



CBD

Secretariat of the Convention on Biological Diversity

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International Day for Biological Diversity



Biodiversity and Climate Change

“GLOBAL ALLIANCE FOR LIFE ON EARTH”

STATEMENT

by

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CONVENTION ON BIOLOGICAL
DIVERSITY**

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Ladies and Gentlemen

During this weekend, the temperature reached 100 degrees Fahrenheit in Romania; as a result at least four people died. This was a stark reminder of the exceptional heat wave that engulfed Europe in August 2003, which led in a matter of days to the death of more than 22,000 people. According to the Prime Minister of France at that time, this was the worst health disaster since 1873. During this trying time, the French authorities endeavoured to draw from the experience acquired by the United States during the heat wave that battered Chicago in 1995 and led to the death of 485 people.

This year, Europe recorded the warmest and driest April ever experienced. It was preceded by the warmest autumn in more than 500 years. The world recorded its second warmest winter. Eleven out of the twelve past years have been the hottest years since meteorological data were first recorded in 1850. A study by NASA has shown that during the last 30 years, world temperatures have been the highest in 12,000 years.

During this weekend, Tornado Alley caused serious property damage in Manitoba and other areas along the border between United States and Canada. According to the United Nations Environment Programme, since 1980 more than 10,000 extreme climatic phenomena have led to the death of more than half a billion people. The number of natural disasters linked to climate has increased four-fold since 1960. Here in the United States, the people of New Orleans are still struggling to cope with the devastating consequences of Hurricane Katrina, which killed thousands of people in September 2005.

Climate Change is real and represents a global challenge for humankind. Historical buildings like this one may be also threatened by climate change. According to UNESCO some of the priceless treasures of cultural and nature based heritage sites are at risk as a result of climate change. Last week, the director of the NASA Goddard Institute for Space Studies together with other leading scientists has issued an unambiguous warning: "civilization itself is threatened by global warming". Last week also, the United Nations Environment Programme issued its first global assessment on the environmental situation in Sudan and concluded that climate change is among the root causes of the Darfur conflict and its human victims, which include more than 200,000 dead and 2.2 million displaced persons. According to the latest report of Intergovernmental Panel on Climate Change (IPCC), more than 100 million people in Africa alone will be become climate-change refugees.

By 2020, between 75 and 250 million people in Africa are projected to be exposed to increased water stress due to climate change. Today four out of 10 people in the world live in countries with a severe shortage of drinking water. In 2025, two thirds of humanity, i.e., more than 5.5 billion people will experience a similar situation. The scarcity of drinking water will have disastrous consequences on the acceleration of desertification, particularly in Africa, where it has attained alarming proportions. Today, more than 1.2 billion people living in 110 countries are affected by desertification. It is threatening the lives of more than 135 million people. According to the CIA, water scarcity will become one of the major sources of tensions and conflicts in the world.

Last month, it was agreed to commission a comprehensive study by the United States intelligence community on the impact of climate change on national United States

security and a national intelligence estimate in global climate change is expected for next year. In April, a panel of 11 retired three-star and four-star admirals and generals from all the branches of the United States armed forces issued a report on “National security and the threats of climate change”. They concluded that: “climate change poses a serious national security threat which could impact Americans at home, impact US military operations and heighten global tensions”.

On 17 April 2007, in New York, and for the first time in its history, the United Nations Security Council, on the initiative of the United Kingdom, debated the issue of energy, security and climate change. On the occasion of this historic event, Ms. Margaret Beckett, the Foreign Secretary, stated that “this is an issue that threatens the peace and security of the whole planet”. Indeed, climate change is a major threat not only for mankind but also for every life on Earth.

I feel therefore very honoured today to be given the opportunity to address this prestigious gathering in this prestigious institution, to share with you the perspective of the Convention on Biological Diversity on the unprecedented challenges facing life on Earth. I would like to sincerely thank the Institute for Policy Innovation for the invitation and the honour. I would like also to express my deep appreciation to all of you for finding the time to be with us this morning.

Simply put, climate change is threatening life on Earth. The latest report published early this year by the Intergovernmental Panel on Climate Change, which was prepared by 2,500 experts from 130 countries, is categorical. The current concentration of greenhouse gases in the atmosphere is greater than has ever been observed in the last 650,000 years. The report specifies that even if greenhouse-gas concentrations were now to stabilize, anthropogenic global warming and the rising of sea and ocean levels would continue for centuries due to the complexity of the world’s climate and the interconnectivity of ecosystems.

Such conclusions require urgent and unprecedented efforts and interventions. The cost of inaction has been evaluated by the Stern report at more than 5,000 billion dollars. The cost of inaction for the unprecedented loss of biodiversity will be soon available as a result of the Postdam Initiative as noted early this month by G8 Summit held in Heilingendamm, in Germany. The Postdam Initiative acknowledges the contribution of biodiversity to the climate-change agenda.

While climate change is a cause of loss of biodiversity, a healthy ecosystem can be a major contributor to addressing climate changes challenges. For example:

- A third of the planet’s CO₂ emissions is absorbed by oceans.
- A recent study has revealed that a one millimetre long earthworm called *Scottinema Lindsayaeh* is living in the permafrost soil of the Antarctic and acts as a veritable carbon sequestration factory. However, since 1993, its population has decreased by more than 65%.
- Forests contain 80% of all the carbon stored in terrestrial vegetation. Ten million hectares of forest continue to disappear each year, the equivalent of an area four times the size of Belgium. Each year, about 1.7 billion metric tonnes of CO₂ are released into the atmosphere due to deforestation and land-clearance.

- Although they only represent 3% of the Earth's surface, peat bogs sequester twice as much carbon dioxide as all the world's forests. Unfortunately, western Europe has already lost 90% of its original peat bogs. In south-west Asia, the draining of peat bogs is responsible for at least 632 million tonnes of carbon dioxide emissions annually.

However, biodiversity is being lost at an unprecedented rate, thus compounding the climate change challenges. The conclusions of the Millennium Ecosystem Assessment, a study prepared over a period of four years by more than 1,395 experts from 95 countries, sound another warning bell. The pressures on the planet's natural functions caused by human activity have reached such a high level that the ability of ecosystems to satisfy the needs of future generations is seriously, and perhaps irretrievably, compromised. Never since human beings first appeared on Earth has anthropogenic change to our planet's natural functioning been so destructive as it has been over the last half-century, resulting in an unparalleled extinction of biodiversity on Earth. The current rate of species extinctions is today higher than at any time since the disappearance of the dinosaurs 65 million years ago and is estimated to be 100 to 1000 times higher than the background rate. Twenty per cent of known bird species have already disappeared. Forty-one per cent of mammals are in decline and 28 per cent are under direct threat.

Two thirds of the ecosystems studied by the Millennium Ecosystem Assessment were found in serious decline. Some 35 per cent of mangroves have been destroyed in the last twenty years. Until recently, forests covered 47 per cent of the Earth's land surface. Since then, they have totally disappeared in 25 countries and, in a further 29 countries, 90 per cent of forest cover has been lost. More than 1.6 billion people depend on forests products for their livelihood. Marine species are also under serious threats. More than 3 billion people depend on marine and coastal biodiversity for their livelihood. 70% of the world's poor live in rural areas and directly depend on natural resources for their livelihood. Natural resources are the backbone of many developing countries economies. Environmental assets provide 25% of wealth in low income countries. 92% of all exports earning of Africa are environment-based.

Since the dawn of history, humans have used more than 7,000 plant species to satisfy their needs. Today, only 150 plants are used, and most of us use only 12 species. Thus, of the 8,000 species of apples that could be found in the United States of America up to the last century, 95 per cent no longer exist.

Around 20 per cent of domestic animal breeds are at risk of extinction, with a breed lost each month. But of the more than 7,600 breeds in the FAO global database of farm animal genetic resources, 190 have become extinct in the past 15 years and 1,500 more are deemed at risk of extinction. Some 60 breeds of cattle, goats, pigs, horses and poultry have been lost over the last five years,

One study, examining over 5,000 plant species in Africa, has concluded that up to 90% of species' suitable habitats will decrease in size or shift due to climate change. According to IPCC report, 30% of plant and animal species assessed so far are likely to be at increased risk of extinction due to climate change.

Agricultural ecosystems are endangered as climate change may affect plant growth and production by promoting the spread of pests and diseases, increase exposure to heat stress and change rainfall patterns. Climate change is likely to give a new dimension to the question of food security, an issue we already have troubles finding a solution. In 2080, 200-600 million people are likely to join the endless list of people affected by hunger and malnutrition.

Pollination, on which 35 per cent of world crops depend on is also threatened by the declining populations of pollinators. Bees from one hive can visit a million flowers within an area of 400 square kilometres in just one day. Without the bees' pollination services, California's almond trees — the state's top export crop — would produce 40 pounds of almonds per acre; with the bees, they can generate 2,400 pounds. Honeybees provide the same service for more than 100 other crops. About 60 per cent of all food consumed in America has a bee connection. Without bees, the country would lose about 20 billion dollars in crops. This year California has lost in six months almost 50 per cent of its bees causing a serious loss to the almond industry, which accounts for 88 per cent of the world's almond crop. Maryland beekeepers have lost 45 per cent of their bees since last year due to temperature changes from an unusually warm November and December to a colder January. Between 1971 and 2006, approximately one half of the US honeybee colonies have vanished.

The decline of pollinators is becoming a major global crisis. Five years ago in Germany there were a million hives, now there are less than 800,000. Beekeepers in northern Croatia estimated that five million bees died in just 48 hours. In Poland, the Swietokrzyskie beekeeper association has estimated that up to 40 per cent of bees were wiped out last year. Greece, Switzerland, Italy and Portugal have also reported heavy losses. Bees are not only essential as pollinators but they are also perfect indicators of the state of the environment. Albert Einstein once predicted that if bees were to disappear, man would follow only a few years later.

Not a single country, regardless of its size and GDP will be able to address alone the interrelated global environmental threats of the loss of biodiversity and climate change. Enhanced multilateral cooperation is essential to meetings the global environmental challenges facing mankind. It is for this reason that the Secretary-General of the United Nations, Mr Ban Ki-moon in his message issued on 22 May this year on the occasion of the celebration of the International Day for Biological Diversity stressed the need for the international community to move much more rapidly and with more determination at all levels—global, national and local—in the implementation of the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change.

The Convention on Biological Diversity was adopted in 1992 at the United Nations Conference on Environment and Development in Rio de Janeiro. This ground-breaking meeting of world leaders adopted this international instrument in order to address the use of our biological resources in a sustainable manner. The Convention recognized for the first time the need for the conservation of biological diversity, including ecosystems, species, and genetic resources, as “a common concern of humankind” and as an integral part of the development process.

The Convention on Biological Diversity, which to date is ratified by 190 Parties, has three main objectives:

- The conservation of biodiversity,
- The sustainable use of the components of biodiversity, and
- The fair and equitable sharing of benefits arising from the use of genetic resources.

Being the first global agreement on the conservation and sustainable use of biodiversity, the Convention links traditional conservation efforts to the economic goal of using biological resources in a sustainable manner. It has now been 15 years since its adoption.

The Convention is comprehensive in its goals. It provides a forum for debate on a number of issues of significant importance to all countries. Some of these issues include technology transfer, access and benefit sharing and private-sector involvement. These, I believe are of particular interest to the United States of America.

The Convention recognizes that both access and transfer of technology to countries are essential elements for attaining its objective, including the target of achieving by 2010 a significant reduction in the current rate of biodiversity loss.

In order to give effect to its pertinent provisions, the Parties to the Convention adopted, in 2004, an ambitious programme of work on technology transfer and scientific and technological cooperation, which provides concrete guidance on activities and a framework for partnerships on four key elements:

- The conduct of technology assessments,
- The strengthening of information systems at national, regional and international levels,
- The establishment of enabling-environments for technology transfer both for the developers of technology and the recipients of that technology; and
- Capacity-building.

The Convention fully supports the use of modern technologies to maximize potential benefits while at the same time minimizing possible risks. In particular, the Convention explicitly recognizes the importance of biotechnology and its potential. The Convention advocates for the full exploitation of the potential of biotechnology while taking into account the possible impact on human health and the environment. It is for this reason that the Parties have negotiated and promoted an international legal instrument, the Cartagena Protocol on Biosafety.

The Cartagena Protocol, which was adopted in January 2000, has to date been ratified by 141 Parties. Its objective is to “contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health and especially focusing on transboundary movements”. The Protocol ultimately aims to ensure that the benefits of biotechnology are fully tapped while protecting human health

and the environment. Indeed, the Protocol provides predictable, workable, transparent and effective regulatory structures necessary for business to operate. The United States has made a distinct contribution in support to the Biosafety Clearing-House, which is a key mechanism for information-sharing in implementing the objectives of the Protocol.

Biotechnology offers the opportunity to make a significant contribution to sustainable development and to help mitigate the impacts of climate change. At the same time, biotechnology has the potential to enhance food security, improve food quality, deliver major health-care benefits, improve supplies of potable water and deliver cleaner technologies. Just as biotechnology is indispensable for the advancement of humanity, so is the diversity of life from which it derives its resources. Biodiversity, the very gene pool from which the technology derives its raw material, must be protected. Preserving biodiversity is an invaluable asset to biotechnology's future business opportunities.

The Cartagena Protocol on Biosafety should not be seen as constraining the development of biotechnology but rather as a facilitating international instrument for the adoption of biotechnology in a manner that ensures its safe use.

Technology transfer offers an important means to share the benefits arising out of the utilization of genetic resources, thereby contributing to the third pillar of the Convention. The international regime on access and benefit-sharing, which is currently being negotiated, should provide a flexible and predictable framework for access to genetic resources and the fair and equitable sharing of benefits arising out of their utilization. The international regime could form the basis of a new partnership between present and future providers and users of the wealth of the planet, biodiversity. An international regime has the potential to put an end to the current climate of uncertainty between users and providers of genetic resources, as well as being a powerful instrument for alleviating poverty, achieving the Millennium Development Goals and promoting peace, security and shared prosperity. All human beings, whether in poor or rich countries, throughout all communities, and industries, large and small, stand to gain from finding a common ground on the distribution of the benefits that Nature has so generously provided.

An Ad Hoc Technical Expert Group will convene on 10-12 September 2007 in Geneva to take stock of existing mechanisms and initiatives to promote technology transfer, and to develop a strategy for the implementation of the programme of work on technology transfer and scientific and technological cooperation. One focus of the meeting will be to explore options for the development of a "Biodiversity Technology Initiative", taking into account the "Climate Technology Initiative" – an initiative of ten countries members of the Organisation for Economic Co-operation and Development that support implementation of technology transfer under the United Nations Framework Convention on Climate Change.

The Convention on Biological Diversity recognizes and values private-sector participation. The relation between business and biodiversity is more obvious in some sectors than others, but all businesses ultimately depend on biodiversity. Agribusiness companies rely on fertile soils and a sustained supply of water, forestry companies depend on healthy trees, and the tourism industry depends on wildlife and pristine destinations.

While businesses have a major direct and indirect impact on biodiversity, they also possess biodiversity-relevant knowledge, technical resources and managerial skills. In turn, how companies manage biodiversity is increasingly appreciated as relevant to their bottom-line performance. Therefore, the recognition of the value of biodiversity is actually creating business opportunities. Green business is already good business and most importantly, it's today's business.

The last meeting of the Conference of the Parties to the Convention on Biological Diversity adopted the first ever decision on engaging business under the Convention – an unambiguous call for greater business engagement. The Convention promotes government engagement with business in the development and implementation of biodiversity strategies and action plans. The Secretariat of the Convention welcomes dialogue with business in general and is keen, in particular, to hear from industry on ways to facilitate participation in the processes and meetings under the Convention. The Convention also encourages the articulation and dissemination of the 'business case' for biodiversity, and the compilation and development of good biodiversity practices.

In order to ensure a good liaison with businesses, the Convention Secretariat has, for the first time in its history, appointed a full-time staff member as the focal point for the business community, and a newsletter entitled *Business 2010* has been launched. The latest issue was on climate change and subsequent issues will focus on technology transfer (September), access and benefit sharing (early October) and the financial services sector (late October). The Secretariat will also be releasing a guide to the Convention for business at the next meeting of the Conference of the Parties to be held in Bonn, Germany, in 2008.

The Secretariat helps businesses to realize that the Convention is not just about locking up large areas of land for conservation purposes. One of its main objectives is the sustainable use of the Earth's biological resources which involves the sustainable development of resources such as forests and fisheries. In the context of climate change, businesses also have a significant role to play in regards to the development of clean, renewable technologies to meet global energy demands. The objective of sustainable development is therefore the key to much of the involvement of business in implementing the Convention.

The conservation and sharing of benefits accruing from resource development is another great possibility for the participation of business in the Convention. The active engagement of business in the ongoing negotiations of an international regime on access and benefit-sharing is crucial for achieving and operationalizing the third objective of the Convention which is key to the future of the biodiversity of our planet and its people.

It is for all these reasons that the Convention on Biological Diversity is referred to as the "Convention on Life on Earth". The Convention offers a forum for debating issues of biodiversity and through consensus make collective decisions. All the decisions of the Convention and its Protocol, without any exception have been adopted by consensus. Indeed, when it comes to life on Earth, dividing the vote between majority and minority is not a viable option. When it comes to life on Earth, we need the active engagement of all the citizens of the world.

Indeed, the objectives of the Convention will not be achieved without the universal participation of all nations of the world. The objectives of the Convention will

remain elusive without the full participation as a Party of the United States of America. The people and institutions of the United States of America have made a unique and distinct contribution to the protection of nature both at national and international level.

Protected areas represent today 12% of the land surface of our planet. Protected areas constitute a major tool for achieving the objectives of the Convention. The movement started here in the United States of America with the establishment in 1872 of Yellowstone National Park. The United States has today 7,448 terrestrial protected areas covering 1.5 million km², which represent almost 16% of its land area or almost one tenth of the protected areas of the world.

While not being a Party, the United States is making a major contribution for the marine protected areas. Last June, President George W. Bush designated the Northwestern Hawaiian Islands as a marine national monument, thus establishing the world's largest marine protected area, the size of California. The Secretariat of the Convention applauded this initiative aimed at protecting 7,000 marine species, most of them endemic thus making a unique contribution to the marine protected area programme of the Convention as well its programme of work on island biodiversity.

The United States Farm Security and Rural Investment Act of 2002 has helped conserve almost 200 millions acres of wildlife habitat on agriculture land. The Conservation Reserve Program (CRP) has made a major contribution to the recovery of many species. In the Prairie Pothole Region, it has contributed to a 30% improvement in duck production or 10.5 million additional ducks.

The United States is one of the main contributors to the Global Taxonomy Initiative (GTI) which is one of the cross-cutting programmes of work of the Convention. Various United States organizations and museums provide tens of millions of specimen records to the Global Biodiversity Information Facility (GBIF), which collaborates closely with the Global Taxonomy Initiative and are key to its implementation. The GBIF has of today, 130 million species data records. 55 million have been provided by 58 United States institutes. The United States of America is therefore, one of the largest contributors of the on-going GBIF initiative aimed at repatriating biodiversity data in poor developing countries in Africa, Asia and Latin America, thus making a distinct contribution to the implementation of the objectives of the Convention in biodiversity-rich countries.

The United States is also one of the most active countries in promoting the scientific and technological issues related to invasive species. The United States conservation movement has played a leading role in the success of the Global Initiative on Aliens species and in promoting collaboration with other non-governmental organizations (NGOs) in the context of the NGO forum organized back-to-back with the meetings of the Convention. Invasive species has been identified by the Millennium Ecosystem Assessment as one of the main causes of the loss of biodiversity. This landmark study has been supported by a leading US-based institution, namely the World Resources Institute.

Early this month in The Hague, the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora held its fourteenth meeting. The Convention was established as a response to growing concerns that over exploitation of wildlife was contributing to the rapid decline of many species of plants

and animals around the world. The Convention was born here in Washington DC on 3 March 1973. The International Alliance against Wildlife Trafficking is an integral part of the Potsdam Initiative adopted by the G8 ministers of the environment and five emerging countries. This initiative was also born here in Washington DC. Last week, here in Washington DC and in this same building, the United States Senate Appropriations Committee approved a measure that blocks American trophy hunters from importing the body parts of polar bears. The Congress and the President are expected to endorse this initiative which may enter into force as early as 1 October, thus making a significant contribution to the conservation of this emblematic polar species. An estimated 20,000-25,000 wild polar bears remain, two thirds of which live in Canada. In the course of the last 25 years, the average weight of female bears has dropped by 20%, thereby endangering their reproductive capacity. Last year, at the initiative of the United States, the polar bear was added to the list of “vulnerable” species.

The commitment adopted at the last G8 Summit in Heiligendamm to enhance efforts for achieving the 2010 biodiversity target aimed a substantially reduce the rate of loss of biodiversity is a major development in the life of the Convention. The Potsdam Initiative between the G8 and Brazil, China, India, Mexico and South Africa is unique. The engagement of the United States in this initiative will make a major contribution in achieving this target adopted in 2002 by the Conference of the Parties and contributing to the success of the enhanced phase of implementation of the Convention.

During the eighth meeting of the Conference of the Parties to the Convention in Curitiba, Brazil, in March 2006, the Parties agreed on the necessity to accelerate the efforts towards the achievement of the objectives of the Convention. A new era was born, which translates the objectives of the Convention into reality through an enhanced phase of implementation. In Curitiba, for the first time in the history of the Convention, the United States was represented at a very high level at the ministerial segment held with the participation of more than 130 ministers and other heads of delegation. In Curitiba, a major scientific institution based in Washington DC, the Smithsonian National Museum joined an alliance of eight leading scientific institutions and botanical gardens to support the implementation phase of the Convention and achieving the 2010 biodiversity target.

Yale University is also a partner of the Secretariat together with 11 Canadian universities. As a result and for the first time three interns from Yale University are undertaking an internship programme in the Secretariat of a three months duration in collaboration of the Commission on Environmental Cooperation of NAFTA.

In May next year, the Parties to the Convention will meet to review progress in achieving the 2010 biodiversity target. I sincerely hope that the United States of America will be able to participate in this meeting as a full fledged Party to the Convention so as to play its rightful role as a leader in promoting a Global Alliance for Life on Earth.

I thank you for your kind attention.