



Gincana 4



Partnerships



Convention on
Biological Diversity



Achieving the 2010
Biodiversity Target



Gincana 4 Partnerships



Table of Contents

BUILDING PARTNERSHIPS	2
AHMED DJOGLAF Executive Secretary, Convention on Biological Diversity.....	3
ACHIM STEINER Executive Director, United Nations Environment Programme	5
ROH MOO-HYUN President of the Republic of Korea	6
JAMES MICHEL President of the Republic of Seychelles	8
GÉRALD TREMBLAY Mayor of Montreal, Canada	10
CARLOS RICHA Mayor of Curitiba, Brazil.....	10
BÄRBEL DIECKMANN Mayor of Bonn, Germany.....	11
TAKEHISA MATSUBARA Mayor of Nagoya, Japan.....	12
ABDOU DIOUF Secrétaire général de la Francophonie	14
IBRAHIM THIAW Director, Division of Environmental Policy Implementation (DEPI UNEP)	15
WALTER ERDELEN Assistant Director-General, Natural Sciences, United Nations Educational, Scientific and Cultural Organization (UNESCO).....	17
ALEXANDER MÜLLER Assistant Director-General, Natural Resources Management and Environment Department, FAO of the UN	19
ROBERT HEPWORTH Executive Secretary, Convention on Migratory Species (CMS)	20
PETER BRIDGEWATER Former Secretary General, Ramsar Convention	23
FRANCESCO BANDARIN Director, United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Centre.....	25
JOSÉ T. ESQUINAS ALCÁZAR Secretario de la Comisión de Recursos Genéticos para la Agricultura y la Alimentación.....	26
JOSÉ SARUKHÁN KERMEZ Secretaría de Medio Ambiente y Recursos Naturales (Semarnat).....	29
BERTRAND-PIERRE GALEY Directeur général du Muséum National d'Histoire Naturelle de Paris.....	30
STEPHEN HOPPER Director, Royal Botanic Gardens, Kew.....	32
CAMILLE PISANI Director General, The Royal Belgian Institute of Natural Sciences.....	33
RODGER SCHLICKEISEN President, Defenders of Wildlife.....	35

Printed in Canada
 ISBN: 92-9225-078-7
 Copyright: Secretariat of the Convention
 on Biological Diversity 2007
 All rights reserved

Design and typesetting
 Em Dash Design

Cover photo
 Francis Dejon (Hands)
 istockphoto (Globe)



Building Partnerships

Four-year strategic partnership with the Netherlands

The Secretariat of the Convention on Biological Diversity concluded a four-year agreement with the Government of the Netherlands to provide USD 2.1 million between now and 2011 in support of engagement of the private sector, development of the ecoregional approach, scenario development in support of the 2010 Biodiversity Target, and development of the programme of work for Communication, Education and Public Awareness. ▶



The Executive Secretary with Mr. André van der Zande, Secretary General, Ministry of Agriculture, Nature and Food Quality



FROM LEFT TO RIGHT: Ms. Noeleen Heyzer, USG and Executive Secretary, Economic and Social Commission for Asia and the Pacific (ESCAP), Mr. Abdoulie Janneh, USG and Executive Secretary, Economic Commission for Africa (ECA), Mr. Ahmed Djoghlaif, Executive Secretary of the Convention on Biological Diversity and Mr. Bader Al-Dafa, USG and Executive Secretary, Economic and Social Commission for Western Asia (ESCWA). Mr. Jose Luis Machinea, USG and Executive Secretary, Economic Commission for Latin America and the Caribbean (ECLAC) also signed the MoU but is not present in the photograph.

Mainstreaming objectives of the Convention into processes of UN Regional Economic and Social Comissions

On 25 October 2007, at UN headquarters, the Secretariat signed an MoU with Regional Economic and Social Commissions to support the integration of the objectives of the Convention into relevant regional activities and processes. This is the first time that such an agreement has been signed with a multilateral environmental agreement, and is a significant contribution to the enhancement of the coherence of global environmental governance through the One UN programme. ▲





Partnership with German Development Cooperation Agencies: MoU with BMZ

The memorandum with BMZ will support activities that link development cooperation with the objectives of the Secretariat of the Convention on Biological Diversity including: Capacity-building for ABS, cooperation for the holding of regional workshops on National Biodiversity Strategies and Action Plans, support to the Programme of work for Protected Areas and collaboration on Communication, Education and Public Awareness. ▼



The Executive Secretary with Ms. Gudrun Grosse-Wiesmann, BMZ

Towards a Global Planet Partnership for Life on Earth

The message of the recently released fourth edition of the Global Environment Outlook is loud and clear. The speed at which mankind is using and abusing the Earth's resources is putting humanity's survival at risk. This authoritative assessment of the state of the environment of our planet by the United Nations Environment Programme (UNEP), prepared by more than 500 experts and peer-reviewed by over 1000 experts, reiterates that human beings are responsible for a reduction in land, freshwater and marine biodiversity at a rate more rapid than at any time in human history. This landmark publication confirms the findings of the Millennium Ecosystem Assessment (MA), as well as the second edition of the Global Biodiversity Outlook issued at the occasion of the eighth meeting of the Conference of the Parties, held March 2006 in Curitiba, Brazil.

Scientists have provided ample evidence that the pressures on the planet's natural functions, as caused by human activity, have reached such a level that the ability of ecosystems to provide for the needs of future generations has been severely compromised. Impacts on the natural functions of our planet have never been so destructive as in the last 50 years. During the last century, the extinction rate of species has increased a thousand times beyond the natural background rates.

It is for this reason that, Dr. Gro Harlem Brundtland, following her appointment as Special Envoy of the Secretary General on Climate Change, stated, "It is irresponsible, reckless and deeply immoral to question the seriousness of the situation. The time for diagnosis is over and the time for action is now." She stressed the importance of 2007 as a year when the wheels have to be set in motion. The solution to "the tragedy of the commons," as Dr.



Brundtland called it 20 years ago in her seminal report, *Our Common Future*, requires the establishment of a global partnership to protect life on Earth.

The MA concluded that the 2010 Biodiversity Target is achievable but requires unprecedented efforts. The Secretariat is making such efforts and is reaching out to partners around the world. For the last two years, 22 Memoranda of Understanding (MoU) have been signed with the objective of establishing a global partnership for the implementation of the three objectives of the Convention—the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising from the utilization of genetic resources.

Our common accomplishments:

Partnership, first and foremost, with UNEP as the host organization:

In 2007, more than 14 senior UNEP officials, including the Executive Director and the Deputy Executive Secretary visited the Secretariat. A UNEP multi-year support programme to the implementation of the Convention is being finalized under the leadership of Mr. Bakary Kante, the Director of the Division of Environmental Law and Conventions. This partnership is not only with UNEP in Nairobi, but also



Scientists have provided ample evidence that the pressures on the planet's natural functions, as caused by human activity, have reached such a level that the ability of ecosystems to provide for the needs of future generations has been severely compromised. Impacts on the natural functions of our planet have never been so destructive as in the last 50 years. During the last century, the extinction rate of species has increased a thousand times beyond the natural background rates.

with its regional and outposted offices, as well as collaborative centers such as the World Conservation and Monitoring Centre and GRID Arendal. Since the beginning of this year a UNEP staff member in Geneva is also serving part-time as a liaison officer of the Secretariat in Europe.

Partnerships with government and actors in Canada, host country to the Secretariat:

An informal host committee for the Convention, which meets every six months and includes participants from all levels of government in Canada, was established. An MoU was signed on 22 February 2007 with the Mayor of Montreal, with the goal of enhancing collaboration between the city and the Secretariat. Enhancing relations with the Secretariat is one of the objectives of the multi year sustainable development strategy of the city of Montreal. Montreal's Mayor has also played a leading role in promoting the programme on cities and biodiversity. The Montreal Nature Museums are partners to the CBD consortium of scientific institutions, and nine Canadian universities are part of the CBD consortium with universities.

Partnership with other United Nations sister agencies:

A Heads of Agencies task force on the 2010 Biodiversity Target has been established. Agreement in principle has been reached with the United Nations Development Programme (UNDP) and the Food and Agriculture Organization of the United Nations (FAO) to second a staff to the secretariat to act as liaison officer. With a view to enhance collaboration, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and FAO have kindly accepted to host major

CBD meetings. The four United Nations regional Economic Commissions have agreed to mainstream the three objectives of the Convention into their respective regional processes to help fight poverty and achieve the Millennium Development Goals.

Partnership with other international organizations:

The MoU signed with IUCN—The World Conservation Union, and its regional and collaborative centres, as well as Countdown 2010 is evidence of the kinds of global partnerships the Secretariat is building. The Secretariat has also established partnerships with regional organizations and groupings such as the Group of 77, the African Union, and the New Partnership for Africa's Development. We have also seen partnerships with the Arctic and European Councils.

Partnerships with major groups:

Implementation of the Convention requires the full involvement of all stakeholders. The Secretariat has made an effort to reach out to a variety of groups including NGOs, indigenous and local communities, the scientific community, youth, women and the business community. CBD Newsletters especially devoted to these major groups now provide a framework for dialogue. An initiative aimed at mainstreaming gender considerations into the Convention's processes has been launched in collaboration with IUCN and the government of Switzerland.

An agreement with twelve universities has been signed with the objective of mobilizing the scientific community in support of the three objectives of the Convention. The objective of this partnership is to in-

crease awareness about biodiversity issues in the academic environment, to engage students in biodiversity related work or research and to enhance the sharing of information with the goal of incorporating the most recent research findings into policies and practical guidance. A consortium of eight scientific institutions and botanical gardens was also established. The second meeting of the steering committee was held in Paris on 19 October 2007 at the Museum National d' Histoire Naturelle de France, which also hosted two training workshops in conjunction with CBD meetings.

Partnership with local authorities:

At the initiative of Mayor Richa of Curitiba, in collaboration with Mayor Tremblay of Montreal, the Curitiba declaration on Cities and Biodiversity was adopted with the participation of 34 mayors. This initiative will be further enhanced, thanks to the initiative of Mayor Dieckmann, at the municipal meeting to be held in May 2008. The results of this meeting will be submitted to the ninth meeting of the Conference of the Parties to be held in Bonn in May 2008. The preparation of this landmark event in the life of the Convention has been facilitated by the establishment of a new form of cooperation between the current and incoming president of the COP. Indeed, a triple presidency of COP dialogue has been established between Brazil, Germany and Japan, the country offering to host COP 10.

Partnership with Parties:

Twenty-eight representatives of Parties, including four ministers, visited the Secretariat. The government of France has seconded, for an initial period of two



years, a staff member to promote biodiversity for development activities. Germany is supporting a major program on biodiversity for poverty alleviation, which will include the secondment of a senior staff. A four-year Letter of Intent with Netherlands was signed. The European Commission, Spain and Norway have supported strategic activities for the implementation of COP 8 decisions, including those related to collaboration with relevant Multilateral Environment Agreements.

Partnership with biodiversity related conventions:

The Ramsar Convention on Wetlands, the Convention on Migratory Species (CMS), the Convention on International Trade in Endangered Species (CITES), and the World Heritage Convention (WHC), provide the basis for collaboration on biodiversity issues at the global level. The fifth meeting of the Biodiversity Liaison Group, which included for the first time the secretariat of the International Treaty on Plant Genetic Resources, adopted a set of measures aimed at enhancing the relation among the sister biodiversity con-

ventions. For the first time, a meeting of the chairs of the scientific bodies of the biodiversity-related conventions and their executive secretaries was convened. This cooperation with biodiversity-related conventions has been extended to regional biodiversity conventions as well, including the Regional Seas Conventions, the Bern Convention and the African Convention on the Conservation of Nature and Natural Resources.

Partnership with the Rio Conventions:

The two meetings of the Joint Liaison Group of the three Rio Conventions, held in June and September, considered options for enhancing collaboration and a set of concrete measures have been taken. Joint documents on forests and adaptation have been prepared.

Partnerships for the Programme of Work on Protected Areas:

An informal consortium was established to facilitate implementation of the programme of work. This partnership raised about USD 700,000 and coordinated a series of nine sub-regional work-

shops attended by nearly 500 planners, practitioners and policy makers covering 80 countries in the Caribbean, East Caribbean States, Latin America, South and West Asia, ASEAN, Eastern Europe, Anglophone and Francophone Africa, and Central Asia and Caucasus sub-regions. These workshops provided an important platform to identify challenges/ obstacles to the implementation of the programme of work and practical ways and means to address these. This kind of partnership represents a potentially valuable way to advance other programmes of work.

This fourth edition of *Gincana* has been geared towards giving the stage to our partners to present their views on the way forward to achieve the 2010 Biodiversity Target. I invite you to read the articles of this edition of the flagship magazine of the CBD, bearing in mind the wisdom of Martin Luther King Jr. who stated, "All of life is interrelated. We are all caught in an inescapable network of mutuality, tied to a single garment of destiny. Whatever affects one directly affects all indirectly." ❖



Achim Steiner, Executive Director, United Nations Environment Programme

Remarks from the launch of GEO-4

Twenty years after Brundtland, we may wonder what we have been doing to try and balance development with environmental sustainability. The fact is quite a lot. The multilateral environmental infrastructure has been rolled out—we have global treaties covering the ozone layer and biodiversity to climate and desertification. GEO-4 is also salt and peppered with shining examples of creative and intelligent management from no-take zones in Fiji's fishing industry to the restoration of river systems in Cameroon. But the fact remains that

faced with the magnitude and scale of the challenge, the response has, to put it mildly, often been confined to national action in limited or specific areas—air pollution in Europe for example. Without an accelerated effort to reform the way we collectively do business on planet Earth, we will shortly be in trouble if indeed we are not already. On one issue we may be finally turning the corner. That issue is climate change.

It has taken 20 years to build the scientific consensus. But in 2007 the Intergovernmental Panel on Climate Change has done that and in doing so deservedly jointly won the Nobel Peace Prize. GEO-4 takes this logic across the

whole spectrum of environmental issues. Like climate change, the GEO-4 findings request us all—governments, business, local authorities, NGOs and individuals—to put a full stop behind the science and for an accelerated effort on this wider environmental landscape. The momentum on climate change in 2007 is nothing short of breathtaking—it is time to find the same sense find the same sense of urgency on biodiversity and land degradation to fisheries and freshwaters.

Ladies and gentlemen, as with climate change, the cost of inaction and the price humanity will eventually pay is likely to dwarf the cost of swift and decisive action now. ❖



Korea's Vision for Meeting the 2010 Biodiversity Goals: Conserving Biodiversity—The Gift for Future Generations

Many countries around the world have recently experienced serious human or environmental damage caused by unexpected changes in the environment and emergence of new diseases. Such destruction stems from harmful human activities like the reckless development of land and excessive use of fossil fuels. In particular, global warming, which has been sparking weather anomalies and accelerating the extinction of biological species, has led humankind to reaffirm the importance of environmental conservation for its survival.

Against this backdrop, countries around the globe signed the Convention on Biological Diversity (CBD) in 1992 and have strived to conserve biodiversity since then. At the 6th Conference of the Parties (COP 6) to the CBD in 2002, the members agreed to drastically reduce poverty and the rate of biodiversity loss at the global level by 2010 and therefore, adopted the National Biodiversity Strategies and Action Plans (NBSAPs). On behalf of the Korean people, I would like to express my sincere appreciation to all countries, international organizations, and professionals for their dedication to this common goal—the conservation of biodiversity.

Korea is located in the easternmost part of Asia and extends southward. It consists of a peninsula and 3,500 surrounding islands. Mountains take up about 64% of the terrain and it is well known for its distinctive four seasons, influenced by continental winds and the oceans surrounding it. For these reasons, Korea boasts a huge diversity of indigenous biological species and habitats compared to its land size.

However, for the past half century, many habitats have been destroyed due to land development policies and rapid industrialization. Climate change is also rapidly taking hold on the Korean peninsula, as evidenced by the emergence of subtropical plants and animals, making conditions for conserving biodiversity all

the more difficult.

Since it joined the CBD in 1994, Korea has implemented various measures to protect the nation's environment and its biodiversity. Korea established the National Strategy for Biodiversity Conservation in 1997 and passed relevant legislation including the Act on the Protection of Baekdu Daegan Mountain (2003), Wildlife Protection Act (2004), and Act on the Conservation and Management of Marine Ecosystem (2006). In addition, various plans such as the Plan for Integrated Management of Coastal Regions (1999), Wetland Conservation Plan (2002), Wildlife Protection Plan (2005), and the Comprehensive Plan for Marine Environment Conservation (2006) have been created and implemented. Furthermore, to promote the practical implementation of the NBSAPs and to effectively meet the Biodiversity Goals, the Comprehensive Measure for Conserving Biological Resources (2005) and the Measure for Conserving Marine Biological Diversity (2007) were devised to build a system of investigation, exploration, conservation and management of biological resources.

Korea is also implementing conservation policies for ecosystems based on the 'three major eco-pillars' which take Korea's unique geographical characteristics into account. These pillars refer to (1) the Baekdu Daegan region or the mountain range that stretches from north to south of the Korean peninsula, (2) the Demilitarized Zone (DMZ) that divides the North from the South, and (3) the coastal region that surrounds the peninsula. The conservation policies will be established to efficiently conserve natural habitats and areas of high ecological value, the core element of the 2010 Biodiversity Target.

The first eco-pillar, the Baekdu Daegan region, is well known for its abundant ecosystem. The Act on the Protection of the Baekdu Daegan Mountain System was enacted in 2003 to prevent the degrada-

tion of wildlife habitats and ecosystems by reckless development projects for road or dam construction.

The DMZ, which is also a painful symbol of national division, has maintained a well-preserved biodiversity that is richer than any other area on the Korean peninsula thanks to minimum human intervention for more than half a century. The Korean government, recognizing the importance of this region, intends to protect the area from rampant development even after the unification of South and North Korea. An 'Eco-Peace Park' will be created in the DMZ as a means of handing down another well-preserved natural heritage to future generations. Support from the international community as well as the efforts of the Korean government will be crucial in transforming the DMZ into an eco-peace region of international importance as well as high historical and ecological value.

Last but not least, a thorough investigation on the Korean coastal ecosystem, the third eco-pillar, will be carried out as a part of the conservation policies. The Coastal Regions Management Act and the Special Act on the Ecosystem Conservation of Small Islands such as Dokdo Island has been enacted to conserve the natural ecosystem. In the past, the plan to reclaim Seochon Tideland on the west coast of Korea failed amid severe conflict between development and environmental protection. However, the government is now planning to build an Eco-City where environment-friendly facilities conducive to biodiversity such as the National Botanic Garden and the National Institute of Marine Biological Resources are also located. This is the first successful sustainability case founded on cooperation between local residents and the government.

As exemplified above, the Korean government has established a 'Natural Eco-Network' connecting the three eco-pillars to prevent the destruction of habitats and



to conserve natural ecosystems. In the future, South and North Korea will cooperate to build an eco-community on the Korean peninsula. Furthermore, the South Korean government will increase the percentage of protected areas from the current 11% to 15% of the nation's territory by 2015.

In order to conserve biodiversity, systematic research on biological species and the protection of habitats are needed. To date, only a fraction of biological species inhabiting Korea has been discovered. The government plans to conduct ambitious studies to discover all wildlife in Korea, estimated to be about 100,000 species, by 2020.

In-situ conservation efforts are underway for endangered species including white storks, Manchurian black bears and gorals whose populations have decreased dramatically due to the destruction of and poaching. As part of these efforts, an in-situ restoration project will be launched to protect 54 different endangered species and foster their healthy populations by 2015. For endangered wildlife that cannot be restored in-situ, 13 ex-situ conservation facilities have been designated. A risk grading system has been developed for invasive alien species that threaten biodiversity and disturb ecosystems. Those species considered high-risk are subject to import restriction and eradication. Korea has belatedly joined other advanced countries in conducting researches on biological resources. Nevertheless, the National Institute of Biological Resources, which opened in October 2007, will definitely play a critical role in conserving biodiversity together with the National Botanic Garden and the National Institute of Marine Biological Resources that will be established in the near future.

Korea acknowledges the Bonn guidelines for the Access to and Benefit Sharing (ABS) of genetic resources as important tools for implementing the basic principles of the CBD, namely to ensure and promote the fair and equal distribution of benefits derived from utilizing genetic resources. In particular, to promote the implementation of ABS in Korea including securing numerous agricultural genetic resources and enhancing sustainable use, the Act on Conservation, Management



Seoraksan National Park

and Use of Agricultural Genetic Resources was enacted.

Biodiversity conservation cannot be achieved through the efforts of the government alone. Voluntary participation and support from the public are key elements in ensuring success. To this end, the Korean government enacted the National Trust Act on Cultural Heritage and Natural Environment Assets in 2006 to encourage voluntary donations from the public. The funds from the donations will be utilized to purchase natural assets or cultural heritage of high value for conservation. In addition, the 'Biodiversity Management Contract,' signed between the government and farmers, assures that some crops will not be harvested in order to feed wildlife. Various educational programs are now provided to the public to raise awareness on the importance of biodiversity conservation.

The government's efforts in biodiversity conservation are not limited to Korea. In fact, Korea has launched a reforestation project in Mongolia to prevent desertification and has also sought cooperation with other developing countries. In Southeast Asia, an area that is rich in biodiversity and indigenous biological resources, ongoing support from Korea is expected to promote conservation activities and enhance the quality of life for residents.

The preservation of biodiversity is an unavoidable task in achieving a sustainable future. All parties to the CBD should make a concerted effort to meet the goals of biodiversity conservation by 2010. Korea will take the initiative and fulfill its responsibility to implement the Convention on Biological Diversity and meet the 2010 Biodiversity Goals to ensure the healthy and prosperous lives of our future generations. ♡



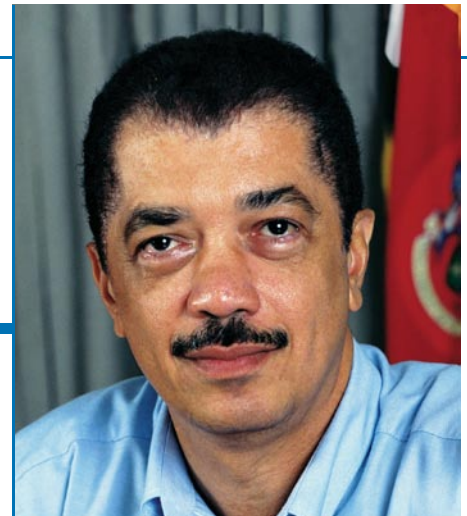
James Michel, *President of the Republic of Seychelles*

Islands: Top Destinations – Top Partners in Biodiversity 2010

The coming of the new millennium has seemingly brought in new opportunities for many small island states, such as increased tourism arrivals. However, in many areas these ‘potential opportunities’ have resulted in accelerated biodiversity loss and environmental degradation. Destinations which have previously experienced constant tourism growth have now seen a decline in their tourism arrivals, not necessarily due to increased competition, but most likely due to degradation of the environment, including its coastal waters. Today’s discerning tourist wants more than a ‘signa-

positive influences tourism has indeed increased coastal pollution, aggravated the solid waste problem and directly impacted on ecosystem structure and function. The consequence has been a decline in tourism arrivals—what the industry terms as ‘boom and bust cycles’. Unfortunately these boom and bust cycles have a tremendous impact on small islands—with declining tourism revenues comes rising unemployment and no resources to restore ecosystems.

To get out of this seemingly vicious cycle requires a paradigm shift in the way we manage tourism development in our



tunity for the industry to work for the environment. Responsible tourism therefore implies not only a consideration for environment protection during the planning stage, but the integration of biodiversity conservation within the tourism business plan.

In Seychelles this consciousness is nicely embedded in numerous policies and our tourism vision for 2001 to 2010. However, its implementation involves a greater order of things—the participation of the private sector and conservationists side by side, in achieving the biodiversity targets. The 2010 Biodiversity Target calls for increased conservation of the world natural areas by at least 10%. In Seychelles, we have already conserved 47% of our land territory, and have marine protected areas set up in many parts of our territory. But many constraints and hurdles remain: how do we financially sustain conservation efforts in those areas? How do we keep out invasive species? And how do we tackle the issue of climate change?

The approval by the Global Environment Facility (GEF) of a USD 3.7 million project aimed at mainstreaming biodiversity into our main economic sectors may provide the opportunity for us to put in place appropriate frameworks to enable the private sector to invest and indeed continue to benefit from the proceeds of the natural environment.

Studies conducted in Seychelles and elsewhere have shown that biodiversity protection works if it also works for the community and the economy. Turning this apparent antithesis into long-term conservation goals is the challenge we have be-

Biodiversity and the integrity of the ecosystem is the foundation for responsible tourism. If tourism does not invest in biodiversity then there is little hope for the many destinations opening up in remote islands on the planet every year. Investing in biodiversity, is an opportunity for the industry to work for the environment.

ture’ building sitting on a beautiful beach; they want a unique experience and closer interaction with nature. To offer such experiences entails bringing tourism closer to nature—not only in spatial terms but also in ‘responsible’ terms. Responsible tourism is the new terminology of developers, and indeed an important consciousness if its true meaning is fully realised.

Of the 700 million global tourist arrivals in 2002, at least 26 million travelled thousands of kilometres to distant small islands. The economic impact on these islands has been paramount, especially by providing new sources of foreign direct investment, increased foreign exchange earnings; create employment and other parallel services. However, despite these

islands. The bottom line is that before the islands were discovered an air of tranquillity and island life used to persist on our islands. Life seemed to start with the chirping of birds at dawn and the sound of choirs at twilight—only to be drowned by the arrival of jumbo jets and bikini-bearing visitors. Maintaining the allure of small islands is the challenge of many small island states governments today. But what has all this got to do with biodiversity?

Biodiversity and the integrity of the ecosystem is the foundation for responsible tourism. If tourism does not invest in biodiversity then there is little hope for the many destinations opening up in remote islands on the planet every year. Investing in biodiversity, thus presents an oppor-



fore us if we are to overcome the boom and bust cycles of tourism.

Already, we see that such partnerships are working at global, regional and local levels. When I initiated the Global Island Partnership, with my colleague, President Remengesau, of Palau at the Small Island States Meeting in Mauritius in January 2005, it signalled a new era for biodiversity on small islands. This partnership has led to the Micronesia challenge in the Pacific and further GEF funding for small island states. The recent appointment of a young Seychellois as a Young Global Leader has indeed shown that we can make a difference globally, and indeed lead the way in terms of meeting our biodiversity targets.

In the Seychelles, such partnerships are working very well in the tourism sector. Take for example the developments on Fregate island and North Island, today's labelled by the world's media as top tourism destinations in the world, are in fact also top investors in the environment

in Seychelles. Fregate Island Resort has an ambitious, and expensive, conservation plan which maintains the survival of one of the rarest birds on the planet, the Magpie Robin. North Island Resort, on the other hand, has been successful in transforming an abandoned island into a sanctuary for eco-tourism and conservationists alike. Through an intensive investment programme and utilising proceeds from tourism earnings, the company has successfully eradicated invasives, in particular rats, and has now embarked on a habitat restoration programme every tourism destination would die for. These and other types of partnership models are growing in Seychelles. Recently, a new investor proposed the setting up of a Conservation Trust for one island atoll in the Seychelles group. Starting with an initial seed of USD 1 million, the trust, which will be managed by an independent body, will oversee conservation and protection of over 90% of the atoll and its marine environment whilst the remain-

der will be developed for low scale but up-market tourism. This is the type of leveraging power of tourism we should be seeking to achieve the global biodiversity targets.

However, we need to be cautious, lest we forget the ongoing ecological tragedy involving the biofuels market. The vulnerability of our ecosystems to the forces of the market should not be ignored. Robust policy frameworks and involvement of the local communities are vital ingredients in this process. Building ecosystem and social resilience needs to go far beyond conservation targets if we are to avert the ecological collapse we currently face. The recent findings of the Intergovernmental Panel on Climate Change and the Stern Report validate this pessimism—that the future of small island states hangs on a shoe string requires urgent attention by the world's political and business leaders. We need to curb our consumption patterns if we are to meet the biodiversity targets and avert a global catastrophe. ❖



Les villes ont un rôle à jouer

En mars 2007, j'ai participé à la Conférence internationale des villes sur la biodiversité, qui se déroulait à Curitiba. À cette occasion, 24 villes se sont entendues sur une Déclaration qui rappelait l'importance du rôle joué par les villes dans la lutte aux changements climatiques et à la protection de la biodiversité. Certaines conditions sont nécessaires pour que l'action des villes ait un impact réel. D'abord, elles doivent veiller à nourrir entre elles les échanges qui leur permettent de partager les meilleures pratiques. En plus, compte tenu de l'urgence d'agir et des objectifs fixés pour 2010, il est essentiel qu'une meilleure coordination s'établisse entre les villes, les pays et les institutions internationales.

Dans cette même Déclaration, on me mandatait pour faire état des conclusions de la rencontre de Curitiba devant les représentants de l'association des *Cités et Gouvernements Locaux Unis* (CGLU). Ce que j'ai fait, lors de la dernière Assemblée

générale de cet organisme tenue à Jeju en Corée du Sud au mois d'octobre 2007. À titre de vice-président Amérique du Nord au Conseil mondial de CGLU et de président de cette même région, j'ai été invité à prononcer une allocution sur le thème « *Cities the future of the humanity : addressing climate change* ». À cette occasion, j'ai rappelé qu'effectivement les villes ont un rôle à jouer dans la lutte aux changements climatiques et la protection de la biodiversité, compte tenu de leurs responsabilités et de leurs activités. Bien qu'elles doivent participer activement à la recherche et à la mise en place de solutions, elles ne peuvent être seules à assumer cette tâche. Les gouvernements nationaux et les organisations internationales doivent travailler aussi activement sans faire reposer le poids de cette lutte sur les épaules des autorités locales. De plus, les citoyens eux-mêmes ne peuvent demeurer indifférents et être des acteurs de premier plan dans cette lutte,



notamment en changeant certaines habitudes de vie.

Pour atteindre les objectifs, tous doivent travailler ensemble à développer des projets concrets. À ce titre, je pense que CGLU est l'organisation la mieux outillée pour coordonner les actions des villes et porter leurs messages à la communauté internationale et auprès des décideurs.

J'ai également profité de cette tribune pour inviter mes collègues à Bonn, les 26 et 27 mai 2008, pour une Conférence des maires sur les villes et la biodiversité. Cette conférence permettra notamment de lancer un message aux Parties signataires de la Convention sur la diversité biologique qui seront réunies également à Bonn à l'occasion du COP-9. Les



Carlos Richa, *Mayor of Curitiba, Brazil*

Sustainability and Urban Biodiversity

In Curitiba, social and urban development has traditionally followed a harmonious path with the environment, and the city has by no means limited its efforts to maintain such a long tradition: actually, this has been, time after time, restated. For instance, as we signed the Green Cities Declaration in San Francisco, United States, in June 2005—which is a series of environmental protocols proposed by the United Nations—Curitiba, once again, together with other 60 signatory cities, committed

itself to adopt sustainable development strategies and plans in the areas of transport, energy, water, waste collection and overall protection of the environment.

In March 2006, Curitiba held the Conference of the Parties (COP 8) of the Convention on Biological Diversity (CBD) and more recently, in March 2007, together with my Mayors colleagues from Montreal, Bonn and Nagoya, Curitiba hosted Mayors from various continents in the event Cities and Biodiversity, in which it adopted the Curitiba Declaration: a document that will be brought to the next Conference of the Parties (COP 9) of CBD, in May 2008, in

Bonn, Germany, where we will demand a more active role of local authorities in the battle against the loss and degradation of biodiversity.

Curitiba's vision, which integrates environmental concerns in urban planning and management, has been realized since the 1960s, with the adoption of a series of coherent administrative, legal, fiscal and educative measures taken in tandem with strategic examination of the potentialities of long term planning.

Since then, the city management has prioritized the urban planning, the environ-



Bärbel Dieckmann, *Lady Mayor of Bonn*

illes rappelleront à nouveau l'importance de leur rôle et des synergies à adopter entre autorités locales, nationales, organisations internationales et les ONG pour la protection de la biodiversité.

Ce qui est important, c'est que nous poursuivions nos efforts pour changer les choses. Les maires doivent faire partie des discussions qui se tiennent aux niveaux national et international. Ils doivent également avoir accès aux outils que les pouvoirs supérieurs et les instances internationales possèdent.

D'ici là, j'invite les villes à appuyer la « Déclaration de Paris sur les changements climatiques et les gouvernements locaux », adoptée en mars 2007 par les membres du Bureau exécutif de CGLU. On y souligne le rôle que les gouvernements locaux peuvent jouer, l'urgence qu'il y a de passer de la parole aux actes et l'importance de la collaboration étroite à établir avec nos communautés et nos gouvernements nationaux. Nous devons parler d'une seule voix à la prochaine Conférence des Parties sur les changements climatiques qui se tient dans quelques semaines à Bali. Ne l'oublions pas *Assurer un environnement durable* constitue le 7^e Objectif du millénaire pour le développement. ♣



Diversity for Biodiversity: In the Run-up to COP 9/MOP 4

From 19 to 30 May 2008 Bonn will host the 9th meeting of the Conference of the Parties to the Convention on Biological Diversity. On 12 May the members of the Cartagena Protocol on Biosafety will also meet in the UN city on the Rhine river.

Both events are casting their shadows—or rather, rays of bright light as they are making themselves felt. After all, the issue of biological diversity that will be discussed has led to activities on all local levels, whose effect will begin to show before and during the conference and may reach far beyond this event.

The key for this is to be found in Bonn's special role and conception. Federal legislation has supported the development of a location for international cooperation and sustainability. In 2006 the UN campus was inaugurated and, in the meantime, 15 UN organizations are working together under the general headline "UN in Bonn—working towards sustainable development worldwide". The UN activities are supplemented by a dense network of scientific research institutes, development aid services, enterprises, media groups and internationally oriented NGOs. Most of them are working in the fields of environment and development. Several UN organizations that are based in Bonn deal directly with the issue of biodiversity—above all, the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC), the Secretariat of the United Nations Convention to Combat Desertification (UNCCD), the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals (UNEP/CMS) as well as the United Nations University (UNU) with a focus on vulnerability.

Bonn is much more than a conference site—Bonn forms part of an interactive hub, which, as is typical for a flexible network, gains impetus through the close exchange and triggers a great number of activities and programs—beyond ex-

isting structures, organizations and hierarchies.

Bonn's biological diversity is to be seen all over the city area. Twenty-three percent of the Bonn municipal region are nature conservation areas. Another 28% are considered landscape conservation areas. The traditionally densely populated Rhineland comprises a great variety of cultivated land, which is reflected by Bonn's nine nature reserves, where you will find mixed forests near a dune.

With its campaign on biological diversity, the city of Bonn is striving for a great goal: by May 2008 as many citizens as possible should have become familiar with the term "biological diversity", appreciate its great value and be aware of the contribution that we all will have to make.

The expertise, communication and education—and, as a third foundation, action and influence—are factors that are taken into account by Bonn's campaign.

Bonn is in the process of establishing its first report on biodiversity, which will bring together those many existing components of expertise, individual programs and initiatives within the administration and the scientific community.

The groups and organisations involved in the Bonn biodiversity campaign bring their activities together under a joint appearance (logo and event calendar). So the events regarding biological diversity are easy to be recognized. A special program focuses on children, youngsters, educationalists and teachers, who, in turn, will be trained as disseminators. At a later time during the run-up to the conference, there will be numerous offers to the general public, which take up people's everyday lives and put the global context into a more concrete perspective.

Action and the exertion of influence are taking place locally in single projects and through the commitment of the administration—however, also on a global basis through an international network.



mental conservation associated to low income housing, the education, the leisure and the health.

We believe that this series of initiatives is consistent with the essence of the Curitiba Declaration and express our contribution to a more responsible conservation and sustainable use of biodiversity, which are the objectives that we will defend at the COP 9 in Bonn. ♣



Takehisa Matsubara, *Mayor of Nagoya, Japan*

Cities and Biodiversity

Immediately before the conference's high level segment from 25 to 27 May, the city of Bonn will invite mayors from all over the world in order to develop a local action plan on biodiversity for cities. This initiative complements our involvement in the meeting on cities and biodiversity held in Curitiba, Brazil, in March 2007, at the invitation of Mayor Richa of Curitiba, with the participation of Mayor Matsubara of Nagoya, and Mayor Tremblay of Montreal. Together, we feel that we can make a difference to protect biodiversity.

The cities constitute an important factor for the successful achievement of the goals as laid down in the CBD. More than half of the world's population currently lives in the city. This is where these people work, this is the focal point of their life and this is where they intend to shape their future. If biological diversity is lost, it will mean an indirect threat to the future of all these people as well.

If nobody feels responsible in person, there will be no perceivable change. This is why the cities must adopt responsibility and take action. At the same time, they should encourage their citizens to become involved in the protection of biological diversity, as a matter of course in their everyday lives. Every small contribution makes a difference. Cities are in a position where they can lead people to become a driving force for change. Everybody can become involved at his or her place in life.

It became apparent throughout the last few weeks and months: it is diversity that supports diversity. It is only if all parts of society and all nations of our planet will take a joint effort, that we can put up some resistance to the loss of biological diversity and achieve a fair distribution and use.

We can gain a lot from diversity: it is colorful and lively—and it is worth to take action for its preservation. Diversity has shaped us and we have shaped diversity. Diversity is valuable and diversity will never come back, once we have allowed its loss.

Diversity is an issue of sustainability which moves and thrills—this is what we felt during our preliminary meetings and wish to pass on.

Striving for diversity with diversity—Bonn is looking forward to May 2008! ♡

Nagoya is the hub city of Central Japan. With a population of 2.2 million, Nagoya is located almost in the geographical center of Japan, and is the fourth largest city after Tokyo, Yokohama, and Osaka. It started to develop as a city when Tokugawa Ieyasu built Nagoya Castle in 1610. Today, this area is the center of a high-quality manufacturing industry, as represented by Toyota Motor Corporation. Although it is a big city, Nagoya has a rich natural environment thanks to its mild, humid climate and four distinct seasons. Nagoya's city planning reflects Nature's Wisdom, the theme of Expo 2005 in Aichi, Japan.

The year 2010 will mark the 400th anniversary of the founding of Nagoya and the fifth anniversary of the expo. Scheduled to be held in the same year is the 10th meeting of the Conference of the Parties (COP 10) to the Convention on Biological Diversity (CBD), which the City of Nagoya is now preparing to host together with the national government. Under the Convention, the Parties are required to significantly reduce the current rate of biodiversity loss by 2010. The year 2010 also falls on the International Year of Biodiversity, as proclaimed by the General Assembly of the United Nations. It is perhaps more than a coincidence that the City of Nagoya and the CBD share the same milestone.

On 22 May 2007, various events were held in Nagoya to commemorate the International Day for Biological Diversity and to raise public awareness about the day and the importance of preserving biodiversity. As a prospective host of COP 10 in 2010, the City of Nagoya will further publicize the importance of biodiversity and build momentum toward COP 10.

Nagoya has a solid track record of protecting a tidal flat and preserving biodiversity by reducing waste. The following is an overview of Nagoya's experience of, and commitment to, preserving biodiversity based on three pillars: "attaining a sustainable lifestyle" through a waste reduc-

tion campaign, "achieving harmony with nature" by redeveloping the Higashiyama Zoo and Botanical Gardens and upgrading the Higashiyama Forest, and "developing human resources and building human networks" through cooperation with citizens and companies under the framework of the Nagoya Eco Campus.

Attaining a sustainable lifestyle

Back in 1997, the City of Nagoya urgently needed to build a new landfill because the conventional one was expected to become full early in the 21st century. The city designated part of the Fujimae Tidal Flat in the Port of Nagoya as a candidate site. However, there were strong calls to preserve the tidal flat because it has a water-purifying function and also serves as one of the largest stopovers in Japan for migratory birds, some 60 species. The city examined an option of building an artificial tidal flat, but failed to win public support, so in January 1999 it abandoned the plan to reclaim the tidal flat.

The only option left was to reduce the waste generated by citizens and companies. In February 1999 the city made an "Emergency Announcement for Garbage Reduction", set a target of reducing waste by 20% (equivalent to 200,000 tons) by the end of the 20th century, and sought public cooperation. The city started to collect empty bottles and cans in all the wards of the city, and to collect garbage put in bags designated by the city. In August 2000, Nagoya became the first city in Japan to launch a program for fully recycling containers and packages.

By sharing a sense of crisis and taking the initiative together, the city and the citizens succeeded in reducing waste by 230,000 tons in fiscal year (FY) 2000 (from 1.02 million tons in FY 1998). This huge increase in the collection of recyclable waste reduced the amount of the waste to be landfilled by about 60%. In fact, the city's failure to build a landfill turned out to be a blessing in disguise—reduction in waste, extension of the service life of



the existing landfill, preservation of the Fujimae Tidal Flat, preservation of biodiversity, and above all, increased public awareness toward the environment.

In November 2002, the Fujimae Tidal Flat was registered as a Ramsar site. In May 2007, the City of Nagoya entered into an agreement with the Australian city of Greater Geelong—a city home to the Swan Bay wetlands, another Ramsar site—to protect the habitat for migratory birds that visit both cities. These efforts demonstrate the city’s commitment to preserving the tidal flat as a valuable asset and to use it for environmental education.

Achieving harmony with nature

The Higashiyama Forest is located on the hilly area in the eastern part of Nagoya. Measuring 410 ha in total, this forest has been miraculously left untouched in the urban area. Situated in the center of this forest are the Higashiyama Zoo and Botanical Gardens, which exhibit some 550 kinds of animals and about 7,000 species of plants, while preserving endangered species of fauna and flora, and conducting research. In 2007, the city embarked on a project to redevelop the Higashiyama Zoo and Botanical Gardens as “a bridge connecting people and nature” to mark the 70th anniversary of their opening. Specifically, the

redeveloped zoo and botanical gardens will enable visitors to experience fauna and flora habitats and to appreciate the relationship between people and nature.

The city also plans to replace old trees with young trees in the Higashiyama Forest which is becoming a climax forest that absorbs less carbon dioxide. Meanwhile, the city is working on a project to revive *sato-yama* (mountains closely linked with community life) and terraced paddy fields so that citizens can take an interest in nature and think about nature. All of these efforts are intended to pass on the natural environment of the Higashiyama Forest to future generations as the symbol of Eco-Capital Nagoya.

Developing human resources and building human networks

Through the waste reduction campaign and Expo 2005 Aichi, Japan helped raise public awareness about environmental issues. To increase the momentum, the City of Nagoya opened Nagoya Eco Campus in 2005 to develop human resources who will underpin Eco-Capital Nagoya.

Administered jointly by civic groups, companies, universities and governmental bodies, Nagoya Eco Campus is intended to provide citizens of all occupations and ages with opportunities to work,

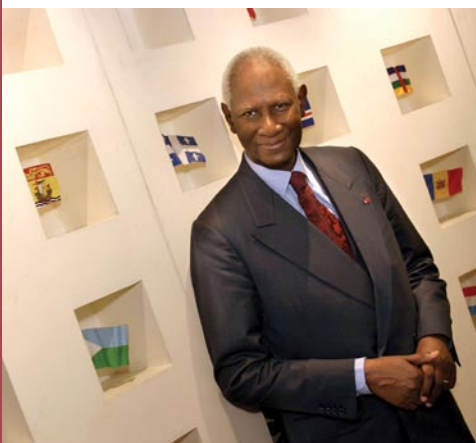
think, and learn together about the environment and share a sense of growth. The campus is everywhere—from forests and rivers to factories and meeting spaces. Nagoya Eco Campus also offers programs where participants can gain university credits. In FY 2006, about 11,000 citizens participated in 110 courses (574 sessions in total).

Concurrently, the city is promoting eco-life activities to conserve the global environment for future generations. Citizens are encouraged to be kind to the environment and avoid wasting resources. Under the slogan of “From awareness to action”, in November 2005 the city started to recognize citizens who practice eco-life activities. As of the end of March 2007, about 390,000 citizens have declared their commitment and started to take action. More citizens should become involved in this program to act like the small hummingbird depicted in a folk legend of South America, which flew back and forth between water and fire, dropping a single drop of water from its beak onto the fire below to do what it could.

In March 2007, I participated in the meeting on Cities and Biodiversity held in Curitiba, Brazil as the mayor of one of the candidate cities for hosting COP 10. I presented Nagoya’s commitment as described above to the representatives participating in the meeting, including the mayors of Curitiba, Brazil (host city of COP 8) and Montreal, Canada. I explained to them that such efforts are the key to overcoming biodiversity-related problems in cities.

Discussions at the meeting led to the conclusion that cities and other local governments in the world play significant roles in achieving the 2010 Target. Action requires the involvement of the private sector including citizens, and in this context, Nagoya has met the challenge to reduce waste through cooperation with citizens. I am convinced that the citizens will fulfill their roles in preserving biodiversity.

I sincerely hope to build upon the accomplishments at the meeting on Cities and Biodiversity, raise awareness of the global community on different occasions, show the commitment of the city to preserving biodiversity, and promote city planning befitting of the host of COP 10. ♡



Abdou Diouf, *Secrétaire général de la Francophonie*

Biodiversité : l'engagement de la Francophonie

Il pourrait sembler de prime abord, plus compréhensible que la Francophonie, communauté liée par le partage d'une langue et de valeurs communes, se mobilise en faveur de la promotion de la diversité culturelle¹ qu'en faveur de la biodiversité. Mais il suffit de rappeler que la raison d'être de l'Organisation internationale de la Francophonie est de donner corps à une solidarité active entre ses Etats et gouvernements membres pour favoriser un développement durable et équitable qui puisse améliorer le vécu de leurs populations et garantir un avenir meilleur pour les générations futures. La langue française est à ce titre, un moyen d'accès à la modernité, un outil de communication, de réflexion et de création et constitue, de fait, le socle de ses actions en faveur du développement.

Consciente qu'il ne saurait y avoir de développement durable sans gestion soucieuse de l'environnement, la Francophonie a, dès son III^e Sommet réuni à Dakar en 1989, décidé d'organiser à Tunis, en 1991, la première Conférence des ministres chargés de l'Environnement. Cette conférence ministérielle, qui se tenait un an avant le Sommet de la planète Terre de Rio de Janeiro, a posé les bases de l'intervention francophone dans le domaine de l'Environnement, selon cinq axes : la concertation en amont et en marge des rencontres internationales sur l'environnement ; la sensibilisation du public et l'information des décideurs ; la formation des opérateurs ; le développement du partenariat.

C'est autour de ces axes que la Francophonie assure, via son Institut de l'énergie et de l'environnement créé en 1987 et basé à Québec, l'accompagnement des pays membres et ce qui deviendra par la suite et à partir de Rio, la dé-

marche de concertation francophone en environnement. Depuis, une centaine d'actions touchant à la fois les négociations sur le climat, la désertification, la biodiversité, les forêts et le développement durable ont été réalisées, dont 12 concernent la biodiversité.

Offrant conseil et expertise à ses Etats membres, assurant sensibilisation et formation des compétences locales, diffusant les savoirs et faisant partager les savoirs faire, la Francophonie a créé une dynamique au sein de l'espace francophone, conjuguant ainsi ses efforts à ceux de la communauté internationale pour la mise en œuvre de la Convention sur la diversité biologique, notamment de ses 13 (Éducation et sensibilisation du public), 17 (Échange d'informations) et 18 (Coopération technique et scientifique).

L'un des principaux moyens d'intervention de la Francophonie est sans conteste le système mondial d'information francophone sur le développement durable, Médiaterre (www.mediaterre.org), lancé en 2002, à l'occasion du Sommet de Johannesburg. Outil d'échange, de formation et d'information fréquenté par environ 5 000 internautes par jour, il est classé par les moteurs de recherche comme la première ressource sur le développement durable.

Médiaterre joue le rôle d'un Centre d'échange international pour la communauté francophone et participe de ce fait au *Mécanisme du Centre d'Échange* mis en place par la Convention sur la diversité biologique. Il permet la mise en commun des savoirs et des compétences francophones pour le développement durable et leur rayonnement au niveau international. Il fédère actuellement une vingtaine de centres de ressources autour de sites portails régionaux, des sites portails thématiques et des sites d'acteurs (scientifiques, jeunes, femmes, parlementaires). Animé de manière très décentralisée, Médiaterre permet l'expression et la valorisation des compétences et des savoir faire locaux.

Le volet «Biodiversité» de Médiaterre (www.mediaterre.org/biodiversite) assure notamment le suivi des différentes Conférences des parties à la Convention et diffuse les documents produits par la communauté francophone en appui aux praticiens et négociateurs de la Convention.

C'est donc tout naturellement que les liens entre Médiaterre et le Mécanisme du Centre d'Échange de la CDB se sont renforcés et je suis convaincu que ces liens se renforceront encore avec la coordination accrue entre les points focaux du Mécanisme du Centre d'Échange dans les pays francophones et les partenaires de Médiaterre dans ces pays.

Convaincu que le combat en faveur de la diversité biologique et celui en faveur de la diversité culturelle sont aussi essentiels l'un que l'autre, pour l'avenir de l'humanité, mon engagement personnel et au nom de la communauté francophone est sans faille. Nous continuerons à nous mobiliser comme nous l'avons fait à l'occasion des Sommets de Rio en 1992 et de Johannesburg en 2002 ou encore à la Conférence de Paris pour une gouvernance écologique mondiale en 2007. La Francophonie poursuivra son soutien à des institutions spécialisées comme, par exemple l'Institut Jane Goodall sur les primates, et aux politiques de défense de la biodiversité que ces institutions aident les pays à mettre en place.

Mes diverses expériences m'ont appris qu'il faut soutenir à la fois la réflexion globale sur la meilleure façon de prendre en compte la biodiversité dans les processus de développement et les recherches sur l'inscription de cette réflexion dans les pratiques locales et le vécu quotidien des populations. Le combat pour la biodiversité doit, pour aboutir, toujours s'inscrire, au-delà des considérations scientifiques et techniques, dans la dimension politique la plus concrète. ✎

1. La Francophonie s'est fortement mobilisée pour l'adoption et la ratification de la Convention internationale sur la protection et la promotion de la diversité des expressions culturelles (Unesco, 2005), entrée en vigueur le 18 mars 2007.

Ibrahim Thiaw, Director, Division of Environmental Policy Implementation (DEPI UNEP)
Former Acting Director General of the World Conservation Union (IUCN)



Our Joint Challenge: Achieving the 2010 Biodiversity Target



With just four years left to reach the target of a significant reduction in biodiversity loss—the internationally agreed ‘2010 Biodiversity Target’—it is time to take stock of progress and ask what needs to be done to place us firmly on a path to success.

The target is undoubtedly an ambitious one. All of us are painfully aware of the rapid and accelerating loss of biodiversity and its implications for the lives of the millions of people who depend on nature’s resources. But we also know that reversing biodiversity loss is possible, as numerous conservation success stories documented in IUCN’s Red List of Threatened Species prove: the southern white rhino in Africa, or more recently the white-tailed eagle in Europe, the blue-poison frog in South America, and West African giraffes. In other cases, the clear identification of threats and proper implementation of conservation mea-

sures have helped stop massive declines and given hope for recovery of species such as the Asian vultures and the Goliath grouper in the Caribbean.

Biodiversity loss cannot be reversed by the environmental community alone: it must become the responsibility of everyone with the power and resources to act. New alliances are needed across all sectors of society. We know what needs to be done and we have the tools at our disposal. What we need is to accelerate the collective action of the different sectors including government, businesses, academia, international institutions and local organizations and to further develop our knowledge, where needed.

The 2010 Biodiversity Target can act as a rallying point and provide a common vision under which we all unite. I see four main challenges inherent in the target and these are all being addressed by The World Conservation Union (IUCN) through

its secretariat, commissions, members and partners.

Link biodiversity to the development agenda and mobilize market forces

Biodiversity must be valued as the *foundation* of life on Earth and as an essential element for future economic development. We must ensure that the terms ‘biodiversity’ and ‘ecosystem services’ are meaningful to the development community and to the private sector, so that ecosystem services are taken into account in development decision making.

As noted by the Parties to the Convention on Biological Diversity (CBD), conserving biodiversity, and specifically achieving the 2010 Biodiversity Target, is fundamental to ensure poverty reduction and progress towards the Millennium Development Goals, in particular for reducing hunger in rural areas where 70% of the poor live. We therefore need to ensure that biodiversity is mainstreamed in global, re-





gional and national development policies, including in development cooperation and trade policies at the international level. We also need to ensure that all countries have the means to implement their international commitments on biodiversity as a critical step in their efforts to achieve sustainability. Biodiversity must also be included in the national development strategies called for by the 2005 World Summit.

IUCN's work on the link between conservation and poverty reduction involves safeguarding ecosystem goods and services to support livelihoods in forests, drylands, wetlands, and protected areas. It also produces the tools to support livelihood security such as poverty reduction strategies. In 2005, IUCN launched the Conservation for Poverty Reduction Initiative which provides a platform for the Union to mobilize the capacity of its members, commissions and secretariat, as well as partners, to contribute to poverty reduction. The Message from Paris, produced by the development and environment communities in September 2006, demonstrates the commitment by government and civil society to integrate biodiversity into European development cooperation. In 2008 we shall assess progress in implementing the Message.

We also need to mobilize the market place in support of the 2010 Biodiversity Target, through incentive measures that promote the conservation of essential ecosystem services such as water purification and carbon storage. We also have to engage the private sector as a critical force in shaping the sustainability of our planet. The *Business and the 2010 Biodiversity Challenge* and the work done in Curitiba that IUCN supported, are encouraging signs that there are already willing and progressive businesses showing the way.

Provide sound science to guide decision making and track progress

Sound science is critical for making the right decisions about biodiversity and for measuring progress towards the 2010 Biodiversity Target. Our challenge is to provide governments, the private sector, and all those responsible for natural resource use with the hard evidence that biodiversity loss matters. Only by doc-

umenting the status of biodiversity and identifying specific threats can we make a strong case for the actions and funding needed to protect it, as shown by the conservation successes mentioned earlier. We do not have a fully comprehensive baseline of biodiversity information that allows us to measure progress toward the 2010 Target and it is impossible to assess the status of every known species with the time and funding available. So, IUCN's Species Survival Commission and Species Programme are working with partners in the 2010 Biodiversity Indicators Partnership to provide a series of biodiversity indicators that will be critical in steering conservation action in the right direction and for setting priorities amid so many conflicting demands.

We are also developing measures to assess sustainability of biodiversity use, which is critical to consider the relationship between biodiversity and development, and the impact of climate change on biodiversity. IUCN continually compiles data on the status of biodiversity, and improves the tools and processes needed to maintain high standards of data quality. We have made significant progress in increasing the coverage of the Red List and developing a Red List Index but overall, progress in developing an information baseline and suitable indicators is slow. We must therefore join forces to secure the necessary investment.

Mobilize political and public support

One of the main challenges to achieve the 2010 Target is generating the political will to ensure that commitments are implemented. This requires positioning biodiversity, and the 2010 Biodiversity Target, higher on the international political agenda, linking it to the Millennium Development Goals and mobilizing public support at global, regional, national and local levels.

The Heads of Agencies Task Force on the 2010 Target established at the last meeting of the CBD Conference of the Parties is now working towards uniting efforts to better communicate and mobilize society in support of the 2010 Biodiversity Target.

Experiences with the Countdown 2010 initiative, launched by IUCN in Europe,

shows that it is possible to mobilize support and create a movement around the target. The initiative is now spreading to other regions of the world creating a powerful network of active partners working together and generating the momentum to reach it. As well as promoting the importance of the 2010 Biodiversity Target and encouraging action, the initiative also assesses progress towards reaching it.

IUCN has worked with the CBD's Executive Secretary to develop a toolkit on Communication, Education and Public Awareness for national focal points and others responsible for biodiversity policy. It will also be used by educators, media and communication professionals with an interest in biodiversity.

We need to learn from our experiences and unite around the 2010 Biodiversity Target to mobilize support from all parts of society and at all scales. Getting the message across about the significance of biodiversity is critical. What do the terms 'biodiversity' and the '2010 Target' mean to the general public? More than half of the world's population now lives in towns and cities, removed both physically and spiritually from the natural world. The links between biodiversity and human well-being and security are being lost amongst the roar of cities while they remain a matter of survival in poor rural communities.

We, the environmentalists, have fallen short in reaching the mainstream of society by not using the appropriate language or the market forces at our disposal. We have to move beyond talking amongst ourselves. Unless a critical mass of people and their leaders understand that healthy, functioning ecosystems are the foundation of human life and prosperity, we will continue to see 'politics-as-usual', blinkered economic policies, and the continued over-exploitation of natural resources.

Achieving 2010 will be almost impossible if we do not work together. Even though challenges remain and progress to date has been slow, I believe there is still time to capitalize on the opportunities the target presents. By rethinking our way to engage outside our community, we can influence the policies and investments which will help create a society that values and conserves biodiversity for the sake of people and the planet. ❖



Walter Erdelen, Assistant Director-General, Natural Sciences, United Nations Educational, Scientific and Cultural Organization (UNESCO)



Key Partnerships in Biodiversity: The UNESCO Experience

The United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Secretariat of the Convention on Biological Diversity (CBD) have been engaged in a very fruitful partnership since the inception of the Convention in 1992. This partnership was formalized through an overarching Memorandum of Understanding between UNESCO and the CBD Secretariat in 1998, the development of a specific Memorandum between the Intergovernmental Oceanographic Commission of UNESCO and the CBD Secretariat in 1995, and the formulation of a revised Memorandum currently being developed.

The main terms of the partnership between UNESCO and CBD are: notification of their respective national focal points on issues of mutual interest to promote their interaction and cooperation; production, exchange and dissemination of scientifically-sound information and information materials; interaction of their respective clearing-house mechanisms; use of their respective rosters of experts; cooperation in building up required scientific, technical and technological capacity; implementation of joint activities related to inventorying, assessment and monitoring of biodiversity; *in situ* conservation and integrated ecosystem management, in particular in areas adjacent to protected areas, such as buffer and transition zones of biosphere reserves; training courses, workshops and university chairs; programmes for the preservation and maintenance of knowledge, innovation and practices of indigenous and local communities; exploring the interactions between culture and biological diversity; and education and public awareness programmes on biodiversity.

Partnerships are important to UNESCO in discharging its mandate to promote peaceful dialogue among its Member States through the promotion of science, culture, education and communication. These partnerships include, but are not limited to, the United Nations special-

ized agencies, funds and programmes, UNESCO Member States, other intergovernmental organizations beyond the UN system, NGOs, the private sector, the media and UNESCO's specialized networks of sites and experts.

On the occasion of this issue of *Gincana* devoted to partnerships, I would like to share some lessons learned from the implementation of partnership arrangements in UNESCO, provide some examples of such partnerships and assess how these experiences and lessons can enhance future cooperation between UNESCO and the CBD.

in fact have resulted in a gradual but profound change in the views of the scientific community concerning its role in society. Today, in part due to UNESCO's ISP, scientists are cognizant of their duty to provide decision makers with the necessary information, based on sound science and presented in an accurate, timely, neutral and balanced manner, to enable decision makers to do their job. The Millennium Ecosystem Assessment, the International Assessment on Agricultural Science and Technology for Development, the design and implementation of the Global Climate, Ocean and Terrestrial Observing Systems,

Partnerships are important to UNESCO in discharging its mandate to promote peaceful dialogue among its Member States through the promotion of science, culture, education and communication.

One first example is that of research partnerships. In UNESCO, many scientific research, observation and assessment programmes are undertaken under its intergovernmental and international scientific programmes (ISP): the Intergovernmental Oceanographic Commission's programmes and activities; the International Hydrological Programme, including the World Water Assessment Programme; the Man and the Biosphere Programme, including the UNESCO Postgraduate Regional School on Integrated Management of Tropical Forests (ERAIFT) and ecosystem research in the World Network of Biosphere Reserves (507 sites in 102 countries); the International Geoscience Programme and the International Basic Sciences Programme.

Some of these programme activities have been conducted for more than 35 years. We have learned that research partnerships in an intergovernmental context have impacts beyond the mere advancement of scientific knowledge and

the implementation of field-based research programmes aimed at assessing the impacts of climate change on mountain and dryland areas, efforts aimed at providing local populations with options for adaptation to climate change—all these are examples of scientific efforts in which scientists have gone from providing scientific expertise, knowledge, information and data for knowledge's sake alone, to providing scientific advice for the specific purpose of backstopping the decision and policy making processes.

In the context of the current UN system-wide reforms, UNESCO recently undertook an initial stock-taking exercise of current environment-related activities of the UN Environment Management Group (EMG), a body comprising 42 members. It is hoped that the resulting report, *Diversity in One—Mapping the Environment*, will help to revitalize the dynamic of true exchange and collaboration between the EMG members, and thus reinvigorate old and initiate new partnerships around the common cause of maintaining a sustain-



able environment for current and future generations. While seeking to eliminate overlapping activities, it is clear that partnerships are essential in order to address the varied components of issues falling under the rubric “environment” in a thorough fashion, as we see in the relationship between the CBD and UNESCO.

A second example of key partnerships for biodiversity is UNESCO’s involvement in communication, education and public awareness for biodiversity. This has been no simple undertaking, as biodiversity messages are complex and difficult to convey effectively. Their impacts are difficult to measure, and there still is a general misperception that “biodiversity” simply means “species”. In UNESCO, efforts have been made to address the various dimensions of biodiversity in the context of the UN.

Another example is provided by partnerships with the private sector. Recently, UNESCO and the ‘Star Alliance’—an alliance of major airlines—agreed on a three-year partnership referred to as ‘Biosphere Connections’, which also involves the Convention on Wetlands (Ramsar, 1971, for which UNESCO provides the legal depositary) and the World Conservation Union (IUCN). In the context of this partnership, the Star Alliance will mobilize its communication network to promote the conservation and sustainable use of natural resources and biodiversity in the countries covered by the Alliance, while UNESCO will mobilize its biosphere reserves and World Heritage sites (over 850 sites in more than 100 countries), where practical options for conservation and sustainable use can be tested and implemented. The List of Wetland Sites of International Importance under the Ramsar Convention (1,674 sites in 155 countries)

is also involved in implementing this partnership on the ground.

The Biosphere Connections partnership will consist of linking the tourism- and business-oriented action of companies adhering to the Star Alliance with the scientific, technical, educational, public awareness and advocacy work of UNESCO’s Man and the Biosphere programme, the Ramsar Convention and IUCN. The Star Alliance will provide a number of air tickets to allow field site managers to attend conferences, meetings and projects organized by the three intergovernmental organizations involved in the partnership, while the latter will highlight and illustrate in the context of their activities the work, expectation and experience of the private sector (which in this specific partnership is represented by airlines).

For the future, it will be important to emulate similar partnerships for effectively implementing the three objectives of the Convention. Several opportunities are provided by carbon trade/carbon economies and their impacts on biodiversity, poverty and, more generally, the sustainable livelihood of local communities. This is an area in which UNESCO can greatly assist, through its initiative on carbon, biodiversity and poverty. This initiative will assist countries in the South to understand the benefits and options provided by carbon trading and should provide threefold benefits: sustainable livelihoods for local people, biodiversity protection, and carbon sequestration through forest protection and regeneration. The involvement of the private sector in this context is essential.

Another opportunity for synergies and partnerships in support of the work of the Convention is provided by UNESCO’s work on studying and formalizing the interrelationship between scientists and

society. A project aimed at briefing policy makers with information derived from scientific research, monitoring and assessments on issues of international relevance such as the carbon, nitrogen and silica cycles, indicators for sustainable development, soil biodiversity, animal production, agricultural impacts on biodiversity, and future directions in the exploitation of grasslands and rangelands has already demonstrated two things: first, if scientific findings are to attract the attention of policy makers, they have to be formulated in specific language, and second, in order for the science to be relevant to policy, policy makers must be involved in the formulation of the research questions.

The support of policy makers is essential in order to achieve the 2010 Biodiversity Target, and they need to know how to measure progress towards the Target. This is therefore of fundamental importance to both UNESCO and CBD in the near term. UNESCO will present progress made on a methodology to measure the Target at the national level at the thirteenth meeting of the CBD’s Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). It is also envisaged that UNESCO will host the SBSTTA meeting immediately preceding the tenth meeting of the Conference of the Parties to the CBD, which will take place in 2010 and be largely devoted to the issue of the 2010 Biodiversity Target.

In July 2007, UNESCO hosted the twelfth meeting of SBSTTA, twelve years after having hosted its first meeting in 1995. This event symbolized the ‘return’ of the SBSTTA to UNESCO, which in turn symbolizes the importance of the partnership of science with policy making. I hope that the Convention will pay special attention to partnerships between the scientific and the policy making communities, between knowledge and political decisions, and between the UN specialized agencies, funds and programmes and the Multilateral Environmental Agreements. UNESCO stands ready to continue its key partnership with CBD on matters of scientific relevance and also on communicating, educating and raising awareness of the importance of biodiversity and of the CBD for sustainability. ❖



Biodiversity in Food and Agriculture: FAO Partnerships and Synergies Towards 2010 and Beyond

People are fed, cured and sheltered by biodiversity which should be considered as the *sine qua non* to food security, poverty eradication, sustainable development, economic growth and prosperity. The conservation and sustainable management of our natural capital are critical steps towards the attainment of international development and environmental objectives such as the 2010 Biodiversity Target and the Millennium Development Goals. In this framework, FAO considers biological diversity as fundamental to its mandate in nutrition, agriculture, forestry and fisheries, and addresses biodiversity conservation and sustainable use through an interdisciplinary approach and through fostering partnerships and synergies that catalyze actions related to knowledge management, technical assistance, and policy development and implementation.



The conservation and sustainable management of our natural capital are critical steps towards the attainment of international development and environmental objectives such as the 2010 Biodiversity Target and the Millennium Development Goals.

At the policy level, FAO deals with issues related to biodiversity in food and agriculture through different biodiversity-related binding and non-binding instruments and initiatives, for example the International Plant Protection Convention (IPPC), the Code of Conduct for Responsible Fisheries, the Forest Resources Assessment (FRA), the International Treaty on Plant Genetic Resources and the Commission on Genetic Resources for Food and Agriculture (CGRFA). In this framework, it is important to recall the latest CGRFA's adoption of the Multi-Year Programme of Work (MYPOW), which sets a phased approach towards the conservation and sustainable use of biological diversity for food and agriculture and promotes synergy and partnerships between FAO and other relevant organizations, and in

particular the Convention on Biological Diversity (CBD).

FAO manages biodiversity-related information through a variety of online instruments such as the FAO Knowledge Forum and databases encompassing the genetic level (e.g. the Domestic Animal Diversity Information System [DAD-IS]; the FAO Global Information System on Forest Genetic Resources [REFORGEN]), the species level (e.g. FISHSTAT+; Ecocrop and the Desert Locust Information System or DLIS) and the ecosystem level (e.g. Terrestrial Ecosystem Monitoring Sites [TEMS] database). The knowledge managed through FAO is an outcome of global team-work with countries through governmental and non-governmental organizations, and the academia. FAO's participation in the 2010 Biodiversity Indicators Partnership (2010BIP) can be brought as one of the examples of collective knowledge management exercise in monitoring progress towards the achievement of the 2010 Biodiversity Target.

FAO has been a major partner of the CBD since the early days of the negotiation of the Convention and its adoption, as one of the Agencies which collaborated in the drafting of its Text. Today, FAO cooperates with the CBD on a wide variety of issues ranging from forest biodiversity, marine and coastal biodiversity to protected areas. As flagship cooperative efforts between FAO and the CBD, the joint work within the Programmes of Work

on Agricultural Biodiversity and Forest Biodiversity is being reviewed and will be discussed at the Thirteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-13) hosted by FAO at its headquarters (Rome, Italy) in February 2008.

Recently, FAO has also worked with the CBD Secretariat on new threats and challenges to biodiversity and in particular on climate change. Building on linkages with the UNFCCC and other stakeholders, FAO focuses on this key driver of biodiversity loss by addressing the role of adaptation measures and mitigation and related growing socio-economic issues in the fisheries, forestry and agriculture sectors (e.g. bioenergy production) within the framework of food security and sustainable development. Upcoming FAO consultations and the High Level Conference on World Food Security and the Challenges of Climate Change and Bioenergy (Rome, Italy, 3-5 June 2008) will further our knowledge and foster new partnerships on these emerging issues that impact on biological diversity at the genes, species and ecosystem levels.

Working together in partnerships and seeking synergies towards the conservation and sustainable use of biodiversity will allow for feeding, curing and sheltering future generations. In this context, FAO provides a neutral forum to further these partnerships for biodiversity in food and agriculture towards 2010 and beyond. ❖



Robert Hepworth, *Executive Secretary, Convention on Migratory Species (CMS)*

CMS and the New Global Challenges

One of the most serious global environmental issues facing us all is climate change. The growing impact of climate change is now central to biodiversity conservation. The cold facts, presented so brilliantly last year by Al Gore in his film, and more systematically in the recent Intergovernmental Panel on Climate Change (IPCC) report, tell us that one primate species has now overheated the planet to such an extent that many thousands of our fellow species across the globe face an even greater risk of extinction than ever before.

The Convention on Migratory Species (CMS) Parties held a special seminar on the issue immediately before our last Conference of Parties (COP) in Nairobi, slightly more than a year ago. They adopted a strong resolution on climate change at the COP itself and suggested some of the responses to the crisis required from Governments and other actors to safeguard migratory species. The United Nations Environment Programme (UNEP)/CMS Secretariat published the results of the seminar in popular format during the United Nations Framework Convention on Climate Change (UNFCCC) COP two months ago and obtained coverage in more than 100 newspapers, websites and other media outlets.

What is the central message of climate change for a body like CMS? Simply that we have to do even more in all the other areas—safeguarding habitats, creating protected pathways for animals by land and sea, outlawing indiscriminate fishing methods and exposing global wildlife abusers who use the opportunity of international travel to hunt down the last specimens of endangered species such as the Sahelo-Saharan antelopes.

Globalization

Globalization has also offered the conservation community an opportunity that, if wisely exploited, can greatly increase human prosperity through sustainable use. Tourism revenues from wildlife watching

activities have increased exponentially in the last two decades. Ecotourism is no longer simply a minor or 'niche' market. Wildlife watching is the main tourism activity in countries like Kenya, Tanzania and Uganda. Kenya alone received over 1,000,000 international arrivals in 2004, which generated international tourism receipts of over \$500 million. Even small wildlife watching operations, such as one in the Seychelles for whale shark watching in which 496 tourists participated in 2005, provided an income of over \$35,000,—of which \$20,000 was then used to support an NGO-led whale shark monitoring programme. Be they nationwide programmes or small companies, wildlife watching operations can be effective businesses that generate income and revenues to be re-invested in conservation. However, standards in the sector vary and are not always sufficient to maintain the living environmental resource being utilized. CMS, notably through its Scientific Council, is working with partners to provide practical guidance in this key sector.

The acceleration in global movement of people and goods creates new business opportunities for ecotourism. Yet the same growth in global trade presents new environmental problems. For CMS, the prime example over the last two years has been the emergence of the pathogenic virus H5N1, better known as highly pathogenic avian influenza, which put wild birds under the spotlight. Vested interests pointed the finger of blame at migrating birds, accusing them of being the main global transmitters of avian influenza. This accusation caused a media feeding frenzy and hence considerable public alarm last year. However the central accusation turned out to be extremely misleading. Good science revealed that the poultry trade is in most (if not all) regions, the main incubator, transmitter and reservoir of the virus. Some of this "good science" came from our Convention. In August 2005 we agreed with our daughter Agreement, African-Eurasian Waterbird Agreement (AEWA), to

establish a Scientific Task Force on Avian Influenza and Wild Birds, which comprises experts from 14 different intergovernmental and NGO bodies. Working electronically, the Task Force painstakingly extracted the key truths as they emerged from scientific research across the globe. They organized a workshop in Nairobi and Aviemore, Scotland to discuss ways to improve the global response to avian influenza. The CMS and AEWA Secretariats published the results of this work, and other Task Force conclusions, in a popular scientific brochure and on the Avian Influenza, Wildlife and the Environment Website (AIWeb).

Similarly, CMS is now undertaking a study on the impact of alien invasive species on habitats and wildlife. The study is emblematic of the effects of globalization, which are often complex and difficult to assess and address. In our case, this is shown by the fact that there is often no distinction between alien and migratory species: changing migration patterns can take new species to unknown lands and waters, allowing them to 'invade' habitats to which they never belonged before.

Commerce

Commerce is the principal driver of globalization. CMS, like other public agencies, is strengthening its co-operation with the private sector. Public-Private partnerships help us not only to increase our resource base, but also crucially to establish a regular dialogue with the private sector, understand its operations and constraints, and identify how companies can support migratory species conservation as well as pursuing their own business objectives. Over the last 18 months we have established a close partnership with one of the largest tourist and travel operators in the world, headquartered like us in Germany. We discovered we had a natural complementarity since we are both, in our own ways, in the global travel business. The fruits of



What is the central message of climate change for a body like CMS? Simply that we have to do even more in all the other areas—safeguarding habitats, creating protected pathways for animals by land and sea, outlawing indiscriminate fishing methods and exposing global wildlife abusers who use the opportunity of international travel to hunt down the last specimens of endangered species such as the Sahelo-Saharan antelopes.

this include a study on wildlife watching, and most recently a new public awareness and action initiative led by CMS—Year of the Dolphin 2007¹—which was only made possible through the marketing and communications resources of our business partner and sponsor.

In Germany we established a little more than a year ago a non-profit association (Freunde der Bonner Konvention) under the leadership of the former UNEP Executive Director. Its main role is to raise funds in and around our host country of Germany, and then invest them to support CMS projects in developing countries, which we could not fund from our basic budget. “Friends of CMS” has just raised €100,000 from a well-known pharmaceutical multinational. We have high hopes that CMS can continue to exploit our unique status as one of the first UN bodies of its type to locate itself in the largest economy in Europe, where we also benefit from a generous host Government and a supportive city mayor in Bonn.

Working more closely with the private sector has also led the Secretariat to make a better use of communication technologies and strategies. CMS ‘corporate’ messages are now part of a more coherent communication strategy, making use of a series of different means, including the development of *ad-hoc* websites for specific initiatives, the involvement of goodwill ambassadors and patrons, the branding of projects, targeted campaigns and social events. Media interconnectivity and its global outreach allow clear messages and campaigns to reach out to a broader audience, thus increasing the visibility of the Convention and its objectives.

Due to its nature and mandate, CMS has also paid particular attention to the development of the UN debates on system-wide coherence and synergies. CMS is a ‘mother convention’ under which a

number of species and regionally focused offspring agreements are negotiated and developed, forming a network of small Multilateral Environmental Agreements (MEAs). Through the years, the system has shown strengths and weaknesses. Some of the agreements have, like wild cubs do in nature, sought their own ways to independence without having to rely on the mother convention. This can bring the benefits of drive and focus, but we can also lose the link to the broader picture of multilateral environmental policies and system. Some of the smaller agreements have found it difficult to survive effectively without the continuous assistance of the parent convention.

Overlaps, sub-optimal use of resources and competition for funds, are some of the challenges the UNEP/CMS Family has to face on a daily basis. “Delivery as One” could easily have been a CMS motto! The UNEP/CMS Family could be considered a ‘UN microcosm’ and even as a testing ground at a small scale for system coherence exercises, where new arrangements and coordination mechanisms can be explored. The experiment agreed in December 2006 by the Parties to one of the CMS regional Agreements, the Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS), to merge its previously independent Secretariat with the UNEP/CMS Secretariat is a case in point. This is streamlining in practice at last. This will be the approach we take for future agreements.

Efficiency and Synergy

There are a number of practical ways to deliver greater efficiency, MEA synergy and harmonization which Governments have signalled regularly at UNEP Governing Council and Meetings of Parties. For example, CMS and one of our key Agreements,

AEWA, expect to be ready to introduce on-line reporting by Parties in 2009. The first country experiments will be ready to roll out by the middle of this year. The UNEP World Conservation Monitoring Centre is the main project contractor. This is an area where the greater resource base of UNEP—who are funding this as part of a wider knowledge management project—is vital to the MEAs.

Beyond this there are many other examples of co-operation between CMS and our parent body UNEP.

By co-operating with UNEP/Division of Early Warning and Assessment (DEWA), CMS and AEWA were able to organize and fund a well-supported seminar in April last year on avian influenza and the environment, hosted by UNEP in Gigiri. This significantly increased the resource base, credibility and outreach of the event, as well as attracting more experts and a key paper on the underlying causes and solutions for highly pathogenic avian influenza (HPAI) commissioned by UNEP—the so-called “Rapport report”.²

By pooling available resources with UNEP/Division of Environmental Law and Conventions (DELCO), CMS has in the last 12 months been able to revive the CMS African Atlantic Coast Marine Turtle MoU, which was agreed to in 1999 but had previously been moribund through lack of funds. As a result of UNEP’s support, we now have an active turtle co-ordination unit, hosted in the New Partnership for African Development (NEPAD) Environmental Secretariat in Senegal, which brings a further range of potential synergies and improved access to funding. Seventy participants took part in the recent workshop organized by the Interim Secretariat of the New Partnership for African Development (SINEPAD) and CMS in January 2007 in Dakar to launch the unit.



By co-operating regularly with the UNEP Regional Seas branch, we have been able to achieve jointly specific projects such as the comprehensive joint UNEP and CMS study of small cetacean species published just over a year ago, and a new project in 2007 to develop a national strategy and action plan to conserve dugong populations in Indonesia.

There are several more examples—co-operation with the Great Apes Survival Project (GRASP) on a CMS Agreement on West and Central African gorillas; the new CMS Family Guide, an outreach and communication tool, recently published and funded by UNEP; our regular co-operation with UNEP/Division of Communication and Public Information (DCPI), most recently in developing the Avian Influenza, Wildlife and the Environment Website (AIWeb); the professional help we receive from UNEP media specialists; and of course the support, in-kind and financial, which UNEP provided to allow us to host our 8th COP here in November 2005.

In sum, it is a very productive relationship. The benefits of being part of UNEP need to be more widely understood. As in any biological relationship, it needs to be based on trust, mutual grooming and, if possible, offspring (i.e. for the UNEP/CMS relationship, conservation outputs). I believe we have a sound marriage!

On co-operation between MEAs, we do this too. The good news is that we can and do deliver more effectively together on specific projects where there are well-defined mutual interests. Good examples are CMS and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) co-operation on the Saiga antelope: without it, I doubt whether the new regional agreement to protect this highly vulnerable species would have come into effect in September 2005. Other examples include our co-operation with Ramsar through the Scientific Task Force on Avian Influenza and our joint project with the Convention on Biological Diversity (CBD) on integrating migratory species conservation in National Biodiversity Strategies and Action Plans (NBSAPs). This practical approach needs to be increasingly reflected in the work of coordinating bodies like the Biodiversity Liaison and Environmental

Management Groups.

Partnership with other MEAs and with the voluntary sector is also allowing CMS to deliver one of its key priorities—the conservation of “MMMs”—Migratory Marine Mammals—is a key priority for CMS Parties. The CMS suite of cetacean-related instruments grew to three with the entry into effect in September 2006 of the CMS Memorandum of Understanding for the Conservation of Cetaceans and their Habitats in the Pacific Islands Region. CMS negotiated the MoU over the course of three and a half years in very close collaboration with the Secretariat of the Pacific Regional Environment (SPREP). Nine Pacific Island Countries (PICs) signed the agreement in Noumea, New Caledonia at the SPREP Environment Ministers Meeting on 15 September last year. The MoU entered into effect on the same day. First negotiations for a fourth CMS cetacean agreement for the African Eastern Atlantic were held in October in the Canary Islands, following a recent decision by our Parties to give this priority. The Range State representatives opted for a Memorandum of Understanding which we hope to conclude in 2008, covering small cetaceans and the West African manatee. Its Indian Ocean cousin, the dugong or sea-cow, gained extra protection under CMS later the same month through a separate MoU negotiated with the leadership and funding of Australia.

The Parties strengthened CMS’s mandate to address by-catch, recognizing that, to quote the Conference Resolution “it remains a key factor threatening many species listed in Appendices I and II of the Convention, including seabirds, sharks, turtles, marine mammals and sturgeons”. The CMS Scientific Council now has a dedicated by-catch Councillor, financed by Australia. However in the end we depend on Governments and, especially in this context, the European Commission with its competence for fisheries, to take the necessary action to deliver environmentally sustainable fisheries. Our by-catch work, and the bridges it builds between the biodiversity conservation and fisheries sectors, should also lay a cornerstone for CMS work on migratory sharks. Again at the specific request of our last

COP, CMS, will organize a meeting on migratory sharks, in partnership with the Government of Seychelles, to examine the (i) conservation status of migration sharks, (ii) existing international, regional and other initiatives to improve the conservation status of migratory sharks, and (iii) options for international cooperation including a possible ‘instrument’ under CMS. This meeting has now been fixed for December 2007, and we are seeking maximum participation from major shark range, fishing and consumer countries.

Results for the Future

The CMS Secretariat is encouraged by the results achieved in the last two years. We have added 16 new Parties to the Convention, including Yemen, whose accession to CMS as our 100th Party we celebrated in January this year. The last two years have also seen improved visibility of CMS in the global community. Since the COP in November 2005, there has been a marked upturn in voluntary donations for specific CMS-led projects. This is due to the commitment of staff members within the Secretariat, combined with superb engagement from key Parties. For example CMS’s flagship project on the conservation of the Sahelo-Saharan antelopes, has been made possible by French financial support through its Global Fund for the Environment (FFEM), which is paying for capacity building, training, wildlife surveys and involving local communities and many partners. Thanks to a further grant from the European Commission, CMS has just expanded the project’s scope in the critical trans-boundary region of Termit (Niger), and we hope Chad will also join in shortly. We are also working with the United Nations Convention to Combat Desertification (UNCCD) to add the human dimension more effectively to the Sahelo-Saharan Antelope Project (SSAP).

I believe, and I hope so do my Parties, that CMS has significantly raised its game. However, like most MEAs, we need to move on from this improved performance to a higher “Premier” league if we are to make the contribution required to achieve the 2010 Biodiversity Target set by the World Summit on Sustainable Development (WSSD) in 2002. A modest budget and funding, despite creative solu-



Peter Bridgewater, former Secretary General, Ramsar Convention



tions, remains a limiting factor for the fully successful implementation of CMS as for other MEAs. The lack of funds for capacity building in line with the Bali Strategy is a particularly serious constraint.

This of course is becoming the actual ongoing story of the 2010 Biodiversity Target. The resources, i.e. those extra resources pledged by the international community in 2002 to achieve them, are not really there, GEF replenishments notwithstanding. The reality, as we discovered at our COP in 2005, and which others MEAs are facing this year, is that most donor Governments are seeking to impose financial cuts in real terms on the core resources available to MEA Secretariats. Generosity by some Governments through earmarked contributions towards individual projects offsets this only in part.

I think it is regrettable that the links between improved implementation of the biodiversity-related MEAs and achievement of the 2010 Target has not been more widely recognized. We support and will participate in events of the International Year of Biodiversity in 2010 which the GA agreed two months ago in Resolution 61-206. The need to focus on raising awareness on 2010 is emerging as a priority in different forums as a prerequisite for enhanced political commitment. This could however be accompanied by firm language to encourage Governments, UNEP, MEAs and other stakeholders to actually achieve those targets by raising their game in 2007, 2008 and 2009. Plus of course, the necessary extra resources!

Speaking of dates and games, CMS will be playing away at a wonderful venue in 2008. The 2008 meeting of the Conference of the Parties to CMS will be held in Italy. I take it as a propitiatory sign that the next meeting for the conservation of wildlife 'on the move' will be held in a country that has made conservation of world heritage not only a goal but also a way of life. I trust this will further stress how biodiversity is not detached from every day life and needs, but is, on the contrary, an essential component of our culture and well-being. ❧

Ramsar and the 2010 Biodiversity Target

The Ramsar Convention is part of the global effort to reduce the loss of biodiversity by 2010, with a special focus in its area of competence—wetland ecosystems. The Convention gives its expression to this goal within its strategic plan. The last Conference of the Parties (COP), held November 2005 in Kampala, Uganda, stated that the plan will contribute to the achievement of the 2010 Biodiversity Target, as well as to the achievement of Millennium Development Goal 7 (Ensuring Environmental Sustainability)

The Convention contributes to the achievement of these globally important targets through its three pillars—Establishment of a list of Wetlands of International Importance; promotion of the wise use of wetlands; and international co-operation.

Examining for a moment the wise use of wetlands, which the last COP defined as:

“The maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development.”

Here, ecological character is;

“The combination of the ecosystem components, processes and services that characterise the wetland at a given point in time.”

So it's clear that reduction of biodiversity loss can be seen as being enhanced by maintenance or by improving the ecological character of wetlands. The linkage between biodiversity, as a hierarchical concept from genes to ecosystems, and the services provided by ecosystems for people and nature is also clear—and further underlines the urgency for reducing biodiversity loss.

The Ramsar Convention aims to achieve this by better selection and management of its network of Wetlands of International Importance, which now comprises over 1600 sites, and by globally promoting the wise use of all wetlands, as part of sustainable development.

While this applies to all wetlands of international importance, it is perhaps particularly useful to examine the issues relating to three coastal systems of wetlands: Coral reefs, mangroves, and sea-grass beds.

Coral reefs occur in 81 tropical and sub-tropical countries, and in 21 overseas or dependent territories of five countries. The total area is estimated as approximately 279,560 km². By Ramsar region, the largest areas are in Asia (43%) and Oceania (42%)—together holding almost 85% of the global coral reef resource (Table 1).

TABLE 1. Estimated area of coral reefs in each Ramsar region (includes coral reefs in non-Parties; coral reef areas in overseas and dependent territories are included in the region in which they lie geographically).

	Total area of coral reefs (km ²)	% in territories of Ramsar Parties
Africa	22,330	82
Asia	120,460	82
Neotropics	17,520	92
North America	3,030	100
Europe	0	–
Oceania	116,220	77
Total	279,560	81

Numbers of sites by Ramsar region are given in Table 2. The largest number of sites has been designated in the Neotropics, followed by North America and Oceania. Africa and especially Asia have so far designated very few coral reef Ramsar sites.

Of the 57 Ramsar Parties which have coral reefs lying within their territories, 28 (62%) have designated some of their reefs. The gaps are greatest in Asia (only 4 of 17 Parties have designated coral reefs), Africa (5 of 11 Parties) and Oceania (2 of 8 Parties). Coverage is better in the Neotropics (13 of 16 Parties) and North America, where Mexico, but not the USA, has designated coral reef sites. Parties with the largest numbers of coral reef Ramsar sites are Mexico (13 sites, cor-

1. See dedicated website www.YOD2007.org.

2. For further information on Avian Influenza see www.aiweb.info.



within these countries in particular is a strategic priority for increasing the coherence and comprehensiveness of the global Ramsar site network for the Convention in line with Resolution VII.11.

The Ramsar Secretariat is working closely with several of the following countries which are not Parties to Ramsar yet, but that have important coral reef resources to become Parties to Ramsar and assist them in their management of their resources: Brunei, Dominica, Eritrea, Federated states of Micronesia, Grenada, Haiti, Kiribati, Kuwait, Maldives, Nauru, Oman, Qatar, Saudi Arabia, Solomon Islands, St. Vincent and the Grenadines, St. Kitts and Nevis, Tonga, Tuvalu, United Arab Emirates, Vanuatu and Yemen.

Regarding associated ecosystems, there are 182 mangrove sites and 178 seagrass beds. Although the global number of these two associated ecosystems is apparently better than coral reefs, we need still more efforts to guarantee their effective conservation and wise use—and thus reducing their biodiversity loss.

For these three key wetland ecosystems, as well as for wetlands in general, climate change is a major threat to biodiversity maintenance. Hence, addressing adaptation to and mitigation against, the effects of climate change is paramount. The Convention's COP 8 looked at climate change as an issue for wetlands and further technical work is underway.

In all these efforts, the Ramsar Convention works closely with the Convention on Biological Diversity (CBD) at the Secretariat and Party level to ensure maximum effort is focused on reducing biodiversity loss in wetland ecosystems, especially through the programmes on inland waters, marine and coastal biodiversity and the programme of work on protected Areas. In this way, we count on each other as we count down to 2010! ❖

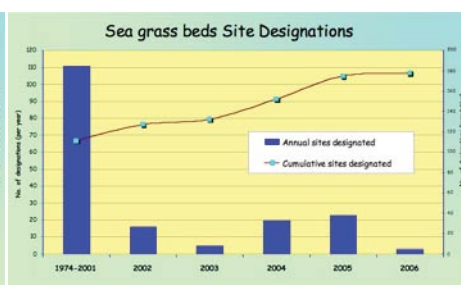
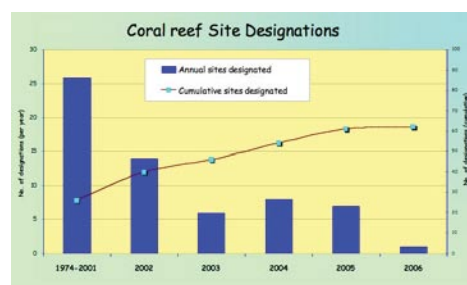
TABLE 2. Number and area of coral reef Ramsar sites, by Ramsar region.

Ramsar Region	No. of Ramsar sites containing coral reefs	Area of Ramsar sites containing coral reefs (km ²)	No. of Ramsar sites with coral reefs as dominant wetland type
Africa	6	6734	2
Asia	10	3148	4
Neotropics	23	44713	6
North America	13	16201	5
Oceania	10	27110	5
Total	62	97906	22

al dominant in 5), Australia (9 sites, coral dominant in 4), Cuba (4 sites, coral dominant in 1) and Thailand (4 sites, but coral not dominant in any). So, together these four Parties have designated 30 sites (48% of the total), and ten (45%) of the sites in which coral reefs predominate.

Four countries (USA, UK, France and the Netherlands) have overseas or dependent territories in other Ramsar regions which have coral reefs.

Of those Parties which have not yet designated any coral reef Ramsar sites, the largest areas of coral reefs found are in Indonesia (51,020 km²—the country with the largest total area of coral reefs), Papua New Guinea (13,840 km²), and Fiji (10,020 km²), India (5,790 km²), Egypt (3,800 km²), Malaysia (3,600 km²), Japan (2,900 km²) and the USA including its overseas and dependent territories (2,520 km²). Designation of coral reef Ramsar sites





The World Heritage Convention: Identifying and Safeguarding the World's Highest Priority Protected Areas



In 1998, the National Assembly of Ecuador agreed to amend the National Constitution to pass the Special Law for Galapagos, establishing the strict legal framework through which conservation of the islands could be better guaranteed. In 2000, the president of Mexico cancelled plans for an industrial salt production facility in Baja California, thus avoiding potentially serious environmental consequences on the nearby El Vizcaino Whale Sanctuary. In 2006, the Russian president announced a multi-million dollar re-routing of the trans-Siberian oil pipeline to avoid the very sensitive Lake Baikal World Heritage site.

By requesting that their protected areas be considered for inscription on the World Heritage List, national governments also explicitly agree to subject the conservation of these sites to intergovernmental peer review, by way of the World Heritage Convention. In each of the cases noted above, the World Heritage Convention was instrumental in expressing, at very senior government levels, and on the international stage, concerns of the global community over the threats to the sites in question. In each case, and in many more like them, real and measurable positive biodiversity conservation outcomes were secured.

Mistakenly regarded as a simple framework under which to develop a modern day list of the “wonders of the world”, the World

Heritage Convention is being increasingly recognized as a robust mechanism through which globally significant *in situ* conservation outcomes can be achieved. A unique feature of the World Heritage Convention is its coverage of both natural and cultural heritage, thus highlighting the inextricable link between the two and the integrated efforts required for their conservation. In addition to intergovernmental monitoring of inscribed sites, the Convention is also being used to promote broader conservation objectives. In particular:

- The Forest Programme: 91 World Heritage sites with a total surface area of over 73 million hectares have been inscribed due in large part to their rich forest ecosystems. Currently, 13% of all IUCN category I-IV protected forests benefit from World Heritage status. The Forest programme’s objectives include assuring site integrity by developing and applying ecosystem approach mechanisms.
- The Marine Programme: 34 World Heritage sites are either predominantly marine, or include a significant marine component. The Marine programme’s objectives focus on addressing the on-going imbalance between terrestrial and marine World Heritage sites by encouraging countries to identify and nominate sites of potential World Heritage value.
- The Sustainable Tourism Programme: This programme promotes planning and management methodologies so that tourism development does not conflict with conservation objectives. It also focuses on strengthening the relationship between conservation of World Heritage sites and local communities by generating economic opportunities based on tourism.

The growing credibility of the World Heritage Convention as a legitimate vehicle upon which major policy decisions

can be made has been corroborated by the recent decisions of the global non-government and private sectors. In 2000, the United Nations Foundation, created to manage Ted Turner’s US\$1B commitment to supporting the work of the United Nations, decided that the rigorous and transparent intergovernmental selection and monitoring processes for World Heritage sites assured it of a good accountability of the investments it would be making in biodiversity conservation. In 2003, both Shell International, and the International Council on Mining and Metals, which represents 14 of the largest global mining and metals companies, independently agreed not to carry out any activities within World Heritage sites, based on their understanding that the global community, through the World Heritage Convention, was engaged and fully supported the conservation of these sites. In 2005, Goldman Sachs, one of the biggest investment banks in the world, adopted its environmental policy in which it commits to not knowingly finance extractive projects or commercial logging in World Heritage sites.

The World Heritage Convention’s distinct contribution to the collective work of the Biodiversity Liaison Group lies clearly in its site based approach. Though restricted to a relatively small number of sites, the World Heritage Convention is made robust by its rigorous intergovernmental vetting and monitoring processes through which conservation work can be implemented, monitored, and results can be assessed in a transparent manner, allowing for constructive follow-up to States parties. The focus on international cooperation in achieving the conservation of World Heritage sites also opens the door for coordinated case by case work with the other biodiversity related conventions.

The World Heritage Centre, acting as the secretariat to the Convention, has recently had its Natural Heritage Strategy ap-



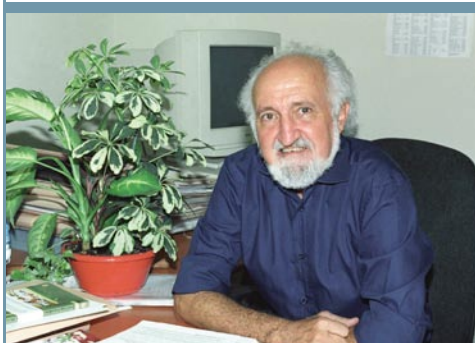
José T. Esquinas Alcázar, *Secretary of the Commission on Genetic Resources for Food and Agriculture, Interim Secretary International Treaty on Plant Genetic Resources for Food and Agriculture—with Angela Hilmi, Agronomist*

proved by the World Heritage Committee. The strategy explicitly recognizes the CBD as one of three sources of its guiding principles. Specifically, the Strategy relies on guidance from the 2010 Biodiversity Target, the Ecosystem Approach and the Programme of Work on Protected Areas (PoWPA).

The Secretariat is focusing a good deal of effort on cross-cutting issues aimed at helping ensure that World Heritage sites indeed meet their biodiversity conservation targets, namely that they fulfil their mandate of conserving the Outstanding Universal Value for which they were inscribed. For example, in cooperation with the University of Queensland, we have developed a detailed assessment methodology (Enhancing our Heritage) with the objective of helping World Heritage Site managers to better monitor the effectiveness of their management inputs, thus ensuring the best use of limited resources. In cooperation with The Nature Conservancy, we are supporting the development of a challenging on-line sustainable financing training course, consisting of several modules based on the Conservation Finance Alliance materials. We are piloting the Rapid Response Facility, with Fauna & Flora International. Through the Facility, funds are approved for World Heritage sites requiring critical emergency financial assistance within 10 days of having received a request. We have also recently assessed the impacts of climate change on World Heritage sites and developed a strategy for addressing them, including through pilot demonstration projects.

World Heritage sites are often referred to as the crown jewels of protected areas. Though this may be the case, we also recognize that they represent only a small fraction of the world's protected areas. Nevertheless, their iconic value makes them ideal to serve as models to demonstrate best practices in all aspects of protected areas planning and management. Hence, the World Heritage Centre is always looking to ensure that lessons learned within the World Heritage Network are disseminated through national and regional protected areas networks, further spreading the biodiversity conservation benefits from the World Heritage Convention. ❧

The CBD and the Treaty Synergies and Complementarities: The 2010 Biodiversity Target



attained “by closely linking this Treaty to the Food and Agriculture Organization of the United Nations and to the Convention on Biological Diversity”.

An intertwined history

In 1983, for the first time, a permanent intergovernmental body was created in the UN System, to specifically deal with genetic resources for food and agriculture worldwide: the intergovernmental Commission on Genetic Resources for Food and Agriculture (the FAO's Commission), which today has 168 members and covers all components of agricultural biodiversity.

The International Undertaking on Plant Genetic Resources, (the Undertaking), which was the precursor of the Treaty, was also adopted in 1983, as the first international instrument dealing with the crucial genetic resources on which world food security is based. The Treaty grew from negotiations through the intergovernmental Commission for the revision of the Undertaking in line with the Nairobi Final Act¹ adopting the CBD.

On various occasions the CBD recognized the importance of the work of the FAO Commission on agro-biodiversity and supported the negotiation process that led to the Treaty. A good example is when, in Jakarta, the Second Meeting of the Conference of the Parties (COP) to the CBD (6-17 November 1995) adopted decision II/15, entitled “FAO Global System for the Conservation and Utilization of Plant Genetic Resources for Food and Agriculture” recognizing *the special nature of agricultural biodiversity*. Decision III/11, on agricultural biodiversity, called for the effective and speedy revision of the Undertaking in harmony with the CBD.

The Treaty, a milestone for international cooperation

The Treaty came into force on 29 June 2004. It provides an agreed international framework for all aspects of the conserva-

Summary

This issue of GINCANA focusing on the 2010 Biodiversity Target, is an excellent opportunity to present and further reflect on joint approaches between institutions to strengthen collaboration for attaining common goals. This short article attempts first to illustrate the major features of the International Treaty on Plant Genetic Resources for Food and Agriculture (the Treaty) and the historical process carried out by countries in the intergovernmental Commission on Genetic Resources for Food and Agriculture (the intergovernmental Commission) that culminated in its adoption by the FAO Conference in 2001. It then highlights the complementarities and the growing collaboration between the Convention on Biological Diversity (CBD) and the Treaty, the common basis for action and the new areas for synergies, as the international community strives to meet the 2010 Target of achieving a significant reduction of the current rate of biodiversity loss.

Common objectives

The CBD and the Treaty share the same three basic objectives: the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, with, in the case of the Treaty, the emphasis on “*sustainable agriculture and food security*”. The Treaty further provides that its objectives will be



BRIDGING THE SEVEN FOCAL AREAS OF DECISION VII/30 AND THE ARTICLES OF THE TREATY

The Treaty will support an environmentally friendly, socially acceptable and ethically sound agriculture and will therefore have a direct impact on focal area (a) “Reducing the rate of loss of the components of biodiversity, including: (i) biomes, habitats and ecosystems; (ii) species and populations; and (iii) genetic diversity” and focal area (c) “Addressing the major threats to biodiversity, including those arising from invasive alien species, climate change, pollution, and habitat change”. More specifically, focal area (b) “Promoting sustainable use of biodiversity” is directly in resonance with Article 6, “Sustainable Use of Plant Genetic Resources”; focal area (d) “Maintaining ecosystem integrity, and the provision of goods and services provided by biodiversity in ecosystems, in support of human well-being”, is directly relevant to Article 5, “Conservation, Exploration, Collection, Characterization, Evaluation and Documentation of Plant Genetic Resources for Food and Agriculture”, and to Article 6 “Sustainable Use of Plant Genetic Resources”; focal area (e) “Protecting traditional knowledge, innovations and practices”, relates to Article 9, “Farmers’ Rights”, in particular Article 9.2 (a) on traditional knowledge; and focal area (f) “Ensuring the fair and equitable sharing of benefits arising out of the use of genetic resources”, is in coherence with Articles 10 to 13 on the Multilateral System and Access and Benefit-sharing. Technical assistance to countries to facilitate the implementation of the Treaty is foreseen under Article 8.

tion and sustainable use of Plant Genetic Resources for Food and Agriculture. The Treaty also recognizes Farmers’ Rights, for the first time in any binding international instrument. It also provides for Contracting Parties to implement a Funding Strategy to mobilize substantial resources for agreed plans and programmes for farmers in developing countries.

The most innovative element in the Treaty is its Multilateral System of Access and Benefit-sharing, which ensures continuous availability of important genetic resources for research and plant breeding, while providing for the equitable sharing of benefits, including monetary benefits that derive from commercialization. The Treaty relies on several supporting components that were previously developed by the Commission, originally to support the Undertaking, in particular the *Global Plan of Action*, the Global Information System, and international networks on plant genetic resources for food and agriculture. The Treaty also provides the framework in which key *ex situ* collections of plant genetic resources for food and agriculture are held in trust for the international community by the International Agriculture Research Centres and other international institutions.

The entry into force of the Treaty marks a milestone for international agricultural cooperation. Some of its provisions have been further developed at the first session of the Governing Body in Madrid, in June 2006.² These include the Standard Material Transfer Agreement for plant genetic resources under the Multilateral System of Access and Benefit-sharing, which regulates access³ and determines the level, form and manner of monetary payments on commercialization⁴. Mechanisms to promote compliance are being developed, as well as the Treaty’s funding strategy. Once these are in place and the benefits are flowing, future meetings may be able to reach consensus on further challenging issues, such as the number of crops that are covered by the Multilateral System of Access and Benefit-Sharing.

After a country’s ratification, the provisions of the Treaty, particularly the provisions on conservation and sustainable utilization, will need to be fully implemented at the national level. In some cases, policies and supporting legislation will be needed to prevent genetic erosion, promote the conservation, characterization and documentation of indigenous genetic resources, implement Farmers’ Rights, facilitate access to genetic resources for

research and plant breeding, and promote benefit-sharing.

Finally, public awareness and scientific, political and economic support for the conservation of, access to, and sustainable use of plant genetic resources for food and agriculture needs to be mobilized urgently. No system of legal provisions is likely to succeed without public understanding and support.

The CBD and the Treaty, prospects for further cooperation

To facilitate the assessment of progress towards the 2010 Target, in decision VII/30, the COP of the CBD adopted a framework that includes seven focal areas, with goals and sub-targets. These clearly echo major elements of the Articles of the Treaty in relation with biodiversity for food and agriculture (See box).

Both the Treaty and the intergovernmental Commission will contribute to the development and realization of the CBD in the agricultural sector. In this respect, a Memorandum of Cooperation between FAO and the Secretariat of the CBD was signed in May 2005. Of special relevance is the fact that the Commission will at its next meeting consider a Multi-Year Programme of Work (MYPoW) including a road map



with targets. One of the aims is to coordinate its plans with those of the CBD. In the MYPoW, the Commission, in accordance with its mandate, will address all components of biodiversity of interest to food and agriculture, within an agro-ecosystem approach. This will be an important contribution to the attainment of the 2010 Biodiversity Target. The country driven periodical publications *State of the World's Plant Genetic Resources*⁵ and the forthcoming *State of the World's Animal Genetic Resources*⁶ are expected to be followed, in the future, by a *State of the World's Biodiversity for Food and Agriculture* prepared periodically with a similar country driven process. This publication should provide the common basis for countries to define priorities and actions on biodiversity for food and agriculture not only through the Commission, but also through the COP/CBD and, in the case of plants, through the Governing Body of the Treaty.

Enhanced synergies and collaboration between the CBD, the Treaty and the Commission could further be strengthened and implemented at three fundamental levels, based on each other's specific area of competence and comparative advantage.

- anticipation and preparation of harmonized actions through enhanced cooperation between Secretariats
- coordination among governing bodies through active participation in the

other Party's deliberations

- promotion of initiatives and programmes of common interest with a view to achieving synergy and coherence in their implementation as well as for reducing reporting burden on countries.

The need to find innovative approaches for cooperation is crucial, as countries that have ratified both the Convention and the Treaty need adapted rules and mechanisms to facilitate the implementation of these instruments in a benefiting and cost-effective way. The development of a country driven periodical publication on the State of the World's Biodiversity for Food and Agriculture as mentioned above is a good example of what could be done to avoid duplications and promote synergies. Close collaboration among the CBD, the Treaty and the Commission is also important in helping countries to achieve the Millennium Development Goals, in particular Goal 1 (*Eradicate extreme poverty and hunger*) and Goal 7 (*Ensure environmental sustainability*).

Acknowledgements

The authors are very grateful to the Secretariat members for their important assistance in the preparation of this paper and in particular to Clive Stannard.

This paper expresses the views of the authors and does not necessarily reflect the views of FAO and its member. ☛

1. Resolution 3 of the Nairobi Final Act: "The Interrelationship Between the Convention on Biological Diversity and the Promotion of Sustainable Agriculture"
2. As of late December 2006, the Governing Body is comprised of 111 Contracting Parties.
3. "Recipients shall not claim any intellectual property or other rights that limit the facilitated access to the plant genetic resources for food and agriculture, or their genetic parts or components, in the form received from the Multilateral System", Article 12.3 (d).
4. For benefit-sharing, the Treaty makes a distinction between situations where the new product obtained by the user is freely available to others for research and breeding, and where it is not. Where it is not freely available, there is a mandatory payment, otherwise payment is voluntary. Users can have unrestricted access to all the material of a particular crop in the Multilateral System, and in exchange pay 0.5% of their annual commercial monetary benefits on that crop, otherwise they can pay 1.1% of the sales of a product only in case it incorporates genetic material from the Multilateral System (IT/GB-1/06/Report—Appendix G, Annex 2 and 3).
5. A process guided by the FAO Commission, based on 158 national reports, 12 sub-regional and regional preparatory meetings where 143 countries participated which culminated in the International Technical Conference in Leipzig attended by 150 countries and over 50 non-governmental organizations.
6. A process guided by the FAO Commission, based on 165 national reports and a number of regional conferences that will culminate in the First International Technical Conference on Animal Genetic Resources in September 2007 in Interlaken, Switzerland.

Algunos de los proyectos más importantes en los cuales la CONABIO está trabajando y que contribuyen a la implementación del Convenio en México son los siguientes:

Informatización de colecciones biológicas (Biótica y Remib)

<http://www.conabio.gob.mx/biotica/cms/index.php>
http://www.conabio.gob.mx/remib/doctos/remib_esp.html

Catálogo de autoridades taxonómicas (ITIS)

http://www.conabio.gob.mx/conocimiento/info_especies/especies_invasoras/doctos/especiesinvasoras.html

Sistema de detección temprana de incendios

http://www.conabio.gob.mx/conocimiento/puntos_calor/doctos/puntos_calor.html

Análisis de vacíos y omisiones en conservación de la biodiversidad

<http://www.conabio.gob.mx/gap/index.php/Portada>

Sistema de Información de Organismos Vivos Modificados

http://www.conabio.gob.mx/conocimientos/bioseguridad/doctos/consulta_SIOVM.html

Apoyo a actividades sustentables de 250 comunidades campesinas o indígenas del sureste de México bajo el Corredor Biológico Mesoamericano

<http://www.cbmm.gob.mx>

Monitoreo de especies y poblaciones de las aves de México a través de AverAves

http://www.conabio.gob.mx/conocimiento/monitoreo_especies/doctos/averaves.html



José Sarukhán Kermez, *Secretaría de Medio Ambiente y Recursos Naturales (Semarnat)*



Actividades de la Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO): en relación al Memorando de entendimiento firmado con el Convenio sobre la Diversidad Biológica

En septiembre de 2006 México suscribió el Memorandum de Entendimiento para promover la implementación eficaz del Convenio sobre la Diversidad Biológica, el cual fue firmado durante la COP-8 por el Secretariado Ejecutivo del Convenio Sobre Diversidad Biológica (CDB), y otras instituciones con una trayectoria de excelencia en materia de conocimiento y capacitación sobre la diversidad biológica. Mediante este instrumento se incorporó a la Comisión Nacional para el Conocimiento y el Uso de la Biodiversidad (CONABIO), como institución mundialmente reconocida por su trayectoria en el manejo de información sobre biodiversidad sumándose al compromiso de contribuir a la creación de capacidades para la implementación del Convenio.

La CONABIO desde 1992 se ha enfocado al manejo de la información sobre biodiversidad utilizando como columna vertebral la información de especímenes de museos y el desarrollo de herramientas bioinformáticas para que esté disponible para la sociedad, de manera que sirva de apoyo en la toma de decisiones. Adicionalmente, CONABIO ha apoyado la organización de actividades de capacitación y difusión en las esferas política, técnica y científica. En este sentido, los objetivos de la CONABIO son plenamente coincidentes con la promoción de la implementación efectiva del Convenio sobre la Diversidad Biológica y su Protocolo de Cartagena.

La CONABIO se ha destacado en la realización de cursos y talleres de capacitación sobre temas relevantes para el CDB como son: taxonomía, bioinformática, detección temprana de incendios, acceso a recursos genéticos y reparto equitativo de beneficios, especies invasoras, medidas de protección y pre-

servación del conocimiento tradicional asociado a la conservación y uso sustentable de la biodiversidad, entre otros. Algunos de estos talleres han contado con recursos externos que han facilitado su realización y han sido organizados en la colaboración con otras instituciones como el Facilitador Global de Información Global sobre Biodiversidad (GBIF) (modelaje de nichos ecológicos), Agencia de los Estados Unidos de Norteamérica para el Desarrollo Internacional (USAID) (detección de puntos de calor) y la Comisión de Cooperación Ambiental para América del Norte (CCA) (especies invasoras). En el caso del sistema de detección temprana de incendios, desarrollado por CONABIO a partir de técnicas de percepción remota, se ha transferido tecnología y capacitación a los países de la región centroamericana, así como el software. El servicio operativo para detectar incendios desde el espacio en Europa y el norte de África fue desarrollado conjuntamente entre la CONABIO y la Agencia Aeroespacial Alemana (DLR). Adicionalmente, se está elaborando la línea de base para el Inventario de Manglares de México, utilizando técnicas de percepción remota, con imágenes multiespectrales del satélite francés SPOT con 10 metros de resolución espacial.

Asimismo, la CONABIO ha impulsado el cumplimiento de diversos compromisos derivados del Convenio, a través de la coordinación del Estudio de País, la Estrategia Nacional de Biodiversidad y su Plan de Acción, el cual incluye novedosas iniciativas como la elaboración de Estrategias Estatales de Biodiversidad y el Segundo Estudio de País, siguiendo el enfoque de la Evaluación de los Ecosistemas de Milenio. Por un lado, el Segundo Estudio de País proporcionará información actualizada sobre el conocimiento, estado y tendencias

de cambio de la biodiversidad, así como una evaluación de las capacidades nacionales para el manejo de la biodiversidad. Por otro lado, las Estrategias Estatales de Biodiversidad, así como los Estudios de Estado, tienen el objetivo de constituir instrumentos más adecuados y eficaces para implementar el CDB a nivel local. Estas iniciativas pueden ser replicadas en otros países, ya que contribuyen a la implementación del Convenio.

En materia de conocimiento tradicional y el uso sustentable de la biodiversidad, en la CONABIO se han desarrollado planes y programas con énfasis en las comunidades locales y el aprovechamiento sustentable de la biodiversidad, a través de su Programa de Recursos Biológicos Colectivos y el Corredor Biológico Mesoamericano-México.

Como proyectos nuevos cuyo desarrollo está iniciando en CONABIO, podemos mencionar:

- Códigos de barras de ADN para el monitoreo de las especies y control de tráfico de especies amenazadas como CITES
- Evaluación de la afectación de la biodiversidad ante el cambio climático
- Monitoreo sistematizado a largo plazo de los bosques mesófilos de montaña en el marco de la Meta al 2010.

Todas las experiencias citadas presentan un gran potencial para crear capacidades e impulsar la transferencia de tecnología a aquellos países que así lo soliciten, en particular en la región latinoamericana. Es necesario, que con el apoyo del Secretario Ejecutivo del CBD, se obtengan los recursos financieros necesarios para cumplir con los compromisos asumidos en el Memorandum para apoyar la implementación del Convenio. ✎



Bertrand-Pierre Galey, *Directeur général du Muséum National d'Histoire Naturelle de Paris*

Le Muséum National d'Histoire Naturelle de Paris¹ : Un Etablissement Scientifique au Service de la Connaissance et de la Conservation de la Diversité Biologique

Ancien Jardin du Roi, le Muséum national d'Histoire naturelle de Paris a été créé en 1793 sous la Révolution française. Grand établissement scientifique, ses principales missions sont la gestion et l'enrichissement des collections, l'expertise, la diffusion des connaissances auprès du public, l'enseignement et la recherche fondamentale et appliquée.

Son champ d'activité couvre l'ensemble de la diversité biologique (y compris ses rapports avec les sociétés humaines et les aspects paléo-historiques) de tous les types de milieux (marins, dulçaquicoles, terrestres), à tous les niveaux de biodiversité (du niveau moléculaire à celui des écosystèmes). Son aire géographique d'intervention couvre à peu près l'ensemble de la planète.

Ses 500 chercheurs rassemblent des spécialistes de toutes les disciplines liées à la diversité biologique: zoologie, botanique, écologie, écologie appliquée, biogéographie, biologie de la conservation, océanographie, taxonomie et systématique, ethno-botanique et ethno-zoologie, ethnologie, anatomie, physico-chimie du vivant, paléo-botanique et paléo-zoologie, inventaire et cartographie des espèces et des milieux, microbiologie, biologie moléculaire, sciences vétérinaires et phytosanitaires, élevage d'animaux d'espèces sauvages, jardins botaniques, muséologie, etc.

C'est aussi un grand musée avec des collections parmi les plus importantes sur le plan mondial : environ une centaine de collections inertes couvrant tous les secteurs de la diversité biologique actuelle et passée, y compris ses aspects culturels. Elles regroupent plus de 65 millions de spécimens dont plus de 800 000 types. L'herbier, un des plus grands du monde, regroupe à lui seul plus de 11 millions de

spécimens. Ces collections font l'objet, chaque année, de milliers de consultations ou de prêts dans le monde entier.

Une partie de ces collections fait l'objet d'expositions permanentes dans la prestigieuse « Grande Galerie de l'Évolution », dans les galeries de paléontologie et d'anatomie comparée, de minéralogie, au Musée de l'Homme et dans les établissements en régions (Harmas de Fabre, stations marines de Concarneau et Dinard, ...).

CITES, Bonn, Berne, CBI, OSPAR, etc) ainsi que de programmes européens ou nationaux de conservation (Natura 2000, stratégie nationale de la biodiversité, Parcs nationaux, etc.).

Un enseignement riche pour tous les publics

En matière d'enseignement, d'éducation, de formation professionnelle, d'assistance technique et d'information du public pour la connaissance, la conser-

Le Muséum est donc un maillon important de la préparation des positions françaises à la CDB et de la mise en oeuvre de cette convention en France et dans le monde.

Le Muséum conserve également des collections vivantes importantes d'animaux (Ménagerie du Jardin des Plantes et parcs zoologiques de Vincennes, de La Haute Touche et de Clères) et de plantes (serres, jardins botaniques, arboretum).

Par ailleurs, il détient une collection unique de documents sur l'histoire naturelle dont 368 000 ouvrages, 105 000 ouvrages anciens, 13 000 manuscrits et 7 000 vélins.

Centre de dissémination du savoir naturaliste, le Muséum organise de multiples expositions temporaires. Chaque année, toutes expositions et sites confondus, ce sont plus de 2 millions de visiteurs qui peuvent ainsi apprendre et mieux comprendre la diversité biologique de notre planète.

C'est dans ce cadre que le Muséum apporte une contribution importante à la mise en œuvre de la CDB et de nombreuses autres conventions internationales liées à la diversité biologique (Ramsar,

et l'utilisation durable de la diversité biologique et le partage des avantages qui peuvent en être tirés, le Muséum propose de nombreuses activités.

La formation universitaire :

Le Muséum est habilité à délivrer, comme une université, des diplômes de **master** et de **doctorat**. Organisé en six spécialités, le master du Muséum, intitulé « Evolution, Patrimoine Naturel et Sociétés », est un enseignement pluridisciplinaire alliant sciences de la nature et de l'homme et s'appuyant sur les spécificités de l'expertise du Muséum. La formation des doctorants (environ 250) s'appuie sur les unités de recherche du Muséum et sur des unités extérieures à l'établissement. Par ailleurs, le Muséum assure un **enseignement de 3^{ème} cycle** dans quelques universités françaises **sur le rôle et le fonctionnement de la CDB** et des autres conventions liées à la diversité biologique.

Il contribue à des **modules d'ensei-**



gnement (niveau 2^{ème} cycle) dans plusieurs universités étrangères de pays du Sud (Gabon, Brésil, ...). Il participe, en partenariat avec 3 autres institutions scientifiques françaises (CNRS, IRD, CIRAD), à un projet financé par le Ministère des Affaires Etrangères (2006-2009) et destiné à développer l'expertise scientifique en biologie végétale dans les pays francophones de l'Afrique de l'Ouest, de l'Afrique centrale, de l'Océan indien et de l'Asie du Sud-Est, en réponse à la demande de 18 institutions scientifiques de ces pays.

L'enseignement pour les publics scolaires

Le Muséum accueille de nombreuses classes dans le cadre de projets pédagogiques ou d'événements comme la Fête de la Science. Environ 350 000 élèves sont concernés annuellement par ces activités. Il assure également la formation de plus de 1500 enseignants par an dans le domaine de la diversité biologique.

La formation professionnelle

Le Muséum a un programme important de formation professionnelle ouvert à l'ensemble des salariés de la fonction publique ou du secteur privé. Il met en oeuvre des formations spécifiques relatives aux questions du développement durable et de la gestion/protection de la biodiversité à l'intention des cadres des collectivités (initiation à la biologie et à l'identification des moisissures, manipulation des animaux venimeux et vénéreux, découverte et protection du milieu marin en plongée, ...).

Il assure également la formation sur la CDB et les autres conventions relatives à la diversité biologique à l'IFORE (Institut de formation des personnels du Ministère en charge de l'environnement) ainsi que des formations sur la lutte contre le commerce illégal de la faune et de la flore pour les douanes, la gendarmerie, la garderie de l'ONCFS. Il a également contribué à la rédaction d'un manuel de formation des douaniers pour l'Organisation Mondiale des Douanes.

Une sensibilisation continue du public

Le Muséum propose tout au long de l'année des expositions, événements, cy-

cles de conférences, projections de documentaires pour sensibiliser le grand public au thème de la biodiversité sur le site du Jardin des Plantes ainsi que dans son Musée de l'Homme et dans ses sites en région.

Les expositions temporaires sur des sujets d'actualité ou basées sur les spécificités des recherches effectuées dans l'établissement attirent un large public ; leur itinérance permet d'étendre cet impact à l'étranger (par exemple, l'exposition sur les grands singes et leur conservation, réalisée en partenariat avec l'UNESCO). Enfin, des expositions multilingues (français, anglais, espagnol, chinois) sont diffusées dans les ambassades et les centres culturels français à l'étranger.

Avec l'appui des scientifiques, le Muséum développe la science participative en proposant aux citoyens de participer activement à des programmes de recherche sur des indicateurs de la biodiversité comme les oiseaux ou les papillons. Ainsi des stages d'ornithologie sont destinés aux observateurs bénévoles pour le suivi temporel des oiseaux communs (STOC). Avec l'association Noé Conservation, le Muséum fait appel au grand public pour compter les papillons des jardins dont les données sont ensuite analysées par les scientifiques du Muséum.

Le Muséum prépare également différents supports pédagogiques pour permettre la présentation de la CDB (un d'entre eux a été diffusé par le Ministère des DOM-TOM aux départements et territoires d'outre mer dans le cadre de la consultation sur le programme de travail sur la diversité biologique insulaire ; une série de présentations *powerpoint* est en cours de finalisation ainsi qu'un document « Parler CDB » pour expliquer la terminologie de la CDB).

Une expertise partagée

Le Muséum apporte une assistance technique pour la gestion d'espaces protégés (Afrique, Caraïbes et Amérique du sud) et la conservation d'espèces menacées (Oryx au Sénégal et au Maroc, tortues marines, éléphant d'Afrique, lémuriers de Madagascar, hirondelles au Vietnam, etc.). Il a notamment développé, dans le cadre de la CITES, des actions d'études, de soutien et de formation

à l'utilisation rationnelle de la faune pour les varans (Afrique de l'ouest) et les crocodiliens (Caraïbes et Afrique). Il a également assuré des missions de soutien aux élevages en ranch de reptiles vivants en Afrique de l'Ouest.

Ces activités d'enseignement, de formation et d'éducation ne sont qu'une partie de la contribution du Muséum à la mise en oeuvre de la CDB. Il intervient également dans les différentes phases des programmes de travail de la CDB :

- Fourniture de données fondamentales (taxonomie, inventaires, statut des espèces et des écosystèmes, etc.)
- Expertise pour l'élaboration des programmes de travail
- Mise en oeuvre de programmes de travail (par exemple Initiative Taxonomique mondiale) ou contribution en fournissant de l'expertise (actuellement les programmes sur les espèces exotiques envahissantes, les aires protégées, la diversité biologique insulaire).
- Gestion du Centre d'échanges français (CHM)
- Dans un futur prochain, il contribuera aux processus d'évaluation, particulièrement en ce qui concerne le suivi des indicateurs.
- Le Muséum a assuré la coordination du 3ème rapport annuel de la France pour la CDB.

Enfin, il est un centre de référence et d'appui pour la définition des positions françaises lors des réunions de la CDB.

Le Muséum est donc un maillon important de la préparation des positions françaises à la CDB et de la mise en oeuvre de cette convention en France et dans le monde. Par ses expositions, ses jardins botaniques et zoologiques, il permet aux millions de visiteurs qui s'y rendent de mieux appréhender l'importance de la diversité biologique et de sa sauvegarde et d'apprendre, selon la formule de Jean Dorst, le grand ornithologue qui fut son directeur « non seulement à connaître la nature, mais à l'aimer, tout simplement parce qu'elle est belle et que nous avons besoin de beauté ». ❧

1. Le siège du Muséum national d'Histoire naturelle est à Paris, mais il comprend également de nombreuses stations ou établissements en province

Royal Botanic Gardens, Kew: Mainstreaming Conservation and Capacity-Building



Kew's plant diversity science, public engagement and capacity building programmes have become increasingly focused on conservation, sustainable use and access and benefit sharing over the past two decades, resulting in an overall programme of work which is very closely aligned with the implementation of the Convention on Biological Diversity (CBD).

Since 2000, a strategic decision to mainstream conservation and capacity building activities throughout Kew has resulted in a large portfolio of multidisciplinary projects which include conservation, sustainable use and capacity building strands. The preparation and adoption of the Global Strategy for Plant Conservation (GSPC) added impetus to this work, and the 2010 Target has provided an invaluable framework which Kew has used to articulate our relevance to current issues and initiate or extend collaborations in key areas.

Kew's capacity building activities aim to enhance the ability of individuals, organisations and institutions to address botanical, horticultural and plant conservation problems. Our endeavours in this field cover a spectrum from the purely technical input of a training course or piece of equipment; through sustained, long-term partnerships developing an organisation's people, culture and ability to plan for the future; to broader 'institutional development' activities aimed at strengthening links between organisations and developing the environments in which they exist.

While this article can only outline a handful of our current initiatives these are, in broad terms, representative of the majority of our projects because the goal is always the same: to transfer the skills and resources needed to enable every individual and organisation with which we work to do what they do even better, in the in-

terests of plant conservation and sustainable use worldwide.

The Millennium Seed Bank Project (MSBP) is Kew's largest capacity building project. Training, infrastructure improvements, collaborative research and information sharing are valued by partners as important benefits enshrined within the Access and Benefit Sharing Agreements, and key to achieving the seed conservation aims of the project.

The MSBP's technology transfer programme aims to facilitate the adoption of best practice seed conservation technology internally and by project partners to make best practice seed conservation technology accessible to the wider scientific community. Training activities focus on practical implications of recent advances in seed biology. The MSBP is not only increasing numbers of trained people, but is also helping to ensure that they are working with appropriate facilities (thus contributing to the GSPC Target 15).

Kew offers a range of International Diploma Courses covering Herbarium Techniques, Botanic Garden Management, Botanic Gardens Education and Plant Conservation Strategies. Over the years, professionals from more than 100 countries have benefited from these opportunities which combine practical sessions, case studies, seminars and workshops to ensure active learning by all participants who thereby gain the confidence and expertise to implement changes, cascade the training and facilitate enhanced outcomes within their own organisations. Contacts made through these courses have resulted in long-term working relationships. For example, a recent Caribbean Regional Workshop on the implementation of the GSPC was organised by a team including Kew staff and the GSPC officer from Botanic Gardens Conservation International, who attended the Plant Conservation Techniques Course in 1993.

Kew staff devotes over 5,000 days per

year to working with partners to build capacity to deliver outcomes in plant conservation and sustainable use, but we also recognise the potential to increase our impact by developing and distributing training materials for use by others. The CBD for Botanists is a presentation pack specifically designed to introduce people working with botanical collections—botanists, curators, horticulturists and technicians in botanic gardens, herbaria, museums and seed banks, in developed and developing countries—to the Convention on Biological Diversity. The pack aims to raise awareness and provide basic information on all of the most relevant parts of the CBD for botanical institutions. It places particular emphasis on the CBD's provisions on 'access to genetic resources and benefit-sharing' and their practical implications, reflecting Kew's focus on developing best practice in this area. The pack includes PowerPoint slides and suggested speaker's notes, and is backed up by a resources section offering more detailed information, useful links and suggestions for further reading. Version 2 in English, French and Spanish was released in 2006 and is available as a CD-ROM or free web download (www.kew.org/data/cbdbotanists.html)

The CBD for Botanists is just one of many Kew initiatives since 1992/93 which have been supported by the Darwin Initiative, the UK fund to assist countries rich in biodiversity but poor in resources with the conservation of biological diversity and implementation of the Biodiversity Convention. Current Kew projects within this scheme include capacity building activities in Anegada (British Virgin Islands), Cameroon, Papua (Indonesia), Peru, Sabah (Malaysia), South Africa and Thailand. ❖

The Royal Botanic Gardens, Kew was pleased to be a founding member of the Consortium of Scientific Partners on Biodiversity and honoured to host the first meeting of the Steering Committee at Kew in September 2006.



The Royal Belgian Institute of Natural Sciences: Building Capacities in the Framework of the Convention on Biological Diversity

The vast majority of countries have their Convention on Biological Diversity (CBD) National Focal Points located within administrations. In Belgium, the mandate has been attributed to a scientific institution, the Royal Belgian Institute of Natural Sciences (RBINS).

This situation provides Belgium with an unusual framework for action. One of its main advantages is that the RBINS can readily assure linkages between the scientific community and decision-makers, and as such bring first-hand biodiversity information to the forefront of policy discussions. This advantage is reinforced by the fact that the RBINS also carries out the mandates of three other National Focal Points under the CBD—those for the Scientific, Technical and Technological Affairs (SBSTTA), the Clearing-House Mechanism (CHM) and the Global Taxonomy Initiative (GTI).

This paper presents a selection of the activities on biodiversity carried out by the RBINS in the fields of education, training, scientific and technical expertise, support to the policy process, and public awareness.

Professional training

The RBINS provides professional education and training opportunities through practical training courses and short-term theoretical workshops and seminars. Many activities in the field of taxonomy are carried out in synergy with two sister institutions; the Royal Museum for Central Africa and the National Botanic Garden of Belgium.

Capacity building in taxonomy

In 2004, the RBINS started a capacity building programme in the fields of taxonomy and collection management. Addressed to professionals—from parataxonomists to experts—from developing countries, the programme comprises several components:

- Demand-driven training—Professionals from developing countries can apply for a study visit through a call for proposals held once a year. These visits combine one week of theoretical training in taxonomy (general concepts) with several weeks of practical training in the candidate's field of expertise. Study visits are also granted for recognised experts wishing to access Belgian collections without having to follow the courses.
- RBINS-driven training—RBINS scientists carry out 'training through research' projects involving professionals from developing countries, with most of the training undertaken on the field.
- Clearing existing taxonomic knowledge—*Abc Taxa* is a series of peer-reviewed manuals devoted to capacity building in zoological and botanic taxonomy. Each volume gives a detailed account of the knowledge and skills needed for the taxonomy of a particular living taxon. Former trainees are encouraged to participate in the elaboration of such manuals (Vols. 1-3 are nearly ready).

Management of collections

The RBINS has developed a course on the management of natural history collections for technicians and curators in Belgium on an on-demand basis. The course includes sections on how to preserve dry and wet specimens, conservation conditions, preventive measures, long-term storage, documentation of the collection, display systems, etc. It has been adapted for the conservation of insect collections in the tropics and has been used as training material for a project in Cambodia.

Bird ringing

The RBINS has been organising and coordinating bird ringing in Belgium since



1927. Fieldwork is mainly done by volunteers, who become bird ringers after undergoing a long training period and successfully passing two exams at the Institute. In the framework of cooperation with the Direction of National Parks of Senegal, the RBINS has trained several National Park Service agents in bird ringing techniques. An 'All Species Map Senegal' with all the ringing and recovery localities for all specimens ringed or controlled at the Saloum delta, illustrates the importance of this wetland ecosystem for bird populations.

Partnering role for the Clearing-House Mechanism

The RBINS has organised training sessions for the Clearing House Mechanism/Belgian Clearing House (CHM/BCH) national focal points and webmasters, mostly from African countries, since 1999. Technical training involving new information technologies is combined with general training on how to implement the CHM mission through networking and scientific collaboration. Types of capacity building include:

- Short-term webmaster training sessions in Belgium (2-4 weeks, in groups of 3-4 persons)
- Sub-regional workshops on the CHM.



Workshops last for 2 weeks and are usually organised in Africa. They enable a broader participation (10-15 participants from 3-5 countries)

- Technical support for the development and/or follow-up of websites
- Hosting of national and/or mirror CHM websites.

University education

Researchers at the RBINS have long had agreements with Belgian universities to teach in their field of expertise. Several researchers hold professorship positions, and many are invited to give guest lectures in their specific field of expertise. Researchers also accept the co-promotership of doctoral and graduate theses. Undergraduate students are not neglected, since several projects are supervised each year.

Post-doctoral researchers are encouraged to come and work at the RBINS for one to several years. The Institute has coordinated several individual Marie Curie post-doc grants, in addition to larger Marie Curie Training and Research Networks. At present, a large network trains six PhD students and four post-docs in nine different European countries on the subject: 'From Sex to Asex: a case study on interactions between sexual and asexual reproduction'.

The RBINS is actively involved in the Postgraduate International Nematology Course organised by Ghent University. This Master of Science programme includes training and research on the morphology, systematics and biology of plant parasitic, insect parasitic and free-living nematodes. Grants are offered for participants from developing countries.

Scientific expertise and support to the policy process

The large variety of research topics developed at the RBINS results in a great potential of expertise that can assist other scientific teams inside or outside the country, and be helpful for decision-making. Researchers at the Institute are constantly solicited to offer their expertise in the framework of international conventions such as the CBD, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES),

the Convention on Migratory Species (CMS), etc.

The ratification by Belgium of the CBD opened new perspectives for the Institute, since it was designated the country's CBD National Focal Point in 1995. Work in this context involves support to federal and sub-national administrations in the follow-up of the Convention, the coordination of national reporting and the provision of assistance in the establishment of official Belgian positions to be defended in an array of European and international meetings.

Many researchers participate in the work of the Belgian CITES Scientific

(UNCLOS), etc.).

The Institute is also involved in the Belgian Biodiversity Platform. This Platform is the federal science policy office's information and communication initiative linking biodiversity science and policy. The Platform represents Belgian researchers in international forums like DIVERSITAS and the European Platform on Biodiversity Research Strategy (EPBRS), and it acts as the Belgian node to the Global Biodiversity Information Facility (GBIF).

Public awareness

The RBINS hosts permanent exhibitions, where galleries put the variety of the

Since January 2004, the RBINS has organized tours behind the scenes to allow the public to discover the scientific activities and the collections of the institute. Every month, a different section of the Institute is opened to the public. Visitors have the opportunity to discuss with scientists and learn about the scientific collections.

Committee and have been designated as a CITES expert by ministerial decision. They assist the customs departments at international airports and seaports with the identification of suspected CITES species. They are also asked to teach customs officials in basic taxon-specific knowledge, in order to help them carry out routine identification work.

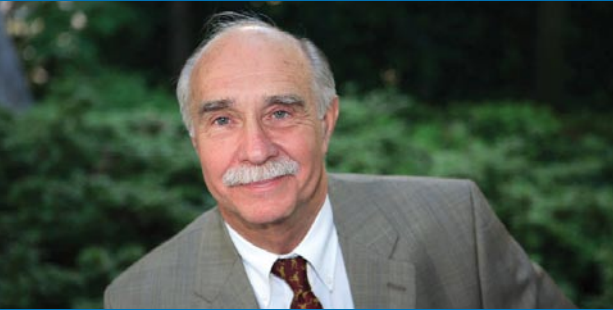
Two RBINS experts are member of the CMS Scientific Council. They are also involved in a sub-regional project implementing the CMS 'Action Plan on the recovery and conservation of Sahelo-Saharan antelopes'.

For the marine environment, expertise is provided through the monitoring and management of the Belgian territorial waters. The RBINS represents Belgium in a number of inter-governmental conventions dealing with the protection of the marine environment (the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention), Bonn Agreement, United Nations Convention on the Law of the Sea

world's animal species and their biotopes on display. Apart from its permanent galleries, RBINS produces about two temporary exhibitions per year on themes related to the natural world.

Beginning in January 2004, the RBINS organises 'Tours behind the scenes', to allow the public to discover the scientific activities and the collections of the Institute is opened to the public. Visitors have the opportunity to discuss with scientists and learn about the scientific collections.

Since 2005, the professional training provided in the framework of the CHM has been complemented by a public awareness programme. Once a year, the RBINS launches a call for public awareness projects on biodiversity to be developed by CHM Focal Points and their national partners. The RBINS not only provides financial support (max. amount 5,000 Euro), but also expertise in the establishment of such projects. These projects are then carried out in the partner country, under the supervision of the CHM Focal Point. ❖



The United States and the Convention on Biological Diversity: A Compelling Time to Ratify

In 2007 in the United States, the Federal Government announced that the bald eagle—the great icon of both our democracy and the country’s rich biodiversity—had been securely recovered from the threat of extinction. The attention and acclaim for this announcement testifies to the inestimable value of laws and policies that protect biodiversity. It was the Endangered Species Act, our landmark biodiversity law, that ensured the recovery of the bald eagle, transforming a dire situation of only 417 nesting pairs in 1963 to an estimated 9,700 pairs now. This achievement was accomplished through the Endangered Species Act’s mandating habitat protections and

uralists, such as John James Audubon, or the globally noted contributions of contemporary United States scientists, such as E.O Wilson, Thomas Lovejoy, and Peter Raven, who have offered seminal understandings of biodiversity and the urgency of the global extinction crisis.

It is in this context of science, conservation policy, and American culture’s deep regard for nature that it is especially discomfiting that the United States has still not ratified the Convention on Biological Diversity. The United States’ non-party status is both perplexing and conspicuous: perplexing because the world and the United States would gain much by U.S. ratification of the CBD; and conspicuous

ed global compact for biodiversity.

Back in 1993, President Bill Clinton recognized the CBD’s importance and signed the treaty, and the Senate Foreign Relations Committee followed in 1994 when it voted 16-3 to recommend the full Senate ratify the CBD. In April 1996 then-Secretary of State Warren Christopher made a prominent foreign policy speech at Stanford University in which he proclaimed CBD ratification as one of the foreign policy priorities for a second term for the Clinton administration. However, nothing came of this because the United States Congress was dominated by politicians who were not inclined to support the CBD, or any international environmental agreement.

Fortunately, things have changed. We had a dramatic transformation in the make-up of the U.S. Congress in 2006 and now have leading politicians who are more concerned about seeing the United States work cooperatively with other nations on the sustainable development challenges of our time. And, one the greatest challenges is the global biodiversity crisis. At Defenders of Wildlife our mission statement proposes that humans have an “ethical responsibility” to “maintain the life-support functions of natural ecosystems and natural evolutionary processes, and to protect for future generations the maximum benefits inherent in a rich diversity of species.” Our mission as an organization is therefore much akin to the CBD’s, whose purpose is embodied in the COP-promulgated 2010 Target to significantly reduce biodiversity loss. Defenders of Wildlife has participated in the CBD since the beginning, and we are committed to promoting U.S. ratification. With change in Washington, now at last we begin to see the possibility of success. But for such success to happen, it will be necessary for many others to join the advocacy

The United States’ non-party status is both perplexing and conspicuous: perplexing because the world and the United States would gain much by U.S. ratification of the CBD; and conspicuous because United States negotiators were active in drafting the CBD treaty language.

hunting prohibitions, alongside other legislative directives, particularly prohibiting the broad use of DDT as a crop pesticide, which had caused severe reproductive problems for the bald eagle.

While the recovery of the bald eagle is a vivid example of our country being galvanized to protect nature, the United States’ efforts on behalf of biodiversity, at our best moments, go beyond just protecting charismatic species. Moreover, U.S. culture has always reflected a passion for living nature, whether it be through Native Americans’ knowledge and use of nature, the passionate identification of species by prominent early American nat-

because United States negotiators were active in drafting the CBD treaty language, and the United States continues to send large delegations to CBD Conference of the Parties meetings, and to attend most CBD advisory meetings as well. Beyond the many self-interest reasons, by acceding to the CBD, the United States will create greater opportunities for working with other nations to redress biodiversity loss and sustainably manage biodiversity, whether it be at the level of genetic resources or protected areas. We will see improved international environmental relations, and the CBD would take a huge step forward to attain its goal of a perfect-



effort. We need friends in the United States and from other countries to promote a broad understanding of the benefits that would come from U.S. acquiring full-party status.

It is especially impressive that over 130 CBD parties have adopted National Biodiversity Strategies and Actions Plans (NBSAPs). For those of us in the United States who have worked hard at upholding the Endangered Species Act, it is very gratifying that so many countries have issued NBSAPs, and we feel that American conservationists, scientists, and government experts have much experience to of-

organization's mission statement promotes the objective of "establish[ing] a network of conservation reserves ... that at a minimum provides required ecosystem life-support functions, contains representative and adequate samples of each habitat type, [and] protects and allows restoration of imperiled species," and we find much that is promising in the CBD's protected areas program.

The CBD's advancing genetic resources agenda is also a place where the American experience can offer assistance. The CBD genetic resources agenda provides an example of greater mastery of what real sus-

CBD should be compelling.

Yet, perhaps most compelling is what being a non-CBD party says about America's recent turning away from global environmental leadership. I am convinced we must reverse direction, and that it is in our and the world's interest that we quickly do so. U.S. relations with both developed and developing nations will be enhanced by assuming a global conservation leadership role. New opportunities will arise for the United States to work with the EU on environment and interconnected trade matters. And, with regard to developing nations, United States ratification will do

U.S. relations with both developed and developing nations will be enhanced by assuming a global conservation leadership role. New opportunities will arise for the United States to work with the EU on environment and interconnected trade matters. And, with regard to developing nations, United States ratification will do much to advance understanding and policy implementation on many sustainable development issues.

fer for effective national biodiversity policies, whether it be with regard to habitat protections or other mechanisms and innovations to protect species and ecosystems.

Another impressive achievement of the CBD is its promotion of many beneficial international and inter-institutional synergies. Among the important CBD initiatives that immediately stand out are the CBD's: protected areas agenda; collaboration with other key accords such as the Ramsar Convention on Wetlands, the Convention on the Law of the Sea, and the Convention on Migratory Species; collaborative sponsorship of the Millennium Ecosystem Assessment; and integral work with the Global Invasive Species Program (GISP) and other international bodies concerned with invasive species issues.

Taking the CBD's protected areas program as an example, the CBD works with international non-governmental organizations and is now the global forum for offering guidance on connecting protected areas and covering representative biomes, disseminating managerial know-how, and promoting understanding on equitable governance of protected areas. My own

tainable development entails, with, as our mission statement states, "biodiversity planning... an integral component of long-term economic planning." This relates directly to my organization's—and others'—belief that "[o]ver the long term, biodiversity conservation and economic growth are flip sides of the same coin." Proper management of genetic resources is essential for both long-term growth and conservation, and the United States needs to fully engage the CBD genetic resources discussions as a full party. While it is often asserted that United States needs, in the interest of industry, to get a full seat at CBD discussions on a new international system for equitable access to genetic resources, the range of U.S. stakeholders for the CBD genetic resources discussions is larger than a just a core group of concerned businesses, and includes a broad array of botanical gardens, zoos, university science departments, and conservation NGOs. With a wide range of American stakeholders, when the United States finally does ratify the CBD, our full-party status should facilitate diverse contributions on the world stage.

The conservation and self-interest reasons for the United States to ratify the

much to advance understanding and policy implementation on many sustainable development issues.

As CBD participants know, exercising leadership on biodiversity conservation is not easy. Those of us in the United States who have fought for a meaningful application of our Endangered Species Act and other conservation laws have been discouraged to see anti-conservation administrations work to severely restrict their application. But we are now heartened by what seems to be a new groundswell of support for protecting species, properly managing our public lands, and promoting sustainable use of our natural ecosystems. There is a growing conviction that nature's bounty must be preserved across generations. And thus the CBD's fundamental goal of conservation and sustainable use of genetic resources, species, and ecosystems should increasingly resonate well here in the United States. Defenders of Wildlife is committed to assisting this trend through our own efforts and by entering into new and productive alliances with others. Hopefully, by working together, we will all see the United States ratify the CBD in the near-future. ♡

“It is irresponsible, reckless and deeply immoral to question the seriousness of the situation. The time for diagnosis is over and the time for action is now.”

—Dr. Gro Harlem Brundtland

