Eucalyptus plantations as biomass fuel: substituting evil for wrong

More and more the rush to use biomass as an alternative source of energy allegedly to reduce CO2 emissions is concealing the unsustainable consumption pattern that underlies global warming and climate change.

Reduccionist approaches focus on solutions which create even greater harm. That is the case of a major European project which has enthusiastically identified industrial-scale eucalyptus plantations as an answer for so said less polluting steel manufacturing processes.

Led by the main European steelmakers, the European Ultra Low CO2 Steelmaking (ULCOS) project involves the French Agricultural Research Centre for International Development (CIRAD) and its central theme is to replace fossil fuels with biomass, notably from monoculture tree plantations in the tropics.

Apart from developing more efficient processes for converting biomass into charcoal, the project addresses the biomass availability from eucalyptus plantations, and CIRAD conducts research on the availability of such woody biomass. It has identified "good candidates" for biomass production --which means where to establish industrial-scale eucalyptus plantations.

The 'candidates' chosen to host such plantations are: Brazil, which CIRAD considers could have 46 million hectares available in 2050, and several central African countries -- Congo (South), the Democratic Republic of Congo (West), Angola (North and East), Zambia (West), Tanzania (West and South), Mozambique (North) and the Central African Republic (West and Centre)-- with 46 million hectares.

This amounts to increase the area of monoculture tree plantations, with the ensuing severe impacts on soil, water, biodiversity and livelihoods. Even worse, the establishment of such large-scale plantations would destroy existing ecosystems –as is already happening- such as grasslands, forests, peat lands, wetlands, which provide livelihoods to local populations. Such destruction implies the release of enormous amounts of greenhouse gases, which challenge the basis of those kinds of projects.

Replacing the major problem of burning huge amounts of fossil fuels with further problems like the encroachment of highly diverse ecosystems and the depletion of soil and water by fast growing eucalyptus will only make matters worse. Meanwhile, the climate keeps changing.

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