

Focus on marginal land to avoid impact on food production

Partly in order to respond to accusations that agrofuels compete with food production, some propose that agrofuel crops should only be planted on marginal or idle land. We are told there are millions of hectares of such land around the world, especially in Africa, and that planting it with agrofuels could be extremely positive, providing income for local communities and supplying an alternative to fossil fuels. It is even suggested that there should be incentives for using so-called marginal land, such as licences to emit more CO₂.

Jatropha dreams

One crop that is often cited as ideal for growing on marginal land, ie: poor soils with little water, is the oilseed bush *Jatropha Curcas*. There are plans to grow *jatropha* in Africa, Asia and South America. However, there is no experience at present of growing *jatropha* on a large scale and little is known about it, except that, even if it can survive drought and poor soil, it is unlikely to produce a worthwhile crop under such conditions. Millions are being promised jobs, but there are real uncertainties about the performance of *jatropha*.

BEFORE CONSIDERING WHAT COULD BE GROWN ON IT, WE MUST DEFINE "MARGINAL LAND"**So-called marginal land may be a vital resource to local communities...**

Land that might appear to be "marginal" to one person may be a vital resource to another. Although to the outsider, it may look idle or underused, it often provides food, fuel, medicine and building materials to local communities worldwide. It may be collective or common land used by local communities for generations, even though they have no formal title to it. Its fragility can mean that they use it on the basis of long rotations, only returning to cultivate plots after leaving them to regenerate for several years. Such land may also be sacred to local communities and vital to protecting water sources.

...especially women

Sometimes it is the only land that women can access, because in many parts of the world, women still have no property or inheritance rights. Sometimes they are allocated land that is exhausted and abandoned to grow food for their families. For them it can make the difference between life and death in hard years because they know how to gather food from it. Those who use such land may well be aware of how fragile it is, but able to use it without degrading it. This is vital knowledge that should be respected.

...also herders, pastoralists – and biodiversity

Particularly in Africa, there are large areas of land used by cattle herders or pastoralists, who may follow the rains and fresh grass across huge areas. External observers often consider that the lives of such people could be improved if they were settled in one place and provided with the means to grow crops. However those people have the right to their way of life, which they have evolved over many generations and which may be the best way to use fragile grasslands. So called marginal land is also important for biodiversity, and may act as a refuge for endangered, neglected and useful species.

Land-use change and climate change are intimately connected

There are reports on how changes in land use increase emissions, for example when forests are cleared for crop production. Less often discussed however are the local and regional shifts in climate caused by land-use changes. Research shows that in East Africa, changing from grazing to crop production would make some areas wetter and others drier, with more extreme floods and droughts and greater temperature differentials. In many parts of the world, people are already suffering local climate change caused by changes in land use in addition to the impact of general increases in emissions.

Millions of hectares of set-aside land in the EU and conservation land in the US

are undergoing rapid conversion to cropland and much is being targeted for agrofuels. Here too there will be serious impacts on biodiversity, water and soil quality. It is highly questionable whether rural livelihoods will be improved.

Information Resources

- "The Gallagher Review of the indirect effects of biofuels production", Renewable Fuels Agency, July 2008
- "Land clearing and the biofuel carbon debt", Joseph Fargione et al, *Science*, 29.2.2008, DOI: 10.1126/science.1152747
- "Gender and Equity Issues in Liquid Biofuels Production – Minimising the Risks to Maximise the Opportunities." Andrea Rossi and Yianna Lambrou, FAO, April 2008.
- "Estimating Water Quality, Air Quality and Soil Carbon Benefits of the Conservation Reserve Program", FAPRI, College of Agriculture, Food and Natural Resources, January 2007, www.fsa.usda.gov/Internet/FSA_File/606586_hr.pdf
- "Rethinking Current Strategies for Biofuel Production in India" Deepak Rajagopal, University of California, Berkeley, 2007
- "Agrofuels - Towards a Reality check in nine key areas", 2007 <http://www.econexus.info/pdf/Agrofuels.pdf>
- "Agrofuels in Africa: The Impacts on Land, Food and Forests" Africa Biodiversity Network http://www.biofuelwatch.org.uk/docs/ABN_Agro.pdf