



**Statement delivered by
Ahmed Djoghlaif, Executive Secretary of the Convention on Biological Diversity
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of the UK Government Global Environmental Change Committee Workshop**

Biodiversity – Climate Interactions: adaptation, mitigation and human livelihoods

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Distinguished scholars,
Ladies and gentlemen,

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 summer of 2003 was the hottest in Europe in the last 500 years. Here in the United Kingdom, the Central England Temperature series, the longest instrumental temperature record in the world, show that mean annual temperature are now over 2 degree celsius higher than in the coldest period of the “Little Iced Age” in about 1690 and that half of this increase occurred during the last 40 years. There is not a single week since the beginning of the year where climate change does not make the headlines in the news. Climate change is real, and represents a global challenge not only for humankind, but for every life on Earth.

Therefore, it’s a great honor to join you today and to be given the opportunity to address this important gathering of distinguished scholars from all over the world to discuss the international framework for biodiversity and climate change.

Climate change is threatening life on Earth. The time has come for action....Urgent action. I want to take this opportunity to congratulate the Minister of Biodiversity, Mr. Barry Gardiner, as well as his team and partners for the launching of two important reports on International Biodiversity Day last May: the Monarch report which illustrates the impact of climate change on rare and threatened species, and the report on ‘Conserving biodiversity in a changing climate’ presenting concrete strategies to land managers to help wildlife to adapt to climate change. I want also to applaud the government of the United Kingdom, and in particular the Department for International Development, for allocating £10 million to seeds banking project to secure essential food crops for the world’s growing population and changing climate.

The report of the second working group of the Intergovernmental Panel on Climate Change (IPCC), published early this year, says that evidence from all continents and most oceans shows that many natural systems are being affected by regional climate change, particularly temperature increase. The report specifies that even if greenhouse gas concentrations were now to be stabilized, 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. As a result, the resilience of many ecosystems is likely to be exceeded by an unprecedented combination of climate change and other global drivers of change such as pollution

and land-use changes. Such conclusions require urgent and unprecedented efforts and interventions. The cost of inaction has been evaluated by the Stern report at around 5,500 billion euros.

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 is also very explicit. Virtually all of Earth's ecosystems have been dramatically transformed through human actions, for example, 35% of mangrove and 20% of coral reef areas have been lost. 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. For all aspects of biodiversity, current pace of change and loss is hundreds of times faster than previously in recorded history and the pace shows no indication of slowing down. Climate change is projected to exacerbate the loss of biodiversity and increase the risk of extinction for many species. Let me highlight a few specific examples of the impact of climate change on biodiversity:

- 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.
- The Arctic, which is the real environmental barometer of our planet, gives us another clear indication of the danger. 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. A victim of climate change, the polar bear has become an endangered species.
- The golden toad has not been seen since 1989. It is labelled as one of the first victims of climate change.
- The mountain pygmy possum is likely to know the same fate if average annual temperature increase by 1 degree celsius.

The work of the IPCC and the Millennium Ecosystem Assessment has made us all aware that climate change affects many natural system and negatively impacts natural resource-based livelihoods. It is likely to become the main driver of biodiversity loss in the future. The conservation and sustainable use of biodiversity, on the other hand, can contribute to both climate change mitigation and adaptation activities:

- Biodiversity can help reduce greenhouse gas emission through avoided deforestation. Forests contain more than half of the total carbon present in terrestrial vegetations and soils. Deforestation is currently estimated to be responsible for 20% of the annual human induced carbon dioxide emissions. Greenhouse gas sequestration by plants and trees can also be enhanced in cities. Willow, for instance, acts as a living noise barrier along highways and has a capacity to absorb 8 tonnes of carbon dioxide during its first growing season.
- The plants, animals and microorganisms present on Earth are the results of billions of years of evolution. Biodiversity thus provide a 'safety net' of genetic resources for adaptation.
- Biodiversity, such as mangroves and wetlands, are 'bioshields' against extreme weather and other changes such as coastal erosion.

- Finally, biodiversity, the very life pool from which people derives their food, energy, fibers and shelters, ensures livelihoods. The role of biodiversity in adaptation and mitigation is thus essential.

The vital link between two of the most pressing environmental issues facing our planet – biodiversity conservation and sustainable use, and climate change - needs to be better understood and addressed through the international framework.

A new generation of multilateral environment agreements was born in Rio de Janeiro in June 1992. The Rio conventions, including the United Nations Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention to Combat Desertification (UNCCD), were born in response to people's cry for the need to reconcile environmental protection with development processes. Fifteen years later, facing climate change, people's cry is still hearable. This is the reason why the international framework for biodiversity and climate change, as represented by the Rio Conventions, is more than ever an essential instrument to respond to the challenges we are facing today.

The Convention on Biological Diversity (CBD) set the international framework regarding biodiversity and very early on looked into the relationship between biodiversity and climate change. The cross-cutting issues on biodiversity and climate change and the ecosystem approach allow for the comprehensive consideration of the issue, taking into account the local, national and international levels, as well as the traditional knowledge and the local and indigenous communities. The CBD integrated climate change components within all of the programme of works of the convention, with the exception of technology transfer and cooperation. The Subsidiary Body on Scientific, Technical and Technological Advices (SBSTTA) of the Convention established in 2001 an ad hoc technical expert group to carry out an assessment of the interlinkages between biodiversity and climate change. The working group produced two Technical Reports based on the best available scientific knowledge, including that provided by the IPCC about the interlinkages between biological diversity and climate change and about guidance for promoting synergy among activities addressing biological diversity, land degradation and climate change.

Climate change is real and its impacts can already be felt. Therefore, adaptation planning is key if we want to reduce the negative impacts. The CBD developed a web-based adaptation planning database which gathers information and tools from a number of relevant partners to support Parties as they continue to integrate climate change impacts and response activities through their implementation of the Convention on Biological Diversity.

At the recent Security Council discussion on security and climate change, the importance of coherence between UN agencies was emphasized. I do believe that coherence and collaboration is indeed crucial. To respond to this need for coherence, important synergies were built through the Joint Liaison Group, grouping together the three Rio Conventions. Since 2001, the Joint Liaison Group, which includes the executive secretaries of the three Rio conventions as well as the chairs of the subsidiary bodies of the conventions, has provided a useful framework for increased coordination, exchange of information and promoting synergistic activities, especially with regards to adaptation to climate change.

The joint Liaison Group prepared a paper on options for enhanced cooperation among the three Rio conventions which was welcomed by the eighth meeting of the Conference of the Parties to the Convention on Biological Diversity, by the UNFCCC Subsidiary Body for

Scientific and Technological Advice at both its twenty-third and twenty-fourth meetings, and by the Conference of the Parties of the UNCCD at its seventh meeting.

More specifically, the CBD and the UNFCCC collaborate on issues related to:

- The UNFCCC five-year programme of work on impacts, vulnerability and adaptation to climate change, named the Nairobi work programme, which can act as a nexus for collaboration and cooperation on biodiversity and climate change;
- Reduced emissions from deforestation, considered as a potential mechanisms for the integration of forest biodiversity conservation and sustainable use within climate change mitigation planning;
- Documents. The national focal points of both Conventions collaborate and reviews documents submitted by each Secretariats.

Thus, the synergies among the Rio conventions call for complementarity of their respective work programmes. The decisions of COP-8 open up the possibility for the Parties of promoting a joint work programme similar to the one already adopted by the CBD and the UNCCD.

Being essential in mitigating the impact of climate change, forests constitute a particular cooperation between the CBD and the UNFCCC. Forests contain more than half of the total carbon present in terrestrial vegetations and soils. Forests absorb around 280 billion tonnes of carbon dioxide or the equivalent of 10 years of global emissions of this greenhouse gas. Deforestation is currently estimated to be responsible for 20% of the annual human induced carbon dioxide emissions. The IPCC 4th Assessment Report reveals that biodiversity conservation in forests reduces the vulnerability of forest ecosystems to the negative impacts of climate change.

The Secretariat of the CBD attended both workshops organized by the UNFCCC and, at the second workshop, sat on a panel on synergies between reducing emissions from deforestation in developing countries and the work of the other Conventions. Outcomes of two meetings revealed the importance of *inter alia*:

- Capacity building to ensure broad participation among developing countries,
- The need for robust monitoring processes in line with IPCC Good Practice Guidelines,
- Engaging the private sector,
- Addressing early actions to reduce emissions from deforestation, and
- Ensuring that actions under the UNFCCC complements the goals of, and enhances synergies with, other multilateral processes.

Public awareness and education offer another area for enhancing the collaboration of the three Rio conventions. The celebration in 2006 of the International Year on Deserts and Desertification, the International Day on Desertification on 17 June and the celebrations of the International Day for Biological Diversity on 22 May offered and will offer ample opportunities for promoting joint activities between the Rio Conventions. For example, the preparation for the celebration on 22 May 2007 of the International Biodiversity Day under the theme “Biodiversity and Climate Change” has promoted a number of joint activities with the Secretariat of the UNFCCC. Celebration in Montreal and all over the world contributed to increase awareness and outreach, which are both indispensable to trigger global changes. The celebration in 2010 of the International Year on Biological Diversity will provide another unique opportunity for joint activities between the Rio conventions.

With the support of the Government of Canada, climate change adaptation was also discussed during a series of meetings, convened in March 2007 by the CBD including:

- A roundtable on the interlinkages between biodiversity and climate change, drawing on the recent conclusions of the IPCC reports, on 19-20 March 2007, in Montreal, Canada.
- An informal consultation on the links between the conservation and sustainable use of forest biodiversity and climate change, including within the framework of reducing emissions from deforestation, on 17 March 2007 in Rome Italy.
- A meeting on the links between biodiversity, water, wetlands and climate change, organized in partnership with the Secretariat of the Ramsar Convention, on 24 March in Gland, Switzerland.

There remains, however, a number of challenges and opportunities for the further development of interlinkages between biodiversity, climate change and livelihoods. There are two possible frameworks for collaboration between the UNFCCC and the CBD: (1) collaboration on cross-cutting activities, and (2) collaboration on specific programme areas.

Collaboration on specific programme areas

Opportunities for collaboration and related emerging issues were identified during the informal consultation convened on 17 March, 2007 on the links between the conservation and sustainable use of forest biodiversity and climate change, including within the framework of reducing emission from deforestation. Identified opportunities for collaboration include monitoring and reporting, the private sector engagement and avoiding negative impacts on biodiversity. These are currently under discussion.

There are no activities integrated within the programme of work of Technology Transfer even though the CBD and the UNFCCC have long been working collaboratively on technology transfer through the exchange of information and efforts to harmonize relevant databases. Moreover, decision V/15 called for Parties and other Governments to explore possible ways and means by which incentive measures promoted through the Kyoto Protocol can support the objectives of the Convention within the Incentive Measures programme of work. Finally, communication, education and public awareness also represent an opportunistic area where more cooperation could be achieved. Decision VIII/6 called for links with the UNFCCC for the establishment of a global network for Communication, Education and Public Awareness.

Enhancing the integration of climate change impact and responses activities within the programmes of work of the CBD also remains of great importance to strengthen collaboration. The topic will be further discussed during the 12th meeting of the SBSTTA next July.

Collaboration on cross-cutting activities

The JLG identified a number of opportunities for collaboration on cross-cutting activities in the options paper including, capacity building, technology transfer, research and monitoring, information and outreach, reporting, and financial resources.

Finally, promoting synergies at the national level is also crucial and usually represent a challenge. National level cooperation will often allow for the most efficient and effective coordination on implementation of commitments under each convention. Examples of mechanisms to enhance collaboration include:

- The delineation of physical areas where biodiversity, projected impacts from climate change and risks of land degradation overlap (Peru)
- Institutionalizing regular meetings of different convention focal points (Argentina and Mexico)
- Developing joint plans and strategies (Australia).

To conclude, I would like to say that cooperation between conventions should focus on improving the efficiency of the work of convention bodies, secretariats and parties. Enhanced cooperation between conventions should streamline secretariat and meeting processes, including, as appropriate, by holding workshops back to back. The Joint Liaison Group has a useful role in promoting best practice secretariat processes, rationalization of support services, acting as an information clearing-house, and supporting outreach activities. Cooperation and collaboration within the international framework is crucial to achieve the 2010 biodiversity target.

The environment that surrounds us is complex and every component, whether living or non-living, is intrinsically linked and interdependent on each other. The international framework for climate change and biodiversity should mirror as much as possible this web of life and make the delivering action bigger than the sum of its parts.

Thank you for your kind attention.