

Bioenergy—The broken promise

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Biofuels are going to save us from climate threats and the oil crisis, while at the same time providing an opportunity to the smallholder farmers of the world. Hopes are high, but completely unrealistic. It is like trying to push a square peg into a round hole, according to a current thesis at Linköping University.

[Bioenergy](#) could replace fossil fuels and solve the looming [energy crisis](#). Into the bargain, we will benefit from reduced [greenhouse gas emissions](#). A further bonus could be that demand for biofuels gives a lift to smallholder farmers in poor countries, who would be able to diversify their production and sell an attractive product on the international market. In short, a win-win-win situation is being portrayed.

And not by just anyone, but by three highly influential international organisations:

- Food and Agriculture Organization of the United Nations (FAO)
- [Intergovernmental Panel on Climate Change](#) (IPCC)
- [International Energy Agency](#) (IEA)

Magdalena Kuchler, recently awarded her Ph.D. at the Centre for Water and Environmental Studies at Linköping University (LiU), investigated the thinking of these three organisations concerning bioenergy during the period 1990 - 2010.

The question of the future of bioenergy has a bearing on three areas:

food, climate and energy; she therefore chose these particular organisations for her investigation.

Her conclusion is that the high hopes for bioenergy will not be realized, at least not under the current [economic system](#) that demands that production be as cheap as possible. Here the three organisations end up in contradictions and a dilemma they are not able to resolve.

"The production of biofuels has to fit in with a market economy, which is completely allied to economic growth and the accumulation of capital", she writes.

The result is monocultures with mechanized production. Changed land use leads to increased [greenhouse emissions](#) that eat into the reductions that biofuels ought to provide. Highly mechanized production creates an increased dependency on fossil fuels rather than the opposite.

Finally, the smallholder farmers of the world have nothing to gain from the large-scale centralized production model that is required in order to keep costs down. There is not much left of the win-win-win situation. On the contrary, colonial structures have been re-established where the need of developed nations for large amounts of cheap energy is allowed to come before all other needs, for example the need for a world in an ecological equilibrium.

Provided by Linköping University

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