

AIJ forestry evaluation and implications for CDM A/R projects

As the first CDM Aforestation and Reforestation (A/R) projects are being approved, it is time to synthesise the lessons learned from forestry projects implemented under the AIJ pilot phase and their implications for the CDM. A number of studies have investigated the contribution of such projects and their key findings are elaborated on below.¹

Leakage accounting

Carbon sequestration estimates in AIJ projects have ranged from 57 Mt CO₂-eq. to 57,000 tCO₂-eq. per project.² However, some AIJ projects have overstated their climate mitigation benefits through poorly estimated baselines. Leakage - which occurs when climate mitigation benefits are negated as a result of baseline agents shifting their activities elsewhere - has been difficult to estimate, costly and time-consuming. Very few projects have been able to periodically follow up on leakage processes despite their important implications for the projects' mitigation objectives. Due to the relative short timeframe, it has also been difficult to assess whether AIJ projects have created impacts outside the project boundaries to increase GHG emissions.³

Environmental outcomes

AIJ projects promoting forest conservation have helped increase the funding available for protected area management. However, AIJ reforestation projects have promoted plantations of low species diversity, thereby ignoring the interests of those stakeholders who prioritise species which provide the household with fruits, fodder or poles rather than with sellable timber. Indeed, although PDDs often suggest that project activities will enhance local biodiversity and minimise soil erosion, in practice few projects have dedicated resources to monitor and quantify such benefits.

Development outcomes

AIJ projects on large private landholdings

and protected areas have provided some permanent or temporal employment, in particular during plantation. Projects have also promoted community-outreach activities (e.g. land titling processes, sustainable forest management training), although they have often failed to sustain those due to a lack of funding.

In contrast, when working with rural communities and small landholders, project activities have brought economic incentives that have translated into tangible collective and household benefits. Carbon revenues have helped extract income from economically unprofitable land but they have hardly covered land opportunity costs. Critically, misunderstandings about carbon fixation and trading, local fears that project activities would alienate property rights and unwillingness to lock up land for long periods of time have also triggered local resistance and conflict.

Implications for CDM projects

The AIJ experience suggests that CDM A/R projects may only meet *both* climate mitigation and sustainable development objectives if they:

- Build in flexibility
Baseline conditions and leakage rates are constantly shaped by local and regional socio-economic dynamics, thereby directly impacting on projects' real emission reductions and indirectly on management priorities. Thus, it is important to secure funding for unexpected expenditures and periodical monitoring activities, in addition

to the contractual verification activities by DOEs. It may also be important to create 'buffer' carbon budgets to compensate for natural or induced leakage.⁴

- Prioritise biodiversity hotspots
It may be inequitable to favour CDM reforestation activities which only benefit private companies involved in the timber market. Poor rural communities and protected area managers have little opportunities to diversify livelihoods and secure funding for conservation; carbon projects can become a source of long-term finance in these cases. If avoided deforestation is considered eligible post-2012, one should account for the fact that the designation of protected areas has sometimes followed political rather than environmental motivations. Thus, carbon conservation activities should be promoted only in biodiversity hotspots and resources should be dedicated to the implementation of community-outreach activities and the establishment of forest protection partnerships with rural communities.

- Negotiate and legitimise project activities
Local populations likely to be affected by project activities, should be involved in the project design from the beginning. Being sensitive to local socio-ecological realities is fundamental to understand whether property rights are contested and to minimise the risk of social conflict. Small-scale A/R activities implemented through community-based organisations can distribute carbon funding more equally than projects that focus only on private landholders. Critical is to ensure that carbon forestry activities are compatible with local land-uses and productive dynamics.

- Secure funding and networks
The AIJ experience suggests that carbon funding *alone* cannot provide for both climate and development outcomes. Relying on existing organisations and networks may be critical to deliver multiple objectives more effectively. In addition, project managers may need to further invest in capacity-building activities and to promote the sharing of environmental knowledge among project actors and existing networks in order to build trust.

Finally, uneven project distribution has characterised the AIJ phase and characterises the CDM as well. This also suggests that CDM expertise and supportive legislative frameworks are not sufficiently developed for CDM activities to be implemented and secured in the long term. Addressing these drawbacks remains the CDM's greater challenge.

1 Landell-Mills, N. and I. Porras (2002), *Silver bullet or fools' gold? A global review of markets for forest environmental services and their impacts on the poor*. London, IIED.
Albán, M. and M. Argüello (2004), *Un análisis de los impactos sociales y económicos de los proyectos de fijación de carbono en el Ecuador. El caso de PROFAFOR-FACE*. London, IIED.
Brown, K., N. Adger, E. Corbera, E. Boyd and S. Shackley (2004), *Evaluating Policy Options for the Clean Development Mechanism: a Stakeholder Multi-Criteria approach*. Norwich, Tyndall Centre for Climate Change Research.
May, P.H., E. Boyd, M. Chang and F. Veiga (2004), *Local sustainable development effects of forest carbon projects in Brazil and Bolivia: a view from the field*. London, IIED.
2 http://unfccc.int/kyoto_mechanisms/aij/activities_implemented_jointly/items/2094.php
3 Aukland, L., P. Moura Costa and S. Brown (2003), A conceptual framework and its application for addressing leakage: the case of avoided deforestation, *Climate Policy* 3: 123-136.
4 Boyd, E., M. Gutiérrez and M. Chang (2005), Adapting small-scale sinks projects to low-income communities, *Working Paper 71*. Norwich, Tyndall Centre for Climate Change Research.