



Secretariat of the Convention on Biological Diversity



MESSAGE

from

**MR. AHMED DJOGLAF,
EXECUTIVE SECRETARY,**

on the occasion of the

**WORLD DAY TO COMBAT
DESERTIFICATION:**

**COMBATING LAND DEGRADATION
FOR SUSTAINABLE AGRICULTURE**

Not an official document

This year's World Day to Combat Desertification, celebrated under the theme *Combating land degradation for sustainable agriculture*, is particularly relevant for the Convention on Biological Diversity given the recent celebration, on 22 May, of the International Day for Biological Diversity under the theme *Biodiversity and agriculture*.

Agricultural biodiversity includes all components of biodiversity—at genetic, species and ecosystem levels—relevant to food and agriculture and that support the ecosystems in which agriculture occurs (agro-ecosystems). This includes crop and livestock species, and the varieties and breeds within them.

Agricultural biodiversity also includes components that support agricultural production such as pollinators and micro-organisms within the soil. In fact, over 1,000 species of invertebrates may be found in a single square metre of a European beech forest, while a single gram of soil may contain millions of individuals and several thousand species of bacteria.

The value of agricultural biodiversity is enormous. Soil biodiversity contributes to ecosystem services such as organic waste disposal, soil formation, nitrogen fixation, and bio-control; services which are valued at US\$ 1.5 trillion per year. Furthermore, estimates of the value of bee pollination services in the United States of America alone range up to \$16 billion annually.



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Agricultural biodiversity, however, faces increasing threats from overuse, mismanagement and climate change. These same threats are exacerbating exposure to land degradation and the associated loss of production in many agro-ecosystems.

With regard to climate change, a warming of greater than 3°C will have projected negative impacts on agricultural production in all regions, while elevated carbon dioxide levels are expected to have negative impacts on livestock health, especially in low-nitrogen environments.

Likewise, demand for food and feed crops will nearly double in the coming 50 years. The increase in human population is above the rate of increase in the yields of the three major cereals (wheat, maize and rice) that supply most nutritional needs. Therefore, it is extremely urgent that we mobilize all available resources to ensure the conservation and sustainable use of agricultural biodiversity and combat the mounting threat of land degradation.

Addressing these challenges presents an opportunity for the integration of synergies between efforts for the conservation and sustainable use of biodiversity and sustainable land management. On average worldwide, in cereal-cropping systems, adaptations based on biodiversity resources and sustainable land management, such as changing varieties and planting times, result in the avoidance of a 10-15% reduction in yield under 1-2°C local temperature increases.

Other biodiversity-based adaptation activities for agricultural systems identified by the Intergovernmental Panel on Climate Change include: the conservation of agricultural genetic resources; the reduction of other threats to agricultural biodiversity; the restoration of degraded land with native species, integrated land and water management; disease control programmes for native livestock; and invasive-species-management planning.

With this in mind, the 191 Parties to the Convention on Biological Diversity recently reviewed the implementation of their programme of work on agricultural biodiversity in order to identify successes and evaluate obstacles to the enhanced implementation of activities.

Sustainable agriculture that takes full account of agricultural biodiversity can deliver yield increases, ensure the resilience of agro-ecosystems and preserve important indigenous and traditional knowledge. As such, I would like, on the occasion of this international celebration of sustainable agriculture, to solemnly pledge my full commitment to spare no efforts to enhance the complementarity of our two mutually supportive conventions and the synergy among our two convergent processes.

Montreal, 17 June 2008