

Comment: Why I had to walk out of farming talks

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05 April 2008 From New Scientist Print Edition. <u>Subscribe</u> and get 4 free issues. Deborah Keith

FOUR years ago, the International Assessment of Agricultural Science and Technology for Development (IAASTD) was born. This ground-breaking exercise brought together government, non-governmental organisations and industry representatives, including Syngenta, to assess world agriculture.

Potential authors were nominated and selected - and I was among them. All the authors were expected to draw on their own experience and interpretations of the available evidence, including that taken from peer-reviewed literature, but to leave their affiliations behind. In other words, though employed by Syngenta I was there in an independent capacity.



I brought with me perspectives and insights

from a PhD in crop genetics and working in a developing country for some years. For the past 10 years I have worked for Syngenta in environmental sciences, crop protection and biotech research. I have seen the potential for development from the extension of technology, and also wonderful examples of local innovation, and the difference technology can make to small farm and rural incomes where farmers were empowered and educated in modern techniques, while valuing their environment.

Syngenta's activities are entirely consistent with this. The company takes the view that it is only through sustainable agriculture which retains biodiversity that we can feed a population growing at 77 million a year, and satisfy the increased demand for meat that comes with rising incomes. While the pressure on land for growing feed and food is increasing, the amount used for agriculture has to remain stable to protect wild spaces, uncultivated land and biodiversity. This means that by 2050 we must double the output from each hectare.

The plant science industry cares passionately about abating hunger and supporting rural development. Higher-yielding plants and protection against insects and crop diseases are critical in helping farmers produce the food the world needs. Without such technologies, between 20 and 40 per cent of the food we grow would be lost to pests.

For the first time since the 1950s and 1960s, population growth is outstripping food supply. Against this background, Syngenta was only too happy to join in the IAASTD investigation into world food security. Encouraged by our past work with NGOs, we hoped that by working with other groups we could find solutions to some of the world's most pressing issues. We were disappointed. Despite our active participation, the draft IAASTD report does not adequately represent the contributions of plant science to sustainable agriculture. This is why we, along with the industry association, and I as an individual reluctantly decided to withdraw.

The decision was not taken lightly, given our commitment to agricultural development and sustainability. But there was blatant disregard for the benefits of existing technologies, and for technology's potential to support agriculture's efforts to meet future crop needs. I think this was in part because the differences between various participants' perceptions about these technologies, and the scientific facts, were not maintained and highlighted. Sadly, social science seems to have taken the place of scientific analysis.

There was no acknowledgement of the stringent testing and regulatory frameworks within which

products are developed and marketed, nor of the professional expertise of farmers in maintaining safe and sustainable use. Syngenta spends \$100 million and takes over a decade to bring just one product to market. That investment ensures it meets the highest standards of human safety and environmental performance. The draft ignored both this huge investment and the value of the training and safe-use programmes provided by industry to farmers.

As for intellectual property rights, it is only if companies like Syngenta protect their intellectual property that they can invest in products to benefit all. Innovation is only created through investment, and investment must be rewarded - another seemingly obvious fact which was overlooked. Overall, the report does not properly represent the positive contributions of plant breeding and crop protection to food security within sustainable agriculture, or the importance of crop yields.

Organic agriculture was not subject to the same scrutiny. Its limitations in sustainably producing more food, feed, fibre and fuels do not appear in the report, even though they have been recognised by bodies such as the UN Food and Agriculture Organization. It takes three times the land to produce the same yield grown conventionally, so going organic could remove wild spaces, compromise biodiversity and mean hunger for many. The report fails to recognise how scientific agriculture helps protect natural resources such as forests, and shields wildlife habitats.

When it comes to the pressing issue of climate change, biotechnology and especially genetically modified crops and molecular markers can help by developing traits such as drought tolerance. This potential and the science supporting it were also ignored in the report. Already, GM crops are grown on over 100 million hectares globally, and the benefit is felt by communities every day. GM is a technology to which farmers should have access, allowing them to select the right tool at the right time from a range of technologies, modern and traditional. We would never claim biotech is a silver bullet for the problems of food security, but it promises to be able to meet real needs and should not be ignored or disparaged.

I finally felt forced to resign my IAASTD authorship because the draft put forward claims not supported by the evidence. Too often it treated fears and prejudices against technology and business as fact, and its style drew heavily on innuendo - the assumption that corporate means bad. The result is a document most scientists would find hard to support, and one it would be dishonest and counterproductive for me to endorse.

Instead, I recommend readers look at reports such as the 2007 *World Development Report* by the World Bank, which highlights the key role of technology in achieving a productivity revolution, especially for smallholders. Like the other industry contributors, I am disappointed that a real opportunity for partnership and consensus has been lost.

When we last faced a global food shortage, all parties came together to create the Green Revolution, which delivered on its promise to feed a growing population. The same is needed today, but sadly some groups refuse to accept the facts, and prefer perceptions and hearsay.

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