

TOWARD LOW CARBON SOCIETY: FORESTRY SECTOR

Rizaldi Boer
Bogor Agricultural University

Summary of Presentation

Climate science identifies that to avoid dangerous climate change the average global temperature increase (over pre-industrial level) should be kept below 2°C. To avoid this, the CO₂e concentration at the atmosphere by 2050 should not be more than 450 ppm. The world should be able to reduce their emission by at least 50% below 1990 level emission by 2050. Following the principle of 'common but differentiated responsibility', developed countries should target an emissions peak between 2012 and 2015 with 30% cuts by 2020 and at least 80% cuts by 2050. For developing countries, their emissions can increase up to 2020 and then have to be cut by around 20% against 1990 levels by 2050. By the end of the 21st century, per capita emissions would fall towards zero in net terms. Based on historical data, it is clear that rate of emission per capita has positive linear relationship with income per capita. Main source of emissions are also related the level of country development. Emissions from land use, land use change and forestry appear to be the main source of emissions from less developed country. In least developed countries, the contribution of LULUCF to the total GHG emissions is almost two third, while in developing countries is about one third. In developed countries, emissions from LULUCF are almost none and this sector is believed to be a net absorber of CO₂. This suggests that in the context of least developed and developing countries, controlling emissions from LULUCF would play significant role in combating global warming. As most of community in least developed and developing countries still depend very much on forest, reducing emission from land use, land use change and forestry from these countries would be difficult without assisting them in improving their land/forest management practices, providing technologies that can reduce the use of fire in opening and clearing land for agriculture practices, improving land productivity and restoring degraded land as well as diversifying economic activities to reduce their dependency on forest. Creating incentive system for reducing emission from deforestation and forest degradation (REDD) will be very important to assist these countries to reduce their emissions from LUKUCF. Government of Indonesia is now preparing strategies and pilot projects for REDD. A number of challenges are identified for the implementation of REDD activities which include governance, payment mechanisms, payment distribution, social issues and legal/regulatory.