
Mangroves hijacked by the carbon market

The capacity of mangroves to store carbon has come to the fore.

University scientists have teamed up with forestry researchers to examine the carbon content of mangrove forests. The finding of one of those studies in the Indo-Pacific region has been published in Nature Geoscience. They found that per hectare mangrove forests store up to four times more carbon than most other tropical forests around the world which can be attributed, in part, to the deep organic-rich soils in which mangroves thrive. The mangrove forest's complex root systems, which anchor the plants into underwater sediment, slow down incoming tidal waters allowing organic and inorganic material to settle into the sediment surface. Low oxygen conditions slow decay rates, resulting in much of the carbon accumulating in the soil. In fact, mangroves have more carbon in their soil alone than most tropical forests have in all their biomass and soil combined. (1)

When land-use change occurs much of that standing carbon stock is released to the atmosphere adding to the problem of climate change. Indeed, mangroves have experienced a rapid 30-50 percent decline in the past 50 years.

The Kyoto Protocol of the United Nations Convention on Climate Change has widened its array of false market solutions by adopting a new method for calculating the carbon dioxide captured and stored from the atmosphere by mangroves which are referred to as "blue carbon" solutions for climate change (see WRM Bulletin N° 167).

The methodology was developed by IUCN, Ramsar and Sylvestrum, in partnership with the French based food-products transnational group Danone, for the Clean Development Mechanism (CDM) of the Kyoto Protocol. This mechanism allows major industrial countries avoid their historical responsibility of reducing their carbon emissions in the source by investing in projects in the South that allegedly avoid carbon emissions. Advocators of carbon trade-off argue that market incentives for letting mangroves untouched in exchange of selling carbon credits would be "the solution" to preserve these coastal ecosystems as well as combatting climate change.

Mangroves will thus be the target of large companies which are eagerly looking to buy carbon credits as a way of compensating for their continued pollution. An example is the Wetland Carbon Partnership of the aforementioned Danone Group, an initiative established in 2008 that fosters the approval of projects of large amounts of carbon credits under the CDM or the so-called voluntary market. By June 2011, no fewer than 25 projects were received. Danone has already invested in two pilot projects in Senegal and India.

The carbon compensation mechanism ('offsetting') proposed by Danone means that the company will continue burning fossil fuels and increasing the amount of greenhouse gases in the atmosphere, while seeking to offset the pollution by storing it in mangroves somewhere in the planet.

This mechanism means a net increase in the amount of carbon in the biosphere, that is the atmosphere, the living beings, the vegetation and the soil. Even if, for example, mangrove trees or

soils absorb carbon, this is a temporary storage and is part of the atmospheric carbon cycle. Meanwhile, fossil fuels extracted from underground and burned by companies like Danone result in a permanent increase in the amount of carbon in the biosphere. That fossil carbon has not been part of the atmospheric carbon cycle and ends up increasing the amount of pollutants responsible for climate change without any possibility of being buried again.

The large scale model of production and commercial distribution of billions of goods, many of them just superfluous and disposable, and intended for overconsumption, produces high level emissions of carbon and is at the root of the present climate crisis. It is the same underlying cause of mangrove deforestation, too. The carbon market is an offshoot of such model and it could hardly be the solution of the problem it has contribute to create.

Article based on information from “Mangroves among the most carbon-rich forests in the Tropics”, June 2011, <http://www.salvaleforeste.it/en/201106231474/mangroves-among-the-most-carbon-rich-forests-in-the-tropics.html>