

Dissenting Report—Peter Andren MP

Introduction

From the outset I was uncomfortable with the terms of reference for this inquiry.

I agree with Mr Robert Phelps, Director, Australian GeneEthics Network in evidence to the Inquiry:

"... we felt that the terms of reference made the assumption that gene technology would proceed and that it undoubtedly had benefits. We simply wanted to make the point that, in the highly monopolised genetic engineering industry, we should not assume there would be benefits to society as a whole; that the benefits would principally accrue to transnational genetic engineering and chemical industrial companies; and that the rules on which this technology was going to be accessible to primary producers would be potentially so restrictive that it might reap them no benefits at all".¹

While there are obvious benefits from the application of biotechnology in the health sector, the jury is well and truly out in the agriculture and food sectors. Therefore, I do not support the broad conclusion in the committee's majority report that:

"The committee is of the opinion that applying gene technology to agriculture can benefit farmers, consumers and the Australian environment and economy".²

I am not convinced of these benefits, and the more evidence I heard, the more I researched this matter through avenues other than the evidence presented, the more I became convinced any objective jury will be out for quite some years before any definitive "benefits" could possibly be measured.

¹ Evidence to Committee, Melbourne 13th August 1999, p. 75

² Majority Report par. 2.59

I have no dispute with the good faith of those committee members who reached the conclusions and recommendations they did. In fact one cannot disagree with recommendations calling for the utmost caution in introducing genetic technology to the Australian landscape.

However, I believe there is a naïve acceptance that industry, science and government knows best, and the concerns of consumers, traditional farmers, organic growers, and other doubters can be overcome through proper "communications" campaigns and a regulatory process that has already displayed shortcomings elsewhere in the world.

I do not believe the case against genetic modification on ethical grounds has been satisfactorily addressed by the committee inquiry. Arguments that it would be unethical not to develop GMOs if they will contribute to alleviating world hunger or to help resist natural catastrophes are really a form of moral blackmail. This is especially so, given the emerging evidence that GMOs could one day indeed contribute to such catastrophes ³ and that forecasts of greatly increased production appear quite premature.⁴

Throughout the inquiry it was apparent to me that a lay committee of the Commonwealth Parliament (supplemented by one member with specialist GMO understanding, but worryingly with strong GM commercial interests) was illequipped to reach conclusions and recommendations on: *"the future value and importance of genetically modified varieties"* as required in the first term of reference.

The "Benefits" of Gene Technology

At par. 2.8 the majority report states the majority of submissions listed benefits from the use of GMOs. That is true. But the report suggests many of these benefits are proven. At par. 2.13 the report also contends: *"the benefits of GM crops to farmers are apparent from the rapid takeup of GM crops in the last few years"*.

I would challenge both contentions.

Monsanto for example: "has already received permits for a threefold increase in herbicide residues on genetically engineered soybeans in Europe and the United States-up from 6 parts per million to 20 parts per million".⁵

In the case of Bt cotton, maize and potatoes (plants modifed with gene from bacterium *Bacillus thuringiensis* toxic to major pests): *"Bt resistance has already been*

³ Majority Report par. 2.34 to 2.36 inclusive

⁴ Majority Report par. 2.43

⁵ Lappe` M. & Bailey B., Against the Grain, Common Courage Press, 1998, pp 75-6

noticed among some insect populations, and the U.S. Environment Protection Agency has predicted that most target insects could be resistant to Bt within 3 to 5 years".⁶

Importantly, the toxin may harm a wide range of insects including pollinating bees and beneficial insects further up the food chain.

Claims in par. 2.9 of the report that gene technology will make possible the breeding of animal or crop varieties which: *"are better suited to specific, different environments"* do not give due recognition to the downside.

The Organic Federation of Australia Inc. in evidence to the committee points out that drought resistant and salt tolerant plants may lead to weeds moving into areas where they have not previously been able to establish.

One wonders if development of salt tolerant species will be an incentive not to deal with the farming practices that created the salination.

World Food Supplies

A major selling point for GM products is the need to feed the world.

According to the United Nations' World Food Program:

"we are already producing one and a half times the amount of food needed to provide everyone in the world with an adequate and nutritional diet; yet one in seven people is suffering from hunger."⁷

Gebre Egziabher, General Manager of the Environmental Protection Authority in Ethiopia says: *"There are still hungry people in Ethiopia, but they are hungry because they have no money. No longer because there is no food to buy"*.⁸

⁶ EPA (US) Pesticide Fact Sheet 4/98

⁷ Anderson L., *Genetic Engineering, Food, and Our Environment*, Green Books, UK, 2000, p.39

⁸ Splice (Genetic Forum UK) Vol 4, issue 6, Aug/Sept 1998, p.4-5

Traditional and Organic Food Crops

Despite the evidence to the committee from the Australian Biotechnology Association that organic or non-genetically modified foods are only likely to be a "minor" component of the national agri-business industry, evidence suggests otherwise.

In fact the swing away from GM products in Europe, Japan and to a lesser degree the US, and the high premiums that are being paid for produce that is guaranteed GE-free, suggest traditionally grown crops (and more and more organically grown products) will enjoy a growing demand.

In this regard, it is imperative that Australian agriculture does not surrender its unique clean, green advantage. There are very clear benefits at the moment for Australia remaining GE free.

In January 1999 the largest shipment of canola ever exported from Australia was announced for processing plants in Europe. Australia was the only country to guarantee non-genetic canola. Canada on the other hand, lost major oilseed rape sales to Europe because 50% of its crop had been genetically engineered.⁹ The potential for non-GE exports appears to be growing strongly.¹⁰ In the UK, demand for organic products has accelerated since the GM debate began. At last reports 75% of the organic produce sold in the UK has to be imported.

The committee unfortunately deleted a draft recommendation asking the Commonwealth to continue to provide funding to the organic farming industry. Mr Robert Phelps, Director Australian GeneEthics Network, told the committee on Friday August 13th 1999 that the organisation had received \$50,000 a year for four years to do public education, debate and discussion. But, *"when the Howard Government was elected we were not given any more money"*. This at a time when public debate and the need for information on this crucial issue was escalating.

It is imperative the Commonwealth substantially increases funding to the organic farming industry and registered organisations promoting non GE products.

In an interview on ABC Director of the UK Soil Association Patrick Holden said:

" And those (GM) crops are so widely grown now, in both North and South America, that they have contaminated the non-GM crops and European consumers have said NO to GM foods and as a result farmers throughout North and South America are faced with a virtual block on the export of all

¹⁰ Anderson L., *Genetic Engineering, Food, and Our Environment*, Green Books UK, 2000, p.11

those commodity crops, and the implications of that can hardly be overstated".¹¹

Market Dominance

While it is fair to say much of the popular media have highlighted negative and confrontational aspects of the GM debate I think it is also fair to say the pro-GM debate is being driven by the major agro-vet and agro-chemical manufacturers.

A growing reliance by universities, CSIRO and individual researchers on corporate support, threatens the objectivity and independence of such research.

This in turn threatens to corrupt the advice given by scientists to national governments.

The Australian Government allocated \$10 million in the 1999-2000 Budget to set up Biotechnology Australia, with a major role of promoting public acceptance of gene technology by funding GE proponents' materials. I am aware its leaflet distribution at supermarkets has been regarded in some quarters as heavily biased in favour of GE products.

In the UK the Biotech and Biological Research Council was headed up by the CEO of Zeneca until May 1999. There does not appear to be a willingness on the part of government in either country to fairly fund and disseminate the alternative point of view.

In fact one commentator argues that:

*"if you want to understand 'objectivity' in the science and medicine of environment and health these days, the same advice applies as it does in politics: follow the money".*¹²

As well, Dr Egziabher from Ethiopia, speaking after the US veto of a Biosafety Protocol designed to regulate the trade and safety assessment of GEOs, said African countries were *"absolutely united"* in resisting US plans to *"decide what we eat"*.¹³

The top five biotech companies (Astra-Zeneca, DuPont, Monsanto, Novartis and Aventis) account for virtually 100% of the market in transgenic seeds, also account for 60% of the global pesticide market and 23% of the commercial seed market.¹⁴

¹¹ ABC "Background Briefing" April 30, 2000

¹² Montague P., "Follow the Money", *Rachel's Environment and Health Weekly*, No 581, 15 Jan 1998

¹³ Lean G., "Third World Rejects G M Environment", Independent on Sunday, London 28th Feb 1999

¹⁴ "Seedless in Seattle", Rural Advancement Foundation International, News Release 26 Nov 1999

The acquisition of seed companies has led to the dramatic shrinkage of the independent seed industry in industrialised countries¹⁵ and monopolisation of genetically engineered crops. It has been claimed the narrowly controlled GE industry now dominates GE food supply from laboratory to dinner plate.

No such monopoly exists, for the moment, in organic or traditional agriculture, which still enjoys a huge market, a market that could grow rather than contract, depending on consumer demand for GM products.

Surveys have indicated a majority of Australian farmers and consumers prefer a non-GMO marketplace.¹⁶ In fact it can be argued the more people learn about GE the less they like it.

The arrogance of using "terminator technology" to render seed sterile and prevent farm saving of seed only underlines what could fairly be described as the "agricultural imperialism" of the current GE industry. Monsanto only backed away from this technology (for the time being) in the face of a public outcry and the undeniable concerns of poor farmers.

Recommendation 6 of the majority report does not adequately address the need for balanced information on the positives and negatives of gene technology. In fact Biotechnology Australia's stated tasks are to promote biotechnology.

Environmental Benefits

There appears to be an acceptance of environmental benefits from GEOs, not only in the evidence presented to the Inquiry, but the conclusions drawn by the majority report.

However in par. 2.38 of the majority report Environment Australia gave evidence that:

"...the unknown evolutionary fate of inserted genes, all contribute to the difficulties of predicting environmental impacts".

Yet in its conclusions at par. 2.59 the report says:

"The committee is of the opinion that applying gene technology to agriculture can benefit farmers, consumers and the Australian environment and economy".

The impact on bio-diversity has not been adequately addressed throughout the inquiry or in the report's findings and recommendations.

 ¹⁵ Anderson L., *Genetic Engineering, Food, and Our Environment*, Green Books UK, 2000 p.103
¹⁶ Ibid p.10

Rather than access to gene technology providing a "broader genetic base" there is strong evidence to suggest a dramatic narrowing of varieties. The so-called Green Revolution that persuaded farmers in the Third World to replace a multitude of indigenous crops with a few high-yielding varieties dependent on expensive inputs of fertilisers and chemicals has reportedly led to *"huge losses in genetic diversity"*.¹⁷

Indian farmers for instance are reported to have seen the number of rice varieties available to them reduced from 50,000 to just a few dozen over several decades. It is argued this would be further accelerated by monopoly control of GM seed varieties and the chemical regimes required for each crop.¹⁸

Paragraphs 2.34 to 2.38 of the majority report adequately complement the above concerns about the bio-diversity and environmental consequences from using GMOs.

Regulatory Regime

There is a wide disparity of views about the kind of "buffer zones" that should be put in place around GM trial crops. In addition, the impact of pollen transported by insects, or wind, is open to wild conjecture.

I am not convinced, despite evidence given to the Inquiry, that the Interim Office of Gene Technology Regulator (or its permanent successor) is, or will be, objective and impartial in its handling of regulatory matters.

I am most concerned at the contradictory evidence provided on the handling of the recent possible breach of GMAC (Genetic Manipulation Advisory Committee) conditions in the Mt Gambier region of South Australia. It is alleged GM Canola plants, part of a trial by the Aventis company, were dumped at an open commercial tip. The Interim Office of Gene Technology Regulator (IOGTR) is currently investigating the allegations, but the process has been rightly criticised in the majority report.¹⁹

From reports provided to the committee, I am not satisfied the IOGTR has managed this matter with anything like the openness required. I am also concerned the stated need for "commercial and security secrecy" in such trials has led to a GM crop-trial program that is unaccountable to the farming community and those other communities with a vital and legitimate interest in such trials.

I am also conscious of the widespread dismay at the lack of control mechanisms that enabled the recent completely unregulated importing, distribution and

 ¹⁷ Genetic Engineering, Food, and Our Environment. Luke Anderson. Green Books UK 2000, p.66
¹⁸ Ibid, p.67

¹⁹ Majority report par. 7.17

sowing of 13,000 hectares of GM modified canola in Great Britain, and an as yet unassessed planting of the same Canadian seed in France, Germany and Sweden.²⁰

As recently as May this year the West Australian Primary Industries Minister Mr Monty House flagged the possibility of permanently banning the commercial production of genetically manipulated crops in WA, while the WA Farmers Federation President Kevin McMenemy said a two year moratorium on the commercial exploitation of GM crops would protect the image and quality of WA honey.²¹

Conclusion

While I have no dispute with most of the recommendations in the majority report, I do not believe we are able to conclusively say that the benefits of GM technology to Australian agriculture or Australian consumers will outweigh the potential detriments in the long term.

Reaching such a conclusion is premature, and has more to do with agricultural and economic domination by a few companies, with the support of a few governments, rather than on an objective assessment of possible benefits of GM against yet to be assessed costs, especially to smaller, less developed economies.

Rather than a mono-culture agriculture, Third World countries should be encouraged to restore the diversity of their agriculture.

Likewise Australia risks surrendering its unique "clean" agricultural status in a too hasty marriage to an unproven technology. Australia should be ultracautious in facilitating any genetic pollution of its agriculture and not give ground as it has in quarantine protection.

The moral and ethical aspects of developing and using GMO technology in food have not been properly debated within the community, a debate that requires far greater attention to the spiritual rather than scientific arguments.

The Australian Medical Association told the inquiry that: *"the jury is still out on the benefits and risks of genetically modified foods on public health and the environment"*.²²

The British Medical Association says starkly: *"there are all sorts of things that we don't know"*.²³

²⁰ Mann S., "Growing Concern over Gene Crops", *Sydney Morning Herald*, 19 May 2000.

²¹ Mallabone, M., "Gene ban sweet with the beekeepers", The West Australian, 20 May 2000

²² Majority Report par 2.52

²³ Majority Report par 2.50

For these and those other reasons detailed in this minority report I would recommend:

There be a five year moratorium on the development of GMOs in Australia to enable adequate independent research to be carried out on health and environmental impacts and consumer demand.

Peter Andren, Independent Member for Calare. 8th June 2000.