
Tree plantations as sinks must be sunk

One of the main aims of some industrialized-country negotiators at the Convention on Climate Change is to have plantations accepted as carbon sinks within the so-called Clean Development Mechanism. The reasoning seems quite straightforward: while trees are growing, they take carbon dioxide from the atmosphere and fix the carbon in their wood. They thus act as "carbon sinks" and therefore help to counter climate change by removing carbon dioxide from the atmosphere. So what's the problem then? The answer is: plenty of things.

The first problem is that tree plantations are not aimed at supplementing measures adopted to reduce the use of fossil fuels. On the contrary, their aim is to allow industrialized countries to meet their reduction commitments without actually reducing them to the extent agreed upon. If, for instance, a country has made a commitment to reduce fossil fuel emissions from 100 to 90 units, then instead of reducing by 10 it could reduce by only 5 and plant trees to absorb the remaining 5.

Secondly, a widespread trade in tree plantation "offsets" would block or undercut necessary and urgent measures such as energy conservation, consumption reduction, more equitable resource use, and equitable development and sharing of clean, renewable and low impact sources of energy.

The above shows that "carbon sink" plantations are not a solution to the real problem, which is the continued use of carbon reservoirs --coal, oil and natural gas-- that is at the root of the current climatic crisis. At the same time, plantations are a problem in themselves for many reasons:

- Large-scale tree plantations are already a threat to communities and ecosystems the world over. If the Conference of the Parties were to accept carbon sink plantations as part of the Clean Development Mechanism, it would mean that millions of hectares of new plantation land would have to be taken over in any attempt to counteract even a small fraction of industrial emissions. Experience with large-scale tree plantations indicates that such "offset" projects would usurp needed agricultural lands, replace valuable native ecosystems, deplete water resources, worsen inequity in land ownership, increase poverty, lead to evictions of local peoples, and undermine local stewardship practices needed for forest conservation.
- Large-scale tree plantations are commonly a direct cause of deforestation. This means that before they become a "carbon sink" they in fact cause "carbon leakage" (to use the climate negotiators' obscure language). That is, carbon that was safely stored in forests is released through deforestation. The carbon balance is thus negative, because most forests store much more carbon per hectare than any plantation.
- Large-scale tree plantations are also commonly an indirect cause of deforestation. People displaced by plantations are usually forced to enter other forest areas and to open them up in order to meet their subsistence needs. These constitute further "leakages."
- Large-scale tree plantations destroy animal and plant diversity and should therefore not be promoted by governments who subscribe to the Convention on Biological Diversity --the same

countries, by and large, as those who subscribe to the Convention on Climate Change.

Apart from all the above, there are scientific uncertainties both regarding the capacity of plantations to act as carbon sinks and the capacity of technocrats to adequately measure the carbon sequestered as a result of a plantation. In order for a plantation "offset" project to be tradable for a given amount of industrial emissions, a single determinate number would need to be calculated to represent the amount of carbon sequestered or stored as a result of the project over and above what would have been sequestered or stored in its absence. Such a determinate calculation is in fact impossible. (see details at <http://www.wrm.org.uy/english/declarations/Tamalpais.htm>)

In sum, "carbon sink" tree plantations cannot be realistically considered a solution to anything, but rather are an additional problem. All efforts must be made to avoid their being countenanced at the upcoming Conference of the Parties. These sinks must be sunk.