



**UNCCD Land Day  
Bonn, 6 June 2009**

**Address by Yvo de Boer, Executive Secretary  
United Nations Framework Convention on Climate Change**

Excellencies, ladies and gentlemen,

Let me begin by stating that when I was in the negotiations on the Kyoto Protocol on behalf of the EU, LULUCF was kept out of the negotiations for three reasons:

- The insufficient scientific capacity to measure CO<sub>2</sub> sequestration in LULUCF at that time
- LULUCF was regarded as a distraction vis-à-vis the behaviour change that was regarded as necessary
- There was a concern that forest credits would have a devastating impact on the carbon market

Since then things have changed.

As you know, at this very moment, more than 850 million people around the world are short of food. By 2030, food production needs to rise by 50 percent compared to today to meet rising demand. By the year 2050, the world's population is expected to reach nine billion, meaning that a further rise in production is needed.

In and of themselves, these are huge challenges that are likely increase even more as a result of climate change impacts.

Already croplands, pastures and forests are increasingly being exposed to threats from climatic vulnerability. In the long run, climate change impacts such as changes in temperature, shifts in growing seasons, storms, floods, droughts and changed rainfall patterns will significantly impact forests and agricultural production.

At the same time, agricultural practices also contribute significantly to global emissions: between 10 – 12 percent of total global greenhouse gas emissions per year. Between 1990 and 2005, agricultural practices contributed about 17 percent of global emissions. This is projected to increase further in the coming decades due to increased food production.

Furthermore, the increased need for cropland and pasture to meet growing food demand is likely to be one of the main drivers of deforestation. Deforestation results in the immediate release of carbon stored in trees as CO<sub>2</sub> emissions. It is estimated that deforestation contributed globally to approximately 20 percent of annual greenhouse gas emissions in the 1990s.

The dual burden on forests of climate change impacts on the one hand, and deforestation and resulting biodiversity loss on the other, also means that forest resources will increasingly dwindle. This has serious consequences for 90 percent of the 1.2 billion people in developing countries who depend on forest resources and who already live in poverty.

***There is a direct correlation between the amount of mitigation done in the present and the extent of adaptation needed in the future.***

The stabilization of CO<sub>2</sub> concentrations will reduce the damage to crop production and forests in the long term. And for both agriculture and forests, mitigation and adaptation can successfully go hand-in-hand.

Agriculture has a large mitigation potential. For example, the mitigation potential from agriculture in Africa alone has been estimated at 17 percent of the global GHG total in 2030. Depending on national circumstances, this potential lies mostly in the sequestration of carbon

in agricultural soils, followed by methane or nitrous oxide reductions resulting mainly from livestock and rice cultivation.

The most prominent mitigation options include improved crop and grazing land management, restoration of degraded lands, restoration of organic soils that are drained for crop production, or agro-forestry.

About 89 percent of the above mitigation potential can be achieved by soil carbon sequestration through cropland management, grazing land management, the restoration of organic soils and degraded lands, bio-energy and water management.

As in forestry, there are synergies between mitigation in agriculture, adaptation, sustainable development, food security and poverty alleviation. Many mitigation options can be realized at low or even negative cost, resulting in win-win situations, such as increasing food security and productivity, or enhancing climate change resilience.

There are many agricultural practices that support adaptation. They include changes in land use to maximize yields, diversification in new or different crop varieties and species, new land management techniques, improvements in the efficient use of water and agro-forestry.

Agro-forestry in particular can reduce the vulnerability of small-scale farmers to climate variability and help them adapt to changing conditions, as interspersed trees improve the soil's capacity to hold water. Agro-forestry also promotes biodiversity and wildlife habitat.

***Mitigation and adaptation in agriculture and forestry hold huge benefits for the climate and the world in general, and for developing countries in particular.***

Reducing emissions from deforestation and forest degradation in developing countries - or REDD - is an area in which developing countries can make a huge mitigation contribution.

In agriculture too, developing countries can make an important contribution to mitigation. About 70 percent of mitigation potential in this sector is in developing countries.

Carefully planned, both REDD and mitigation in agriculture will have positive spin-offs for reducing vulnerability. But to contribute to mitigation and to fully exploit adaptation options, developing countries need assistance through international cooperation.

***Copenhagen 2009 is the opportunity to make sure that these win-win effects become reality across the developing world.***

The negotiations under the United Nations Framework Convention on Climate Change on strengthened climate change action are set to conclude in an ambitious deal in Copenhagen in December this year.

- To be successful, Copenhagen 2009 clearly needs to include ambitious emission reduction targets for industrialized countries
- It also needs to provide clarity on meaningful mitigation contributions by developing countries, in the form of nationally appropriate mitigation actions - or NAMAs. As agreed, NAMAs need to be supported and enabled by financial and technological support from industrialized countries
- And Copenhagen 2009 needs to secure significant, new and predictable financial and technological support for adaptation and mitigation in developing countries

The scope and scale of developing countries' nationally appropriate mitigation actions - or NAMAs - has not yet been defined by the negotiations. But judging from Parties' proposals, they could include anything from REDD actions, to mitigation in agriculture, to boosting energy efficiency, provided that international support is available and the additional mitigation benefit can be measured, reported and verified.

This is still especially important for REDD, where robust and cost-effective methodologies and forest monitoring systems are needed for measuring actual emission reductions.

Removals by sinks were considered under the Kyoto Protocol as a way to mitigate climate change. This was done quite widely for developed countries, and in a more limited way for developing countries through afforestation and reforestation projects under the clean development mechanism. Many developing country Parties have called for this to change.

In the negotiations over at the Maritim, Parties are currently considering the “what” and the “how” to measure, report and verify actions and support for REDD. What is clear already is that Parties want REDD to be an integral part of a Copenhagen deal, and there is a keen awareness that strong incentives are needed.

The full mitigation potential of agriculture was not considered during the negotiations for the Kyoto Protocol because of scientific uncertainty at the time. Yet since then, science has caught up, and monitoring the CO<sub>2</sub> sequestration into soils can be monitored with much greater accuracy.

At the Climate Change Talks, Parties are currently discussing land use, land-use change and forestry and how best to take this forward.

Both the scientific progress and NAMAs provide an opportunity to unleash the mitigation potential of this sector.

Regarding adaptation, there is growing convergence in the negotiations on the need for a strong adaptation framework or programme, which also needs to address synergies between adaptation and mitigation measures, including in the area of REDD, but also in other sectors.

Parties are still in the process of assessing how best to secure new, sufficient and predictable financing for both NAMAs and adaptation. A mix of public and private sources is likely.

***So, a successful outcome in Copenhagen will include incentives for the agricultural and forestry sectors to adopt decisive mitigation measures.***

The world cannot afford to mismanage that which sustains us. Especially in developing countries, mitigation measures will also represent good adaptation options in forestry and agriculture. And mitigation and adaptation in agriculture and forestry will protect food production and boost food security.

I am quite confident that the negotiations will find ways and means for full carbon accounting. This will rule out the remaining uncertainty and enable the linking of climate change to the broader development agenda.

Thank you

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