

**ADP Technical Expert Meeting: Land use**

**Statement by Renate Christ  
Secretary of the Intergovernmental Panel on Climate Change**

**Bonn, 11 June 2014**

AFOLU is a key emission sector. Globally, it is the second largest emitter after Energy and responsible for just under a quarter (~10–12 GtCO<sub>2</sub>eq /yr) of anthropogenic GHG emissions mainly from deforestation and agricultural emissions from livestock, soil and nutrient management. Anthropogenic forest degradation and biomass burning (forest fires and agricultural burning) also represent relevant contributions. AFOLU is the dominant emitting sector in many developing countries, especially low income countries, where agriculture is often the dominant economic activity with emission shares well above 50% in many countries.

The role of crop and livestock agriculture as the main emitting source of all AFOLU sub-categories has been growing. Non-CO<sub>2</sub> agriculture emissions have become a larger GHG contributor than deforestation, since the mid-2000s, reaching more than 5 billion tonnes CO<sub>2</sub>eq in 2010. Agriculture emissions will continue to be a dominant source in coming decades.

The AFOLU sector offers large, often low-cost mitigation opportunities that link socio-economic development, food security and adaptation into a coherent package.

On the supply side, emissions from land-use change (LUC), land management and livestock management can be reduced and terrestrial carbon stocks can be increased by sequestration in soils and biomass. The most cost-effective forestry options are reducing deforestation and forest management; in agriculture low carbon prices favour cropland and grazingland measures. Bioenergy can play a critical role for climate change mitigation, but there are issues to be considered such as sustainability of practices and the efficiency of energy systems. Bioenergy and carbon dioxide capture and storage (BECCS) may be critical to scenarios for stabilization at <2°C.

On the demand side, changes in human diet can have a significant impact on GHG emissions from the food production lifecycle. Further measures include reducing losses and wastes of food and changes in wood consumption.

It must nonetheless be kept in mind that mitigation opportunities are dependent on local conditions, scale and scope of the efforts undertaken, with potential negative consequences linked to competition for land. Land based mitigation must therefore be planned and weighted very carefully for potential impact on other services provided by land – food, fibre, livelihoods for billions of people worldwide and a multitude of ecosystem services – in order to be effective across all relevant rural development dimensions. Furthermore, considering that some mitigation options in the AFOLU sector may be vulnerable to climate change, policies governing agricultural practices and forest conservation and management are more effective when involving both mitigation and adaptation.

Finally, it must be stressed that opportunities for mitigation and rural development through AFOLU are available and should be pursued now, under current climate regimes, considering that further climate change in coming decades may limit their effectiveness.