Views on the implications of possible changes to the limit for small-scale afforestation and reforestation

Submission of SustainUS

SustainUS, the United States network of youth advocating for sustainable development, is concerned with the appalling rate of global deforestation. While many collaborative efforts are being undertaken globally to reduce deforestation—including forestation to uptake atmospheric carbon—we believe several improvements must be made to this process. Future generations will face the implications of any afforestation and reforestation (A/R) project, and SustainUS believes the economic, social, and environmental benefits and threats must be weighted equally for true progress to be realized in small-scale A/R projects.

I. Economic Impacts

Research has shown how the transaction cost barriers to small-scale Afforestation/Reforestation (A/R) Clean Development Mechanism (CDM) projects are likely to decrease as the size of the project increases.[1] Of all the 790 CDM projects registered through the UNFCCC, only one is classified as Afforestation or Reforestation; it is a large-scale operation in the Pearl River Basin in China.[2] It is surprising that so little progress has been made in this area, but some possible reasons include the lack of knowledge, skills, and technical resources in local communities to accommodate current CDM rules.[3] If the limit of each project is increased above the current 8 kilotonnes of carbon dioxide per year ($kTCO_2/yr$), there could be more interest in creating and developing forestry projects and maintaining them through project completion. Higher potential returns in the form of Certified Emission Reductions (CERs) for investors coupled with costs that are more effective per CER received will likely encourage more Annex-I nation participation.

There lies a significant risk that increasing the limit for small-scale projects will cause investors to choose larger projects because of their economic returns (larger projects, on the whole, offer more returns (CER's) per dollar spent than do smaller

---

[1] Jindal, Rohit. "Carbon Sequestration Projects in Africa: Potential Benefits and Challenges to Scaling Up." EarthTrends Environmental Essay Competition Winner. June 2006. <http://earthtrends.wri.org/features/view_feature.php?fid=68&theme=3>.

[2] United Nations Framework Convention on Climate Change. "Project 0547: Facilitating Reforestation for Guangxi Watershed Management in Pearl River Basin." United Nations Framework Convention on Climate Change. August 22, 2007. <http://cdm.unfccc.int/Projects/DB/TUEV-SUED1154534875.41/view.html>.

[3] Minang, Peter, McCall, M.K., Bressers, H.T.A., "Community Capacity for Implementing Clean Development Mechanism Projects Within Community Forests in Cameroon." Environmental Management. 39 (2006): 615-630.

projects). But in doing so, small projects with an emissions reduction less than 8kTCO_2/yr may become—whether intentionally or not—unappealing to investors.

If the limit is increased, one way to ensure that smaller landholders are still involved in A/R projects is to allow them to aggregate their land together and operate as an entity. Known as a common-property regime, evidence suggests that these arrangements can actually reduce the transaction costs of project governance under certain conditions.[4] In addition, regimes of this nature can actually diminish the economic advantage that large landholders might bring to projects by creating their own economies of scale because of shared land, resources, and labor.[5] Oscar Cacho states "facilitating participation by smallholders in designing and implementing group contracts is now a widely-recognised way of strengthening their capacities to act collectively."[6] This regime enables both small land parcels as well as communities to remain competitive in A/R projects, without the environmental consequences that larger plots may cause.

SustainUS believes that there must be policies created to ensure that local peoples and small parcels of land are utilized in the CDM project activities, and remain attractive to Annex-I country investment. Those policies should include promotion of pooling small plots of land together to reduce transaction costs on the part of the investor. These policies should be in place regardless of what the limit is set as. On any scale it will promote more community engagement in a project, which is absolutely critical for a forestry project to succeed.

But in order to attain positive results in any forestry regime, we must realize that improvements must be made with regard to the capacity of non-Annex-I nations to benefit from the opportunities that CDM projects can provide.

II. Social Impacts

For CDM A/R projects to succeed, long-term involvement of the community from project inception and planning through its execution is critical. Successful forestry projects depend on effective empowerment, participation, and accountability of local stakeholders.[7] Local communities with an interest in a forest project will likely prevent physical encroachment by outsiders, monitor for pests and fire risks while prohibiting illegal harvest and social unrest.[8] All A/R projects must have community members actively involved in the process—from providing feedback and suggestions in project design to assisting in the monitoring, reporting, and evaluation of carbon stocks. Local

---

[4] Cacho, Oscar J., Marshall, G. R., and Milne, M. "Smallholder Agroforestry Projects: Potential for Carbon Sequestration and Poverty Alleviation."
The Food and Agriculture Organization, Agriculture and Economic Development Analysis Division.
<http://www.fao.org/docrep/007/ae039e/ae039e00.htm>.

[5] Ibid.

[6] Ibid.

[7] Boyd, Emily, Gutierrez, M., Chang, M., "Small-scale forest carbon projects: Adapting CDM to low-income communities." Global Environmental Change 17 (2007) 250-259.

[8] Ibid.

participation, accountability, empowerment, and knowledge of the area and project species are essential for long-term monitoring and assessment of success.[9] SustainUS believes that ensuring that local communities remain intimately involved and employed in A/R projects will create a more reliable and stable A/R system. Community involvement should engage everyone—from landowners to homebuilders, craftsmen and craftswomen, to children and youth. The potential benefits of community involvement and the cohesion that can result from a project include increased communication, lessons on shared responsibility, and a desire to sustain the given project over long periods—benefits that are meaningful and important in any community.

But community involvement may become much more difficult if larger A/R projects are universally accepted as a solution. As larger and larger plots of land are set aside, either land used for community survival and sustenance could be affected or communities themselves may become displaced by landowners eager to make a profit. While larger projects may have larger global benefits insofar as they potentially sequester more carbon, communities that are displaced in the process would never be able to see, let alone appreciate, the benefits of these projects. As Emily Boyd points out, "A/R projects on productive lands run the risk of activity-shifting leakage (such as displacement of farmers leading to clearing of adjacent lands resulting in more emissions)..." which "would go against any notion of sustainable development..."[10] In order to preserve the integrity of local communities, A/R projects must not occur when the project may result in physical displacement or additional challenges to survival.

III. Environmental Impacts

A/R projects can have positive environmental effects beyond the sequestration of CO_2. Higher natural forest cover can enhance biological diversity and increase the rate of natural forest regeneration on previously degraded sites.[11] This does not apply in the case of monocultures, which, instead of benefiting biodiversity, can be significant threats to local ecosystems. Compared to the restoration of natural cover, monoculture plantations are not only less healthy than polycultures,[12] but also contribute to the degradation and erosion of soils and increase the incidence of plant diseases.[13] Increasing the limit for A/R projects could unwittingly make it easier for monoculture forest plantations to proliferate globally. Coupled with the limited ability for monitoring worldwide, significant ecological harm can result from monoculture forestry projects. Any increase

---

[9] Boyd, Emily, Gutierrez, M., Chang, M., "Small-scale forest carbon projects: Adapting CDM to low-income communities." Global Environmental Change 17 (2007) 250-259.

[10] Ibid.

[11] Carnus, J.M., Parrotta, J, Brockerhoff, EG, Arbez M., Jactel, H., Kremer, A., Lamb, D., O'Hara, K., and Walters, B. "Planted Forests and Biodiversity." Delivered at: UNFF Intersessional Experts Meeting on the Role of Planted Forests in Sustainable Forest Management, 24-30 March 2003, New Zealand. <http://www.maf.govt.nz/mafnet/unff-planted-forestry-meeting/conference-papers/planted-forests-and-biodiversity.htm?print>.

[12] Ibid.

[13] Forest Ethics, "Chilean Delegation Statement on Plantations." Forest Ethics. September 15, 2007. <http://www.forestethics.org/article.php?id=1619>.

in small-scale A/R project limits must be coupled with a provision that ensures that biodiversity remains a priority and any monoculture plantations are ruled out.

Conclusion

Any decisions on whether to increase the small-scale limit on A/R projects or retain the status quo must take all economic, social, and environmental benefits and threats into account. Increasing the limit could spark interest in A/R projects and result in significant atmospheric carbon dioxide reductions. But the threat of displacement and community neglect remains. Small parcels of land must remain attractive to investment, and landowners should be allowed to pursue innovative property-pooling schemes. In order for projects to be successful, local people must be intimately involved from project inception through completion. Projects must also not displace any communities or utilize any type of monoculture. The central goal for the future must be the economic, social, and environmental sustainability of the entire project.

For more information, please contact:

Dominic MacCormack, Sustain US Policy Coordinator: dominic@sustainus.org

Zach Swank, LULUCF and Deforestation working group: zach.swank@sustainus.org

Whit Jones, SustainUS External Relations Coordinator: whit.jones@sustainus.org