



The market benefits of staying GM-free

The future is GM-free

There is global opposition to genetically modified (GM) ingredients in food. A 2017 survey of 23,000 consumers in 17 countries found that nearly half (48 per cent) stated that food products being free from GM ingredients was “extremely” or “very” important to them.¹

According to Cargill, the world’s largest manufacturer of processed food components, non-GM is among the fastest growing claims in the food industry.² The sector grew 49 per cent between 2012 and 2017. The University of Adelaide found that “*the two most attractive markets for Non-GMO labelled foods at this time are the United States and China.*”³ In the United States alone, sales of non-GM products grew by 270 per cent between 2014 and 2017.⁴

The organic industry is another rapidly growing agricultural sector. In Australia, the area of certified organic agricultural land has grown at 22 per cent per annum over the past five years.⁵ South Australia is the leading organic state in Australia, accounting for 40% of Australia’s certified organic hectares (and 20% of the world’s certified organic hectares).⁶

With GM-free crop zones there is potential for South Australian regions to protect and improve these rapidly expanding market opportunities, capitalising on the positive image of non-GM foods and beverages and a general wariness of GM products.

The trade benefits of GM-free crop zones are already evident on Kangaroo Island which the SA government has allowed to remain GM-free. Japan is a big buyer of non-GM food, with one co-op buying canola and honey for \$6 million each year, only from Kangaroo Island. GM-free zones are critical to keeping and increasing sales throughout the state.

South Australia’s export markets are very sensitive to GM

South Australia’s key export markets include China, the United States, New Zealand, Japan, South Korea and Europe – all of which are extremely sensitive to GM foods.

Value of South Australian primary industries ⁷		
Agricultural sector	Value in 2018/19	Key export markets
Field crops	\$1.9 billion	Egypt, Belgium, Bangladesh
Livestock	\$4.5 billion	USA, China and South Korea
Wine	\$2.27 billion	China, UK, USA
Fruits, nuts and veg.	\$1.77 billion	China, Japan, New Zealand
Dairy	\$565 million	China, Vietnam and New Zealand

Asian attitudes to GM foods

A 2015 review of Asian attitudes to GM food observed that:

“Australia’s clean, green and safe brand has a market value” and that “GM crops and food could seriously ‘taint’ the brand position of non-GM Australian produce in Asian markets.”⁸

In 2018, the Tasmanian Department of State Growth and Austrade, commissioned a survey of the attitudes key importers and distributors of Australian food products in China, Japan and Korea hold, towards GM foods.

Five of the six Chinese companies said they do not import GM foods, or purchase from countries or regions which grow GM crops commercially.⁹ Of the six major Japanese retailers and importers interviewed, five stated that GMO-free products have a market advantage.¹⁰ The majority of Korean companies interviewed also stated that a non-GM crop producing country of origin has a market advantage over those countries that do produce GM crops.¹¹

A 2016 study by the University of Adelaide found that Chinese consumers are very concerned about food safety because of past food scares.¹² Other studies have shown that 67% of Chinese consumers are concerned about GM foods and only 23% are willing to eat them.¹³

As Woodhead *et al.* put it

“Do we focus on brand Australia – clean, green and safe for wealthier Asian’s who will pay higher prices for Australian non-GM produce or do we develop GM crops and food products for poorer consumers? Australia currently produces 5% of the world’s food...Australia cannot become the food bowl for Asia, rather many contest that Australia should concentrate on becoming the premium provider – the delicatessen.”¹⁴

Is coexistence possible?

GM-free crop zones afford agri-food and agri-tourism businesses the opportunity, free of charge, to market produce from that regions as GM-free, by virtue of its provenance. Having declared GM-free crop zones removes the need for these businesses to continually test for and demonstrate proof-of-freedom from GM contamination. Without such protections, businesses wishing to market GM-free produce would need to establish systems and bear the cost of proving the product’s freedom from GM contamination.

Managing the coexistence of GM and non-GM crops results in increased costs and risks that non-GM producers mainly bear. These include additional infrastructure, transportation, time and other expenses, to maintain co-existence and segregation; extra quality assurance, compliance and possible insurance costs; and the risk of contamination incidents leading to rejected shipments or price discounts, and the loss of markets and reputation.

As the Tasmanian Government observes:

“co-existence typically requires acceptance of at least some level of GM contamination...On the other hand, organic and GMO-free production systems and markets for organic and GMO-free products have zero tolerance for GM contamination and any amount of contamination could risk the loss of those markets and any premium dependent on the organic or GMO-free attributes of the products.”¹⁵

GMOs in the pipeline

Whilst GM canola and safflower are now the only GM crops that could be commercialised in South Australia, a number of GM crops are in the pipeline that - in the absence of a moratorium - could be introduced to the state as soon as they are approved at a Federal level. These could pose even greater problems for export markets.

GM pastures

The Victorian Government and Dairy Australia currently have a joint project to develop GM ryegrass. If this is approved Federally, regions without GM-free crop zones will be unable to prevent it from being planted.

In its submission to the recent Tasmanian GM moratorium review, one of Australia's largest dairy processors – Fonterra - noted that the company remains concerned about consumer preference against foods made from GMOs. Fonterra stated it would like to see more conclusive consumer insights before there is any reduction in controls on the use of GMOs.¹⁶

Fonterra recently developed a segregated milk pool in New Zealand for non-GMO certified products and these products are achieving a greater market share and/or price premium in some international markets.

Similarly, Organic Dairy Farmers Australia markets its milk as non-GMO, grass-fed and certified organic and these attributes are essential components of its brand and pricing strategies, with an increasing number of consumers willing to purchase organic dairy products at the premium price.¹⁷

According to the Tasmanian Government:

“Perennial ryegrass is extensively used in the agricultural landscape and wind pollinated, hence cross-pollination between GMO and non-GM ryegrass pastures appears inevitable.”¹⁸

If GM rye grass is introduced commercially it could destroy our non-GM livestock and dairy export industries. For example, China has warned that if Australia waters down GM tolerance laws in any way it could have impacts on the importation of organic products.¹⁹

GM wheat

If GM wheat is approved Federally, regions without GM moratoria will have no way of preventing it from being planted. GM wheat is not commercialised anywhere in the world, because markets have stated they will immediately cancel wheat orders from any area growing GM wheat.²⁰

A 2011 Grain Growers Limited report suggests that Australia's key export markets (80% by value) will not buy GM wheat now or in the foreseeable future.²¹

Conclusion

According to the University of Adelaide:

“Global food trends indicate that discerning consumers are increasingly seeking foods that are ‘naturally healthy’, have a ‘clean’ label with simple ingredients (that include GM-free), and have identifiable provenance that links consumers to producers.”²²

By becoming GM-free crop zones, South Australian regions can be in the enviable position of being able to capitalise on these growing premium markets.

Councils wishing to become GM-free crop zones must consult with their constituents and apply to the State Government by 30th September.

¹ GfK (2017) Decision Factors on What to Eat or Drink: Global GfK Survey (October 2017). London: GfK (Growth from Knowledge),

https://www.upa.it/static/upload/glo/global_201710_global_studies_decision_factors_eat_drink_2017.pdf

² Tasmanian Government (2019) *REVIEW OF Tasmania’s Genetically Modified Organisms (GMO) Moratorium: FINAL REPORT*, p. 22., <https://dpiwwe.tas.gov.au/Documents/GMO%20Final%20Report.pdf>

³ The University of Adelaide Centre for Global Food and Resources (2016) Executive Summary and Recommendations: Identification and assessment of added-value export market opportunities for non-GMO labeled food products from South Australia, https://www.pc.gov.au/__data/assets/pdf_file/0008/208934/subdr308-agriculture-attachment.pdf

⁴ Michail, N 2017, ‘Organic and non-GMO additives: should you pay the premium?’, *Food navigator*, <https://www.foodnavigator.com/Article/2017/10/23/Organic-and-non-GMO-additives-Should-you-pay-the-premium>

⁵ Tasmanian Government (2019) *op. cit.* p. 37.

⁶ Paull, J., & Hennig, B. (2018). Maps of Organic Agriculture in Australia. *Journal of Organics*, **5(1)**:29-39.

⁷ Government of South Australia (2020) *Primary Industries in South Australia: Fast Facts*, https://pir.sa.gov.au/__data/assets/pdf_file/0011/339842/PIRSA_Primary_Industries_in_SA_Fast_Facts_Overview_Mar20_v3.pdf

⁸ Woodhead, A, Sun, T, Cotter, J & Maraseni, T (2015), Review of Asian Consumer Attitudes Towards GM Food and Implications for Agricultural Technology Development in Australia, in *Farm Policy Journal*, vol. 12, no. 3, Spring 2015, pp. 37-43, Surry Hills, Australia.

⁹ Tasmanian Government (2019) *op. cit.* p. 52.

¹⁰ *Ibid.* p. 53.

¹¹ *Ibid.* p. 54.

¹² The University of Adelaide Centre for Global Food and Resources (2016) Executive Summary and Recommendations: Identification and assessment of added-value export market opportunities for non-GMO labeled food products from South Australia, https://www.pc.gov.au/__data/assets/pdf_file/0008/208934/subdr308-agriculture-attachment.pdf

¹³ Hu, W. & Chen, K. (2005) Can Chinese consumers be persuaded? The case of genetically modified vegetable oil, *Agbioforum*, 7(3):4; Zhang, X. (2005) Chinese consumers’ concerns about food safety: case of Tanjin, *Journal of International Food and Agribusiness Marketing*, 17(1): 57-69.

¹⁴ Woodhead, A, Sun, T, Cotter, J & Maraseni, T (2015), Review of Asian Consumer Attitudes Towards GM Food and Implications for Agricultural Technology Development in Australia, in *Farm Policy Journal*, vol. 12, no. 3, Spring 2015, pp. 37-43, Surry Hills, Australia.

¹⁵ Tasmanian Government (2019) *op. cit.* p. 3.

¹⁶ *Ibid.* p. 35.

¹⁷ *Ibid.* p. 7.

¹⁸ *Ibid.* p. 26.

¹⁹ Jasper, C. (2015) Certifier says changes to organic standards could affect international trade, 26/5/15, <https://www.abc.net.au/news/rural/rural-news/2015-05-26/nasaa-ben-copeman-chinese-visit/6496756>

²⁰ *No appetite for Australian GM wheat*, January 2013, <https://www.gmfreeaustralia.org.au/assets/script/ckfinder/userfiles/files/No%20Appetite%20GM%20Wheat%20Report.pdf>

²¹ GrainGrowers (2011) *What The World Wants From Australian Wheat*, <https://www.graingrowers.com.au/wp-content/uploads/2018/04/What-The-World-Wants-From-Australian-Wheat-2011.pdf>

²² The University of Adelaide Centre for Global Food and Resources (2016) *op. cit.* p. 5.