of a global biofuel regulatory system addressing these environmental and social problems. Eikeland described current efforts regarding the promotion of sustainable biofuel production and the development of processing standards and certification schemes. He elaborated on challenges ahead, including: making standards and certification truly international and binding on biofuel-producing companies; ensuring that standards are complemented by monitoring of land use and impacts on food supply; providing financial and advisory support to implement sustainability standards in developing countries; and financing conservation programmes of carbon stores in biodiversity-rich areas.

Discussion focused on how to balance the advantages and the disadvantages associated with biofuels, and on how to advise large fuel companies and countries that are just entering the biofuel arena.

Peter Prokosch, UNEP/Global Resource Information Database (GRID) Arendal, and Ahmed Djoghlaif, CBD, signed a Memorandum of Understanding to enhance cooperation between their organizations on issues of common interest relating to the three objectives of the CBD.

### **FOREST RESOURCES AND BIODIVERSITY**

This session, held on Wednesday morning, was chaired by James Griffiths, World Business Council for Sustainable Development (WBCSD).

Andy White, Rights and Resources Initiative, US, presented on forests and governance, focusing on recognizing rights, advancing development and addressing major global challenges. He identified several challenges, including poverty, conflict and climate change, and highlighted that most forest dwellers do not benefit from secure land tenure. He also underscored that countries with the most natural resources are often the poorest and that economic growth rarely occurs in rural areas. White recommended dialogue among the different stakeholders and noted that “rural people are organizing, governments are reforming, markets are shifting to provide more opportunities to improve livelihoods, and conservation is rethinking its role.”

Manuel Guariguata, CIFOR, presented on measuring and monitoring the flow of forest ecosystem services, focusing on water and pollination. On forests and water-flows, he said efforts to enhance water availability by expanding forest cover may not always deliver expected benefits, and underlined

the need for detailed site assessments, bottom-up monitoring and demand-driven initiatives. On pollination, he said 35% of global crop production depends on animal pollination. He noted a correlation between crop production and distance from natural or semi-natural habitat, and highlighted the positive effects of “crop pollination zones” in heavily fragmented production landscapes. Guariguata concluded that knowledge and tools are already available, and that compensation and reward schemes should rely less on perceptions and untested assumptions and implement cost-effective approaches to monitoring.

Simone Lovera, Global Forest Coalition and Sobrevivencia, Paraguay, addressed the impacts of market-based biodiversity conservation on indigenous peoples, local communities and women. She discussed payments for environmental services and the impacts of markets, and provided a history of different measures, from the 1960’s “tradable rights to pollute,” to command and control measures and the Kyoto Protocol trading scheme. She noted that challenges include poor valuation, certification problems, and a lack of reliable baselines and verification systems. Lovera described an experiment on the payment for ecosystem services in Paraguay and the related Paraguayan Law 3001/06, noting several difficulties in its implementation and negative local impacts. She underscored the success of deforestation moratoriums and community-governed forests, and questioned the efficacy and equitability of schemes for the payment for ecosystem services.

Anatoly Petrov, All-Russian Institute of Continuous Education in Forestry, presented on forestry in Russia. He described the country’s resources, noting that forests: occupy 50% of the land; are distinct in species composition, being 80% coniferous; have low yields; and are mainly mature and over-mature. He told of illegal logging, providing data on official and illegal activities and that solutions may lie in improving the livelihoods of those who depend on illegal logging. Petrov provided details on Russia’s forest law and policy approved in 2006, decision-power shifts in the system since the Soviet era and leasing agreements. He underscored challenges in the lengthy process to obtain logging rights and the industry’s responsibility but lack of capacity to manage forests. He also drew attention to forest certification schemes, transparency and private land ownership issues.

A presentation on local forest governance and the role of community-based forest management (CBFM) was given by Yam Malla, Executive Director, Regional



Simone Lovera, Global Forest Coalition and Sobrevivencia, Paraguay



Yam Malla, Executive Director, Regional Community Forestry Training Center for Asia and the Pacific (RECOFTC), Thailand

Community Forestry Training Center for Asia and the Pacific (RECOFTC), Thailand. He noted that RECOFTC's role includes capacity building and information dissemination on CBFM. Describing the changing context of forest governance, he highlighted: the development of national forest-related laws; the impact of international forest regimes, laws and organizations; trade in forest products; forest tenure and ownership; and decentralization. He said CBFM contributes to: protecting and regenerating forests; improving forest quality and the flow of benefits to local people; and strengthening local forest institutions. Malla concluded that CBFM plays an important role in developing forest governance systems that are transparent, participatory and accountable, and facilitates the involvement of local communities in national development agendas.

### **BIODIVERSITY AND FOOD PRODUCTION**

This session, chaired by Bente Herstad, Norwegian Agency for Development Cooperation (Norad), was held on Wednesday afternoon.

Angeline Munzara, Community Technology Development Trust, Zimbabwe, discussed agrobiodiversity and food security. Noting that only three crops – maize, wheat and rice – constitute half of the world's food requirements, she said crop variety underpins food security and provides insurance against future threats and ecological changes. Munzara described Africa's Community Biodiversity Development and Conservation Programme, highlighting that it promotes: community efforts to utilize resources sustainably and apply local knowledge; on-farm conservation of plant genetic resources; and capacity building and experience sharing among farmers. She called for the CBD to: ensure a biopiracy ban; harmonize its efforts with the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA); and recognize that genetic erosion is rapid and principally caused by increased monoculture and restrictive practices.



Angeline Munzara, Community Technology Development Trust, Zimbabwe

Ola Westengen, Global Crop Diversity Trust (GCDT), addressed safeguarding crop biodiversity for a food-secure future, describing crops, their variety, origin, distribution and contribution to human well-being, and drawing attention to gene banks. He discussed the value of diversity in adaptation to environmental change, sustaining and increasing production, and fighting disease and pests. Westengen defined the pros and cons of the green revolution, noted habitat loss and genetic erosion as shortcomings, and described *in situ* and *ex situ* conservation initiatives. He discussed ITPGRFA, a GCDT fund to set up a global system, and the Svalbard gene bank as the ultimate safety net.

Corazon de Jesus, Southeast Asia Regional Initiatives for Community Empowerment (SEARICE), the Philippines, presented on the potential impacts of genetically modified organisms (GMOs) in food production and agricultural biodiversity, noting that GMOs constitute one of the most controversial topics faced by the CBD. She highlighted farmers' contribution to food production and agrobiodiversity

conservation, notably through the development of new crop varieties, increased genetic diversity and food security through seed security. Among issues associated with GMOs, she highlighted potential risks concerning human health, the environment and food security, and cited an example from the Philippines where the introduction of GMOs led to competition for local markets, genetic contamination, cultural erosion and the violation of farmers' rights. She supported the drafting of adequate biosafety laws, a moratorium on the importation and/or commercialization of GMOs, and mandatory labelling.

Fabrice DeClerck, Columbia University and Tropical Agricultural Research and Higher Education Center (CATIE), Costa Rica, presented on integrating biodiversity conservation, ecosystem functioning and production in agricultural landscapes. He underscored the meaning and roles of biodiversity and presented scientific studies underpinning its importance. He cited a study illustrating the impacts of diminishing diversity on ecosystem functions, including pollination, and another demonstrating species interactions and ecosystem productivity increasing with diversity. DeClerck investigated the functional role played by species and questioned whether the loss of ecosystem services could be sustained. He presented the Millennium Research Villages project and its role in attaining the MDGs. After defining eco-nutrition, he concluded on an analogy of species loss being like a plane losing bolts.

Emile Frison, Bioversity International, discussed biodiversity in relation to nutrition and health, advocating models of development other than just industrialized production. Noting the undervalued problem of "hidden hunger," which is a lack of nutritional quality rather than caloric quantity, he highlighted a trend of dietary simplification and reduced access to traditional and indigenous foods. He described actions undertaken by Bioversity International in Kenya, India and Bolivia to address these issues, including through awareness raising, education and training. Identifying gaps in large-scale evidence relating to nutrition data and the impact of malnutrition on health, he said the challenge lies in bringing together health, agricultural development and finance policymakers to address the issues, and in promoting cross-sectoral dialogue and action plans. Discussions focused on the practical issues surrounding the reintroduction of indigenous crops on the market.

### **FOOD PRODUCTION, FOOD SECURITY AND BIODIVERSITY**

Ruth Haug, Norwegian University of Life Sciences, chaired this panel session on Wednesday afternoon. Panelists included: Corazon de Jesus, SEARICE; Devin Bartley, UN Food and Agricultural Organization (FAO); Emile Frison, Bioversity International; Fabrice DeClerck, Columbia University and



L-R: Jackie Alder, University of British Columbia, Canada; Fabrice DeClerck, CATIE, Costa Rica; Emile Frison, Bioversity International, Italy; Devin Bartley, FAO; Corazon de Jesus, Southeast Asia Regional Initiatives for Community Empowerment, the Philippines; and Ruth Haug, Norwegian University of Life Sciences, Norway (moderator)

CATIE; and Jackie Alder, University of British Columbia, Canada. Chair Haug asked panelists to provide their views on the role of biodiversity in eliminating food insecurity.

De Jesus highlighted the role of farmers as seed keepers. Bartley noted that multi-sectoral interaction is a prerequisite to the sustainable growth of agriculture. Frison pointed out that much biodiversity lies within controlled environments and that focus should be on the quality, as much as the quantity, of food. DeClerck highlighted the concept of “ecoagriculture.” Alder urged for the bigger picture to be taken into account, noting that catchment management impacts on fish stocks. Chair Haug opened the floor for discussion. Participants noted, *inter alia*: issues of GMOs and biofuels in relation to food security; the need to take a holistic view of environmental problems; and the value of traditional food crops and the potential of their integration in tourism.

### **WETLANDS AND FRESHWATER RESOURCES**

This session, held on Thursday morning, was chaired by Gabriele Obermayr, Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management.

Nick Davidson, Ramsar Convention on Wetlands, addressed the role of wetlands for water and people. He said wetlands provide a range of ecological and hydrological services, representing an annual monetary value of US\$ 14 trillion. He noted that wetland conversion leads to a loss of value and services, and that there is a major need for more detailed valuations of wetlands to better inform decision making, as wetlands are disappearing faster than any other ecosystem. Davidson stated that “the escalating burden of water demand will become intolerable in water-scarce countries,” and said climate change is exacerbating these problems. Describing cooperation with the CBD, including through the establishment of joint programmes and management guidelines, he recommended: an integrated ecosystem-based approach; cross-sectoral decision making; the empowerment of local communities; new forms of water and land use governance; and increased attention to the benefits of wetlands to human health.

In the ensuing discussion, participants debated: the displacement of people in areas of conflict leading to wetlands being drained for human settlement; threats to marine and coastal wetlands; and the need for participation at all levels and for the involvement of economists.

Noting the role of ecosystems in securing sustainable development, Terje Tvedt, University of Bergen, Norway,



Terje Tvedt, University of Bergen, Norway

discussed river controls and biodiversity. He underlined the importance of rivers and freshwater to life on Earth, and underscored competing interests and demands that put pressure on river systems. He noted: the impacts of climate change on freshwater supplies such as the Himalayas; natural seasonal variations such as those occurring in Bangladesh; and human intervention to control river basins. Tvedt stressed that today’s ecosystems are often human-made, as

illustrated by Venice or Amsterdam, and highlighted China’s interventions on the Yangtze River to further the country’s agricultural ambitions.

Wouter van de Bund, European Commission Joint Research Centre, Italy, discussed the biodiversity aspects of the European Union (EU) Water Framework Directive (WFD). He noted that the WFD aims to protect all European waters and to achieve a “good status” in these waters, explaining that this is defined by biological, chemical and morphological parameters. He classified the WFD as: ambitious; legally-binding and with enforceable environmental objectives; flexible on tools and paths to achieve these objectives; focused on guidance documents, information exchange, capacity building and common understanding; and fully involving NGOs, future member States, scientists and the European Commission. Among challenges, he mentioned that: many indicators are still under development; approaches differ between water categories, quality elements and countries; and biodiversity is not always adequately taken into account.

Discussion focused on the establishment of reference levels, and the need to consider climate change effects.

### **MARINE RESOURCES AND BIODIVERSITY**

This session, held on Thursday morning and afternoon, was chaired by Isabel Sousa Pinto, University of Porto, Portugal.

Jackie Alder, University of British Columbia, Canada, explored the state of marine biodiversity and ecosystems,



Jackie Alder, University of British Columbia, Canada

providing details on the expanding exploitation of the world’s oceans and the critical threats faced by many species. She stressed a lack of understanding of marine biodiversity, noting that the genetics of non-commercial species are particularly poorly understood. She drew attention to the marine implications of the 2010 biodiversity target, the Marine Trophic Index, the IUCN Red List of Threatened

Species and WWF’s Living Planet Report. She discussed over-fishing, habitat fragmentation, invasive species, harmful algal blooms, marine protected areas, trends in different fish stocks, climate change and acidification.

Kenneth Sherman, National Oceanic and Atmospheric Administration (NOAA), US, discussed ecosystem-based biodiversity conservation in relation to large marine ecosystems (LMEs). He underlined the need to reduce coastal pollution, restore damaged habitats, safeguard fish stocks and conserve biodiversity, and described advanced systems available to monitor and assess LMEs, including satellite technology. Elaborating on fish and fisheries indicators and on pollution and ecosystem health indicators, Sherman discussed how trends in climate change relate to alterations in species composition in various LMEs, and called for a paradigm shift in ecosystem management towards entire ecosystems, multiple scales, long-term perspectives and adaptive management. He highlighted ecosystem-related targets set at the WSSD, including on land-based sources of pollution, ecosystem-based approaches and marine protected areas, and on the restoration and sustainability of fisheries.



Ricardo Serrão Santos, University of the Azores, Portugal, talked about the conservation and utilization of biodiversity on seamounts, and drew attention to a new publication: "Seamounts: ecology, fisheries and conservation." He defined seamounts as underwater mountains and specified that very few have been studied. He noted that seamounts trap water currents and are areas of high productivity and biodiversity, including many endemic species and visitor species, such as sharks, cetaceans and tuna. Santos underscored the vulnerability of deep sea fish stocks and the endangered status of many species, highlighting the harmful effects of bottom trawling and long-line fishing. He called for the application of the precautionary approach and for changes in fishing practices. Discussions revolved around the FAO's mandate to work on guidelines on high seas fisheries, the impacts of industrial fisheries and the effects of a potential moratorium on deep-sea bottom trawling.

Salvatore Arico, UN Educational, Scientific and Cultural Organization (UNESCO), presented on deep sea genetic resources, noting that the fields of application of these resources include pharmaceuticals, and genes that encode proteins and metabolic pathways for industrial application. He called for improved valuation of deep sea genetic resources and a broadened knowledge base for policy decision making. He noted that information on the origin of genetic material is generally not disclosed and an appropriate ABS regime is lacking. He also said that uncertainty over the access to deep sea genetic resources can act as a deterrent to investment in research and hamper the potential benefits of these resources, and at a time when oceans are increasingly affected by human activities, bioprospecting of deep sea genetic resources may present an alternative economic use of the oceans and contribute to attaining the MDGs.

Devin Bartley, FAO, discussed the ecosystem approach, looking into the integration of fisheries and biodiversity conservation. He discussed the normative, operational and cognitive frameworks of the approach, noted the need for improved management, and described fisheries and aquaculture challenges. Bartley also discussed the impacts of marine protected and managed areas, as well as of land and freshwater protected areas on fish stocks. He drew attention to certifying aquaculture products and to the role of women and traditional knowledge in conservation. He called for stakeholder engagement and partnerships.

Anne Martinussen, WWF-Norway, addressed the management of coastal resources, notably in WWF's Eastern African Marine Ecoregion. She highlighted opportunities offered by sustainable natural resources management, including employment, the right of communities to use resources in national parks, and tourism taxes that contribute directly to the local economy. She said threats include: over-harvesting and decline in marine resources; unsustainable tourism and development; cases of non-compliance with sustainable management plans; oil and gas exploration; and



Anne Martinussen, WWF-Norway



Panel Discussion on "How do we secure marine biodiversity beyond national jurisdiction". L-R: Devin Bartley, FAO, Jeffrey McNeely, IUCN, Stefan Leiner, European Commission, Peter Bridgewater, UK Joint Nature Conservation Committee (moderator), Jackie Alder, University of British Columbia, Canada, Kenneth Sherman, NOAA, US, and Salvatore Arico, FAO

illegal international fishing fleets. Citing lessons learned, she underlined the importance of: long-term planning and investments; capacity building; incentives for local communities; raising stakeholder awareness of the importance of biodiversity; and balancing conservation and consumption.

### **HOW DO WE SECURE MARINE BIODIVERSITY BEYOND NATIONAL JURISDICTION?**

This panel discussion, held on Thursday afternoon, was chaired by Peter Bridgewater, Joint Nature Conservation Committee, UK. Panelists included: Devin Bartley, FAO; Jeffrey McNeely, IUCN; Stefan Leiner, EC; Jackie Alder, University of British Columbia, Canada; Kenneth Sherman, NOAA; and Salvatore Arico, UNESCO. Chair Bridgewater presented the main issues, noting that there is still much to learn and communicate about areas beyond national jurisdiction, and invited panelists to provide their views. Leiner called for the implementation of agreed decisions and highlighted knowledge gaps. Alder noted that reducing subsidies might be the best way to diminish destructive fishing practices, underscoring that, without subsidies, it would not be worthwhile to fish in the high seas. McNeely pointed out that compared to the exploration of space, very little money is spent on the high seas. He noted that oceans have become dumping grounds, raised the idea of international peace parks, and underscored that the military may hold much knowledge of such areas. Sherman explored options within the fourth replenishment of the GEF. Arico stressed that "we know enough to take action." Discussions focused on, *inter alia*: marine protected area databases; compliance; alternative livelihoods; trade-offs; aquaculture; the impacts of environmental change; bioprospecting; and the role of the CBD.

### **GLOBAL GOVERNANCE AND BIODIVERSITY**

Maria Mbengashe, Ministry of Environmental Affairs and Tourism, South Africa, chaired this session on Friday morning.

Ivar Baste, UNEP, presented on strengthening the scientific basis of the CBD and improving the interface between science and policy. He drew attention to CBD Articles on scientific cooperation, underscored the role of SBSTTA and looked into other initiatives such as the Global Biodiversity Outlook, the Global Environment Outlook, the Global Biodiversity Assessment, the MA and an IMOSEB. He noted the need to strengthen assessment processes, improve environmental data, build capacity and promote linkages. Baste called for an enhanced two-way flow between the science and policy realms and defined the characteristics of international scientific

assessments, such as policy relevance and legitimacy and scientific credibility. He suggested a regular intergovernmental and multi-stakeholder assessment process for the CBD.

Participants called for better science and models to support assessments, and raised concerns in relation to new GEF criteria.

James Griffiths, WBCSD, addressed the role of private business in ecosystem management, noting that the WBCSD aims to promote business leadership for sustainable development and to provide a platform for business action, policy development, best practice and global outreach. He identified energy and climate, development, and ecosystems as WBCSD's focus areas and that the organization develops partnerships, projects and tools to help: assess, measure and value ecosystems; reduce business impacts on ecosystems; explore new business opportunities associated with ecosystem stewardship; and advocate ecosystem governance and policy frameworks to include flexible market approaches. Among future areas of work, Griffiths named: ecosystem valuation approaches and systems; ecosystem regulation, ownership and tenure mapping; biodiversity off-set design; and pilot biodiversity trading within or between companies. He concluded that market mechanisms can be powerful complements to existing strategies for ecosystem conservation.

In the ensuing discussions, participants discussed the WBCSD's efforts in relation to ABS, the compliance of its members to environmental standards and pollution prevention.

Adil Najam, Tufts University, US, discussed the role of developing countries in global biodiversity governance, looking into the evolution of environmental governance systems. He

underscored the need to identify challenges, analyze problems and propose reforms, and, looking at global environmental governance since 1972, highlighted successes and an increase in actors, funding, rules and norms. Najam identified challenges linked to growth, looked at why reforms stall, and outlined



Adil Najam, Tufts University, US

characteristics intrinsic to developing countries. In designing reform, he underscored the importance of long-term vision, leadership and coherence, and wondered about having one person heading several organizations and about making UNEP the pre-eminent convener and catalyst. In response to the floor, he noted the importance of equity, focus and being positive about successes achieved to date.

### **THE ROAD TO 2010 AND BEYOND**

This panel discussion, held on Friday morning, was moderated by Jeff McNeely, IUCN. Panelists included: John Hutton, UNEP-WCMC; Maria Berlekom, SwedBio; Sebastian Winkler, IUCN Countdown 2010; Alfred Oteng-Yeboah, IMoSEB; James Griffiths, WBCSD; and Maria Mbengashe, South African Ministry of Environmental Affairs and Tourism.



L-R: Jon Hutton, UNEP WCMC; Maria Berlekom, SwedBio, Sweden; Sebastian Winkler, Countdown 2010; Jeffrey McNeely, IUCN (moderator); Alfred Oteng-Yeboah, IMoSEB; Jeffrey Griffiths, WBCSD; and Maria Mbengashe, Ministry of Environmental Affairs and Tourism, South Africa

On scientific information, McNeely said that we may not be on track to reach the 2010 target, but it is important to focus on achievements to date. Oteng-Yeboah elaborated on the IMoSEB process, calling for ideas on how to combine all relevant kinds of knowledge and how to present it in a coherent, policy-relevant and applicable manner. Mbengashe stressed that scientific information needs to be simplified and communicated in a way that is useful at the local and provincial levels. Berlekom underscored the need for indicators that: communicate the link between ecosystems and human well-being; are contextually relevant; and are developed in consultation with all sectors to ensure ownership. Hutton argued that the kind of information that is generated should depend on the specific question that needs to be answered. Griffiths noted that businesses need scientific information that is credible, timely, cross-sectoral and relevant.

Discussion then focused on the 2010 target. McNeely called for attention to post-2010 processes. Winkler said achieving the target requires partnerships, communication and assessment, and drew attention to the need for response indicators. Hutton called for the prioritization of funding and said targets beyond 2010 need to be innovative in order to remain credible. Griffiths underlined efforts to bring ecological issues into the business planning process. Oteng-Yeboah emphasized that the drivers of biodiversity loss need to be addressed and called for capacity building and improved communication. Mbengase underlined the importance of cross-sectoral cooperation and mainstreaming biodiversity into all national development issues. Winkler said conservation is traditionally focused on areas outside cities, despite ongoing urbanization. Berlekom called for increased emphasis on ecosystem services in the context of the 2010 target, and suggested holding decision makers accountable, both in the North and in the South.

### **CLOSING SESSION**

The closing session on Friday afternoon was chaired by Conference Chair Schei.

Chair Schei introduced the conference conclusions and recommendations and a Call for Interaction, to be taken to the UNFCCC's Bali meetings in December 2007. Denoting that both human well-being and development depend on biodiversity and ecosystem services, he underlined steps to respond to current and emerging challenges and opportunities, addressing the climate change, food and health, fisheries and oceans agendas as well as the road to 2010 and beyond. He said the Call for Interaction concludes that the objectives of the UNFCCC, the CBD and the MDGs can only be achieved if there is close cooperation among the actors within the different regimes.

A closing address was delivered by Christian Prip, Denmark, outgoing Chair of the CBD's SBSTTA. He highlighted discussions held during SBSTTA-12 in July 2007, including: the further application of the ecosystem approach; implications of the MA findings for the CBD; economic incentives for biodiversity conservation; links between climate and biodiversity; and emerging issues, such as biofuels. He said the more challenging discussions had been related to interdisciplinary issues and ecosystem services, including valuation and economic incentives. He expressed confidence that the Trondheim Conference would help take these topics forward, particularly those on the relationships between biodiversity and ecosystem services, and between biodiversity and climate.

In his closing address, Ashkar Fazel, Iran, incoming SBSTTA Chair, noted that issues covered in Trondheim will be deepened at the upcoming SBSTTA meeting in Rome. He underscored the take-home messages on health, food, governance and the opportunities that biodiversity brings, urging each delegate to disseminate them widely to other sectors, be it governments, civil society, the health and food sectors or business. He said it is everybody's ethical responsibility to find the right means of communication to voice these outcomes. He expressed hope that SBSTTA would resume a scientific role and move away from its current "mini-COP" format, and that the next Trondheim Conference would be held before COP-10.

Erik Solheim, Norwegian Minister of the Environment and International Development, elaborated on the importance of the Conference theme, highlighting the linkages between climate change and biodiversity, and the importance of the MA. He paid tribute to Brazil's environmental achievements and advocated schemes for support from the developed nations to the biodiversity-rich countries in the South. Minister Solheim stressed that the poor are not the ones causing climate change, yet they are the ones who suffer the most from its consequences. He said the challenge in the South lies in raising living standards without making the same mistakes that have been made in the North. He also elaborated on the linkages between environment and peace.

Chair Schei thanked participants and organizers, wishing everyone a safe journey home, and closed the Conference at 4:00 p.m.



Conference Chair Peter Schei, Fridtjof Nansen Institute, Norway

## UPCOMING BIODIVERSITY MEETINGS

**SIXTH MEETING OF THE CBD OPEN-ENDED WORKING GROUP ON ACCESS AND BENEFIT-SHARING:** The meeting will take place from 21-25 January 2008 in Montreal, Canada. For more information, contact: CBD Secretariat; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: [secretariat@cbd.int](mailto:secretariat@cbd.int); Internet: <http://www.cbd.int/doc/meeting.aspx?mtg=ABSWG-06>

**SECOND MEETING OF THE CBD AD HOC OPEN-ENDED WORKING GROUP ON PROTECTED AREAS:** This meeting is scheduled to take place from 11-15 February 2008 in Rome, Italy. For more information, contact: CBD

Secretariat; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: [secretariat@cbd.int](mailto:secretariat@cbd.int); Internet: <http://www.cbd.int/meetings/default.shtml>

**SBSTTA-13:** The 13th meeting of the CBD's Subsidiary Body on Scientific, Technical and Technological Advice will be held from 18-22 February 2008 in Rome, Italy. For more information, contact: CBD Secretariat; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: [secretariat@cbd.int](mailto:secretariat@cbd.int); Internet: <http://www.cbd.int/meetings/default.shtml>

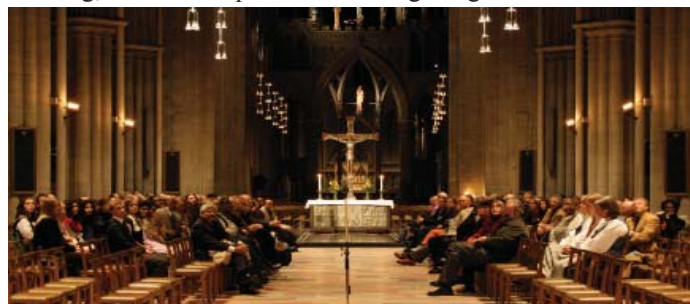
**BIODIVERSITY RESEARCH – SAFEGUARDING THE FUTURE:** This scientific meeting will be held from 12-16 May 2008 in Bonn, Germany, immediately prior to the ninth Conference of the Parties to the CBD (COP-9). It aims to channel results and needs of biodiversity research into the political discussion at the COP. It will consist of three symposia on: acceleration of biodiversity assessment and inventorying; functions and uses of biodiversity; and biodiversity change – the 2010 target and beyond. For more information, contact: Jobst Pfaender; tel: +49-228-9122-277; fax: +49-228-9122-212; e-mail: [precop9@uni-bonn.de](mailto:precop9@uni-bonn.de); Internet: <http://www.precop9.org>

**CBD COP-9:** This meeting will take place from 19-30 May 2008 in Bonn, Germany. For more information, contact: CBD Secretariat; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: [secretariat@cbd.int](mailto:secretariat@cbd.int); Internet: <http://www.cbd.int/doc/meeting.aspx?mtg=COP-09>

**URBAN BIODIVERSITY AND DESIGN: IMPLEMENTING THE CBD IN TOWNS AND CITIES:** This conference, organized by the Competence Network Urban Ecology (CONTUREC), is scheduled to take place from 21-24 May 2008 in Erfurt, Germany. Main topics include: biodiversity of urban-industrial areas and its evaluation; cultural aspects of urban biodiversity; social aspects of urban biodiversity; urban biodiversity and climate change; and design and future of urban biodiversity. For more information, contact: Jan-Tobias Welzel, CONTUREC; tel: +49-361-6700-286; fax: +49-361-6700-259; e-mail: [jan-tobias.welzel@fh-erfurt.de](mailto:jan-tobias.welzel@fh-erfurt.de); Internet: <http://www.urbio2008.com>

**INTERNATIONAL DAY FOR BIOLOGICAL DIVERSITY:** "Biodiversity and Agriculture" has been selected as the theme of International Day for Biological Diversity, to be celebrated on 22 May 2008. For more information, contact: CBD Secretariat; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: [secretariat@cbd.int](mailto:secretariat@cbd.int); Internet: <http://www.cbd.int/default.shtml>

**IUCN 4TH WORLD CONSERVATION CONGRESS:** IUCN's 4th World Conservation Congress is scheduled to take place from 5-14 October 2008 in Barcelona, Spain. The first half of the Congress will be the World Conservation Forum, from 6-9 October. For more information, contact: IUCN; tel: +41-22-999-0000; fax: +41-22-999-0002; e-mail: [congress@iucn.org](mailto:congress@iucn.org); Internet: <http://www.iucn.org/congress/2008/>



Reception hosted by the City of Trondheim on Wednesday, 31 October