



# Secretariat of the Convention on Biological Diversity

22 May 2007  
International Day for Biological Diversity



Biodiversity and Climate Change

**Statement by Dr. Ahmed Djoghlaf,  
Executive Secretary of the Convention on Biological Diversity  
to the  
Workshop on Small Sea Changes: Big Business Impacts  
The City Conference Centre, London, 31 October 2007**

Ladies and Gentlemen,

Humans were enchanted by oceans and seas and driven to conquer these unknown realms, even before the Greek poet Homer wrote his epic tale of ocean adventure, the *Odyssey*. Now, we stand again before the ocean in search of answers to the greatest challenge humanity has ever experienced, the Global Climate Change.

The Fourth Assessment of the Intergovernmental Panel on Climate Change clearly warned that the oceans are warming and the sea level is rising. Over the period 1961 to 2003, global ocean temperature has risen by 0.1°C from the surface to a depth of 700 m, and the global mean sea level has risen at an average rate of 1.8±0.5 mm/yr. It was stressed that the rate of sea level rise has increased between the mid-XIX<sup>th</sup> and the mid-XX<sup>th</sup> centuries. Sea level is projected to rise at an even greater rate in this century. Sea level change is highly non-uniform spatially, and in some regions, rates are up to several times the global mean rise. There is also evidence for an increase in the occurrence of extreme high water worldwide related to storm surges, and variations in extremes during this period are related to the rise in mean sea level and variations in regional climate.

The two major causes of global sea level rise are thermal expansion of the oceans and the loss of land-based ice due to increased melting. There is compelling evidence that the heat content of the world ocean has increased since 1955. The geographic pattern of sea level change since 1955 is largely consistent with thermal expansion and with the change in heat content.

During the XX<sup>th</sup> century, glaciers and ice caps have experienced considerable mass losses, with strong retreats in response to global warming after 1970. For 1961-2003, their contribution to sea level rise is assessed as 0.5±0.18 mm/yr and for 1993-2003 as 0.77±0.22 mm/yr.

Climate change and sea-level rise will expose coastal ecosystems as well as human settlements and industries in the coastal areas to increasing risks, including storm surges, coastal erosion, saline intrusion, and sea flooding. The impacts of climate change, in association with human-induced stresses, probably would result in a loss of biodiversity. Increases in sea surface temperature of about 1 to 3 °C are projected to result in more frequent coral bleaching events and widespread mortality, which would result in depleting one of the world's most species-rich ecosystems. In addition, the capacity of species and ecosystems, such as mangroves, to shift their ranges and locations in response to climate change will be hindered by land-use practices that have fragmented existing habitats. Many millions more people are projected to be flooded every year due to sea-level rise by the 2080s. The numbers affected will be largest in the mega-deltas of Asia and Africa while small islands are especially vulnerable. Where extreme weather events



become more intense and/or more frequent, the economic and social costs of those events will increase. Climate change impacts will spread from directly impacted areas and sectors to other areas and sectors through extensive and complex linkages.

The impacts of climate change are of great concern to the Convention on Biological Diversity (CBD). At its fifth meeting, the Conference of the Parties (COP) to the CBD highlighted the risks of climate change, in particular, to coral reefs and to forest ecosystems, and drew attention to the serious impacts of biodiversity loss on these systems and their associated livelihoods. At its seventh meeting, the COP encouraged Parties to take measures to manage ecosystems so as to maintain their resilience to extreme climate events and to help mitigate and adapt to climate change. In 2006, at its eighth meeting, the COP highlighted the importance of integrating biodiversity considerations into all relevant national policies, programmes and plans in response to climate change, and to rapidly develop tools for the implementation of biodiversity conservation activities that contribute to climate change adaptation. The COP also noted the need to identify mutually supportive activities to be conducted by the Secretariats of the three Rio Conventions (UNFCCC, UNCCD, and UNCBD), parties and relevant organizations.

Challenges ahead of us are too overwhelming, and thus our efforts to collaborate in addressing these challenges need to be extended beyond the Conventions or public sectors. In view of the Secretariat's enhanced role in supporting the implementation of the Convention, the Secretariat is thus currently making concerted efforts to further strengthen partnerships with private sector. The private sector is being considered as a strategic element of the Convention's Strategic Plan. Private sectors can be highly influential on governments and on public opinion. For example, in the context of the UN Framework Convention on Climate Change (UNFCCC), a coalition of companies played an important role in promoting the need for a clear and agreed regulatory framework so they could plan ahead, such as investing in low-carbon technologies. Many companies lobbied governments in support of the Kyoto Protocol and for progressive post-Kyoto policies. The private sector possesses biodiversity-relevant knowledge and technological resources, as well as more general skills in management, communications, and research and development. Effective mobilization of these resources could make a significant contribution to addressing our common challenges associated with global climate change.

In this line of thought, I very much welcome the initiatives of Marine Information Alliance, the Interagency Committee for Marine Science and Technology (IACMST), and the Institute of Marine Engineering, Science and Technology (IMarEST), for providing this important forum, which will further encourage active involvement of marine business sector in our common endeavors.

Taking this opportunity, I would like to invite all of you to join hands together with the CBD Secretariat in achieving by 2010 a significant reduction of the current rate of biodiversity loss, which is now further exacerbated by the global climate change. I also invite you to collaborate with the CBD in celebrating in 2010 the International Year on Biological Diversity proclaimed by the United Nations General Assembly.

I wish you a very successful deliberation, and would like to convey to you my deep appreciation for the honor bestowed on the Secretariat of the Convention on Biological Diversity to address this important workshop on "Small Sea Changes: Big Business Impacts".

Thank you for your attention.

-----