

## FRANKENFOODS RIDE AGAIN



In any crisis there is always someone wanting to make a fast buck. The trick is to exploit the weak, the vulnerable and the insecure. You just don't expect leaders of rich industrial nations to fall into this category. They are the ones expected to bring clarity and sanity into arenas all too easily be driven by fear.

Faced with spiralling energy prices, world leaders should get tough on speculators in the energy market, rather than making meaningless pleas to oil producers to pump up supplies. Spiralling food prices, however, present a more complex challenge for leaders to respond to.

There is no simple on-off switch for food supplies. Nature, the climate and the seasons define parameters that are hard to manoeuvre around. Today's crisis requires a sober look at long-term solutions

rather than quick fixes. Least useful of all, however, is to allow the agenda to be driven by vultures in search of a financial killing.

This was the challenge facing EU leaders when they met in Brussels in mid-June. Could they come up with a plan to constrain or reduce global food prices? At the end of an era of falling food prices, this may be a difficult call, but it need not become a foolish one. There is still enough food being grown every year to feed the world's population. Current issues of hunger are more to do with poverty, war and maldistribution than with absolute shortage.

EU Ministers were offered a list of factors contributing to today's dramatic rise in food prices. The list included rising oil prices, the consequential effect on (oil based) fertiliser prices, the impact of using land for biofuels rather than food production, the problems of salination and soil exhaustion, extreme weather, speculation on commodity markets and increasing affluence in developing countries (that has changed food consumption patterns). It was a list that made no mention of GMO's.

How perplexing, then, that Britain should decide this was the time to re-open talks with the bio-tech industry, about creating an "improved regulatory regime" for GMO crops to save the world. Gordon Brown is known to be sympathetic. George Bush claims that GM crops could solve the global food crisis because of their high yields and resistance to drought. The press have been carefully fed genetically modified stories about GM's answers to salty soils, nutritional deficiencies, crop blights and insufficient harvests. The trouble is that none of the claims stand up to scrutiny.

Let's just begin with a clear picture of where we are. GM crops amount to only 2.4% of global agriculture and commercial forestry. All of the major staple foods – wheat, barley, oats, potatoes, sorghum, cassava and rice - come principally produced from conventional crop varieties. GM crop production is primarily confined to soya beans, maize, oilseed rape and cotton. Up to 90% of the GM food production goes to feed animals rather than humans. GM is not a major driver of world food supplies nor of future food solutions.

Despite this, Bob Stallman, President of the American Farm Bureau Federation, pressed the following point in his address to Britain's National Farmers Union Conference in 2008:

"I think that the debate about higher prices and being able to meet the demand of people in the world for food is a perfect opportunity to make the case [for GMO crops]... We may have a window of opportunity here and I encourage you to exploit that."

You could almost hear the wings of Monsanto, Bayer, BASF, Dow, Pioneer and Syngenta flapping overhead.

There are two problems facing an industry whose principal desires are to own the food chain rather than feed the world. The first is that the public show no desire to consume their products. The second is that the science doesn't even back up their claims.

An international body of 400 scientists has just produced a report on GM Crops that the British Government is keen not to talk about. It goes under the not-so-snappy title of the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD). When you cut to the chase, the four year review of GM crops concludes that the view that they are not the answer to either world hunger or to increased crop yields.

In some cases, GM crop production had actually reduced yields. Elsewhere, their environmental damage far outweighed any claims of gain.

Since the 1930's the world had seen steady annual increases in conventional crop production. Then, following the shift into GM varieties in the mid-1990s, there followed a series of flat yields for soya bean and cotton production. The failure of GM crops even to keep pace with the output from conventional varieties was bad enough. It looked even less impressive once its downsides became apparent.

Scientists have now highlighted problems about the uptake of nutrients from GM crops. They require the application of increased quantities of manganese fertilisers to support sufficient crop growth. Moreover, after 12 years of commercial production, nature itself has been kicking back against GM crops. Blight-resistant crops now have spray resistant insects and weeds. GM 'super crops' are being attacked by GM super bugs.

In both North and South America, varieties of herbicide-resistant ragweed, horseweed and (in Argentina) Johnson grass, are all emerging to blight GM crops. Farmers are having to resort to the use of older, more dangerous, herbicides to control the weeds. At its core, however, the fundamental problem of the biotech industry is one of mentality rather than technology.

At one stage, Monsanto were singing the praises of their GM maize that was resistant to the Corn Borer caterpillars. In Southern Africa, (and in Europe), the Corn Borer has the ability to inflict huge damage on crop yields, blighting up to 30% of production. GM maize was to be the answer until the Corn Borer began to develop a resistance to the company pesticide. Even from the start, however, Monsanto was less than enthusiastic about quite a different approach taken up by farmers in Kenya.

Kenyan farmers knew the Corn Borer liked maize. They also knew it was fonder still of Napier grass. Caterpillars would eat the stem of the grass, and then get caught in the sap that the grass released. The bugs died on the grass. In turn, as the grass died off, it returned its nutrients to the soil. Farmers were getting improvements in yields without having to surrender either the right to save their own seeds or become dependent on the company's agro-chemicals.

This is a far more coherent approach for international leaders to put on the world food table. The problem is that it doesn't sit with the cadaverous interests of the bio-tech industry. So instead of promoting diversity and sustainability, global politicians use food scares to become snake oil salesman for an industry at the margins of the food agenda.

The most gullible of international leaders, our own included, trot out claims that GM crops could be the answer to blindness in the Third World, produce food in defiance of drought, and raise harvests from soils that have turned to salt. In truth, genetic engineering has not produced a single commercial crop capable of doing so. After ten years of research to alter salt tolerance in crops, bio-technology is still at least two decades away from even the prospect of doing so. Conventional crop breeding has been far more successful in producing varieties that can survive extreme conditions. Sometimes the problems aren't about crop technology at all.

In one of Ethiopia's droughts there were serious food shortages in the south. Farmers in the north, however, had had a bumper year for cassava. The country faced two problems. One was the practical difficulty of shifting food from the North to the South. The second was that the Ethiopian Government didn't have the money to buy cassava from farmers in the North in order to feed its communities in the South.

The Ethiopian Government turned to the international community for help. They asked for cash not food. The US wanted to send food aid, in the form of US (GM) grain surpluses. The EU – bless their socks – sent cash. It allowed Ethiopia to keep its farmers on the land. To do otherwise would have increased farm bankruptcies and an exodus from the land; exacerbating problems for the years that followed. This isn't rocket science let alone biological science. It is about the politics of food, and about who has rights to both own it and access it.

UK Ministers can have all the discussions they like with the bio-tech industry but they need to understand that GM crops are a complete distraction from today's food security issues. The agenda of the bio-tech industry is about imposing patents and 'royalty' charges on nature itself. It is about the ownership of the food chain, not the feeding of the poor. It is about corporate wealth not global wellbeing. None of this is about food security.

The world has to make big decisions about our agricultural future. Some of these will are about food production in a world running out of oil (and oil-based fertilisers). Some are about food security and national food production. Some concern the terms (and time requirements) of a society that can meet its own food needs.

Within such an agenda, the bio-tech industry has virtually no meaningful contribution to make. This won't stop them wining and dining the most gullible of political leaders. Those who succumb will be dining out on the politics of greed and self-delusion.

The real challenges of food security are going to be hard enough. Without politicians being led into the wasteland of GM's barren illusions.

