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Making CDM Forestry Projects Attractive for Communities

by

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Abstract

Till today forestry projects form a bare 0.53% of all registered CDM projects because it is almost impossible to find eligible lands for CDM forestry projects that are also biologically suitable for raising trees. The lands most suitable for capturing carbon dioxide from the atmosphere, without compromising food security, are the degraded forest lands that extend over 280 Mha worldwide. But most of these lands do not qualify as CDM rules permit only forestation over non forest lands even though under Article 3.4 of the Kyoto Protocol, forest management for enhancing carbon sequestration and storage is an eligible activity for Annex I countries to meet their emission reduction targets. This has deprived impoverished forest communities from using their skills for enhancing the carbon sequestration and storage in forests under their control and improve their economic situation. In India alone, there are almost 100,000 Joint Forest Management Committees which are legally empowered to manage forest within their identified jurisdictions but are unable to exercise this option.

The core defining requirements of a CDM project, that are both necessary and sufficient, are real, measurable and long term climate change mitigation benefits leading towards sustainable development and biodiversity conservation. Since improved forest management for enhanced carbon sequestration meets these requirements it should become a permissible CDM activity making as much as 280 million hectares available for CDM forestry projects across the world without threatening the food security. Millions of men and women among the rural communities

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spread across the developing world can then begin taking active part in climate change mitigation and benefit economically.

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Around the time Kyoto Protocol was being negotiated in 1997 there was a huge opposition, led by Greenpeace, against using the forest based carbon sequestration route to lower the carbon dioxide build up in the atmosphere for fears that raising forests for capturing carbon in developing countries would be so cheap most Annex I countries would not bother reducing greenhouse emissions from fossil fuel use. It ultimately did make it to the Protocol but with such hobbled feet that it has become nearly impossible to initiate a CDM forestry project. Today forestry projects form a bare 0.53% of the total projects registered by the CDM Executive Board with not a single temporary Certificates of Emission Reduction (CER) from any of these projects issued so far. And, to compound the matter still further, there is no demand for these temporary CERs in the forward markets. Which is not surprising because, of the two potential purchasers, Japan is more interested in the cheaper and permanent “hot air” credits from the former Communist bloc, and the European Union, under the influence of Greenpeace with its active, though minor, presence in their Parliament, has forbidden the use of forestry credits to meet the emission reduction needs till 2012.

By now it is clear that for making a meaningful dent in the problem of checking the continuous rise in the global temperature removing carbon dioxide from the atmosphere would be at least as important as reducing its emission. For even if we assume that the developed countries are able to take the sturdiest possible measures to reduce the greenhouse gas emission, something even the most optimists would be shy of expecting given the widespread opposition in these countries to the smallest sacrifices, we would still have to deal with the fact that a humongous amount of cheap energy is needed to bring more than 1.4 billion people living below the poverty line across the developing world to a minimum standard of living to fulfill the promise of the Millennium Development Goals. And this cheap energy can only come from fossil fuels in the foreseeable future. The rising emissions can at best be slowed, not reversed, till some path breaking technological solution comes our way.

But the ways to remove carbon dioxide from the atmosphere are limited. The oceans capacity to absorb more CO₂ is limited by the solubility of the CO₂ in the water and the rate at which the CO₂ dissolved in the surface ocean can trickle down to the bottom and there is little that man can do to increase it. The geological sequestration is still a technological chimera, the contours of which are unlikely to become clear any time soon.

We are thus left with the more familiar carbon sequestration in the vegetation but here also one is limited by the availability of land eligible for CDM forestry projects and the lack of water poses even greater limitation. With the world population projected to cross 9 billion marks well before 2050 it is inconceivable that land presently under agriculture can be brought under tree cultivation for carbon sequestration and storage without severely affecting the availability of food, something which is already making the FAO deeply nervous.

The grasslands are seldom suitable for growing trees either because of low moisture availability or their current economic utility as pastures for producing animal products like milk and meat. And the vast stretches of wastelands seen in many Asian and African countries not only suffer

from very low productivity but are also utilized heavily by the poverty stricken people in the developing countries and are, therefore, often not actually available for carbon sequestration without depriving the poorest of their only means of survival.

The lands which are available for capturing carbon dioxide from the atmosphere are mostly the degraded forest lands that extend over 280 Mha worldwide most of which lies in the developing world. In India alone as much as 28 Mha of lands fall under the category of open forest having a crown density of 40% or less, a large part (though not all) of which is degraded forest. These degraded forest lands should be the best candidates for CDM projects but they are not because the CDM rules for forestry projects allow only the use of a non forest land that does not reach the defining threshold forest cover parameter adopted by the country concerned. Thus India, which has adopted minimum 15% crown cover formed by trees of minimum 2m height as defining features of a forest, cannot bring almost three fourth of its degraded forest lands under CDM.

The problem does not end here. Even the degraded forests which today have crown cover below the forest threshold, i.e., less than 15% crown cover in the case of India, are often not eligible because of another condition which requires that the lands selected should not have been a forest as on December 31, 1989. With increasing population in the last 20 years, and enormously increasing demand for timber in India and China, a lot of deforestation and degradation of forest lands has taken place after 1990 and much of these lands meet the requirement of being non-forest now but are still ineligible for CDM projects having been forests on the cutoff date of December 31, 1989.

The situation in other countries is not much different. This author had the opportunity of examining land availability for CDM in Mongolia, Korea, Myanmar and Cambodia, besides India, and found that it was virtually impossible to find significant extent of eligible lands for CDM forestry projects that are also biologically suitable for raising trees.

Under Article 3.4 of the Kyoto Protocol, the management of forest for enhancing carbon sequestration and storage is an eligible activity for the Annex I countries to meet their emission reduction targets. But, strangely, Article 12 of the Kyoto Protocol permits only afforestation and reforestation as an eligible CDM activity. These deprives a large number of impoverished communities living close to forests from using their management skills for enhancing the carbon sequestration and storage in forests under their control and earn increased incomes by attracting CDM investment. In India alone, there are almost 100,000 Joint Forest Management Committees which are legally empowered to manage forest within their identified jurisdictions. But till date none of these Committees have been able to offer the use of their skills to the global community for mitigation of climate change and enhance their economic situation in the bargain. The roots of this paradox lie in the rules that have been framed for carrying out CDM forestry projects driven by unjustified fears of adventurism in land based carbon sequestration projects leading to excessive caution and resultant paralysis.

The core defining requirements of a CDM project are that it should result in real, measurable and long term climate change mitigation benefits and should lead towards sustainable development and biodiversity conservation.

The requirement of real benefit contains within itself the clauses of additionality and accounting for leakages. It also includes the cutoff date of December 31, 1989, to ensure that forest land are not degraded deliberately just to make the lands eligible for CDM. The requirement of measurability ensures that the payments are commensurate with the climate benefits and the condition of long term benefits ensures that CO₂ taken away from atmosphere through sequestration stays away long enough for it to have a real impact on reducing the warming of the earth.

These requirements are both necessary and sufficient and nothing more is needed beyond meeting these conditions. Then why is forest management leading to increased carbon dioxide sequestration and storage in forest vegetation not permitted in the case of Non-Annex I countries? It provides real, measurable and long term climate change benefits and can be made consistent with the requirements of sustainable development and biodiversity conservation. In fact that is the reason why it is permissible for Annex I countries to meet a part of their Kyoto emission reduction targets through forest management based activities. The fears in 1997 at the time of Kyoto negotiations were that the Non-Annex I countries were not in a position to measure the carbon sequestered through forest management and perhaps the apprehensions were not without basis for a large number of developing countries. But there are also a large number of Non-Annex I countries that have the capacity to make correct estimates and this includes bigger countries with most opportunities like India, China, Indonesia, South Korea, Brazil and a host of others, and there are many more which can do this at a project level even if they find country level estimates beyond their reach. And there will surely be many more countries that can develop this capacity once it is made a requirement of the CDM.

If forest management for enhancing carbon sequestration and storage becomes a permissible CDM activity as much as 280 million hectares would become available for CDM forestry projects across the world and hundreds of millions of men and women among the rural communities spread across the developing world can begin taking active part in climate change mitigation and benefit economically. A hundred thousand Joint Forest Management Committees in India alone are ready to jump into fray given half an opportunity.

There is nothing that is needed to bring this massive change except changing our mindsets. And some investment in capacity building in forest management, carbon stock measurements and monitoring and the resolve to create and strengthen appropriate institutions.

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