BE-REDDi



Development of Belgian REDD Information Systems.

Cluster of the project SAFE and of Earth observation projects

DURATION OF THE PROJECT 15/12/2009 – 31/01/2012

CONTEXT

One of the essential building blocks in a new global climate agreement within the UNFCCC is reducing emissions from deforestation and forest degradation in developing countries (REDD+). Almost one fifth of anthropogenic emissions results from deforestation and land use changes, so mitigating emissions in this sector will be essential to limit the effect of climate change. The objective of REDD+ is to support developing countries (financially, but also scientifically and technologically) in implementing effective policies and measures to reduce the rate of deforestation and the resulting emissions.

PROJECT DESCRIPTION

Objectives

If successfully implemented, REDD+ could result in a significant global emission reduction of greenhouse gases and provide significant additional co-benefits. In this project we will look into several relevant aspects related to REDD+ (monitoring carbon pools, sustainability aspects and costs). More specifically, we will:

- look into emerging technological and scientific issues with respect to remote sensing;
- test a framework to assess the sustainability of REDD+ mechanisms regarding environment (carbon sequestration), economics (e.g. leakage) and social aspects (livelihoods and local perspectives)
- integrate and link Belgian expertise on REDD+ related issues with selected international institutions
- draw lessons for the relevant Belgian policy level (DGDC, BTC, FPS environment)

Methodology

99.844 €

The objectives of this proposal will be achieved via 6 work packages that are linked to one another. It is clear that for effectively monitoring forest cover and deforestation rates, remote sensing will be an essential tool. In this project we will look at how information on net primary production from earth observation can be used to determine forest carbon stocks. This task will require the integration of remote sensing information and additional information on carbon fluxes and disturbances (e.g. logging and forest fires).

An important aspect from a global perspective is the efficiency of carbon sequestration through REDD+ by quantifying deforestation and degradation and the resulting greenhouse gas emissions. However, this cannot be uncoupled from issues such as additionality, leakage and permanence.

In practice the success and sustainability of REDD+ is often linked to development at local scale, through so-called co-benefits, that provide sustainable livelihood options for the longer term, enhance the buffering of water flows and conserve biodiversity. Relevant information from this local scale level does not reach policymakers sufficiently. The existing SAFE framework will be a starting point for a detailed evaluation of two Indonesian REDD+ case studies in close collaboration with ICRAF and the development of proxy indicators. The framework will be tested on other case studies in Vietnam, Kenya and/or Ethiopia, depending on the available project information.

Finally, REDD+ policies will come with a certain economic cost. The cost-effectiveness of mitigation measures via different REDD+ policies will be compared. Depending on data availability, costs associated with implementing REDD+ (e.g. opportunity costs) will be assessed in a case study. The general literature focusing on the implementation, transaction and opportunity costs of REDD+ will be reviewed.

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INTERACTION AMONG PARTNERS

The 6 partners in this cluster project have relevant complementary experience that together cover the expertise needed to fully evaluate the efficiency and fairness of REDD+ mechanisms. The 5 Belgian partners have a comparative advantage to work on methods regarding the efficiency of REDD-mechanisms, while ICRAF can add valuable knowledge regarding the – until now often overlooked - fairness and the pro-poor effects of REDD+-mechanisms. Throughout the work packages different institutes will work on the themes of their expertise and share necessary data and experience.

EXPECTED RESULTS

This direct collaboration is expected to result in more joined proposals. Concrete outputs will be A1paper(s) and policy paper(s) on the case studies and/or on methodological and political problems and issues in REDD+. A scientific workshop will be organised to bring together all Belgian expertises, presumably mid/end of 2011, the international year of the forest. Finally, a website will be made where relevant information to different stakeholders will be posted by the consortium partners.

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Follow-up Committee

For the complete and most up-to-date composition of the Follow-up Committee, please consult our Federal Research Actions Database (FEDRA) by visiting http://www.belspo.be/fedra or http://www.belspo.be/ssd

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