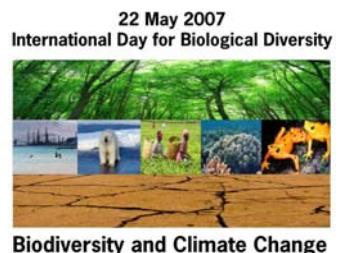


# Secretariat of the Convention on Biological Diversity



## Address by Dr Ahmed Djoghlaf, Executive Secretary of the Convention on Biological Diversity at the opening of the Expert Meeting on the further strengthening of Links between Biodiversity and Climate Change Montréal, Canada, 19 March 2007

Mr. Gerald Tremblay, Mayor of the City of Montréal,  
Ladies and Gentlemen,

In the space of a few days, the south of “La Belle Province” has broken all temperature records. On 6 March, temperatures in Montréal reached minus 24.3 degrees Celsius, minus 39 degrees with the wind-chill factor. The previous record dated back to 1989, when the temperature was down to minus 23.2 degrees. Last Wednesday, the temperature rose to plus 14 degrees. This year, for the first time since 1959, the year when precipitation data was first compiled, the Quebec region has experienced last year a Christmas without snow, a green Christmas. This winter was the warmest winter in Canada. Europe had also the mildest winter since 1950 which was preceded by the mildest autumn in 500 years. The world recorded this year the 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.

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. Climate change is real and human activity is its main factor. The report specifies that even if greenhouse gas concentrations were now to stabilize, human-caused 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 conclusions of another study, the Millennium Ecosystem Assessment, which is the result of four years of work 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. Since the appearance of man on earth, impacts on the natural functions of our planet have never been as destructive as in the last 500 years, leading to an unprecedented extinction of biological diversity on earth.

During the last century, the extinction rate of species increased a thousand times. Every hour, three species that are the result of thousands of years of evolution disappear for ever. Each day, 150 species perish. Each year, between 18 and 55 thousand species become forever extinct. This loss of biodiversity is real and climate change, caused by human activity, is one of its main factors.

The Arctic, which is a real environmental barometer of our planet, gives us a clear indication. The snow and permafrost melt is affecting the livelihood of local populations and fauna. Satellite data show that the summer Arctic ice canopy has lost 15% of its surface area and more than 40% of its thickness since 1978. In the last twenty five years, the ice cap has shrunk from 7.5 million to 5.5 million km<sup>2</sup>. It could disappear completely by 2070. Early thawing of the Arctic ice is not sparing Quebec or its biodiversity. The marked reduction of the Arctic ice canopy is forcing polar bears to fast for increasingly longer periods of time. 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, the polar bear was added to the list of "vulnerable" species. It is sad to observe, in this International Polar Year, that the population of this species, which symbolizes the great white open spaces, is likely to decrease by 30% during the next 45 years. A victim of climate change, the polar bear has become an endangered species. The willow warbler, the boreal tit and other titmice, the Eurasian bullfinch and the swamp sparrow are likely to meet with the same fate.

Due to the varied and dispersed nature of the habitats they depend on, migratory species reveal the true impact of climate change and serve as a warning of its future impact on other animal species. During the last fifteen years, ornithologists have observed profound changes in the behaviour of migratory species. Thrushes from Finland and German blackbirds that used to migrate to France for the winter are seen far less frequently there. Ducks, geese and cranes from Nordic countries that used to migrate to France in September/October now prefer to stay in the south of Sweden, Denmark and Holland. Similarly, swallows, storks and many black-tailed godwits prefer to spend winter in France. The great travellers that used to leave for Nigeria, Senegal, Niger and Mali in July and August now tend to reduce the distance of their migratory travel.

Climate change does not only affect animal species, but also marine and terrestrial plant species. The large-scale decline of oak trees observed since 2003 in central France and never observed before from 1750 onwards, appears to be caused by a microscopic fungus that spreads like white powder on peduncle leaves and thrives as a result of the warming climate. Agriculture is also affected. Since 1970 in France, maize has been sown a month earlier and apple trees blossom ten days early. For the past twenty years, grapes have been harvested two weeks earlier in Champagne and alcohol content has increased by 0.8%. Global warming is likely to alter the production of rice, wheat, maize, beans and potatoes, which are major crops in Africa and a basic food for millions of people. Approximately 35% of world crops depend on pollinators such as bees. However, their populations have already decreased by 30% in the last twenty years. Climate change is likely to give a new dimension to the question of food security. In 2080, 200-600 million people are likely to join the increasing list of people affected by hunger and malnutrition.

Climate change also affects the biological activity of seas and oceans. Phytoplankton, the basis of the ocean food chain, has become sensitive as a result of increased water temperatures. By 2050, the Great Barrier Reef may have lost 95% of its living coral. Must we be reminded that more than 3 billion people depend on sea and ocean products for their livelihood? The

production of this microscopic biomass is not only the basis of sea and ocean life; it also plays a considerable role in regulating the climate. A third of the planet's CO<sub>2</sub> emissions is absorbed by oceans. However, satellite observations have shown that from 1999 to 2005, the ocean absorbed on average 190 million tonnes of CO<sub>2</sub> less than the previous year, i.e. approximately 695 billion tonnes. Scientific studies have also shown that the reduction of the Siberian permafrost is releasing five times more greenhouse gases than initially calculated. A recent study has revealed that *Scottnema Lindsayae*, an earthworm hardly one millimetre long living in the permafrost soil of the Antarctic, acts as a real carbon sequestration factory. Since 1993 however, its population has decreased by more than 65%, thereby reducing carbon sequestration. Carbon absorption by oceans or animals such as this earthworm illustrates how the extinction of biodiversity is both a cause and a consequence of climate change.

Forests absorb around 280 billion tonnes of carbon dioxide or the equivalent of 10 years of global emissions of this greenhouse gas. Each year, more than 2 billion tons of CO<sub>2</sub> are expelled into the atmosphere due to deforestation. Forests, which until recently covered 47% of the earth's surface, have totally disappeared in 25 countries and only 10% remain in 29 others. Ten million hectares of forest continue to disappear each year, the equivalent of an area four times the size of Belgium. Must we be reminded that more than 1.6 billion people depend on forest products for their livelihood? 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. Mangroves, which protect coastal regions from extreme weather events, are also threatened. Some 35% of mangroves have been destroyed in the past 25 years.

While climate change spares no species or ecosystem, a high price will be paid by the most vulnerable. Similarly, while climate change spares no country or continent, a high price will be paid by the most vulnerable, particularly African countries and small developing island States. Thus those who contribute the least to climate change will suffer disproportionately from its consequences.

For this reason, very early on, the Convention on Biological Diversity looked into the relationship between biodiversity and climate change. A workshop was held in Helsinki in 2003 and followed in 2005 by an expert meeting on biological diversity and adaptation to climate change. A decision on this issue was adopted at the eighth meeting of the Conference of the Parties held last March in Curitiba, Brazil. For this reason also, the international community will be celebrating the International Day for Biological Diversity under the theme "Biodiversity and Climate Change". I would like to thank the Canadian federal, provincial and municipal authorities and in particular, Mr. Gérald Tremblay, for the measures taken to celebrate this important event in the life of the Convention.

The report of the Intergovernmental Panel on Climate Change came just in time to give the theme of International Biodiversity Day on 22 May a very special significance. The results of the study put a new light on the gravity of the multidimensional challenges of climate change. The impact on biological diversity should therefore be re-examined in the light of these new conclusions. This is the reason for today's meeting, which will facilitate the review of this issue at the next meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, to be held in Paris in July this year.

I would like to congratulate the Chairman and other members of the SBSTTA Bureau and express my sincere thanks to Professor Pachauri, Chairman of the Intergovernmental Panel on Climate Change, and his colleagues for their support in holding this meeting today. This meeting, which is the first of its kind among SBSTTA and IPCC experts, would not have been possible without the support of the Canadian Ministry for Foreign Affairs and I would like therefore like to extend my sincere thanks to its representative.

My thanks also go to Mr. Gérald Tremblay, Mayor of Montréal, for the constant and unfailing support he has shown for the Secretariat's mandate. His personal participation in the meeting on Cities and Biodiversity which takes place next week in Curitiba is testimony to his personal commitment to the harmonious implementation of the three interdependent objectives of the Convention. Mr Tremblay's presence at today's meeting following his unanimous election last month to the post of Vice-Chairman of the World Mayors Council on Climate Change in charge of biodiversity is particularly important. The signing of the Memorandum of Understanding between the Secretariat and Montréal City Hall on 22 February also bears witness to his support.

These four magnificent pictures now adorning the walls of this room are about to be unveiled by the Mayor of Montréal. They constitute the 24<sup>th</sup> collection of the Convention's "Nature and Culture" Museum. Once again, I would like to reiterate my thanks to Mr Tremblay for this donation which, by paying homage to its author, honours the Secretariat. These photographs representing life are the work of the famous entomologist, Jacques Godefroy de Tonnancour. This true Montréal man liked to say: "To know is to awaken to something. I owe to insects the infinite privilege of awakening to the greatness of the world". I hope that your meeting today, in the very room that bears the name of a militant of the climate change cause, the late Joke Waller-Hunter, will help further our knowledge of the relationship between climate change and biodiversity, so that we may awaken to nature and therefore to life on earth.

It gives me great pleasure to welcome you all and Mr. Gérald Tremblay in particular, to whom I would like to say on his first visit: "welcome home to the headquarters of your secretariat". Without further ado, I give the floor to Mr Gérald Tremblay, Mayor of Montréal, amidst your welcoming applause.

Thank you for your kind attention.