Biodynamics: Farmers are the solution

Hamish Mackay

Development Manager Biodynamic Agriculture Australia PO Box 54, Bellingen NSW 2454 (02) 6655 0566 bdoffice@biodynamics.net.au

Abstract

The environment, global warming, biological farming and increased farm costs are receiving wider consideration and media coverage. It is my belief that fixing the environment will fall to the lot of farmers. Biodynamics is proving to be an extremely cost-effective tool to achieve improved agricultural, environmental, health and social outcomes within the constraints of our contemporary economy.

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Introduction

The significance of carbon in the environment is gaining recognition as an issue of our time. Scientists and politicians remain divided about the reasons for global warming (a term frequently re-phrased as climate change) while the carbon dioxide levels in the atmosphere continue to rise.

I am particularly struck by the paper prepared by Ray O'Grady and Rod Rush, 'The Terra Preta phenomenon', in which they state: "We require only 10% of our productive, degraded lands to absorb the estimated 6.1 gigatons of carbon dioxide of emissions to make a carbon negative world possible in our lifetime."

I have always felt confident humanity has the technology to solve our global environmental challenges when we choose to do so, but this figure of 10% and our knowledge of and growing experience with biodynamics makes it very achievable – even with limited support of government and science. This figure is of course only valid if we do not increase our consumptive habits. Dealing with the carbon emissions from an increase in western lifestyles by a growing proportion of the global population will obviously require more land to be farmed carbon efficiently.

The nuclear debate

One consequence of the rising carbon dioxide levels is the move to sell nuclear power as the environmentally sound way forward. This theory establishes that the number of coal/oil fired power stations required to supply the world's high and growing energy consumption put unacceptable levels of carbon dioxide into the atmosphere. It posits nuclear power as a solution because nuclear waste is not the problem it has been made out to be. It is clear there will again be division in the scientific and political worlds on this issue, making it likely that nuclear power will follow the genetically engineered products into economic implementation before the scientific and political debate has been openly heard and resolved.

It is worth noting that Sweden, a country that was quick to utilise nuclear energy, has chosen to decommission its nuclear plants as they – despite extensive and heavily funded research – cannot find a safe resolution to the stored spent radio-active fuel rods.

Chemical agriculture

Vast energy resources are used to produce the synthetic fertilisers, herbicides, pesticides and veterinary products used in chemical agriculture. More energy again is used to transport these products around the globe. Farmers and consumers, pay these costs.

Biodynamics: the practical alternative

When the unaccounted environmental costs of modern agricultural inputs are added to the increasing, high energy, material costs of chemical farming it becomes apparent that biodynamics is the most efficient option for agricultural production as well as for the environment. It needs to be stated that biodynamic inputs have minimal environmental and production costs. A further bonus of food grown

biodynamically will be the subsequent reduced health expenditure; both personal, as in expenses covered by the individual and communal, as in expenses covered by the taxpayer/state.

Energy efficiency

If the science of genetic engineering and nuclear power remain in debate among scientists and politicians, the short answer to both technologies is that they are unnecessary. It is possible to outperform the genetic engineering approach to agriculture through biodynamics in terms of economy, environment and food production for the world. The application of known science and planning for energy efficient infrastructure can also reduce the need for major increases in power demand and production. I remember reading at the time of the first oil crisis that if the people of the Unites States stopped using their clothes driers they could shut down all their nuclear power stations. In Australia, on top of greater use of solar and wind power, we have great capacity to reduce our air-conditioning, heating and water requirements through implementing environmentally sustainable proven design and construction technologies.

A consumer-led revolution

We can take some comfort from the fact that consumers remain sceptical of genetic engineering and are willing to make independent choices. However, we can be equally concerned that labelling laws make it almost impossible for consumers to know what they are buying. One irony is that this stimulates the demand for biodynamic and organic produce; many consumers seeking foods that are free of chemical and genetic technologies choose these products regardless of science and politics. They are able to choose these products because they are clearly labelled as free of chemicals and genetically modified organisms. There are also consumers who source biodynamic food for its objective quality and not for any environmental or health reasons. Even modestly experienced biodynamic farmers know that the genetic engineering option is both costly and unnecessary. It is a question whether consumers will be able to exercise the same power of choice concerning nuclear power, except through making themselves independent of the grid.

CONCLUSION

We will be living in the world we create as growers and consumers, with or without scientific sanction, as we inhabit an increasingly global environment.

Carbon may well be the high profile environmental element just now and while scientist and politicians continue to debate the safety or otherwise of nuclear power and genetic engineering, biodynamic growers continue to develop satisfactory outcomes on all levels; quality, environment, economy, health and human satisfaction. I remain confident that biodynamics will assist farmers around the world solve the agricultural and environmental issues of our time, including Climate Change.

Reference

O'Grady R. and Rush R. (2006). The Terra Preta phenomenon. *Proceedings 'Managing the Carbon Cycle Forum' Kingaroy, Qld,* 25-26 October 2006, pp.11-15