GMOs & SA: Food Sovereignty & Consumer Sentiment

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GMO Forum
Parliament House,
Adelaide, South Australia
3 March 2020
Lessons from Holden…

Sovereignty
Detroit calls the shots = Detroit wields the axe

Consumers
*Selling sedans into an SUV market = Kaput
WANTED: Mindless Jurisdictions

Apply now to:
- Dusseldorf, DE (Bayer & Monsanto)
- Basel, CH (Syngenta)
- Beijing, CN (ChemChina)

You are required to:
- Relinquish Your Food Sovereignty
- Ignore Global Consumer Sentiment
- Grow Bargain-Basement Crops &
- No Social Licence Required

PS It’s too bad, we can’t grow our GMOs in Germany, Switzerland or China :-(

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World Consumer sentiment:
“We don’t want GMOs”

<table>
<thead>
<tr>
<th>Country</th>
<th>GM-free is important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>28%</td>
</tr>
<tr>
<td>UK</td>
<td>31%</td>
</tr>
<tr>
<td>Belgium</td>
<td>32%</td>
</tr>
<tr>
<td>Australia</td>
<td>33%</td>
</tr>
<tr>
<td>Japan</td>
<td>36%</td>
</tr>
<tr>
<td>Canada</td>
<td>37%</td>
</tr>
<tr>
<td>USA</td>
<td>37%</td>
</tr>
<tr>
<td>Argentina</td>
<td>41%</td>
</tr>
<tr>
<td>Germany</td>
<td>43%</td>
</tr>
<tr>
<td>South Korea</td>
<td>45%</td>
</tr>
<tr>
<td>Brazil</td>
<td>45%</td>
</tr>
<tr>
<td>France</td>
<td>45%</td>
</tr>
<tr>
<td>Russia</td>
<td>45%</td>
</tr>
<tr>
<td>Spain</td>
<td>45%</td>
</tr>
<tr>
<td>Italy</td>
<td>49%</td>
</tr>
<tr>
<td>Mexico</td>
<td>49%</td>
</tr>
<tr>
<td>China</td>
<td>60%</td>
</tr>
</tbody>
</table>

Data source: GfK, 2017; n=23,000
Chinese shoppers want clean & green
Australian Consumer sentiment: “GMOs not safe”

- Safe: 10%
- Don't Know: 22%
- Not safe: 68%

Data source: Cormick & Mercer, 2017; n=1225
Australia: 51% of World Organic Agriculture (ha)
Australia: 0.4% of World GMO Agriculture (ha)
Australian Agriculture (ha)

Commodity Prices

- 91% for The Rest Ag
- 8.8% for Premium Prices
- 0.2% for GMO Ag
- 8.8% for Organic Ag

data sources: ABCA, 2019, ABS, 2018, Cotton Australia, 2019, Willer & Lernoud, 2019
Europe Rejects GMOs

European GMO-Free Regions

www.gmo-free-regions.org
Vladimir Putin
Russia rejects GMOs
Russia to be world leader in organic food
2015 Peaked

GM Canola WA %

2014 19%
2015 24%
2016 23%
2017 18%

GM canola in WA %

Data source: Bucat, 2019
GMO cotton - Australia

2010 Peaked

Cotton (Hectares)

0 ha
100,000 ha
200,000 ha
300,000 ha
400,000 ha
500,000 ha
600,000 ha

1996/97
1997/98
1998/99
1999/00
2000/01
2001/02
2002/03
2003/04
2004/05
2005/06
2006/07
2007/08
2008/09
2009/10
2010/11
2011/12
2012/13
2013/14
2014/15
2015/16
2016/17
2017/18
2018/19

data source: Cotton Australia, 2019
Peak GMOs?

2015 GMO Canola Peaked in WA ↓ 6% share to 2017 (a)

2010 GMO Cotton Peaked in Australia ↓ 53% to 2018 (b)

2017 GMO Corn Peaked, World, ↓ 1% in 2018 (c)

2017 GMO Canola Peaked, World ↓ 1% in 2018 (c)

2017 Cotton Peaked, World ↓ 3% in 2018 (c)

a= Bucat, 2019, b=Cotton Australia, 2019, c=ISAAA, 2018.
GMO Price Penalty
Price penalty for GM Canola = 7.2%

Non GMO

GMO

Non GM canola (Albany)
Non GM canola (Kwinana)
GM canola (Albany)
GM canola (Kwinana)

data: CBH, 2019; Taylor, 2019; graph: Paull, 2019b
Rogue GMOs in Tasmania - 2 decades

Number of GM trial sites with rogue canola plants

- Apr 2001: 44
- Feb 2002: 28
- Oct 2002: 19
- Jun 2003: 17
- Feb 2004: 18
- Oct 2004: 22
- May 2005: 29
- Oct/Nov 2005: 28
- May 2006: 23
- Jan/Feb 2007: 12
- Oct 2007: 15
- May 2008: 11
- Oct 2008: 12
- May 2009: 10
- Oct 2009: 13
- May 2010: 19
- Oct 2010: 12
- May 2011: 10
- Oct 2011: 9
- May 2012: 9
- Oct 2012: 6
- May 2013: 4
- Oct 2013: 3
- May 2014: 8
- Oct 2014: 1
- May 2015: 6
- Oct 2015: 6
- May 2016: 8

Data source: DPIPWE, 2016 et al
Protecting organic farmers

Steve & Sue Marsh
Marsh v Baxter
2010 @ Kojonup, WA

Baxter
GMO
900 ha

Common boundary

GMO canola

non-GM canola

GM canola

Marsh
Organic
477 ha

GMO contamination

Author's graphic after Supreme Court WA, 2015, Marsh v Baxter
The process failure of Marsh v Baxter

Agreed injury to Marsh $85,000

Legal costs $2,000,000

Case was lost

Costs awarded against the injured party (Marsh)
“... the chilling effect ...”

of the Marsh v Baxter case
Asymmetry of contestants v GMO companies


Bayer buys Monsanto for US$63 Billion (2018)
California couple who developed the same cancer after using Roundup weed killer on their property for 30 years are awarded $2BILLION in Monsanto trial

- Monsanto must pay $2 billion to Alva and Alberta Pilliod, a California jury ruled Monday
- The California couple both developed non-Hodgkins lymphoma
- For 30 years, they use Monsanto’s Roundup weedkiller
- Now, their ongoing lawsuit is one of many to claim that the chemical glyphosate

• 3 cases lost by Bayer
• 20,000 more plaintiffs
Buffer?

Canola Pollen travels 1.5 km

Canola seeds & pods etc travel 450 m

Buffer 5-10 m

Data: OGTR, 2002; Martin, 2014
Using a removal model and estimates of economic costs incurred during toad removal, we estimate that eradicating cane toads would cost $AUD96,556 per km². Across islands that have been prioritized for conservation benefit across the toads predicted range, we estimate the remaining value of toad quarantine to be more than $1.3 billion. The value of a proposed waterless barrier on the mainland to prevent the spread of toads into the Pilbara was in excess of $26 billion. We conclude that quarantine of toads across Australia provides substantial value in prevented eradication costs. Smart, Tingley & Phillips, 2018.
No mechanism to compensate for GMO contamination

<table>
<thead>
<tr>
<th>#</th>
<th>Option</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Status quo, i.e. Do nothing</td>
<td>The recommended outcome in the Inquiry Report</td>
</tr>
<tr>
<td>B</td>
<td>Levy GM industry</td>
<td>Not a recommendation in the Inquiry Report</td>
</tr>
<tr>
<td>C</td>
<td>Technology Licence Bond</td>
<td>Absent in the Inquiry Report</td>
</tr>
<tr>
<td>D</td>
<td>Non-GM farmer Insurance</td>
<td>Not readily available (or at all) in the marketplace</td>
</tr>
<tr>
<td>E</td>
<td>GM farmer Insurance</td>
<td>Not readily available (or at all) in the marketplace</td>
</tr>
<tr>
<td>F</td>
<td>Compulsory Third Party (CTP)</td>
<td>Not a recommendation in the Inquiry Report</td>
</tr>
<tr>
<td>G</td>
<td>Government pays</td>
<td>Absent in the Inquiry Report</td>
</tr>
</tbody>
</table>

WA Parliamentary Inquiry, 2018-2019
All WA canola now GM contaminated

<table>
<thead>
<tr>
<th>Canola Grade</th>
<th>Marketing Description</th>
<th>Specified Characteristics</th>
<th>Fair Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAN</td>
<td>“Non GM Canola”</td>
<td>“Certified GM free to Maximum adventitious presence of 0.9% GMO. Suitable for Human Consumption and Biodiesel production. ISCC EU Certified”.</td>
<td>Canola with GM contamination $\leq 0.9%$</td>
</tr>
<tr>
<td>CAG</td>
<td>“Canola”</td>
<td>“Suitable for Human Consumption and Biodiesel production. ISCC EU Certified”.</td>
<td>GM Canola</td>
</tr>
</tbody>
</table>

after: Paull, 2019a
SA decides!

Dusseldorf

Basel &

Beijing

await your decision
SA GMO Moratorium

1. Preserves Food Sovereignty
2. Accords with Consumer Sentiment
3. Validates SA Clean & Green Image
4. Supports Price Premium Agriculture
5. Avoids another Holden Car Crash
Questions ... 

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3 March 2020
Abstract

The South Australian (SA) Moratorium against genetically modified organisms (GMOs): (i) preserves food sovereignty for SA, (ii) it accords with global consumer sentiment, (iii) it validates SA's clean and green and natural image, (iv) it supports premium price agriculture, and (v) it avoids another Holden car crash experience in SA. General Motors recently wielded the axe on the Holden brand in Australia. Sovereignty for Holden had long ago been ceded to Detroit, USA, and, the company in Australia had persisted in ignoring consumer sentiment by promoting sedans (Commodores) long after consumer demand had moved on to SUVs (sports utility vehicles). With a GMO Moratorium, SA maintains sovereignty of its foodscape. Without a GMO Moratorium, the shots are ceded to Dusseldorf (Bayer & Monsanto), Basel and Beijing (Syngenta & ChemChina). Global consumer surveys reveal that consumers do not want GMOs on their plate (e.g. 60% of Chinese consumers say no to GMOs). Germany, Switzerland and China exclude their own GMO companies from selling and growing their own GMO products in their home countries. So, these GMO/pesticide companies seek far away ‘mindless jurisdictions’ which will allow their products. Australia has 51% of the world’s certified organic agriculture hectares, and just 0.4% of the world’s GMO hectares. SA is a world leader in Organics and accounts for 40% of the certified organic agriculture hectares of Australia. The SA GMO Moratorium safeguards this important premium sector. GMO crops are ‘bargain basement’ crops that sell at a price penalty (e.g. 7.2% price penalty for WA GM canola). There is no way of containing or recalling GMOs. Once released into the environment they knit themselves into the genetic fabric of the foodscape, without any mechanism for recall. Most Australian consumers think that GMO foods are unsafe (90% in a recent survey survey), they may be right. There is at present a point of difference that Australia has from USA, also a major food exporter. Food in Australian supermarkets is non-GMO - mandated GMO labelling means that Australian food manufacturers and retailers exclude GMOs. There is no means for effectively segregating GMO crops and nor for avoiding contaminating non-GMO farms. The sensible decision for the Parliament of South Australia is to leave the SA GMO Moratorium in place.
References


Daily Mail. (2019). California couple who developed the same cancer after using Roundup weed killer on their property for 30 years are awarded $2 BILLION in Monsanto trial. *Daily Mail, 18 May*.


