

## No. 88

### Refuelling instead of Feeding?\*

Food prices are increasing in Europe. They are rising because it has been too hot and hasn't rained enough. And because farmland is increasingly being used for biofuels instead of for food production. Oil pressed from rape seed can be used as diesel fuel, and from maize or sugar beets ethanol can be made, to replace petrol. The president of the German farmers' association, Helmut Born, expects that in the long-term food prices will be coupled to energy prices.

The so-called tortilla crisis, which led to protests in Mexico City at the beginning of the year, gives an impression of what mankind may expect. The price of maize, half of which is imported from the USA, more than doubled in the course of a year, primarily because of the maize used for the production of bioethanol. A Mexican famine was only averted by a state-administered price ceiling for tortillas made of maize, combined with duty-free imports of maize.

This example sarcastically demonstrates the deficiency in current German environmental policy that seeks to reduce the greenhouse effect by promoting, among other things, the production of biofuels, as Chancellor Angela Merkel recently emphasised at the EU Climate Summit in March 2007. The deficiency of this policy is that we haven't been told where the land will come from that will be used for the production of biofuels and other natural fuels. Until we know this, it is hard to see the logic in the promotion of biofuels and other natural fuels.

In principle there are only three ways to procure land for the cultivation of biofuels. Firstly, land can be withdrawn from the production of food. Secondly from the production of natural materials, wood in particular. And thirdly from nature. The perversity of the first course is manifest – it cannot be pursued with a clear conscience because there is no surplus food production in the world. Whoever wishes to grow biofuels on land that was previously used for food production must realise that this increases food prices and burdens especially the poorest of poor. We are taught not to throw away food, but we shouldn't burn it either.

Only two alternatives remain, but these are also hardly convincing. To cultivate biofuels on land that would otherwise be used for construction material drives up their prices and encourages their substitution by other materials. Then less wood is used for construction and more concrete and steel. This is unobjectionable on ethical and social-policy grounds, but it certainly doesn't help the environment.

Wood stores carbon, which is taken from the air in the process of photosynthesis. The larger the stocks of wood on earth, in the form of living trees or in the form of wooden construction material, the smaller the portion of carbon dioxide in the air and the cooler the earth remains.

To be sure, biofuels could replace fuel obtained from mineral oil. Then less carbon dioxide would probably be released into the atmosphere. But this assumes that the oil sheiks will extract less oil because of the production of biofuels than they would otherwise have done. If they continue to extract their oil from the earth as fast as they are planning to do, biofuels will simply come in addition to fossil fuel and no gains will have been made for the environment. Quite the contrary. Because of the reduction in wood stocks, more carbon dioxide must be in the air, on balance, which will speed up global warming.

The remaining alternative is land that has not been previously used commercially. But here too the analysis comes to the same conclusion because such land is usually wooded. The substitution of forests by maize, rape and other oilseed cultivation reduces the stock of biomass and likewise leads to an increase in the concentration of carbon dioxide in the air. Brazil has cleared huge areas of forest land in order to produce bioethanol, which already today comprises nearly a quarter of Brazil's automotive fuel. At the same time, the country has done a great disservice to the world climate.

Every year, the world loses a forest area the size of Ireland. This accounts for 18 percent of annual carbon dioxide emissions, more than from the world's entire transport sector. Deforestation must be reversed not accelerated.

The analysis shows that it makes little sense to take land in whatever form and use it for the production of biofuels. Only the possibility of making biofuels without the use of additional land is justifiable in terms of environmental and social policy. This would mean using agricultural waste, which would otherwise rot and produce nearly equal amounts of carbon dioxide and methane, an even more dangerous greenhouse gas.

All these options should be exhausted and supported, also by the state. But let's not officially promote the production of biofuels on land that could be used for other purposes.

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\* Published as "Tanken statt essen", *WirtschaftsWoche*, no. 36, September 3, 2007, p. 162.