



Agrifood
Awareness
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Mr Peter Corish
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Agriculture and Food Policy Reference Group
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Monday 18 July 2005

Dear Peter,

Agrifood Awareness Australia Limited (AFAA) welcomes the opportunity to provide a submission to this important discussion.

Agrifood Awareness Australia Limited is an industry initiative established in 1999, to increase public awareness of, and encourage informed debate about, gene technology. The organisation is supported by Avcare, the Grains Research and Development Corporation and the National Farmers' Federation and has project partnerships with a number of Research and Development Corporations.

While AFAA's core business is gene technology communication and education with the rural sector, we have extensive interactions on a range of related topics with broad a spectrum of players from across the agricultural community.

We agree, as identified in your issues paper that "the development and adoption of new technologies will be paramount to maintaining profitability". Further, we believe that Australian agricultural could be placed at a competitive disadvantage if it is denied the opportunity to access products of biotechnology, specifically genetically modified (GM) crops. While you have identified "community acceptance" as the "threshold issue" we do not necessarily believe that this issue is unique to the gene technology debate. Central to a great number of issues facing Australian agriculture is consumer understanding and acceptance of agricultural production and processes. Consumers are placing increased demands on agriculture worldwide with little, if any, knowledge of how food is produced. This we believe is one of the most critical issues confronting the sector.

We encourage the Reference Group and Minister McGauran, a strong supporter of Australian science, to take a pro-active approach to this situation - to increase community knowledge and understanding of agriculture, and in turn, ensure farmers have access to research and development outcomes. We would welcome the opportunity to discuss this further with you.

Yours sincerely,

Paula Fitzgerald
Executive Director

Agriculture and Food Policy Reference Group Submission Response

KEY CHALLENGES THE SECTOR WILL FACE IN NEXT 10-15 YEARS

While Australian agriculture will face a number of challenges going forward, we have chosen in this submission to focus only on those issues impacting on the gene technology debate. That said, we believe these challenges cut across the four key areas identified in your Issues Paper.

Image

Australia's schools are facing a declining number of students electing to do science in senior years, our universities are facing a reduction in agricultural science related enrolments, and fewer children are returning home to manage the family farm. As the Academy of Science pointed out in its "Policy Statement on Research and Innovation in Australia" (see <http://www.science.org.au/reports/10september03.pdf>),

"The current level of recruitment of high-ability students into the enabling sciences of physics, chemistry and mathematics at the secondary school level and, as a consequence, at the university level, has fallen to such a low level that it is doubtful that Australia will have the capacity to support the skilled workforce necessary to prosper in an innovative and competitive global environment".

Images of agriculture are portrayed through the media primarily in times of crisis – drought, water management, floods, plagues etc. This creates a negative impression across Australia of a desperate and erratic industry. We believe Australian agriculture is largely perceived as brown, boring, uncertain, hard, and dominated by an aging population. This image not only impacts on the attractiveness of agriculture itself, but also on the appeal of rural and regional communities that are largely supported by agricultural production.

Contrary to this image, agriculture worldwide has improved for centuries through innovation and the adoption of new technologies. Our farmers have readily adopted new technologies to advance agricultural production. This trend has been underpinned by science, a commitment by government and industry to research and development, and in more recent years the recognition of the importance of extension/technology transfer. The Australian Bureau of Statistics highlighted this in its 2002 Year Book in a special article on Agricultural inventions (see <http://www.abs.gov.au/Ausstats/abs@.nsf/0/954f629c0adffbd9ca2569de0026c598?OpenDocument>). It notes,

"In the pioneering days of Australia's history, technology and innovation were used to overcome the obstacles faced by farmers trying to make a living off impoverished soil and very dry land. In leaving the 20th century, we see farmers making use of technology and innovation to remain viable players in a keenly competitive international market, while ensuring the sustainability of their social, economic and biophysical environments. While we do not know what technologies will be available to Australian farming in the future, the uptake of technology over the last century has helped to place Australian agriculture in its present strong position".

Challenge: Australian agriculture, we believe, is perceived as brown, boring, uncertain, hard, and an activity undertaken by an aging population.

Community knowledge

In 2001 the Kondinin Group's National Schools Survey (see <http://www.kondinin.com.au/WorkbootSeries/ag2classroom.asp>) found that only 12 per cent of Year 5 Australian school students had visited a farm and many city-based children had little knowledge of farming activities.

A sample from the Kondinin Group's survey shows:

- Four per cent of children believe farmers aren't important to them and a further 16 per cent are not sure.
- Eighteen per cent of children believe people living in cities don't need farmers.
- Forty-six per cent of children in metropolitan areas consider farmers are very important to their daily lives compared to 62 per cent of kids in country areas.
- Just over half the children surveyed believed the food they ate for dinner would have come from a farm (21 per cent disagreed and 24 per cent were not sure).
- Fifty per cent of city kids think farmers never use computers or fax machines.
- Almost one in every three city children are completely unsure about why farmers use pesticides. In contrast, 76 per cent of country children recognise farmers use pesticides to control pests and weeds.

Australian consumers are further from the farm gate yet they have an increasing desire to have input into agricultural food production. As you point out in your Issues Paper, "Consumers are taking more interest in the origins of their food and the processes underpinning its production, including the use of pesticides, animal welfare and environmental management". The mention of pesticides is particularly interesting when you take into account the Kondinin survey results indicating that many children do not understand the role of pesticides in agriculture.

For the past decade we have spent time educating farmers about the importance of markets – explaining that they cannot simply produce what grows on their farm and expect to sell it, but must instead produce what the market demands. Farmers have been inundated with the message 'the customer is always right' but in doing this have we really created a two-way information flow? Farmers across Australia have placed increased importance on market signals and are in effect listening to the customer, but are farmers sending messages to the customer? Has the agricultural community explained how food is produced?

As the Academy of Science highlighted in its "Policy Statement of Research and Innovation in Australia" (see <http://www.science.org.au/reports/10september03.pdf>),

"A strong education sector is vital to creating and sustaining a knowledge-based economy. The primary purpose of school science education is to develop scientifically literate citizens with the skills to make informed decisions on issues of science, technology, the environment and their own health and wellbeing, as well as to prepare students for science-related careers.

We believe it is time to really engage with the customer. Agriculture manages, as you note in your Issues Paper, 62 per cent of Australia's land area. Agricultural enterprises have cared for and managed Australia's resources for decades, and while there is always room for improvement, they have largely done so in a responsible manner, with increasing recognition on environmental, social and economic impacts.

Challenge: The gap between city and rural consumers is growing with the Australian community having an increasingly lower understanding of agricultural production.

The campaign against

Australian agriculture is facing increased pressure from groups campaigning against broad scale agricultural production. Minister Truss, the former Minister for Agriculture, Food and Fisheries, identified this recently in his presentation to the Victorian Rural Press Club (see: <http://www.maff.gov.au/speeches/2005/rpcv.html>) when he said,

“The risk to agriculture is that when the claims of groups like PETA (People for the Ethical Treatment of Animals) are publicised through the media, they start winning mainstream acceptance. I already frequently receive letters from schoolchildren who have clearly been influenced by and disturbed by PETA-style propaganda. Sometimes they say they heard about these issues in the classroom”.

Australian agriculture has been significantly impacted by the campaigns of PETA on mulesing and Greenpeace on GM crops. Interestingly, Australian agriculture has challenged the claims of PETA, but has largely let the Greenpeace campaign on GM crops go unchallenged.

In April, AFAA hosted Mr Ross Irvine from the Vancouver-based firm “ePublic Relations”. Mr Irvine specialises in activist strategies and campaigns. He warned Australia that activist campaigns would continue to grow and he made the following comments (see <http://www.epublicrelations.ca>) in relation to the Australian gene technology situation and the different approaches taken.

“The (Australian) biotech industry followed a traditional, command-and-control, centralized PR approach. Opinion leaders were targeted and brought inside. Significant stakeholder organizations and spokesmen were made available to the media. Great efforts were made to enhance understanding of the science and technology of biotechnology. Specialists were appointed to deal with specific issues. Scientists and academics brought authority and credibility to the industry’s position. The biotechnology industry focused on explaining its position and its technology.

The anti-biotech forces – the activists – took a different approach. They conducted a decentralized, networked campaign. There was no command-and-control centre for their campaign. Individuals and groups were bound together by a common vision – the destruction of the biotech industry. Their common goal was to incite grassroots, community opposition to biotechnology. They were free to speak out and take action where and when they pleased. This created more “voices” for the media to cover. Some were more aggressive than others. They wanted news coverage, not editorial support.

Activists talked about human reaction to biotechnology, not scientific assessment of a technology. They expanded the discussion of biotechnology to include environmental contamination, world trade, free trade, corporate power, business domination of the food supply, consumers’ right-to-know, labelling, food quality, and a variety of other issues. They talked about simple, common, shared visions and values, such as Australia’s “clean, green” image.

While it’s possible to criticize the activist tactics from a scientific, rational perspective, one can’t argue with their success. They raised public concerns about biotechnology. Sensing mounting public opposition to biotechnology – whether justified or not – Western Australia politicians came down hard on the industry. When one state government took decisive action and received public praise for it, politicians in other jurisdictions quickly followed suit. That’s politics! Its grassroots politics, a form the biotech industry has yet to appreciate and master”.

Challenge: Debates on significant agricultural issues, have been often ignored by recognised agricultural organisations and have been dominated and even managed by small groups or networks that are ultimately campaigning against broad scale agricultural production.

Challenge: Australian agriculture has failed to recognise the importance of risk communication and issues management.

Genetically modified crops

The adoption of GM crops continues to grow with an estimated 81 million hectares grown in 2004 by 8.25 million farmers in 17 countries – both developed and developing nations. This represents a 47-fold increase since the first GM crops were grown in 1996.

Australia's gene technology regulatory framework is one of, if not the, most rigorous, transparent, science-based systems in the world. This has been implemented and managed by the Office of the Gene Technology Regulator (OGTR). The Australian agricultural industry, in particular the cotton industry, has also played a significant role in the success of this framework through the successful adoption and management of Australia's first GM commodity, cotton, first grown in 1996.

Genetically modified cotton, now grown across 80 per cent of the industry, has delivered substantial benefits to Australia's cotton growers and regional cotton communities. It has:

- Resulted in, on average, a reduction in overall pesticide use by 50 per cent in the areas where it is planted and has reduced the use of some chemicals such as endosulfan by up to 90 per cent. (See <http://www.csiro.au/index.asp?type=fag&id=Bollgard&stylesheet=divisionFag>)
- Through the reduction in pesticide, had a flow on effect in providing a healthier environment for regional cotton growing communities, and positively impacted other commodity sectors, such as beef, which is particularly sensitive to endosulfan.
- Increased grower understanding of farming systems with a much greater recognition and understanding of the importance of integrated pest management (IPM) which has, in turn, resulted in better farming practices across all production systems – GM and conventional.

While the Australian cotton industry has had the opportunity to benefit from GM cotton varieties, other commodity sectors have been denied such access to GM crops. In 2002 two companies were granted approval for the commercial production of GM canola varieties. Despite this approval bans introduced by State and Territory Governments have denied farmer access to these varieties. The bans, while justified on marketing grounds, have almost entirely been driven by politics.

It has been interesting to watch politicians and State and Territory Premiers promoting their agricultural biotechnology capacity nationally and internationally (most recently in Philadelphia at the world's largest biotechnology conference "BIO") yet at the same time banning the commercial production of GM crops in their jurisdiction.

Within the agricultural community, the GM canola debate was largely ignored as it was viewed as a commodity-specific issue. However, GM canola has been positioned as the test case for all future GM crops. State-based moratoria are already beginning to play a role in decisions about research projects. Some examples include:

- The developers of GM canola, who partner with Australian agriculture in a number of projects, have largely placed on hold their investments in gene technology,

particularly in the Australian grains and oilseed industries. Australia is increasingly being viewed, internationally, as not worth investment in this area.

- Several gene technology products/projects – developed with investment from Australian research and development funds in the red meat and horticulture industries – have been suspended as a result of the uncertain environment, enhanced by State Government moratoria.
- Researchers at CSIRO are finding solutions to issues through gene technology and then armed with this knowledge, are re-inventing projects to deliver non-gene technology solutions. This raises questions in relation to the efficiency of research and development investments.

The President of the Academy of Science, Dr Jim Peacock, questioned the current situation in his 2003 National Press Club Address (see <http://www.science.org.au/reports/16july03.htm>). He said:

“About two years ago here in Canberra, we found a barley plant with a changed starch composition in the grain. The change to a high amylose starch suggested it could have positive health functionality.

In the past couple of years, we have conducted trials with rats, pigs, scientists, and now humans. The first human trial examined its suitability as a food for pre-diabetic and diabetic conditions. It has a low glycaemic index, very favourable insulin metering characteristics and is likely to be of considerable value in both the avoidance and management of diabetes.

This barley is not a GMO - it has a natural genetic change and can enter the food chain immediately as can any other variety of barley. Only one genetic letter in one starch gene has been changed - and, it's nice to eat.

We have further human trials underway where we predict a cholesterol lowering activity, and maybe most important of all, that our barley may have very positive health benefits for your bowel.

We found the same mutation in the world collection of barleys that is held in Fort Collins in the United States. It has exactly the same properties. We have also been able to produce the same change by transgenic methods - no new proteins, no chance of allergens, no new genes, just a volume control to turn down the activity of that one starch gene.

In contrast to the CSIRO and Fort Collins barleys, the GMO barley, although it has exactly the same properties, can't enter the food chain. It is not acceptable in our society at present because it is a GM plant - ridiculous isn't it? In this case it doesn't matter because we have the non-transgenic barley plants that can enter the food chain right away.

But there are many properties of our food that will be able to be optimised for health where we will need to use transgenic methods. Is it right for us to reject this new level of knowledge and this new, safe technology?”

Your Issues Paper notes that currently “the Australian, State and Territory Governments are working to improve the existing (research and development) system through a review of gaps in research capabilities, support facilities and service delivery in Australian agricultural research, development and extension”. While we recognise the importance of this review, we take the opportunity to point out that while no path to market exists for GM products research and development will decline. You also identify that Australia's

“ability to attract new investment and retain existing investors will depend on a range of factors. These include, apart from the prospective return on investment itself, perceptions ...” Currently, there is no return on investment for GM products. Australia is, and will increasingly be viewed, as a country not worthy of agricultural investment.

Your Issues Paper states that “issues such as cross-pollination with non-GM crops, segregation of supply chains and legal liability need to be addressed before GM crops gain wider acceptance among Australian farmers”. We question if these topics are of concern to the majority of Australian farmers or are issues being vocalised by a noisy, small minority. We firmly believe that GM crops should be assessed on a case-by-case basis and such issues should not be considered as relevant to all GM crops and/or exclusive to GM crops. Further, in relation to GM canola these issues have been addressed in detail – through world-class science, industry protocols and government discussion papers. The fact that they are continually raised serves to highlight Australia’s departure from a science-based system.

Agrifood Awareness Australia Limited believes that a clear, transparent and predictable path to market must exist for GM products. This is currently not the case, with Australia’s rigorous science-based system unable to ‘deliver’ approved products to the marketplace as a result State-based moratoria – all of which are different in timeframe, conditions etc. We question how these are viewed internationally with regard to our World Trade Organisation obligations, particularly with Australia partnering with the United States in an action against Europe on its negative GM crop stance.

Challenge: As a result of politics, no clear path to market exists in Australia for GM crops, providing an uncertain investment environment and denying farmers access to technologies.

Challenge: Australian agriculture has not acted as a whole but focussed only on individual commodity sectors and on short-term goals rather than taking a whole-of-agriculture long-term vision.

PRIORITISE THOSE ISSUES AND CHALLENGES IN ORDER OF IMPORTANCE

We summarise the challenges facing Australian agriculture as follows:

- Australian agriculture is perceived as an unattractive industry.
- The gap between city and rural consumers is growing, with city consumers having little, if any, knowledge of agricultural production.
- No path to market, investment certainty or farmer access to GM crops exists in Australia.
- Australian agricultural remains focussed on short-term, commodity-specific issues rather than committing to a whole-of-industry long-term vision.
- Australian agriculture will continue to be the target of well organised and well resourced activist campaigns which are ultimately campaigning against broad scale agriculture.
- Many players within Australian agriculture have not fully recognised the importance of, and invested in, professional risk communication and issues management.

IDENTIFY OUTCOMES RESPONSIBLE TO ENHANCE THE PROFITABLE AND SUSTAINABLE GROWTH OF THE SECTOR – PARTICULARLY IN RELATION TO THE CHALLENGES

- Australian agriculture must be viewed as highly credible, attractive industry.
- The Australian community must be literate in science, agriculture and food production.
- Australian agriculture must commit to a 'whole-of-industry vision' and engage in two-way communication within and between industry players and the community and pro-actively manage issues.
- State governments should remove moratoria to provide investment certainty and grower access to GM crops through a national system.
- Those campaigning against agriculture and certain technologies must be constantly challenged, their fiction contested and ultimately, their campaigns proven unsuccessful.

ACTIONS REQUIRED FOR BUSINESS, COMMUNITY, INDUSTRY, GOVERNMENT

We believe the following actions are required:

- **Australian Governments and the agriculture community** must come together to discuss how to present/promote Australian agriculture as a dynamic, innovative, 'green', rewarding and vibrant industry, and in turn, bridge the gap between city and rural consumers by increasing knowledge and understanding of agricultural production.
- **Australian agriculture** must place a greater recognition on and investment in, professional risk communication and issues management, adopt an 'all of industry long-term vision', and pro-actively challenge those campaigning against agricultural production.
- **Australian Governments** must demonstrate leadership and provide a clear path to market for approved GM products. In particular, a national system based on sound-science and recognising market dynamics must be implemented. State and Territory Governments must remove moratoria preventing commercial production.

IMPEDIMENTS AND RISK TO THE ACHIEVEMENT OF THOSE OUTCOMES

We believe these outcomes are critical to underpin the successful future of agricultural production in Australia.

We believe that a substantial commitment exists to enhance the promotion of Australian agriculture. This will only fail if it is not underpinned by a significant long-term commitment in resources.

The impediment to greater recognition and adoption of risk communication and issues management expertise is continuing short-term, commodity-based thinking by the agricultural sector and one where one industry sector believes it has the right to prevent/override another's activities. A long-term, whole-of-industry vision and approach is critical.

Finally, a path to market for GM crops will continue to be hindered while politics plays the predominant decision-making tool. Agriculture decisions must be science-based not driven by emotions or politics. Crops developed utilising gene technology undergo much greater assessment than their conventional counterparts. It is essential that assessments remain science-based and needless regulations are not imposed on GM crops. The intention of Australia's regulatory framework must be allowed to reach fruition – to deliver approved products to the marketplace.

RECOMMENDATIONS FOR AUSTRALIAN GOVERNMENT

1. That the Australian Government resource, in partnership with the agricultural industry, a campaign which raises the profile and understanding of Australian agriculture, to create an agriculturally literate society.
2. That the Australian, State and Territory Governments commit to a national gene technology system which provides a clear and transparent path to market for all GM products. This system must be developed in consultation with the agricultural industry.
3. That existing Government biotechnology initiatives – particularly the National Biotechnology Strategy and the Biotechnology Strategy for Agriculture, Food and Fibre – target consumers and proactively engage on issues in the public arena.
4. That the Australian Government facilitate a forum to generate support for a united, whole-of-agriculture national vision and an agreed approach to major issues, particularly those driven by activist campaigns.
5. That the Australian Government through existing initiatives – such as the proposed Centre for Excellence in Risk Analysis – facilitate a greater understanding across the agricultural sector of the importance of risk communication and issues management.