Focali (Forest, Climate, and Livelihood research network) is a Swedish research network focusing on forest / bio-energy, climate change and poverty issues. Several Swedish universities and institutions are represented in the network. Focali develops new and synthesizes existing knowledge, and increases the flow of relevant information between scientists, industry, government and civil society.



Focali Brief: 2011:05

Expanding Land Use, Land Use Change and Forestry activities under the Clean Development Mechanism - Discussions within the United Nations Climate Negotiations

Clean Development Mechanism (CDM) is one of the flexible mechanisms within the Kyoto Protocol and one of the few arenas where developing countries have an active part as hosts of the CDM projects. Land use and forestry-based CDMs have so far been limited to only afforestation and reforestation projects but there are discussions within the negotiations to expand the portfolio.

LAND USE, land use change and forestry activities (LULUCF) can mitigate climate change by creating a terrestrial carbon sink, removing carbon dioxide from the atmosphere. LULUCF has therefore been an area of interest within the United Nations climate negotiations. Although LULUCF activities are argued to have significant potential for climate mitigation, there are also some problematic aspects. These are mainly related to difficulties in deriving measurements for historical carbon content in land (baseline setting), in monitoring carbon sequestered and to the fact that carbon stored in biomass or soils is only stored temporary since natural or human induced disturbances can cause a total or partial loss of stored carbon. LULUCF-activities under the Clean Development Mechanism (CDM), one of the flexible mechanisms under the Kyoto protocol, have

About this brief

Focali provides knowledge to Swedish ministries, government agencies and other relevant actors for effective forest management to achieve climate-poverty targets. This brief summarizes the main findings, highlights challenges and provides recommendations within the focal area. This brief is based on Lundgren L (2011), and can be quoted as Ostwald M. (2011) Expanding Land Use, Land Use Change and Forestry activities under the Clean Development Mechanism - Discussions within the United Nations Climate Negotiations, Focali Brief No 2011:05, Gothenburg. The brief can be downloaded from www.focali.se.



Multiple Land Use in Karnataka, Indien. Photo: Madelene Ostwald

been limited to afforestation and reforestation (A/R) projects under the first commitment period (2008-2012). Recently, the possibility of expanding the project types eligible under CDM to also include revegetation, forest management, cropland management, grazing land management, wetland management and soil carbon management in agriculture has been discussed.

What is CDM?

The CDM is a project-based market mechanism, which allows for emission reduction to occur in developing countries, thereby most likely reducing the cost for the emission reduction compared to if they were done in an industrialized country. The carbon not emitted or stored generates Certified Emission Reductions units (CER) that can be traded on

the carbon market. The Kyoto Protocol under the United Nations Framework Convention on Climate Change (UNFCCC) was adopted in 1997 and entered into force in 2005. The Kyoto Protocol sets binding targets for greenhouse gases (GHG) reduction for Annex I parties (developed counties) who signed the Protocol. Three flexible market-based mechanisms were also adopted in order to realize the targets; International emissions trading, the Clean Development Mechanism (CDM) and Joint implementation (JI). The only LU-LUCF-based project types presently allowed under CDM are afforestation (forestation on areas not previously forested) and reforestation (forestation of non-forested land that previously has been forested) (A/R), but there are discussions within the negotiations to expand eligible project types.

Different views within the climate negotiations

LULUCF under CDM has been discussed mainly in the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP). The AWG-KP has been negotiating a new LULUCF-decision, which is yet to be adopted. In the draft LULUCF-decision from the Conference of Parties in Copenhagen 2009, the possibility of expanding LULUCF under CDM was raised. In the draft decision the Subsidiary Body for Scientific and Technological Advice (SBSTA) is requested to initiate a work programme on additional LULUCF-activities. Since the LULUCF-decision has not yet been adopted, SBSTA cannot initiate this work programme. Whether or not they will be able to do so will be dependent upon the outcome of the negotiations relating to the LULUCF-decision. However, LULUCF-activities under CDM have so far received little negotiation time.

There are diverging ideas on whether a more holistic approach should be applied to the treatment of LULUCF under CDM or whether the current structure should be kept. Costa Rica, Colombia, Mexico, Panama, El Salvador, New Zealand, Norway, Canada, Australia and several of the Least Developed Countries have been positive towards expanding the number of eligible LULUCF-activities under CDM.

It has been argued that the LULUCF-sector holds a large untapped potential to mitigate climate change, and that a broader inclusion of LULUCF-activities would allow for a more countries to participate in CDM. China, Brazil and Alliance of Small Island States have, on the other hand, been sceptical towards including additional activities. They argue that there are too many uncertainties and that broadening the menu of LULUCF activities would create an offset mechanism, allowing developed nations to delay emission reduction in other sectors. The EU, including Sweden, supports the current structure and rules but is open to discuss alternatives.

Stated pros and cons for expanding LULUCF-based project types within CDM

Pros:

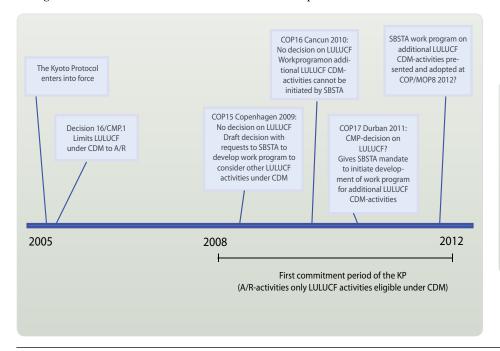
- The proposed additional LULUCF-based CDM types would offer a more holistic landscape-approach.
- For poor regions, including many countries in Africa, LULUCF based activities hold great potential to alleviate poverty. The absence of industry in many of these countries suggest that LULUFC based activities are the only options that could enable them to benefit from CDM.
- The sustainability component, which is one of the components that need to be delivered

within CDM projects, is particularly significant within LULUCF CDM projects since it deals with improvement of the natural resource base that is direct crucial for livelihoods.

Cons:

- Methodological challenges of baseline setting, additionality, non-permanence, leakage and monitoring are still unsolved.
- The mitigation focus should not be on terrestrial options, which contain much uncertainty, but rather on other sectors.
- Existing temporary Certified Emission Reductions units (tCER) for LULUCF CDM-projects are complex and excluded from the European Trading System.
- CDM projects provide an easy way for industrialized countries to achieve emission targets without having to take action domestically and should therefore not be promoted.
- Focus should be on safeguarding the efficiency of existing CDM-project types.

This brief is written by Madelene Ostwald, and is based on Lundgren L (2011). "Including Additional Land Use, Land Use Change and Forestry-activities under the Clean Development Mechanism - Discussions in the United Nations Climate Negotiations." CSPR Briefing No 7, Centre for Climate Science and Policy Research (www.cspr.se).



Project types discussed as possible additional LULUCF based CDM projects within UNFCCC

Revegetation
Forest Management
Cropland Management
Grazing land Management
Wetland Management
Soil carbon Management in Agriculture

Focali consists of representatives from: University of Gothenburg

Departments of Earth Science, Human and Economic Geography, Plant and Environmental Science, Economics, School of Global Studies.

Focali is a part of the Forest Initiative Partnership:

Chalmers University of Technology
Physical Resource Theory
Linköping University
Centre for Climate Science and Policy Research

Swedish University of Agricultural Sciences
Department of Forest Ecology and Management
Stockholm University

SwedBio (within Stockholm Resilience Centre)





