

Say No to Soil Carbon Markets!

Six reasons why soil carbon markets won't work for smallholders

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Soil carbon capture or sequestration is the process of transferring carbon dioxide from atmosphere into the soil through crop residues and other organic materials. It is being heralded as one of the key ways to off-set emissions that cause climate change. Markets are being established to trade credits earned through soil-based sequestration of carbon.

Many organizations, including the World Bank, claim that not only will soil carbon markets reduce greenhouse gas emissions, but also that smallholder farmers in developing countries will benefit. There seems to be, however, little evidence behind these claims.

ActionAid is concerned that without critical examination of the potential impacts of soil carbon markets on the livelihoods of tens of thousands of smallholders, we could be stumbling blindly into “false solutions”.

Soil carbon sequestration is being presented as a threefold win -a solution to the global warming crisis, a way for African farmers to adapt to climate change, and as a means to increase resources for African farmers. But far from a “triple win”, soil carbon markets could actually become a “triple injustice” for poor smallholders, particularly women, in Africa:

- Poor farmers without political connections and resources would become vulnerable to “land grabs” by those with more money and power as they try to control opportunities for making money through the new markets.
- The smallholders may have to depend on an unpredictable and volatile source of funding through carbon markets, instead of receiving sustainable, adequate and compensatory public finance from rich countries, who are obliged to pay to developing countries to deal with climate change impacts.
- Apart from adapting to climate change, smallholder farmers would now have to also bear the mitigation burden of the climate crisis caused by rich countries who are simply avoiding urgent decisions to reduce carbon emissions in their own countries.

Promoting soil carbon markets therefore is a major distraction from providing the public finance needed to help poor countries tackle climate change.

For these and other reasons, soil carbon markets must not be established.

Six reasons why soil carbon markets won't work for smallholders

1) The science doesn't measure up

Soil carbon sequestration is easily reversible and the loss of soil carbon can be caused by external occurrences such as fires, strong winds, droughts, pests, and human activities such as change in land management practices and deforestation.

It is also very **hard and expensive to accurately measure** carbon captured in soil. Sequestered carbon should be measured through deep sampling more than 30cm below ground, but at present conventional data collection includes *only* topsoil measurements. The costs of regular soil measurements can be prohibitively expensive for smallholder farmers. The aggregated 'proxy' figures on which agricultural carbon offset schemes are based are prone to large inaccuracies.

This means that soil carbon capture schemes may not actually lead to lasting carbon sequestration to slow the impacts of climate change.

2) Agribusiness and big farmers will benefit

Agribusiness and commercial farmers are better positioned to benefit from soil carbon markets, further marginalizing smallholders. There are **high transaction costs** associated with soil carbon schemes, including search, negotiation, approval, administration, monitoring, enforcement, and insurance costs. Big farmers might be able to meet these costs, but the relative costs for smallholders – who farm tiny plots of land – are far greater. Market incentives are skewed towards larger farmers at the expense of smallholders, especially women, who have least access to credit, training and research. Agribusiness and big farmers who own large tracts of land and have huge financial resources are more likely to be targeted under soil carbon offsets schemes. Hence, finance is also likely to flow to large landowners, commercial farmers and plantations, rather than smallholders for better 'return on investment'.

3) More land grabs

Thousands of women and smallholders could be pushed off their land as investors try to secure large plots for large-scale soil carbon schemes. **Land grabbing** is occurring at an unprecedented rate because of, among other things, food security concerns in investor countries, demand for biofuels and lax investment rules. As land is acquired by investors, women, pastoralists and local farmers are further marginalized. And as land becomes more profitable, as would happen if soil carbon markets take off, smallholders are likely to be under greater pressure to leave their land. Women are particularly vulnerable because they often have very weak or no land rights and rely on less protected communal and marginal land

4) Reduced adaptive capacity

Agriculture in the developing world is particularly vulnerable to climate change and the Intergovernmental Panel on Climate Change is predicting a drastic reduction in yields from rain-fed agriculture. Farmers are already reviewing and changing their agriculture practices to adapt to ever changing weather patterns. Soil carbon sequestration requires long-term commitment and often binds farmers to certain type of agriculture practices and land management practices that may negatively affect the adaptive capacity of poor farmers, who may need to change their production systems to adapt to new climate conditions and economic needs. We recognize the potential and role of low external input and highly diverse crop production systems in carbon sequestration; however we strongly believe that the focus must be to assist smallholder farmers to adapt to changing climates and ensuring their food security rather than pushing them towards carbon sequestration.

5) Public money, private gain

Carbon credits, already in use with offset schemes like tree-planting, rarely deliver money to projects and communities on the ground. Out of a total carbon market volume of \$144 billion in 2009, only \$3.37 billion (2%) was for project-based transactions, with only a tiny proportion of that likely to reach the community level. Even though projects themselves are in developing countries, most of the **money stays in rich countries**. Those that benefit most from carbon trading are financial speculators, such as JP Morgan, Goldman Sachs and Merrill Lynch, who buy and sell carbon credits like any other tradable commodity.

6) Funding distraction

Developed countries have accepted obligations to provide new public funding to help tackle climate change, but soil carbon capture and offset schemes are distractions to evade these promises. Rich countries, which are responsible for historic and current emissions, including massive nitrous oxide and methane emissions from industrial agriculture, are trying to shift the **burden of responsibility onto poor communities in developing countries**, and are focusing on **'private financing'** as a means to evade their obligations. This may reduce the funds available for public financing of agriculture in developing countries which is fundamental to support smallholder farmers and achieve food security.

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