
Myth No. 15: Planting trees to produce biochar can help to mitigate climate change

A coalition of start up companies, consultants and some soil scientists is promoting a new 'solution' for climate change: Large quantities of wood and other biomass are to be turned into fine-grained charcoal (euphemistically called biochar) and applied to agricultural soils. It's very worrying that advocates, who are organised in the International Biochar Initiative, claim that the carbon in the charcoal would remain in the soil for thousands of years and 'offset' fossil fuel burning, and that charcoal will make soils more fertile. They class all biomass as 'carbon-neutral', whether it comes from tree plantations or from stripping large areas of cropland and forests of residues. None of the claims are proven:

-- The climate impacts of charcoal are not fully understood and could be negative, even on a small scale.

-- Charcoal itself is not a fertiliser. Indigenous farmers have successfully combined it with organic residues to make some soils more fertile, yet what biochar advocates call for would require large areas of land to be stripped of crop and forest residues to make charcoal, a very different process. Large-scale removal of residues depletes soils and makes them more likely to erode and it makes forests more vulnerable and less biodiverse. It would also entrench dependence on fossil-fuel based fertilisers since residues will no longer be returned to the soil.

-- The potential for soil and air pollution has not been addressed and could be serious.

No amount of residues could produce the quantities of charcoal which are being advocated. Wood yields more charcoal than other types of biomass and large cheap quantities would be needed. Industrial tree plantations are the most likely source of large-scale biochar. Claims about a 'potential' for billions of tonnes of biochar rely on the false idea that there are vast areas of 'abandoned' cropland which could be appropriated, as if people, biodiversity and climate did not depend on land not yet under monocultures. The same arguments have been used to justify designating and taking over large areas of pasture, community land and forests, with disastrous consequences for people and also for the climate, since large amounts of carbon are released when trees and other vegetation are removed and the soil is ploughed, and as people's other agricultural activities are pushed further into remaining forests.

Furthermore, the proposals to include biochar into the Convention on Climate Change's Clean Development Mechanism (CDM) are not limited to 'residues'. The first CDM methodology for dedicated tree plantations for charcoal has already been approved –for Plantar in Minas Gerais, Brazil. It applies to charcoal as a fuel, but if biochar advocates have their way, we can expect a lot more eucalyptus and other monocultures for charcoal, which means a further land grabbing catastrophe for indigenous peoples and peasants in southern countries.

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